

1301 Shoreway

Appendices to the Draft Environmental Impact Report

SCH # 2024060880

October 2024

CITY OF BELMONT

Kimley»Horn

Appendices
to the
1301 Shoreway Draft EIR

October 2024

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Appendix A

Notice of Preparation and Responses

NOTICE OF PREPARATION

1301 Shoreway
Environmental Impact Report (EIR)

Date:	June 19, 2024
To:	State Clearinghouse Governor's Office of Planning and Research San Mateo County Cleark Responsible and Trustee Agencies Interested Individuals and Organizations
SUBJECT:	**Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the City of Belmont 1301 Shoreway Project**

1 Shoreway Owner, LLC has submitted an application to the City of Belmont (City) for an office development called 1301 Shoreway project and requests a Planned Unit Development (PD) zoning designation, associated Conceptual and Detailed Development Plan (CDP & DDP) to allow for greater building heights than permitted under the City's existing zoning for the property and to allow for flexibility in land use (office and life-science). The City has determined that a Project Environmental Impact Report (EIR) will be necessary to evaluate environmental impacts of the project pursuant to the California Environmental Quality Act (CEQA).

The City, as the Lead Agency under CEQA, is preparing an Environmental Impact Report (EIR) for the proposed 1301 Shoreway project. The project, its location, and potential environmental effects are described below.

The City is requesting comments and guidance on the scope and content of the EIR from responsible and trustee agencies, interested public agencies, organizations, and the general public (CEQA Guidelines Section 15082). Agencies should comment on the elements of the environmental information that are relevant to their statutory responsibilities in connection with the proposed project. The EIR will serve as the environmental document for responsible and trustee agencies when considering any discretionary approvals or permits within their jurisdiction.

This Notice of Preparation (NOP) provides a summary of the project, includes the City's preliminary identification of the potential environmental issues to be analyzed in the EIR, and provides information on how to comment on the scope of the EIR.

Notice of Preparation Public Review Period: June 19, 2024 to July 26, 2024

The City requests your careful review and consideration of this notice, and it invites any and all input and comments from interested agencies, persons, and organizations regarding the preparation of the EIR. This NOP will be circulated for a 37-day review period, from June 19, 2024 to July 26, 2024. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but no later than the close of the NOP review period. Comments and responses to this notice must be submitted to the Lead Agency contact by **5:00 pm on July 26, 2024**. If applicable, please indicate a contact person for your agency or organization. If your agency is a responsible agency as defined by CEQA Guidelines Section 15381, your agency may use the environmental documents prepared by the City when considering permits or approvals for action regarding the project.

Lead Agency Contact:
Chris Dacumos, Good City Company (Consultant to the City of Belmont)
cdacumos@goodcityco.com

Written Comments: Please submit written comments with the subject "1301 Shoreway Project EIR" within 30 days of the date of this notice to any of the below by 5:00 p.m. on July 26, 2024:

- Email: cdacumos@goodcity.com
- Regular Mail: City of Belmont, Community Development Department, One Twin Pines Lane, Suite 310, Belmont, CA 94002. Attn: Contract Planner, Chris Dacumos

A digital copy of this NOP and additional detail about the project can be viewed at:
https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/471/642

Public Scoping Meeting: The City will hold a scoping meeting to provide an opportunity for agency staff and interested members of the public to submit verbal comments on the scope of the environmental issues to be addressed in the EIR. The scoping meeting will be held as part of the **July 16, 2024 Planning Commission meeting, at 7:00 p.m. at Belmont City Hall, Second Floor City Council Chambers, at One Twin Pines Lane, Belmont, CA 94002**. For more scoping meeting attendance information, please see https://www.belmont.gov/our-city/city-government/meetings-agendas-minutes.

WATCHING/ATTENDING THE MEETING:

The meeting will be broadcast live to Belmont residents on Comcast Cable Channel 27, streamed live via the City's website at www.Belmont.gov, and streamed live on Zoom. The public may also attend the meeting in the City Council Chambers and address the Commission from the Chambers.

PUBLIC COMMENT:

To maximize time for live public comment, we encourage members of the public to provide oral comments by joining the Commission meeting via Zoom. To participate virtually, visit https://belmont- gov.zoom.us/ select "Join" and enter Meeting ID:968 6972 2514. Use the Raise Hand feature to request to speak for a particular agenda item. You may rename your profile if you wish to remain anonymous. For dial-in comments, call *67 1-669-900-6833 (your phone number will appear on the live broadcast if *67 is not dialed prior to the phone number), enter Meeting ID: 968 6972 2514, and press *9 to request to speak.

All public comments are subject to a 3-minute time limit unless otherwise determined by the Commission Chair. If you wish to submit written public comment, you may send an email to cdev@belmont.gov or a letter to the City of Belmont, One Twin Pines Lane, Suite 310, Belmont, CA 94002 before the Commission considers the item. Please indicate the agenda item topic or agenda item number you wish to comment on in your email's subject line. Any public comment regarding agenda items that are received from the publication of the agenda through the meeting date will be made part of the meeting record but will not be read during the Commission meeting.

Project Location
The 6.9-acre project site is located east of US Highway 101 at 1301 Shoreway Road at the northeast intersection of Shoreway Road and Sem Lane. The site consists of one parcel (Assessor Parcel Number [APN] 040-371-110) and is bounded by Shoreway Road to the west, Sem Lane to the north, the San Francisco Bay Trail and Belmont Creek to the east, and a PG&E electrical substation to the south. Shoreway Road serves as a frontage road for US Highway 101. The project is within the city limits of Belmont in San Mateo County, CA. See **Figure 1: Project Location** on page 6 of this notice.

Existing Conditions
The project site is currently developed with a 148,919 square foot multi-tenant medical office building and associated surface parking and landscaping, including 176 existing trees. The project site also includes outdoor amenities including a seating area with benches and a basketball court as well as a pedestrian walkway along Belmont Creek connected to the Bay Trail. Surrounding land uses are urban and primarily commercial, including hotels and office/technology. The project site has a General Plan land use designation of Regional Commercial (COM-R) and corresponding Zoning of Regional Commercial (RC).

Project Description Summary
The proposed project would result in the demolition of an existing medical office building and surface parking lot, and the removal of 156 trees. The project applicant is proposing a general office and/or research/technology campus and associated parking garage for the subject property . The development includes 542,035 square feet of employment uses (e.g. office space), a 442,690 square foot parking garage, and landscape improvements including a central

courtyard. A series of outdoor amenities open to the public are proposed along the rear of the property, accessible from the slough and adjacent trail along Belmont Creek.

The proposed project would include two commercial office and/or research/technology buildings: Building 1 would be located on the western portion of the project site adjacent to Shoreway Road and Building 2 would be on the northeastern portion of the project site along Sem Lane. Building 1 would be 8 stories and would extend to approximately 144 feet in height, including rooftop screening. Building 2 would be 7 stories and extend to approximately 128 feet in height, including rooftop screening. The office buildings would include a mixture of solid and glazed panels on the exterior of the buildings.

Parking for both buildings would be provided through a 9-level parking garage and surface parking for a total of 1,626 spaces. The parking garage would provide 1,432 spaces and the surface lots provide 194 spaces. Due to the building heights proposed, the project requests a PD zoning designation and permit to allow for greater building heights and flexibility with land use (office and life-science). The PD District is designed to accommodate various types of development, such as professional and administrative areas, commercial service centers, industrial parks, and other uses or a combination of uses, to allow flexibility of design, in accordance with the objectives and spirt of the General Plan.

Project Alternatives

The EIR will evaluate a reasonable range of project alternatives that, consistent with CEQA, meet most of the project objectives and could reduce or avoid potential environmental effects. The alternatives section would also include the required No Project Alternative.

Potential Areas of Environmental Effects

The City of Belmont will be preparing an environmental impact report (EIR) that evaluates potential environmental effects consistent with CEQA Statues and Guidelines. An initial study is not required to determine that an EIR will be prepared, and as such, an initial study was not prepared for the proposed project. The EIR will discuss potential environmental impacts of the proposed project, including potential construction and operational effects. The City has identified several environmental areas where impacts are most likely to occur. These impact areas include:

- Aesthetics (including visual changes and community character)
- Air Quality (including an assessment of health risk)
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services and Recreation
- Transportation and Circulation (including vehicle miles travelled)
- Tribal Cultural Resources
- Utilities and Service Systems (including water supply and demand/system capacity)

The EIR will also evaluate other required discussions including: (a) any significant environmental effects that cannot be avoided if the project is implemented; (b) any significant irreversible and irretrievable commitments to resources; (c) growth-inducing impacts of the proposed project; (d) effects found not to be significant; and (e) cumulative impacts. While the proposed project has the potential to generate significant environmental impacts in number of areas, the proposed project would have no significant impact on the following environmental topics due to existing conditions on the project site and surrounding area. These issues will therefore not be analyzed further:

- Agricultural and Forestry Resources
- Mineral Resources
- Wildfire

When the Draft EIR is completed, it will be made available for review at the following location:

City of Belmont
One Twin Pines Lane, Suite 310
Belmont, CA 94002

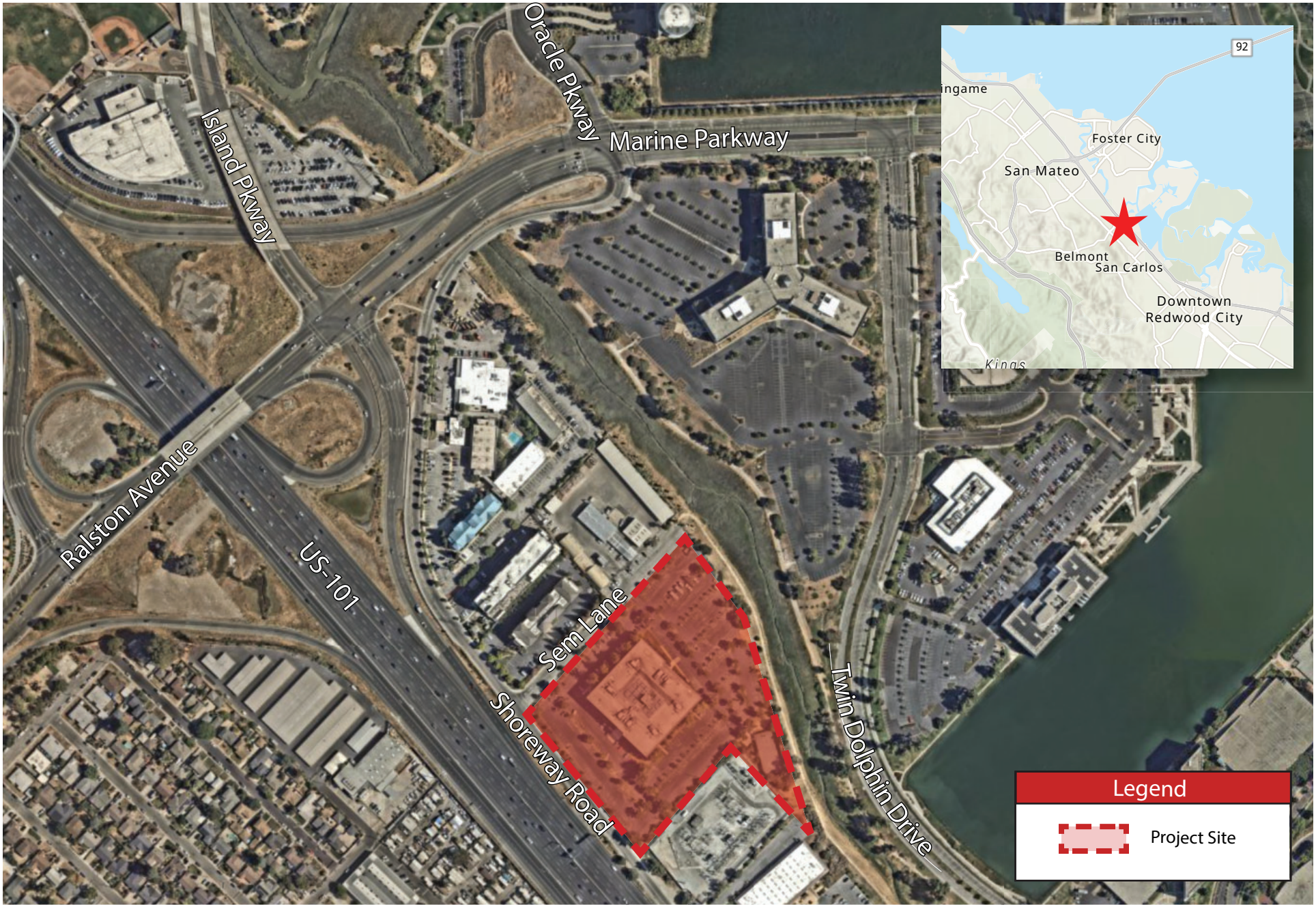
The Draft EIR will also be available online at:
https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/471/642
The City will issue a Notice of Availability of a Draft EIR at that time to inform the public and interested agencies, groups, and individuals of how to access the Draft EIR and provide comments.

Figures:

Figure 1: Project Location Map

6/19/23

Carlos de Melo, Community Development Director **Date**



Source: Nearmap, 2024

Figure 1: Project Location

1301 Shoreway Project
NOP

Not to scale

Kimley»Horn

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San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600

State of California | Gavin Newsom – Governor | info@bcdc.ca.gov | www.bcdc.ca.gov

July 25, 2024

Chris Dacumos, Contract Planner
City of Belmont
One Twin Pines Lane, Suite 310
Belmont, CA 94002
Via E-mail: <cdacumos@goodcityco.com>

SUBJECT: Comments on the Notice of Preparation of a Draft Environmental Impact Report for the 1301 Shoreway Project BCDC Inquiry File No. SM.BM.2024.01

Dear Chris Dacumos:

Thank you for the opportunity to comment on the scope of the upcoming Draft Environmental Impact Report (DEIR) for the 1301 Shoreway Project (Project). The Notice of Preparation for the DEIR was dated and received by our office on June 19, 2024.

The San Francisco Bay Conservation and Development Commission (BCDC) is providing the following comments as a responsible agency with discretionary approval power over aspects of the Project, as described below. BCDC will rely on the Final EIR when considering its approvals for the project, and we appreciate this opportunity to comment on information and analyses to be included in the scope of the DEIR. While the description of the project in the NOP is not specific enough for BCDC staff to comment on every potential issue that could be raised with respect to BCDC's laws and policies, staff has prepared the following comments outlining issues under BCDC's jurisdiction that should be addressed. The Commission itself has not reviewed the NOP; the following comments are based on BCDC staff review of the NOP, the McAteer-Petris Act (Title 7.2 of the California Government Code), and the *San Francisco Bay Plan* (Bay Plan) in relation to CEQA requirements for the Project.

San Francisco Bay Conservation and Development Commission

BCDC is a State planning and regulatory agency with permitting authority over San Francisco Bay, the Bay shoreline, and Suisun Marsh, as established in the McAteer-Petris Act and the Suisun Marsh Preservation Act. Per the McAteer-Petris Act, BCDC is responsible for granting or denying permits for any proposed fill; extraction of materials; or substantial changes in use of any water, land, or structure within the Commission's jurisdiction (Government Code Section 66632). Additionally, BCDC establishes land use policies for the Bay as a resource and for development of the Bay and shoreline in the Bay Plan, which provides the basis for the Commission's review and actions on proposed projects.

The Project site is partially located in BCDC's permitting shoreline band jurisdiction, consisting of all territory located between the shoreline of the Bay and 100 feet landward of and parallel with the shoreline (Government Code Section 66610[b]). The Project team has previously

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worked with BCDC staff to map the limits of this jurisdictional area. Staff requests that the City include this mapping in the DEIR and pay particular attention to potential impacts that may occur in this area. Areas in the shoreline band jurisdiction include the shoreline, most of the open space and public access amenities, and portions of the surface parking lot located near Belmont Creek.

Environmental Analyses

Below is a list of environmental topics from the NOP and a description of how they overlap with BCDC policy areas that staff will use to evaluate the Project for a BCDC permit. Including these analyses in the DEIR and addressing any related impacts with mitigation measures will support staff in developing relevant conditions and necessary findings to include in the permit. Please see the following referenced legislation and plans from our website:

- The McAteer-Petris Act
- The San Francisco Bay Plan

Aesthetics

The Bay Plan includes a policy section on Appearance, Design, and Scenic Views upon which the Commission will base its findings for the Project's visual impacts on the Bay. In defining the significance of the Project's aesthetic impacts, please consider the findings and policies in this section, and acknowledge these policies in the regulatory settings of the analysis. BCDC provides additional guidance on the interpretation of these policies in the Public Access Design Guidelines for Shoreline Spaces, particularly in the sections related to Visual Access, Visual Quality, and Bay Setting. Please consider the Guidelines available on our website in your evaluation of the Project's potential effects on scenic vistas and scenic resources.

Biological Resources

The Bay Plan includes several policy sections related to biological resources, including Fish, Other Aquatic Organisms and Wildlife; Tidal Marshes and Tidal Flats; Subtidal Areas; and Mitigation. Please review the policies and findings in these sections and consider them in your biological resources analysis and in the development of any related mitigation measures and acknowledge them in the regulatory setting for this section. Additionally, please consider the Bay Plan in your analysis of whether the Project would conflict with the provisions of a regional habitat conservation plan.

In defining the study area for the biological resources analysis in the DEIR, please include any areas of the Bay that may be affected by site preparation and construction activities and the ongoing operation of the Project, including those that might be affected by light, sound, debris, runoff, etc. Additionally, please provide a detailed analysis of any potential impacts in and along Belmont Creek.

Cultural/Tribal Cultural Resources

As part of the Bay Plan's policies on Environmental Justice and Social Equity, the Commission is required to consider its guiding principles on environmental justice and social equity in all of its actions and activities. The first of these guiding principles is to "recognize and acknowledge the California Native American communities who first inhabited the Bay Area and their cultural

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connection to the natural resources of the region." Additionally, Public Access Policy No. 5 states that public access should embrace "local multicultural and Indigenous history and presence," and Recreation Policy No. 4 states that parks should emphasize historical and cultural education and interpretation.

Please ensure that the DEIR includes a description of the Native American history and cultural resources associated with the Project site. In preparing the DEIR, please conduct meaningful outreach towards the tribes associated with this area as part of the AB 52 consultation requirement. Additionally, please ensure that the cultural and tribal cultural resources environmental setting identifies all historically and culturally significant resources at the Project site and at any related sites (if applicable) and note in the analysis whether and how the Project will acknowledge or incorporate information about those resources in its design or programming.

Geology and Soils

The analysis in the DEIR's geology and soils section relates to issue areas that BCDC will consider in permitting the Project, including the safety and stability of the site in light of the site preparation and filling work required for the Project's construction; the potential for erosion and implications for the long-term stability, safety, and usability of the proposed public access and open space amenities; and the potential for any erosion to affect biological resources and/or water quality in riparian and tidally influenced habitats present at the site. In your analysis of geology and soils, please pay particular attention to the potential for soil erosion in the shoreline band, as well as any potential hazards related to the fill required to elevate the site and the ability of the underlying soil to support it.

Hazards and Hazardous Materials

The potential for hazardous materials release is relevant to BCDC permitting considerations of whether the Project is consistent with Bay Plan policies on water quality, biological resources, climate change, and environmental justice. As part of its analysis of the potential for the Project to create a contaminant hazard for the public or the environment, please consider the potential for groundwater rise to mobilize below-ground contaminants. Groundwater rise as a function of rising sea levels is an emerging issue of great concern for its potential to bring hazardous materials to the surface, even in areas where capping has already taken place or where shoreline protection is utilized to address above-ground flooding. Such exposure could affect water quality, habitat quality, and the usability of any public access facilities required by BCDC as a condition of permit approval. Therefore, please include a discussion of whether groundwater rise could potentially mobilize below-ground contaminants at the Project site.

Hydrology and Water Quality

The Bay Plan includes policy sections for Water Quality and Climate Change that are relevant to the DEIR hydrology and water quality analysis. Please review these findings and policies and include them in the regulatory settings for this section. As part of the settings and analysis, please clearly identify the water quality standards, plans, and/or discharge requirements applicable to the Project site.

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As part of the hydrology analyses, including the analysis of the Project's effect on drainage and whether flood hazards present a risk of releasing pollutants, please include analysis of relevant sea level rise scenarios in accordance with the best available science (currently considered to be the Ocean Protection Council's 2024 Sea Level Rise Guidance). Because sea levels are expected to rise over the life of the Project, the analysis of operational impacts would be incomplete without a consideration of sea level rise scenarios. The DEIR should identify all types of potential flooding related to sea level rise (including groundwater rise) and any proposed adaptation measures, including site elevation or flood protection. Particular attention should be paid to potential future flooding impacts on the proposed public access amenities and storm drainage system.

Please note that as part of the application for the Project, the project proponents are expected to provide a sea level rise risk assessment prepared by a qualified engineer, per Bay Plan Climate Change Policy No. 2. The risk assessment will be expected to include mid- and end-of-century scenarios at the intermediate-high risk level, with the high emissions assumption, using the NAVD 88 datum. Bay Plan policies require that all projects be designed to be resilient to a mid-century sea level rise projection and adaptable to end-of-century if the project is expected to still be in place. In designing any proposed shoreline protection, please note that Bay Plan Shoreline Protection Policy No. 5 requires projects to evaluate the use of natural and nature-based features and incorporate these features to the greatest extent practicable. For the DEIR, any design features necessary to ensure resilience should be included in the Project Description and analyzed throughout the document as part of the project.

Land Use and Planning

The McAteer-Petris Act and the Bay Plan are a State law and a land use plan, respectively, adopted for the purpose of avoiding or mitigating an environmental effect and should be included in the regulatory settings for this section as well as considered in the impact analysis.

Recreation

Per the McAteer-Petris Act, BCDC is tasked with ensuring maximum feasible public access to the Bay. As such, BCDC has permitted several public recreation facilities along the shoreline in the vicinity of the Project site, including contiguous segments of the Belmont Creek Trail and Bay Trail adjacent to the site that connect a series of existing and planned park spaces. As the project will be improving an existing Belmont Creek Trail segment and providing a new recreation destination in this network, please include the adjacent Belmont Creek Trail segments and connected planned and existing recreation areas in the study area for the recreation analysis, identify the service area and service population for these facilities, assess whether the recreational facilities provided are commensurate with the need generated by the Project, and consider whether the Project has the potential to result in the physical deterioration of these facilities.

As part of ensuring maximum feasible public access, Bay Plan Public Access Policy No. 7 requires that public access along the shoreline be permanently guaranteed and should remain viable in the event of future sea level rise or flooding, or that equivalent access consistent with the project be provided nearby. The DEIR analysis should demonstrate that public access and recreational facilities are resilient to projected sea level rise at mid-century, with a comprehensive plan for

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adaptation through the end of the century. This plan should include strategies for maintaining accessibility, functionality, and safety of recreational and visitor-serving amenities under various sea level rise scenarios. The DEIR should state whether the adaptation or replacement of the proposed public access would require further construction or expansion of recreational facilities and assess whether that may have an adverse effect on the environment.

Transportation

One of BCDC's key considerations for assessing maximum feasible public access is the convenience and safety of site access where a project connects to the larger transportation network, particularly for members of the public approaching the site via the Belmont Creek Trail or by surface roads. Please review the findings and policies in the Bay Plan's sections on Transportation and Public Access and acknowledge them in the regulatory settings for the transportation analysis. Furthermore, please consider these policies in your analysis of whether the Project would conflict with a policy addressing transit, roadway, bicycle, and pedestrian facilities, and whether the Project would increase transportation hazards, with particular attention paid to the Belmont Creek Trail and routes by which drivers would access the Project's public parking spaces.

Conclusion

We appreciate your attention to the topics discussed above and for the opportunity to make the above comments on the scope of the DEIR. If you have any questions or concerns regarding this matter, please do not hesitate to contact me at pierce.abrahamson@bcdc.ca.gov.

Sincerely,

DocuSigned by:
Pierce Abrahamson
8A992957C01D4E8...

PIERCE ABRAHAMSON
Shoreline Development Analyst

cc: State Clearinghouse; <state.clearinghouse@opr.ca.gov>
Carlos de Melo, Community Development Director of the City of Belmont; <cdemelo@belmont.gov>

PA/kr

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 11, 2024

Carlos de Melo, Community Development Director
City of Belmont
1 Twin Pines Lane, Suite 300
Belmont, CA 94002
Cdemelo@belmont.gov

Subject: 1301 Shoreway Project, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2024060880, City of Belmont, San Mateo County

Dear Mr. Carlos de Melo:

The California Department of Fish and Wildlife (CDFW) has reviewed the City of Belmont's (City) Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the 1301 Shoreway Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect fish and wildlife resources of the State. Please be advised, by law, CDFW may be required to carry out or approve aspects of the Project through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW is providing the City of Belmont, as the Lead Agency, with specific detail about the scope and content of the environmental information related to CDFW's area of statutory responsibility that must be included in the EIR (See: Cal. Code Regs., tit. 14, § 15082, subd. (b)).

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.). For purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority over the Project pursuant to the Fish and Game Code. For example, the Project may be subject to CDFW's Lake and Streambed Alteration (LSA) regulatory authority, if the Project impacts the bed, channel or bank of any river, stream or lake within the State (Fish & G. Code, § 1600 et seq.). Likewise, to the extent the Project may result in "take" as defined by state law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

REGULATORY REQUIREMENTS

California Endangered Species Act

A CESA Incidental Take Permit (ITP) must be obtained from CDFW if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Under CESA, "take" means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish & G. Code, § 86.) CDFW's issuance of an ITP is subject to CEQA and to facilitate permit issuance, any project modifications and mitigation measures must be incorporated into the CEQA document analysis, discussion, and mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a mandatory finding of significance if a project is likely to substantially impact threatened or endangered species. Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064 & 15065.) In addition, pursuant to CEQA, the Lead Agency cannot approve a project unless all impacts to the environment are avoided or mitigated to less-than-significant levels, or the Lead Agency makes and supports Findings of Overriding Consideration (FOC) for impacts that remain significant despite the implementation of all feasible mitigation. FOC under CEQA, however, do not eliminate the Project proponent's obligation to comply with the Fish and Game Code.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting rivers, lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes,

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watercourses with a subsurface flow, and floodplains is generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements**.** Therefore, any impact to the mainstems, tributaries, or floodplains or associated riparian habitat caused by the proposed Project will likely require an LSA Notification. CDFW may not execute a final LSA Agreement until it has considered the final EIR and complied with its responsibilities as a responsible agency under CEQA.

Migratory Birds and Raptors

CDFW has authority over actions that may result in the disturbance or destruction of active bird nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include section 3503 (regarding unlawful take, possession, or needless destruction of the nests or eggs of any bird), section 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

PROJECT DESCRIPTION AND LOCATION SUMMARY

Proponent: 1 Shoreway Owner, LLC

Objective: The objective of the Project is to demolish an existing office building and redevelop the property to include a general office campus with two commercial office buildings and associated parking structure at 1301 Shoreway Road. The Project includes the development of amenities along the rear of the property adjacent to Belmont Creek.

Location: 1301 Shoreway Road, Belmont, CA 94002.

Timeframe: TBD

The CEQA Guidelines (§§15124 & 15378) require that the draft EIR incorporate a full Project description, including reasonably foreseeable future phases of the Project, and that contains sufficient information to evaluate and review the Project's environmental impact. Please include a complete description of the following Project components in the Project description including, but not limited to, the below information.

- Footprints of permanent Project features and temporarily impacted areas, such as staging areas and access routes.

- Area and plans for any proposed buildings/structures, ground-disturbing activities, fencing, paving, stationary machinery, landscaping, stormwater systems, and amenities adjacent to Belmont Creek and northern coastal salt marsh habitat.

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- Operational features of the Project, including level of anticipated human presence (describe seasonal or daily peaks in activity, if relevant), artificial lighting/light reflection, noise, traffic generation, and other features.

- Construction schedule, activities, equipment, and crew sizes.

ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand any potentially significant impacts on the environment of the proposed Project and any alternatives identified in the draft EIR (CEQA Guidelines, §§15125 & 15360). CDFW recommends the draft EIR provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, and endangered species (CEQA Guidelines, §15380). The draft EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or State, and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site (for sensitive natural communities see:https://wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities), and any stream or wetland set back distances the City may require. Fully protected, threatened or endangered, candidate, and other special-status species or sensitive natural communities that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

Common Name	**Scientific Name**	**Status**
Alameda song sparrow	*Melospiza melodia pusillula*	SSC
American peregrine falcon	*Falco peregrinus anatum*	Delisted
Arcuate bushmallow	*Malacothamnus arcuatus var. arcuatus*	1B.2
California black rail	*Laterallus jamaicensis coturniculus*	ST, FP
California least tern	*Sternula antillarum browni*	FE, SE, FP
green sturgeon - southern DPS	*Acipenser medirostris pop. 1*	FT, SSC
longfin smelt	*Spirinchus thaleichthys*	FPE, ST
pallid bat	*Antrozous pallidus*	SSC
Point Reyes salty bird's-beak	*Chloropyron maritimum ssp. palustre*	1B.2
Common Name	**Scientific Name**	**Status**

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saline clover	*Trifolium hydrophilum*	1B.2
salt-marsh harvest mouse	*Reithrodontomys raviventris*	FE, SE, FP
Santa Cruz kangaroo rat	*Dipodomys venustus venustus*	
San Francisco owl's-clover	*Triphysaria floribunda*	1B.2
short-eared owl	*Asio flammeus*	SSC
western snowy plover	*Charadrius nivosus nivosus*	FT, SSC
woodland woollythreads	*Monolopia gracilens*	1B.2

FT = listed as threatened under the federal Endangered Species Act; FE = listed as endangered under the federal Endangered Species Act; FPE = Proposed Endangered under the federal Endangered Species Act; ST = listed as threatened under CESA; SE = listed as endangered under CESA; SSC = state species of special concern; FP = state listed as fully protected. California Rare Plant Rank 1B: All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Fish and Game Code and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125; (c) and/or §15380.

Habitat descriptions and species profiles included in the draft EIR should include robust information from multiple sources: aerial imagery; historical and recent survey data; field reconnaissance; scientific literature and reports; U.S. Fish and Wildlife Service's (USFWS) Information, Planning, and Consultation System; California Aquatic Resources Inventory; and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Only with sufficient data and information can the City adequately assess which special-status species are likely to occur in the Project vicinity.

CDFW recommends surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

Botanical surveys for special-status plant species, including those listed by the California Native Plant Society (http://www.cnps.org/cnps/rareplants/inventory/), should also be conducted during the blooming period for all sensitive plant species potentially occurring within the Project area and include the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants available at: https://www.wildlife.ca.gov/Conservation/Plants.

IMPACT ANALYSIS AND MITIGATION MEASURES

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The CEQA Guidelines (§15126.2) necessitate the draft EIR discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project. This includes evaluating and describing impacts such as:

- Land use changes that will increase Artificial Lighting at Night (ALAN) pollution;
- Potential for impacts to special-status species;
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic, or human presence;
- Obstruction of movement corridors used by birds, bats, and insects;
- Water quality impacts resulting from construction and operation of the Project;
- Impacts both from construction and operation of the Project; and
- Impacts to the bed, channel, and bank, in the stream, slough, and wetlands adjacent to and downstream of the Project;

The CEQA document also should identify existing and reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to each impact (CEQA Guidelines, §15355). Although a project's impacts may be insignificant individually, its contributions to a cumulative impact may be considerable; a contribution to a significant cumulative impact (e.g., reduction of available habitat for a listed species) should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

The CEQA Guidelines direct the City, as the Lead Agency, to consider and describe in the draft EIR all feasible mitigation measures to avoid and/or mitigate potentially significant impacts of the Project on the environment based on comprehensive analysis of the potential direct, indirect, and cumulative impacts of the Project. (CEQA Guidelines, §§ 15021, 15063, 15071, 15126.2, 15126.4 & 15370.) This should include a discussion of take avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with the USFWS, the National Marine Fisheries Service and CDFW. These measures can then be incorporated as enforceable Project conditions to reduce potential impacts to biological resources to less-than-significant levels.

Fully protected species such as California black rail (*Laterallus jamaicensis coturniculus*), California least tern (*Sternula antillarum browni*), and salt-marsh harvest mouse (*Reithrodontomys raviventris*) may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

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- Take is for necessary scientific research;
- Efforts to recover a fully protected, endangered, or threatened species, live capture and relocation of a bird species for the protection of livestock; or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an ITP for unavoidable impacts to fully protected species if certain conditions are met (Fish & G. Code §2081.15). Project proponents should consult with CDFW early in the project planning process.

COMMENTS AND RECOMMENDATIONS

COMMENT 1: Riparian Encroachment

Issue: The NOP states that the proposed parking area and associated retaining wall will be located within the riparian corridor where the parcels slopes toward Belmont Creek. Although the NOP does not clarify whether riparian vegetation will be removed, encroaching into the riparian corridor can negatively impact sensitive species that rely on an appropriately sized riparian buffer between development and the stream zone. Encroaching on the riparian zone can lead to deleterious materials, including wastewater discharge and other pollutants, entering the creek.

Because natural stream processes are complex and dynamic, development too close to stream channels can result in threat to property from erosion due to lateral and/or vertical channel adjustments over time. Incorporation of a sufficient riparian buffer into the Project design is necessary to avoid the potential need for stream channel stabilization solutions in the long-term. CDFW discourages use of hardscape material such as cement retaining walls in streams as a result of insufficient riparian buffer setbacks.

Evidence the impact would be significant: Riparian habitats are important to watershed integrity because they perform many ecological functions such as enhancing water quality/quantity, biodiversity, habitat connectivity, and flood capacity. Impacts to riparian habitats have potential to cause a wide range of adverse effects to fish and wildlife resources.

Riparian vegetation improves stream water quality by removing sediment, organic and inorganic nutrients, and toxic materials (Belt and O'Laughlin 1994, Mitsch and Gosselink 2000, USDA 2000, Mayer et al. 2006). Riparian buffers help keep pollutants from entering adjacent waters through a combination of processes including dilution, sequestration by plants and microbes, biodegradation, chemical degradation, volatilization, and entrapment within soil particles. As buffer width increases, the

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effectiveness of removing pollutants from surface water runoff increases (Castelle et al. 1992). There is substantial evidence showing narrow buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

Riparian trees and vegetation, and associated floodplains provide many essential benefits to stream and river fish habitat (Moyle 2002, CDFG 2007). Riparian forests provide thermal protection, shade, and large woody debris. Large woody debris stabilizes substrate, provides shelter and cover from predators, facilitates pool establishment and maintenance, maintains spawning bed integrity, and creates habitat for aquatic invertebrate prey. Riparian areas also provide critical fish habitat in the form of off-channel and back-water winter-rearing sites and floodwater refugia (CDFG 2007). Few fishes have been more significantly impacted by loss and alteration of habitat than Pacific salmon and anadromous trout (Moyle 2002).

Riparian habitats also contribute to bank stability and provide flood protection. Development which includes increases in impervious surfaces and installation of stormwater systems and storm drain outfalls can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth 2005). Riparian habitat and adjacent wetlands and floodplains are critical to lessening these impacts because they store and meter floodwaters, recharge groundwater aquifers, trap sediment, filter pollution, help minimize erosion, lessen peak flow velocities, and protect against storm surges (Mitsch and Gosselink 2000, Tockner et al. 2008). In doing so, they protect adjacent upland, down-stream, and coastal properties from loss and damage during flooding and help maintain surface and groundwater during summer months.

In addition to direct habitat loss, development adjacent to a riparian zone has three principal indirect effects: 1) fragmentation of habitat into smaller, non-contiguous areas of less-functional habitat by structures, roads, driveways, yards and associated facilities; 2) the introduction or increased prevalence of exotic species or species that are habitat generalists, termed “human adapted” or “urban exploiters,” and 3) decreases in native species abundance and biodiversity and the loss of “human-sensitive” species that require natural habitats (Davies et al. 2001, Hansen et al. 2005, CDFG 2007).

Recommendation: CDFW recommends that the Project establish and the EIR incorporate a riparian buffer zone and limit development outside of the riparian area. Furthermore, CDFW recommends that the Project incorporate activities to enhance the riparian zone of Belmont Creek and the EIR include a detailed riparian enhancement plan to offset potential Project impacts, a plan which identifies a palette of trees and plants and planting locations along the reach of Belmont Creek adjacent to the property proposed for redevelopment. CDFW is available to coordinate with the City to determine appropriate site-specific buffer riparian buffer to limit impacts to sensitive species, as

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well as provide suggestions for tree and plants species appropriate for enhancing the riparian zone at Belmont Creek. At a minimum, CDFW recommends a 50-foot riparian buffer as measure from the top of streambank to the nearest Project infrastructure.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to prepare subsequent CEQA documents or to make supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (d) & (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be filled out and submitted online here: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found here: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

CDFW anticipates that the proposed Project, will have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (See: Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP in order to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jason Teichman, Environmental Scientist at (707) 210-5104 or Jason.Teichman@wildlife.ca.gov; or Wesley Stokes, Senior Environmental Scientist, (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2024060880)

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California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

July 26, 2024

SCH #: 2024060880
GTS #: 04-SM-2024-00584
GTS ID: 33127
Co/Rt/Pm: SM/101/9.307

Chris Dacumos, Contract Planner
Good City Company (Consultant to the City of Belmont)
One Twin Pines Lane, Suite 310
Belmont, CA 94002

Re: 1301 Shoreway Project – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear Chris Dacumos:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the 1301 Shoreway Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the June 2024 NOP.

Please note this correspondence does not indicate an official position by Caltrans on this project and is for informational purposes only.

Project Understanding

The proposed project would result in the demolition of the existing 148,949 square feet (sq. ft.) medical office building and surface parking lot to develop 542,035 sq. ft. of employment uses through the construction of two buildings to serve as a general office and/or research and technology campus. An associated 9-story, 442,690 sq. ft. parking garage would also be constructed. The development also proposes a series of public outdoor amenities that would be accessible from the slough and adjacent trail along Belmont Creek. The 6.9-acre project site is located adjacent to northbound U.S. Route 101 (U.S. 101).

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Vehicle

Miles Traveled (VMT) analysis for land use projects, please review Caltrans' Transportation Impact Study Guide (*link*).

If the project meets the screening criteria established in the City's adopted VMT policy to be presumed to have a less-than-significant VMT impact and exempt from detailed VMT analysis, please provide justification to support the exempt status in alignment with the City's VMT policy. Projects that do not meet the screening criteria should include a detailed VMT analysis in the DEIR.

Aeronautics
The project site is located approximately one mile from the San Carlos Airport. One of the goals of the Caltrans Aeronautics Program is to assist cities, counties, and Airport Land Use Commissions (ALUC) or their equivalent, to understand and comply with the State Aeronautics Act pursuant to the California Public Utilities Code (PUC), Section 21001 et seq.

The proposed project is in Airport Influence Area B (AIA) and Safety Zone 6 of the San Carlos Airport, established by the San Mateo County ALUC pursuant to Section 21675(c). Therefore, the proposed Project shall adhere to the safety and land use criteria and restrictions defined in the Airport Land Use Compatibility Plan (ALUCP) formed by the ALUC pursuant to the PUC, Sections 21674 and 21676, and may be subject to review authority by the ALUC.

California PUC, Section 21659 prohibits structural hazards near airports. Structures should not be at a height that will result in penetration of the airport imaginary surfaces. In accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace," a Notice of Proposed Construction or Alteration (Form 7460-1) may be required by the Federal Aviation Administration (FAA). For further information or a copy of Form 7460-1, please refer to the FAA website (*link*).

Hydrology
Please ensure that any increase in storm water runoff to State Drainage Systems or Facilities be treated, contained on project site, and metered to preconstruction levels. Any floodplain impacts must be documented and mitigated.

The development will alter the unpaved areas close to U.S. 101 and may impact the existing draining systems at U.S. 101. Please include in the Encroachment Permit application plan views, profiles, cross-sections, details of all drainage facilities, and hydrologic calculations showing conditions before and after development at this location.

Water Quality
On account of the proposed Replaced Impervious Surface (RIS), the New Impervious Surface (NIS) for the project will exceed the 5000 sq. ft. threshold set for a non-highway facility according to the current National Pollutant Discharge Elimination System (NPDES) Statewide Stormwater Permit (*link*). Accordingly, please implement post-construction Treatment Best Management Practices (*link*) as required for Encroachment Permit recipients.

Construction-Related Impacts
Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*).

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Additionally, please note the following two Caltrans projects within the vicinity of the project site that may pose a potential construction conflict. For future project coordination, please contact Rommel Pardo, Senior Project Manager of Program Project Management for San Mateo County at Rommel.Pardo@dot.ca.gov.

- *Project 04-0Q070* – modify and enhance the metering system and guardrails for various U.S. 101 on-ramps, including the on-ramps at Whipple Ave and Hillsdale Blvd.

- *Project 04-2J73A* – pavement rehabilitation and upgrade guardrails along U.S. 101 near Cordilleras Creek Bridge.

Lead Agency
As the Lead Agency, the City of Belmont is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These

access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Encroachment Permit
Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement.

The Office of Encroachment Permit requires 100% complete design plans and supporting documents to review and circulate the permit application package. To obtain more information and download the permit application, please visit Caltrans Encroachment Permits (*link*). Please note that the checklist TR-0416 is used to determine the appropriate Caltrans review process for encroachment projects. Your application package may be emailed to D4Permits@dot.ca.gov.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Luana Chen, Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact LDR-D4@dot.ca.gov.

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

July 11, 2024

Carlos de Melo
Community Development Director
City of Belmont
1 Twin Pines Lane Suite 310
Belmont, CA 94002
cdemelo@belmont.gov

RE: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 1301 SHOREWAY PROJECT DATED JUNE 20, 2024, STATE CLEARINGHOUSE NUMBER 2024060880

Dear Carlos de Melo,

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the 1301 Shoreway Project (Project). The project applicant is proposing a general office campus and associated parking structure at 1301 Shoreway Road. The proposed Project will include demolition of an existing office building, raising the base flood elevation by 2 feet, and redevelopment with 542,035 square feet of employment uses (e.g. office space), parking garage, and landscape improvements. A series of outdoor amenities open to the public are proposed along the rear of the property, accessible from the trail along Belmont Creek. Two commercial office buildings are proposed; building 1 will be 8 stories and approximately 144 feet in height, building 2 will be 7 stories and

approximately 128 feet and a parking structure will be 9 levels. After reviewing the project, DTSC recommends and requests consideration of the following comments:

1. If buildings or other structures are to be demolished on any project sites included in the proposed Project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual.
2. DTSC recommends that all imported soil and fill material should be tested to ensure any contaminants of concern are within DTSC's and U.S. Environmental Protection Agency Regional Screen Levels for the intended land use. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material meets screening levels outlined in the PEA Guidance Manual for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of the prior land use. Additional information can be found by visiting DTSC's Human and Ecological Risk Office (HERO) webpage.

DTSC appreciates the opportunity to comment on the NOP of a DEIR for the 1301 Shoreway Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like any clarification on DTSC's comments, please respond to this letter or via email for additional guidance.

Sincerely,



Tamara Purvis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

cc: (via email)

Governor's Office of Planning and
Research State Clearinghouse
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SIERRA CLUB
LOMA PRIETA CHAPTER

SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

City of Belmont Planning Commission
Via email: PlanningComm@belmont.gov

Subject: Comments - 301 Shoreway EIR Scoping – July 16, 2024 Agenda Item 8

The Sierra Club Loma Prieta Chapter's Sustainable Land Use Committee (SLU) advocates on sustainability and land use issues in San Mateo and Santa Clara Counties. In that role, we have investigated extensively into potential health and environmental impacts associated with life science (biotech lab) facilities. As a result of that, **the Sierra Club requests that the EIR include a detailed analysis of the potential impacts of this proposed biotech development as it relates to both public health impacts as well as environmental impacts.**

Sierra Club is very supportive of the Life Sciences industry and the benefits that it brings to our communities. To educate and raise awareness of the complexities of biohazards and public safety, we have compiled materials for reference of public officials, available at this link: Planning for Life Sciences Development in Bay Area Communities.

A Life Science facility is not your typical office development. It may include offices, but its core is the biotech laboratory which researches a wide array of health issues ranging from the common cold to deadly Coronavirus and Ebola. Therefore, based on the type of research anticipated, they can come with a heightened level of health risk. Life Sciences labs are also one of the more environmentally unsustainable building uses that are being proposed on the Peninsula, entailing intensified water and energy use, waste disposal issues, and animal research concerns.

All Life Sciences labs are required to be rated for their biohazard level. Biosafety levels are standards set for the different levels of contamination, risk, and protective measures needed in laboratories for specific activities. Biosafety levels (BSL) are primarily for the benefit of the workers in laboratories but also raise risk considerations for the general public and the environment. There are 4 biosafety levels; levels 1 and 2 are lower risk and comprise almost all of the biotech research. However, the more esoteric labs researching highly infectious diseases, BSL 3 and 4, involve agents lethal to human life, from Coronavirus and Tuberculosis to Ebola that require very rigorous procedures and specialized high containment buildings.[1]

[1] 98% of biotech research involves BSL 1-2. Only 1 - 2% of all labs worldwide are BSL-3 or 4 labs and there are many more places in the world more suitable for these higher-risk laboratories than in a high population region such as Belmont

Belmont's Safety Element fails to address these new biohazards. San Mateo County Environmental Health staff, similarly report [2] that they have no authority or responsibility for biohazard incidents, except for tracking the Coronavirus. The state hazardous materials data bases, which emergency responders depend upon, do not have a category for these new biological hazards.

Are our emergency responders equipped to address a potential biohazard release resulting from a major earthquake, flooding or power-outage event? Realizing the answer is "NO", cities around Boston, San Carlos and Redwood City have adopted ordinances **banning BSL 3 and 4**. The intent is not to discourage business applicants, but to secure public safety, and to ensure the City and County Emergency Response personnel are aware of and can respond to the presence of approved hazardous materials in buildings in an emergency situation.[3]

Some of the potential environmental impacts of a biotech lab include:

Flooding and Earthquake Liquefaction. This parcel is located adjacent to Belmont Creek and on bay fill, in a high liquefaction zone. The surrounding area has a history of flooding during king-tides, especially when coinciding with storm events, and is subject to earthquake liquefaction. In the event of a fire, flooding, earthquake or any sustained power outage, failure of any one of a number of containment systems could lead to failure of containment systems or release of toxic or deadly pathogens to either the air or water. Any release of toxins adjacent to creeks or lagoons that connect to the bay multiply the public health risk. High-containment labs (BSL3 & 4) and subterranean parking should not be permitted in FEMA flood zones, areas prone to flooding, sea level rise or liquefaction, or in populated urban areas.

Energy Use. Biolabs use 5 - 10 times the amount of energy as other traditional offices in order to operate complex equipment, exhaust and containment systems. Therefore, the added energy use needs to be accounted for in the climate action plan. Unfortunately, they often cannot use rooftop solar panels due to many required tall exhaust systems. Lab research also requires the use of natural gas or other types of tanked flammable gasses, and, if BSL3 or 4 labs are allowed, on-site explosion carries the risk of potential escape of deadly bio-toxins.

Light at night. Lab buildings often operate through the night. Therefore lights are on 24/7. Given the buildings' proximity to Belmont slough, a wildlife habitat area, it is important to shield wildlife from light at night. As mitigation, consider automatic shades that are timed to close after daylight hours so that night foragers are not disturbed in their feeding schedules.

Noise and Odors. Prominent rooftop mechanical equipment critical to required ventilation systems and, if BSL levels are not regulated, to possible hazardous materials containment,

[2] In an interview with the San Mateo County Office of Environmental Health and the Sierra Club Biosafety working group

[3] 98% of biotech research involves BSL 1-2. Only 1 - 2% of all labs worldwide are BSL-3 or 4 labs and there are many more places in the world more suitable for these higher-risk laboratories than in a high population region such as Belmont

generates noise 24/7 and chemical odors are sometimes generated from extensive lab exhaust systems. Mitigation should include target maximum noise levels.

Water Use. If there are "wet" labs, Biolabs use 4 - 5 times more water than other uses, and cannot use recycled water (except for landscaping). The applicant needs to identify anticipated water usage and the City's water budget should be analyzed to include this as well as the other approved lab buildings that are already in the pipeline to see whether additional emergency water supply is required. The impact of lab water usage on water rationing for residential communities nearby should also be examined. The Climate Action Plan needs to be adjusted for the added consumption.

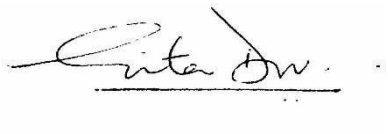
Waste Disposal. Labs generate large amounts of single use plastics that need to be accounted for in the City's Climate Action Plan (CAP) and waste reduction targets, and also non-recyclable biohazard waste which requires specialized disposal measures and transport on public roads.

Animal Research. Will research animals be allowed on site? If this is allowed, Emergency Response teams need to be educated in developing safe emergency procedures for the health and safety of the animals under a disaster scenario.

We therefore recommend that the EIR analysis include, <u>as the preferred option</u>, a plan that would prohibit the inclusion of any BSL-3 or 4 research and/or manufacturing activity in this proposed development and include strong mitigations for sustainability items listed as well as the handling, monitoring and transportation of hazardous waste, especially under disaster conditions.

It is essential that cities examine the potential environmental impacts of biotech labs on the city's public health and safety, environmental sustainability and on its carbon action plan (CAP).

Respectfully submitted,



Gita Dev, FAIA
Chair, Conservation Committee and
Sustainable Land Use Committee
Sierra Club Loma Prieta Chapter

Cc: James Eggers, Executive Director, Sierra Club Loma Prieta Chapter

Jennifer Hetterly, Bay Alive Campaign, Sierra Club Loma Prieta

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June 20, 2024

Chris Dacumos
City of Belmont
One Twin Pines Lane
Suite 310
Belmont CA 94002

Re: 2024060880, 1301 Shoreway Project, San Mateo County

Dear Mr. Dacumos:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.

b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@NAHC.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

cc: State Clearinghouse

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Via Email

June 27, 2024

Chris Dacumos, Contract Planner
Community Development Department
City of Belmont
One Twin Pines Lane, Suite 310
Belmont, CA 94002
cdacumos@goodcityco.com

Jozi Plut, City Clerk
City Clerk's Office
City of Belmont
One Twin Pines Lane, Suite 340
Belmont, CA 94002
cclerk@belmont.gov

Re: CEQA and Land Use Notice Request for the Project known as the 1301 Shoreway Road Project

Dear Mr. Dacumos and Clerk Plut:

I am writing on behalf of the Laborers International Union of North America, Local Union 261 and its members living in the City of Belmont ("LiUNA"), regarding the project known as the 1301 Shoreway Road Project, including all actions related or referring to the proposed development of approximately 542,035 square feet of office development in two buildings, with Building 1 proposed at 8 stories (145 feet) and Building 2 proposed at 7 stories (131 feet), and approximately 1,626 parking spaces to be provided in a nine-level parking garage along with surface parking, located east of US Highway 101 at 1301 Shoreway Road at the northeast intersection of Shoreway Road and Sem Lane, Assessor Parcel Number 040-371-110, in the City of Belmont ("Project").

We hereby request that City of Belmont ("City") send by electronic mail, if possible or U.S. Mail to our firm at the address below notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the City and any of its subdivisions, and/or supported, in whole or in part, through contracts, grants, subsidies, loans or other forms of assistance from the City, including, but not limited to the following:

- Notice of any public hearing in connection with the project as required by California Planning and Zoning Law pursuant to Government Code Section 65091.
- Any and all notices prepared pursuant to the California Environmental Quality Act ("CEQA"), including, but not limited to:
    - Notices of any public hearing held pursuant to CEQA.
    - Notices of determination that an Environmental Impact Report ("EIR") or supplemental EIR is required for the project, prepared pursuant to Public Resources Code Section 21080.4.
    - Notices of any scoping meeting held pursuant to Public Resources Code Section 21083.9.

- Notices of preparation of an EIR or a negative declaration for the project, prepared pursuant to Public Resources Code Section 21092.
- Notices of availability of an EIR or a negative declaration for the project, prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations.
- Notices of approval and/or determination to carry out the project, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of approval or certification of any EIR or negative declaration, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of determination that the project is exempt from CEQA, prepared pursuant to Public Resources Code section 21152 or any other provision of law.
- Notice of any Final EIR prepared pursuant to CEQA.
- Notice of determination, prepared pursuant to Public Resources Code Section 21108 or Section 21152.

Please note that we are requesting notices of CEQA actions and notices of any public hearings to be held under any provision of Title 7 of the California Government Code governing California Planning and Zoning Law. **This request is filed pursuant to Public Resources Code Sections 21092.2 and 21167(f), and Government Code Section 65092**, which requires agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send notice by electronic mail, if possible or U.S. Mail to:

Michael Lozeau
Juliana Lopez
Lozeau Drury LLP
1939 Harrison Street, Ste 150
Oakland, CA 94612
510 836-4200
michael@lozeaudrury.com
juliana@lozeaudrury.com

Please call if you have any questions. Thank you for your attention to this matter.

Sincerely,

Juliana Lopez

Juliana Lopez
Legal Assistant
Lozeau | Drury LLP

From: Rona Gundrum <ronagundrum@yahoo.com>
Sent: Tuesday, July 16, 2024 4:45 PM
To: Planning Comm <PlanningComm@belmont.gov>
Subject: Item 8A - 1301 Shoreway project

Dear Commissioners,

For the past four years I have been compiling a spreadsheet that illustrates life science projects, either currently in development or in the immediate pipeline, along Hwy 101 from Redwood City to South San Francisco; the latest tally equaling @ 32 million square feet.

LIFE SCIENCE DEVELOPMENTS: With over 32 million square feet of life science and R&D space planned in this limited area of focus in San Mateo County, and given the amount of available space on the market, comprised of both newly-built buildings and buildings being vacated such as 530,000 sq ft of currently available life science space in the immediate vicinity of Redwood Shores along Skyway, Shoreway, Industrial and Harbor, one has to question the need for a 6.9 acre, 985,000 sq. ft. development with 112-128' tall buildings.

To further this point, just yesterday (7/15/24), the industry publication "The Registry" reported "Peninsula office market vacancy rates continue to climb, reaching a concerning 22.9%, reflecting ongoing reassessments of office needs… further compounded by the delivery of new office buildings adding to an already oversupplied inventory." "The near-term outlooks for the Peninsula office market appears challenging. Limited demand and increasing vacancy rates are expected to exert further pressure on pricing and property values."

Interestingly, the photo leading into the article showed one of the newly remodeled office/life science buildings on the Redwood Shores lagoon.

LAYOFFS: There are reports of more and more biotech layoffs everyday. Daily Journal 1/16/24: "New highs for San Mateo County biotech layoffs". Life science job losses in the county reach highest levels in nearly a decade. Last year's layoffs were more than triple from the previous year. On 5/13/24 they reported "Biotech sees more job cuts" with several major local firms reducing workforces and facilities and about 30% of all layoffs, or @ 2,260 of job cuts, in 2023 came from life science firms. And, experts "expect more of the same in the next few months as companies continue to battle economic headwinds."

IMPACTS OF THE SHOREWAY PROJECT ON THE COMMUNITY: Belmont and Redwood Shores share the Ralston Hwy 101 exits/entrances, and as such, the additional traffic this project will bring will significantly impact both communities, creating hazardous situations particularly for Redwood Shores as there are only two main routes into and out of the Shores.

Traffic to this development will also come from the south via the Holly Street exit. Traversing the Holly Street exit into the Shores to access the Shoreway frontage road requires cutting across several lanes of the roadway with vehicles traveling east from Holly Street at high rates of speed - an extremely hazardous situation! Try it for yourselves!

The size and scope of this project will also profoundly alter the visual landscape, towering over adjacent commercial properties and blocking views of the hills to the west.

Per the industry publication The Registry, premium, well-appointed office spaces are in demand. *"Premium, well-appointed" newly built or remodeled, does not have to mean massive, hundred plus feet tall buildings.*

In Dec. 2023, The Registry stated that "the life science industry is aware that projects that have been approved might not necessarily ever be completed". Given the uncertainty in the industry and the negative ramifications of this development on the Belmont and Redwood Shores communities, I urge the Commission to reconsider the size and scope of the Shoreway project.

Respectfully,

Rona Gundrum
36 year Redwood Shores resident

From: tomercer@comcast.net <tomercer@comcast.net>
Sent: Thursday, July 25, 2024 11:16 AM
To: cdacumos@goodcity.com
Cc: Carlos de Melo <cdemelo@belmont.gov>
Subject: 1301 Shoreway Project EIR - Scoping comments

City of Belmont, Community Development Department

Attention Contract Planner, Chris Dacumos via email: cdacumos@goodcity.com

CC Planning Director, Carlos DeMelo cdemelo@belmont.gov

Subject: 1301 Shoreway Project EIR

As an impacted resident of Belmont, I respectfully request that the scope and specific detail of the EIR for this project address the following concerns:

• **Aesthetics:** The proposed façade features a high percentage of highly reflective materials aligned largely in a uniformly-facing plane. Evaluate the degree of *reflective glare* radiating from these surfaces and the safety impacts on surrounding properties, pedestrians on the bay trail, wildlife in the adjacent creek and wetlands, and motorists on Shoreway and Highway 101.

The plan provides for a mere 5 feet landscaping buffer along Shoreway and Sem Lane, which is grossly inadequate to include living infrastructure (trees). Evaluate the actual viability of landscaping (e.g. adequate space for tall crowning trees) adequate to mitigate heat, glare, sound and light impacts of these significantly taller and bulkier buildings.

Health professionals increasingly highlight the importance of dark skies at night for public health. Evaluate the total nighttime light emissions (including windows, signage, parking, and aesthetic) compared to the current use. Require implementation light-reduction techniques.

• **Biological Resources:** the population of North American birds has dropped *nearly 30% since 1970 and window strikes is a notable cause.* The site is adjacent to Belmont Slough, home to a large population of native and migratory birds. Evaluate the potential for bird strikes; require use of bird-safe windows and eliminate unnecessary interior lighting.

Added building bulk requires added setback and living green infrastructure to buffer reflective glare, heat, noise and nighttime light impacts to wildlife and humans alike. Evaluate the reflective, glare, heat-island and noise effect on the adjacent bay trail and waterway with regard to both humans and wildlife.

See also Hazards and Hazardous Materials.

• **Energy Use and Conservation:** Biolabs use 5-10 times the amount of energy as other office uses to operate complex exhaust and containment systems Unfortunately, they often cannot use rooftop solar panels due to many required tall exhaust systems. Evaluate energy use (electric and gas) compared to the existing use, and in context of Belmont's Climate Action Plan.

The plan provides for a mere 5 feet landscaping buffer along Shoreway and Sem Lane, which is grossly inadequate to include living infrastructure (trees). Evaluate the adequacy of the site's living urban forest infrastructure in context of mitigation for the increased heat-island and GHG impacts of the greatly increased development.

• **Geology and Soils:** Since this parcel is located on historic bay fill, evaluate the risk of earthquake liquefaction, and the potential risk to building foundations, utilities and site access in the event of a major earthquake (now overdue in geological terms).

• **Greenhouse Gas Emissions:** The three-fold increase in square footage entails significant increase in jobs and site traffic. Added jobs and added vehicle trips increases greenhouse gas emissions What is the net increase in daily trips compared to the existing site use. Evaluate the net GHG increase due to both vehicle trips and on-site energy use in context of Belmont's Climate Action Plan.

• **Hazards and Hazardous Materials:** In the event of a fire, flooding, earthquake or any sustained power outage, failure of any one of a number of biological containment systems could lead to release of toxic or deadly pathogens to either the air or water. Evaluate the risk of failure of any biological containment system on wildlife and public safety.

Evaluate any use of live-animals in research, and the provision of facilities, systems for care and handling, disposal, and safety procedures in the event of fire, prolonged power outage or natural disaster.

Bio research generates large quantities of unrecyclable and potentially hazardous waste requiring specialized storage, handling, treatment and disposal. Evaluate the adequacy of on-site containment and disposal systems as well as any risks associated with transport of these hazardous waste.

Lab research also requires the use of natural gas or other types of tanked flammable gases. Evaluate the associated risks in the event of fire or natural disaster, including risk of release of deadly toxins in event of an explosion.

Evaluate the ability of local emergency agencies to respond to and effectively control a potential hazardous biological release, both from an isolated fire or power-outage and from a regional natural disaster such as a major earthquake.

• **Hydrology and Water Quality:** Since the parcel is located adjacent to Belmont Creek which has a history of flooding during king-tides, especially coinciding with storm events, evaluate the risk on site flooding, and the impact of site-runoff on water quality of adjacent creeks.

Evaluate the risk of release of biological toxins in the event flooding causes a long-term

power outage or impaired site access. Evaluate the potential spread of such toxins into nearby waterways and subsequently the bay, the distance/range such toxins could spread to threaten public health, and the ability of local emergency agencies to control the spread.

• **Land Use, Population and Housing:** The three-fold increase in square footage entails significant increase in jobs. What is the net increase in jobs for the site? What is Belmont's capacity to increase housing stock to meet RHNA standards given this increase in jobs and needed housing (where will these workers live?).

• **Noise and Vibration:** Bio-labs require prominent rooftop mechanical equipment to operate ventilation systems essential for specialized biological containment systems and prevention of chemical odors. Evaluate the noise impacts of mechanical systems on adjacent properties and the wildlife of Belmont Creek and slough.

• **Public Services and Recreation:** Belmont is already underserved in park space, and this project adds jobs and thus residents to Belmont. Evaluate the increased park deficiency in light of added residents, and the degree to which park mitigation fees actually reduce this deficiency.

• **Transportation and Circulation:** Given the added jobs, evaluate the number *and timing* of daily vehicle trips and potential traffic impacts to surrounding intersections, Hwy 101 and Ralston (already at critical mass) compared to the existing site use.

Additionally evaluate the cumulative impact of this project traffic <u>in combination with</u> other pending development projects in East Belmont and on Shoreway Rd. Evaluate the net GHG in context of Belmont's climate action plan.

• **Utilities and Service Systems:** Where there are wet labs, Biolabs use 4-5 times more water than other uses, and cannot use recycled water (except for landscaping). Evaluate the increased water needs over that of the existing use, and the demand impact on the local water supply *in total*, and in context of Belmont's Climate Action Plan.

Labs generate large amounts of single use plastics and non-recyclable biohazard waste which requires specialized disposal measures and in some instances transport on public roads. Evaluate the anticipated non-recyclable and bio-hazard waste volume related to capacity of local disposal facilities, and in context of Belmont's Climate Action Plan.

Please respond with email confirmation of receipt of this request.

Respectfully submitted,

Kristin Mercer

Belmont resident

SIERRA CLUB
LOMA PRIETA CHAPTER

SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

City of Belmont, Community Development Department
One Twin Pines Lane, Suite 310
Belmont, CA 94002
Attention Contract Planner, Chris Dacumos
Via email: cdacumos@goodcity.com

Subject: 1301 Shoreway Project EIR - Scoping comments

The Sierra Club Loma Prieta Chapter's Sustainable Land Use Committee (SLU) advocates on sustainability and land use issues in San Mateo and Santa Clara Counties. In that role, we respectfully request inclusion of the following issues in the scope of the EIR for the project at 1301 Shoreway, Belmont. Life Sciences labs are one of the more unsustainable uses on the peninsula.[1] Given that the City has a Climate Action Plan with measurable goals, mitigation of the environmental impacts takes on greater urgency.

Aesthetics



BSL-4 labs at University of Texas at Galveston

Tall exhaust stacks on rooftops are required for the fume hoods of all levels of biolabs. In addition, if BSL3 and BSL4 labs are included, they require advanced mechanical systems to maintain negative air pressure to contain and safely exhaust highly infectious, often lethal airborne pathogens.

[1] **Connections between laboratory research and climate change: what scientists and policy makers can do to reduce environmental impacts,** The Scientists Forum
"... In 2015, the global pharmaceutical industry had a carbon emission intensity 55% higher than the automotive industry
… Given the immense environmental impact of scientific research, a dramatic shift in how research is conducted and supported is necessary to help combat the global climate crisis … While voluntary programs and individual laboratory initiatives can have significant effects, even greater lasting impact could be achieved through institutional, corporate, and government-level policy changes that incentivize and even require sustainability in laboratory environments.



Exhaust vents similar to Albany Medical Center are currently being installed at the Biotech lab building at 1091 Industrial Road, San Carlos.

This equipment can be required to be screened. However, codes may have several restrictions on obstructions, such as screens, for the high velocity exhausts required.[2] [3]

Evaluate what is needed to make sure that unsightly stacks on the rooftop are completely screened from view.

Air Quality

Exhaust emissions from Biosafety Level (BSL) laboratories can be highly toxic and/or noxious, posing significant health risks ranging from mild irritation to severe illness. BSL-3 "high containment" laboratories rely on advanced mechanical systems to contain and safely exhaust highly infectious, often lethal airborne pathogens. However, these systems are not always fail-safe and are vulnerable to mechanical failure and human error. [4] [5]

---

[2] American Laboratory: These shortcomings can be added to a relatively new concern in many locations, that is, the sight of tall exhaust stacks on a building's roof, which usually imparts negative connotations in a community, in other words, another neighborhood polluter.

[3] Rooftop Exhaust Fans: Environmental considerations,
Tall exhaust stacks …Another consideration when retrofitting or designing new roof exhaust systems includes the aesthetics of stack height. The lowest possible profile not only eliminates the smoke stack look and negative connotations perceived by many people, but may also help conformance to applicable ordinances

[4] American Laboratory: Exhaust discharges from BSL laboratories may be highly toxic (or noxious) or both. Their danger to people covers a broad spectrum, which may be mildly annoying to seriously unhealthy. Also, government agencies are continually setting more stringent standards, with allowable exposure limits dropping lower and lower. Obviously there is no room for tolerance with regard to possible contamination from some agents that are exhausted at BSL Level 3 and 4 facilities. In many cases, even if the fumes are not toxic, public tolerance for odiferous discharges has decreased sharply in recent years.

[5] Rooftop Exhaust Fans: Environmental considerations, Exhaust re-entrainment can also be affected by building location, with regard to adjacent buildings, as well as prevailing wind and weather conditions. As a result, for both renovations and new construction, wind studies have become important with regard to IAQ, since harmful exhaust gasses must not be allowed to re-enter a building or adjacent buildings.

Evaluate impact on air quality.

Biological Resources

The site is adjacent to Belmont Slough, which supports a substantial population of native and migratory birds. The North American avian population has declined by nearly 30% since 1970, with window collisions being a notable contributing factor. It is critical to evaluate the potential for avian collisions and mandate the use of bird-safe windows while reducing unnecessary interior lighting. Increased building mass necessitates additional setbacks and green infrastructure to mitigate glare, heat, and noise impacts on wildlife and humans. The reflective, heat-island, and noise effects on the adjacent bay trail and waterway must be assessed for their impact on both humans and wildlife.

Evaluate how effectively the project is preventing bird strikes, and whether bird-safe and whether bird-friendly design elements are going to be effective in this habitat-adjacent location.

Energy Use and Conservation

Biolabs consume 5 to 10 times more energy than typical office spaces due to their complex exhaust and containment systems, an impact that may be magnified tenfold for clean rooms and other specialized facilities.[6] Rooftop solar panels are often not feasible due to the numerous tall exhaust stacks required. It is essential to evaluate the energy consumption (electricity and gas) relative to current usage and within the framework of Belmont's Climate Action Plan. *Evaluate the energy conserving measures of the project for meeting Climate Action Plan goals[7].*

Geology and Soils

The parcel, situated on bay fill, in a High Liquefaction zone. This presents earthquake-induced liquefaction risk and the potential threat to building foundations, utilities, and site access in the event of a major earthquake.

Evaluate the potential for loss of utilities and services due to seismic events potentially combined with soil liquefaction resulting in loss of soil integrity.

Greenhouse Gas Emissions

[6] Laboratories for the 21st century Unfortunately, a laboratory is also a prodigious consumer of natural resources. For example, laboratories typically consume 5 to 10 times more energy per square foot than do office buildings. And some specialty laboratories, such as clean rooms and labs with large process loads, can consume as much as 100 times the energy of a similarly sized institutional or commercial structure.

[7] The goal should be that R&D projects shall submit a zero-waste management plan to the city, with monitoring requirements, which will cover how the applicant plans to minimize waste to landfill and incineration in accordance with all applicable state and local regulations.

The proposed tripling of square footage will result in a significant increase in the number of jobs and site traffic, leading to higher greenhouse gas emissions. Given this, we need to evaluate the net increase in daily vehicle trips compared to current site usage and assess the overall greenhouse gas emissions from vehicle traffic and deliveries. It is also necessary to evaluate on-site energy consumption within the context of Belmont's Climate Action Plan.

Evaluate the GHG impact of traffic and equipment emissions from labs and the mitigations required to achieve Climate Action Plan goals. What form of emergency generators will be used for the mandatory emergency power supply and what is its GHG contribution?

Hazards and Hazardous Materials

Evaluate the following items:

1. *In the event of fire, flooding, earthquake, or prolonged power outage, failure of biological containment systems could release toxic or lethal pathogens into the air or water. The risk of containment system failure and its impact on wildlife and public safety must be thoroughly evaluated.*
2. *Also include the use of live animals in research and the provision for their care, handling, disposal, and, in particular, procedures for their health and safety during emergencies.*
3. *Biolabs generate significant quantities of single use plastics, non-recyclable and potentially hazardous waste, requiring proper storage, handling, treatment, and disposal. Laboratory plastics account for about 5.5 million tons of waste per year. These can include anything from packaging to syringes to beakers, and they have supplanted many other materials that we used to reuse – sometimes for good reason. Labs are under pressure to decrease their waste because the reality of increasing plastics pollution outweighs their convenience.*[8]
4. *The adequacy of on-site containment and disposal systems, as well as the risks associated with transporting hazardous waste, must be assessed.*
5. *The use of natural gas or other flammable gasses in laboratory research necessitates evaluating associated risks during fires or natural disasters, including the potential release of toxins in explosions.*

Additionally, the capacity of local emergency agencies to manage hazardous biological releases, unlike the normal hospital biological waste, must be assessed.

Hydrology and Water Quality

The parcel is adjacent to Belmont Creek, which has a history of flooding during king tides, particularly during storm events such as early 2023.

There is a risk of on-site flooding. The potential release of biological toxins and potentially deadly impacts on research animals during a flood-induced power outage or impaired site

[8] Single Use Plastics in the Lab, *Climate and Pharma*, September 2020

access must also be assessed, including the spread of toxins into nearby waterways and the bay, their threat to public health, and the ability of local emergency agencies to control exposure.

Evaluate its impact on the water quality of adjacent creeks, and wildlife habitat on Belmont Creek given the above concerns.

Land Use, Population, and Housing

The proposed tripling of square footage will result in a significant increase in employment. It is necessary to determine the net increase in jobs and assess Belmont's capacity to expand housing stock, including the cumulative impact of other commercial projects in the pipeline, considering the rise in employment and subsequent housing demand.

Evaluate the jobs to housing impacts and impact on Belmont RHNA. Also analyze the jobs to housing "fit".

Noise and Vibration

Biolabs require prominent rooftop mechanical equipment for ventilation systems essential for biological containment and odor prevention. These powerful air handling and exhaust systems are much noisier than conventional office equipment. Some of the exhaust stacks for BSL-3 labs can be 30' tall. Noise attenuation is required to meet noise standards.

The noise impact of these mechanical systems on adjacent properties and the wildlife of Belmont Creek and Slough must be thoroughly evaluated and appropriate mitigation proposed.

Transportation and Circulation

The increase in employment necessitates evaluating the number and timing of daily vehicle trips and their impact on surrounding intersections, Highway 101, and Ralston Avenue, which are already heavily congested. What is the proposed Transportation Demand Management plan?

Evaluate the cumulative impact of project traffic combined with other pending developments in East Belmont and on Shoreway Road. The net increase in greenhouse gasses should also be evaluated within the context of Belmont's Climate Action Plan.

Utilities and Service Systems

Biolabs with wet laboratories consume 4 to 5 times more water than other uses and cannot utilize recycled water (except for landscaping). The increased water demand compared to current usage and the impact on the local water supply must be evaluated, considering other approved projects as well. It is essential to determine whether the project will have a water budget and how laboratories will be held accountable for their water usage. The impact on

emergency water supplies must also be assessed. Labs generate significant amounts of single-use plastics and non-recyclable biohazard waste, requiring specialized disposal and transportation. The anticipated volume of non-recyclable and biohazard waste must be assessed concerning the capacity of local disposal facilities and within the context of Belmont's Climate Action Plan. A zero waste management plan, including monitoring requirements, should be provided to the City, detailing how the applicant plans to minimize waste to landfill and incineration per applicable regulations

Therefore

1. *Will R&D labs have a water budget? How will R&D labs be kept accountable for their water usage?*
2. *Should there be a total maximum allowable square footage for biolabs in the DSPU to calculate water requirements?*
3. *How will the water requirements for the project affect the emergency water supply available?*
4. *Will there be a policy that lab water needs will not preempt City residential water needs in drought water rationing? If labs cannot function without water supply, how will the project ensure that residents will not experience water rationing, before labs do, during water shortage periods?*
5. *With water shortages anticipated, the projected water needs of the Life Sciences lab buildings should be carefully evaluated to ensure that water supply will be adequate.*

We therefore recommend that the EIR analysis include as the preferred option, a plan that would prohibit the inclusion of any BSL-3 research and/or manufacturing activity in this proposed development, especially so close to the slough that connects to rich habitat and the Bay itself, and include strong mitigations for the handling and monitoring of hazardous waste in disaster conditions.

It is essential that cities examine the potential environmental impacts of biotech labs on the City's public health and safety, environmental sustainability and on its Climate Action Plan (CAP).

Respectfully submitted,
Gita Dev, FAIA
Conservation Committee, Chair
Sustainable Land Use Committee, Chair
Sierra Club Loma Prieta Chapter

Appendix B

Air Quality and Greenhouse Gas Technical Report & Health Risk Assessment

AIR QUALITY AND GREENHOUSE GAS TECHNICAL REPORT AND HEALTH RISK ASSESSMENT FOR THE 1301 SHOREWAY ROAD PROJECT

PREPARED FOR:

Four Corners Properties
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June 2022



ICF. 2022. *Air Quality and Greenhouse Gas Technical Report and Health Risk Assessment for the 1301 Shoreway Road Project*. June.
(ICF 104476.0.001.01) San Mateo County, CA. Prepared for Four Corners Properties.

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Acronyms and Abbreviations

ABAG	Association of Bay Area Governments
AQP	Air Quality Plan
AQTR	Air Quality and Greenhouse Gas Technical Report
BAAQMD	Bay Area Air Quality Management District
Belmont CAP	City of Belmont 2017 Climate Action Plan
BMPs	best management practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Clean Air Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
City	City of Belmont
CMP	Congestion Management Program
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
DPM	diesel particulate matter
EMFAC2017	Emissions Factors 2017
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
HI	hazard index
HRC	Heat Recovery Chillers
LOS	level of service
kWh	kilowatt-hour
MEIR	maximally exposed individual resident
MSM	Mobile Source Measure
MW	megawatt
NO_x	nitrogen oxide
OEHHA	Office of Environmental Health Hazard Assessment
PG&E	Pacific Gas & Electric
PM2.5	particulate matter 2.5 microns or less in diameter
PM10	particulate matter 10 microns or less in diameter
PV	photovoltaic
ROG	reactive organic gas
RPS	Renewable Portfolio Standard
sf	square feet
SFBAAB	San Francisco Bay Area Air Basin
TAC	toxic air contaminant
TCM	Transportation Control Measure
VMT	vehicle miles traveled

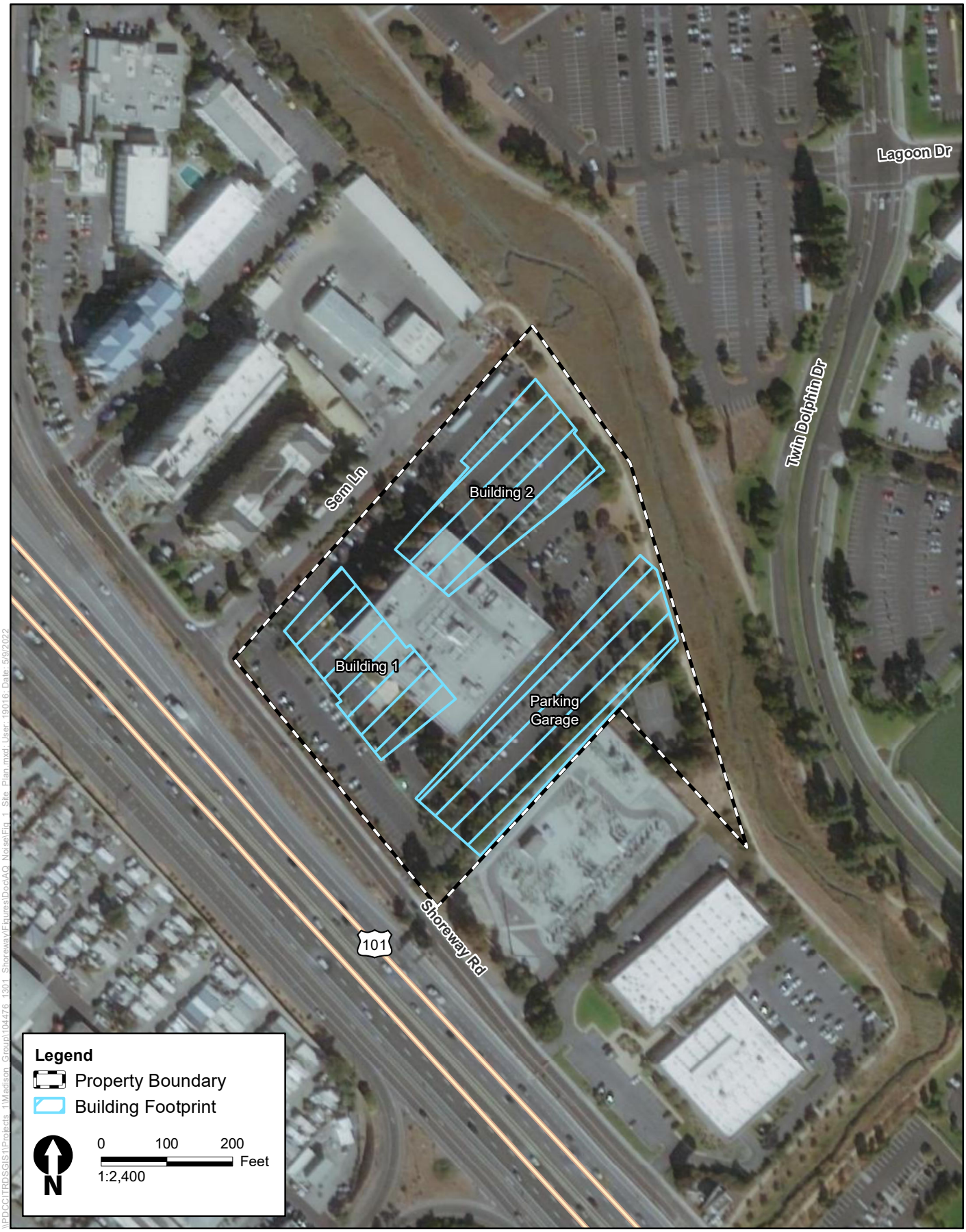
Chapter 1
Introduction

The purpose of this Air Quality and Greenhouse Gas (GHG) Technical Report and Health Risk Assessment (Air Quality Technical Report) is to identify air quality and GHG impacts, as well as health risks that may be associated with the 1301 Shoreway Road Project (proposed project). The analysis provided in this report evaluates the potential for construction and operation of the proposed project to result in significant impacts on air quality and GHG emissions and the potential for health risks. The report includes a description of the environmental setting for the proposed project, including existing conditions and applicable laws and regulations. It also documents the assumptions, methodologies, and findings used to evaluate air quality and GHG impacts. The project is subject to environmental review pursuant to the California Environmental Quality Act (CEQA). It is anticipated that the City of Belmont, the lead agency for the project, will use this technical report to inform the proposed project's CEQA analysis.

Project Overview

The proposed project is located at 1301 Shoreway Road in Belmont, California (project site), see Figure 1. The approximate 6.9-acre (301,130-square-feet) project site is bounded by existing commercial and industrial buildings to the north and south, with Shoreway Road to the west and Twin Dolphin Drive to the east, see Figure 2. The assessor's parcel number for the project site is 040-371-110.

The existing project site includes surface parking lots, a basketball court, and one four-story commercial/educational building. The proposed project would demolish all existing on-site uses totaling approximately 148,919-square feet and construct an eight -story, 240,000-square-foot building (Building 1); a seven-story 305,000-square-foot building (Building 2); and a 469,000-square-foot parking garage with nine levels above grade. The total building footprint would be approximately 1,014,000 gross square feet. The parking garage and surface parking lots would provide approximately 1,626 parking stalls. No subterranean parking is proposed. Project construction would consist of six main categories of construction activities, beginning in 2024 and ending in summer 2026. The project would include one 0.5-megawatt (MW) emergency generator and four 1.25- MW emergency generators with diesel particulate filters and up to 1,200 employees working on-site. Two emergency generators would be located at the southern façade of Building 1 (between Building 1 and the proposed parking garage), while two other emergency generators would be in the northern corner of the project site, between Building 2 and Sem Lane. The fifth emergency generator would be between the proposed parking garage and US-101. Onsite uses after project construction would include a combination of office and research & development (R&D), consistent with the Regional Commercial land use designation and zoning district. The proposed buildings would include Type I Chemistry and Chemical Engineering and Type II General Biological Sciences laboratory ("laboratory" or "labs") uses. The Type I and Type II laboratory uses are anticipated to be a source of emissions from chemical or biological processes that generate fugitive off-gassing emissions of certain pollutants. It was conservatively assumed in this analysis that 50 percent of Building 1 and 50 percent of Building 2, or approximately 272,500 square feet, would be dedicated to Type I/II laboratory uses. Figure 1 shows the proposed site plan for the project.



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Figure 1
Proposed Site Plan

ICF prepared this air quality and GHG technical report (AQTR) and Health Risk Assessment (HRA) at the request of Four Corners Properties. The AQTR documents air quality and GHG analyses of construction and operational activities for the 1301 Shoreway Road Project, located at 1301 Shoreway Road, Belmont, California. The analyses follow the most recent version of the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2017).[1] The HRA analyzes the pollutant concentrations and health risks associated with construction and operational activities of the proposed project and follows the most recent guidance from BAAQMD and the California Office of Environmental Health Hazard Assessment (OEHHA).

Climate and Meteorology

While the primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted from those sources, meteorological conditions and topography are also important factors. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. Unique geographic features throughout the state define fifteen air basins with distinctive regional climates. The air quality study area for the proposed project is located on the San Francisco Peninsula in the San Francisco Bay Area Air Basin (SFBAAB).

The peninsula region of the San Francisco Bay Area (Bay Area) extends from the area northwest of San José to the Golden Gate. The Santa Cruz Mountains, part of the Pacific Coast Ranges, extend up the center of the peninsula, with elevations exceeding 2,000 feet at the south end, and gradually decreasing to 500 feet elevation in South San Francisco, where the mountain range terminates. On the west side of the mountains lie small coastal towns, such as Half Moon Bay and Pacifica, that due to coastal ocean upwelling and northwest winds, experience a high incidence of cool, foggy weather in the summer. On the east side of the mountain range lie the larger cities. Cities in the southeastern peninsula experience warmer temperatures and few foggy days because the marine layer, with an average depth of 1,700 feet, is blocked by the 2,000-foot ridge to the west. At the north end of the peninsula lies San Francisco. Because most of the topography of San Francisco is below 200 feet, the marine layer is able to flow across most of the city, making its climate cool and windy.

The blocking effect of the Santa Cruz Mountains can be seen in the summertime maximum temperatures. For example, at Half Moon Bay and San Francisco, the average maximum daily summertime temperatures are in the mid-60 degrees Fahrenheit (°F), while on the eastern side near the City of Belmont, maximum temperatures are in the low 80°F for the same period. Daily maximum temperatures throughout the peninsula during the winter months are in the high 50°F. Large temperature gradients are not seen in the minimum temperatures. Average minimum temperatures at Half Moon Bay are about 43°F in winter, and 50 to 52°F in summer. The east peninsula, near the City of Belmont, reports winter minimum temperatures of 40°F, and summer minimum temperatures of 52 to 54°F.

Annual average wind speeds range from 5 to 10 miles per hour (mph) throughout the peninsula. The tendency is for the higher wind speeds to be found along the western coast. However, winds on the east side of the peninsula can also be high in certain areas because low-lying areas in the

[1] Bay Area Air Quality Management District. n.d. *California Environmental Quality Act Air Quality Guidelines.* Available: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: May 2022.

mountain range, at San Bruno Gap and Crystal Springs Gap, commonly allow the marine layer to pass across the peninsula.

The prevailing winds are westerly along the peninsula's west coast; however, individual sites can show significant differences. For example, Fort Funston in western San Francisco County shows a southwest wind pattern, while Pillar Point in San Mateo County to the south shows a northwest wind pattern. Sites on the east side of the mountains also show a westerly pattern, although their wind patterns show influence by local topographic features. That is, a few hundred feet rise in elevation will induce flow around that feature instead of over it during stable atmospheric conditions. This can change the wind pattern by as much as 90 degrees over short distances. On mornings without a strong pressure gradient, areas on the east side of the peninsula often experience eastern flow in the surface layer, induced by upslope flow on the east-facing slopes and by the bay breeze. The bay breeze is rarely seen after noon because the stronger sea breeze dominates the flow pattern.

On the peninsula, there are two important gaps in the Santa Cruz Mountains. The larger of the two is the San Bruno Gap, extending from Fort Funston on the ocean side to the San Francisco International Airport on the bay side. Because the gap is oriented in the same northwest to southeast direction as the prevailing winds, and because the elevations along the gap are under 200 feet, marine air is easily able to penetrate into the bay.

The other gap in the Santa Cruz Mountains is the Crystal Springs Gap, along Highway 92 between Half Moon Bay and San Carlos. The low point is 900 feet, with elevations of 1,500 feet north and south of the gap. As the sea breeze strengthens on summer afternoons, the gap permits maritime air to pass across the mountains and its cooling effect is commonly seen from San Mateo to Redwood City.

Rainfall amounts on the east side of the peninsula are somewhat lower than on the west side, with San Francisco and Redwood City reporting an average of 19.5 inches per year. On the west side, Half Moon Bay reports 25 inches per year. Areas in the Santa Cruz Mountains are significantly higher, especially west of the ridge line, due to orographic-lifting induced condensation, close proximity to a moisture source, and fog drip.

Air pollution potential is highest along the southeastern portion of the peninsula because this area is most protected from the high winds and fog of the marine layer, the emissions density is relatively high, and pollutant transport from upwind sites is possible. In San Francisco, to the north, pollutant emissions are high, but winds are generally fast enough to carry the pollutants away before they can accumulate.

Chapter 2
Criteria and Other Air Pollutants of Concern

The primary criteria pollutants of concern that could be generated by the project are ozone precursors (reactive organic gas [ROG] and nitrogen oxide [NO_X]), carbon monoxide (CO), and particulate matter. The principal characteristics and possible health and environmental effects from project-generated exposure to primary criteria pollutants are discussed below.

Ozone

Ozone, or smog, is a photochemical oxidant that is formed when ROG and NO_X (both by-products of the internal combustion engine) react with sunlight. ROGs are compounds made up primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROG are emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2).

NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen. In addition to serving as an integral participant in ozone formation, NO_X also directly acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

Ozone poses a higher risk for those who already suffer from respiratory diseases (e.g., asthma), children, older adults, and people who are active in outdoor environments. Exposure to ozone at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggravate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease. Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest that long-term exposure to ozone may increase the risk of respiratory-related deaths.[2] The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion.[3]

In addition to human health effects, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone can also act as a

[2] U.S. Environmental Protection Agency. 2019. *Health Effects of Ozone Pollution*. Available: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed: March 28, 2022.
[3] U.S. Environmental Protection Agency. 2019. *Health Effects of in the General Population*. Available: https://www.epa.gov/ozone-pollution-and-your-patients-health/health-effects-ozone-general-population. Accessed: March 28, 2022.

corrosive and oxidant, resulting in property damage and the degradation of rubber products and other materials.

Carbon Monoxide

CO is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. In the study area, high CO levels are of greatest concern during the winter when periods of light winds combine with the formation of ground-level temperature inversions from evening through early morning. These conditions trap pollutants near the ground, reducing the dispersion of vehicle emissions. Moreover, motor vehicles exhibit increased CO emissions rates at low air temperatures. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects related to ambient CO.[4]

Particulate Matter

Particulate matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of particulates are considered in this analyses: inhalable coarse particles (PM10) and inhalable fine particles (PM2.5). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading. Particulate pollution can be transported over long distances and adversely affect humans, especially people who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked particulate matter exposure to premature death in people with pre-existing heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Depending on its composition, both PM10 and PM2.5 can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain.[5]

Toxic Air Contaminants

Although ambient air quality standards have been established for criteria pollutants, no ambient standards exist for toxic air contaminants (TACs). Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, the California Air Resources Board (CARB) has consistently found that there are no levels or thresholds below which exposure is risk-free. Individual TACs vary greatly in the risks they present. At a given level of exposure, one TAC may

[4] California Air Resources Board. 2019. *What Is Carbon Monoxide?* Available: https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed: March 28, 2022.

[5] U.S. Environmental Protection Agency. 2019. *Health and Environmental Effects of Particulate Matter*. Available: https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm. Accessed: March 28, 2022.

pose a hazard that is many times greater than another. TACs are identified and their toxicity is studied by the OEHHA.

Diesel Particulate Matter

Diesel particulate matter (DPM) is generated by diesel-fueled equipment and vehicles. Within the Bay Area, BAAQMD has found that of all controlled TACs, emissions of DPM are responsible for about 82 percent of the total ambient cancer risk.[6] Short-term exposure to DPM can cause acute irritation (e.g., eye, throat, and bronchial), neurophysiological symptoms (e.g., lightheadedness and nausea), and respiratory symptoms (e.g., cough and phlegm). The U.S. Environmental Protect Agency (EPA) has determined that diesel exhaust is "likely to be carcinogenic to humans by inhalation."[7]

Type I/II Laboratory Toxic Air Contaminants

According to the Health Risk Assessment conducted for the University of California, Davis 2017 Long Range Development Planby York Engineering (UC Davis HRA),[8] Type I Chemistry and Chemical Engineering and Type II General Biological Sciences laboratories are known to emit a variety of TAC emissions. These TAC emissions would occur from the usage of different solvents, preservatives, acids, and other chemicals typically found in a laboratory setting. Table 1 highlights the various TACs that would be emitted from the proposed project's Type I/II laboratory uses. Additionally, Table 1 includes the CARB and OEHHA risk assessment health values that were used in the UC Davis HRA.

Table 1. Type I/II Chemistry and Chemical Engineering/General Biological Sciences Laboratory Toxic Air Contaminant Pollutants

Pollutant	Pollutant Name	Chemical Abstracts Service[a]	Inhalation Cancer Slope Factor[b]	Acute Reference Exposure Level[c]	Inhalation Chronic Reference Exposure Level[d]
Benzene	Benzene	71,432	0.1	27	3
Carbon tetrachloride	CCl4	56,235	0.15	1,900	40
Chloroform	Chloroform	67,663	0.019	150	300
1,4-Dioxane	1,4-Dioxane	123,911	0.027	3,000	3,000
Formaldehyde	Formaldehyde	50,000	0.021	55	9
n-Hexane	Hexane	110,543	-	-	7,000
Hydrochloric acid	HCl	7,647,010	-	2,100	3

[6] Bay Area Air Quality Management District. 2017a. *Final 2017 Clean Air Plan.* Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: March 28, 2022.

[7] U.S. Environmental Protection Agency. 2003. *Diesel Engine Exhaust; CASRN N.A.* February 28. Available: https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0642_summary.pdf#nameddest=woe. Accessed: March 28, 2022.

[8] Yorke Engineering. Health Risk Assessment for the University of California, Davis 2017 Long Range Development Plan. https://ucdavis.app.box.com/s/uc2zwm2hmfgou618dme9wt04bqkal6qk. Accessed: March 28, 2022.

Pollutant	Pollutant Name	Chemical Abstracts Service[a]	Inhalation Cancer Slope Factor[b]	Acute Reference Exposure Level[c]	Inhalation Chronic Reference Exposure Level[d]
Isopropanol	Isopropyl Alcohol	67,630	-	3200	7000
Methanol	Methanol	67,561	-	28000	4000
Methylene Chloride	Methylene Chloride	75,092	0.0035	14000	400
Toluene	Toluene	108,883	-	5000	420
Xylenes	Xylenes	1,330,207	-	22000	700
Dimethylformamide	DMF	68,122	-	-	80
Trichloroethylene	TCE	79,016	0.007	-	600
Hydrazine	Hydrazine	302,012	17	-	0.2
Tetrachloroethylene	Perc	127,184	0.021	20000	35
Glutaraldehyde	Glutaraldehyde	111,308	-	-	0.08
Triethylamine	Triethylamine	121,448	-	2800	200
Hydrogen Fluoride	HF	7,664,393	-	240	14
Methyl Bromide	Methyl Bromide	74,839	-	3900	5
Acrylamide	Acrylamide	79,061	4.5	-	-
Ethylene Dichloride	EDC	107,062	0.072	-	400

Sources:
York. 2018. Health Risk Assessment for the University of California, Davis 2017 Long Range Development Plan.
CARB. 2020. Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values. October 2. Available: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable.pdf.

[a] The Chemical Abstracts Service is a unique number to identify each pollutant.

[b] The Inhalation Cancer Slope factor is a characteristic of each pollutant that quantifies the potential for the pollutant to cause cancer.

[c] The Acute Reference Exposure Level is a characteristic of each pollutant that quantifies the amount of exposure that is not likely to cause adverse health effects in a human population that is exposed to concentration at or below that level on an intermittent basis.[9]

[d] The Inhalation Chronic Reference Exposure Level is a characteristic of each pollutant that quantifies the amount of long-term exposure that is not likely to cause adverse health effects in a human population that is exposed to concentrations at or below that level.[10]

Asbestos

Asbestos is the name given to several naturally occurring fibrous silicate minerals. Before the adverse health effects of asbestos were identified, asbestos was widely used as insulation and fireproofing in buildings, and it can still be found in some older buildings. It is also found in its natural state in rock or soil. The inhalation of asbestos fibers into the lungs can result in a variety of adverse health effects, including inflammation of the lungs, respiratory ailments (e.g., asbestosis,

[9] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.* February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: April 15, 2021.

[10] Ibid.

which is scarring of lung tissue that results in constricted breathing), and cancer (e.g., lung cancer and mesothelioma, which is cancer of the linings of the lungs and abdomen).

Odors

Offensive odors can be unpleasant and lead to citizen complaints to local governments and air districts. According to the CARB's Air Quality and Land Use Handbook,[11] land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, manufacturing, and agricultural activities. CARB provides recommended screening distances for siting new receptors near existing odor sources.

[11] California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April. Available: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed: March 29, 2022.

Chapter 3
Existing Air Quality Conditions

Local Criteria Pollutant Monitoring Data

A number of ambient air quality monitoring stations are located in the SFBAAB to monitor progress toward air quality standards attainment of National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). There are no monitoring stations in the City of Belmont, but there is one monitoring station south in Redwood City at 897 Barron Avenue. Recent air quality monitoring results from the Redwood City monitoring station are summarized in Table 2. The data represent air quality monitoring for the last 3 years for which a complete dataset is available (2018–2020). As indicated in Table 2, the Redwood City monitoring station has experienced infrequent violations of state and federal air quality standards during this time period.

Table 2. Ambient Air Quality Monitoring Data From Redwood City Monitoring Station

Pollutant Standards	2018	2019	2020
Ozone (O_3)			
Maximum 1-hour concentration (ppm)	0.067	0.083	0.098
Maximum 8-hour concentration (ppm)	0.049	0.077	0.077
Number of days standard exceeded[b]			
CAAQS 1-hour (>0.09 ppm)	0	0	1
CAAQS 8-hour (>0.070 ppm)	0	2	1
NAAQS 8-hour (>0.075 ppm)	0	1	1
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	1.7	1.1	1.5
Maximum 1-hour concentration (ppm)	2.5	2	2.1
Number of days standard exceeded[b]			
NAAQS 8-hour (>9 ppm)	0	0	0
CAAQS 8-hour (>9.0 ppm)	0	0	0
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
State maximum 1-hour concentration (ppb)	77	54	45
State second-highest 1-hour concentration (ppb)	73	51	44

Pollutant Standards	2018	2019	2020
Annual average concentration (ppb)	10	9	8
Number of days standard exceeded[b]			
CAAQS 1-hour (180 ppb)	0	0	0
Particulate Matter (PM10)[a]			
National maximum 24-hour concentration (µg/m^3)	115.4	75.4	134.9
National second-highest 24-hour concentration µg/m^3)	111.6	53.6	91.0
State maximum 24-hour concentration µg/m^3)	121.8	77.1	137.1
State second-highest 24-hour concentration µg/m^3)	118.5	56.0	90.8
National annual average concentration µg/m^3)	20.9	18.4	24.1
State annual average concentration (µg/m^3)	23.1	19.1	24.8
Number of days standard exceeded[b]			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)	4	4	10
Particulate Matter (PM2.5)			
National maximum 24-hour concentration (µg/m^3)	120.9	29.5	124.1
National second-highest 24-hour concentration (µg/m^3)	118.1	24.7	116.0
State maximum 24-hour concentration (µg/m^3)	120.9	29.5	124.1
State second-highest 24-hour concentration (µg/m^3)	118.1	24.7	116.0
National annual average concentration (µg/m^3)	10.5	7.0	9.8
State annual average concentration (µg/m^3)	10.6	*	9.8
Number of days standard exceeded[b]			
NAAQS 24-hour (>35 µg/m^3)	13	0	9

Source: California Air Resources Board 2021; U.S. Environmental Protection Agency 2021.

[a] Data for Particulate Matter (PM10) was unavailable from the Redwood City Monitoring Station or anywhere else in San Mateo County, so data is taken from the San Jose – Jackson Street Monitoring Station in Santa Clara County.

[b] An exceedance is not necessarily a violation.

ppm = parts per million; NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; µg/m3 = micrograms per cubic meter; mg/m3 = milligrams per cubic meter; - = data not available.

Attainment Status

Local monitoring data, included in Table 3, are used to designate areas as nonattainment, maintenance, attainment, or unclassified for NAAQS and CAAQS. The four designations are further defined as follows:

- Nonattainment. Assigned to areas where monitored pollutant concentrations violate the standard in question.
- Maintenance. Assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.
- Attainment. Assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.
- Unclassified. Assigned to areas where data are insufficient to determine whether a pollutant is violating the standard in question.

Table 3 summarizes the attainment status for San Mateo County with regard to NAAQS and CAAQS. For ozone and PM2.5, the county is in nonattainment for the federal standards, while, for PM10, the county is in nonattainment for the state standard only.

Table 3. Federal and State Attainment Status for San Mateo County

Criteria Pollutant	Federal Designation	State Designation
Ozone (O_3) (8-hour)	Marginal[a] Nonattainment	Nonattainment
CO	Attainment	Attainment
PM10	Attainment	Nonattainment
PM2.5	Moderate[b] Nonattainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No Federal Standard)	Attainment
Hydrogen Sulfide	(No Federal Standard)	Unclassified
Visibility	(No Federal Standard)	Unclassified

Source: California Air Resources Board 2021; U.S. Environmental Protection Agency 2021b.

[a] Marginal nonattainment areas have a design value of 0.076 up to but not including 0.086 ppm.

[b] Moderate maintenance areas have a design value of less than or equal to 12.7 ppm.

CO = carbon monoxide; PM10 = particulate matter with a diameter of less than or equal to 10 microns; PM2.5 = particulate matter with a diameter of less than or equal to 2.5 microns; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide.

Sensitive Receptors

The NAAQS and CAAQS apply at publicly accessible areas, regardless of whether those areas are populated. For the purposes of air quality analysis, sensitive land uses are defined as locations where human populations, especially children, seniors, and sick persons, are located and where there is reasonable expectation of continuous human exposure according to the averaging period for the air quality standards (e.g., 24-hour, 8-hour, and 1-hour). Typical sensitive receptors include

residences, hospitals, and schools. Diverse land uses and numerous sensitive receptors are distributed throughout the city, including residential uses, schools, parks, and open space.

Currently, land uses in the immediate vicinity of the project site consists of commercial industrial uses and does not contain any sensitive receptors. Places of employment (e.g., at industrial uses) are not considered sensitive land uses because health-sensitive individuals (e.g., children and seniors) are not present. However, there are sensitive receptors, including residential uses, within 1,000 feet of the project site. The nearest sensitive receptor is located 300 feet from the project site. Residential uses are located southwest of the project site, across U.S. 101. Figure 2 illustrates sensitive receptors within 1,000 feet of the project site.



Figure 2
Sensitive Receptors in the Vicinity of the Project Site

Chapter 4
Greenhouse Gases of Concern

The principle anthropogenic (human-made) GHGs contributing to global warming are CO_2, methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds, including sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic sources.

The primary GHGs of concern associated with the project are CO_2, CH_4, and N_2O. Principal characteristics of these pollutants are discussed below.

- Carbon Dioxide. CO_2 enters the atmosphere through fossil fuels (oil, natural gas, and coal) combustion, solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., manufacture of cement). CO_2 is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- Methane. CH_4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide. N_2O is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method to compare GHG emissions is the global warming potential (GWP) methodology defined in the Intergovernmental Panel on Climate Change (IPCC) reference documents. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO_2e), which compares the gas in question to that of the same mass of CO_2 (CO_2 has a global warming potential of 1 by definition).[12]

[12] Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis. Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miller (eds.). Available: http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed: April 5, 2022.

Chapter 5
Regulatory Setting

This section provides a summary of the regulatory setting at the federal, state, and regional and local levels that are applicable to the proposed project.

Air Quality

The federal Clean Air Act (CAA) and its subsequent amendments form the basis for the nation's air pollution control effort. EPA is responsible for implementing most aspects of the CAA. A key element of the CAA is the NAAQS for criteria pollutants. The CAA delegates enforcement of the NAAQS to the states. In California, CARB is responsible for enforcing air pollution regulations and ensuring the NAAQS and CAAQS are met. CARB, in turn, delegates regulatory authority for stationary sources and other air quality management responsibilities to local air agencies. BAAQMD is the local air agency for the project site. The following sections provide more detailed information on federal, state, and local air quality regulations that apply to the proposed project.

Federal

Clean Air Act and National Ambient Air Quality Standards

The CAA was first enacted in 1963 and has been amended in 1965, 1967, 1970, 1977, and 1990. The CAA establishes federal air quality standards, known as NAAQS, which are set to be protective of human health, for six criteria pollutants and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The SIP must include pollution control measures that demonstrate how the standards will be met.

The 1990 CAA amendments identify specific emissions-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. Table 4 shows the NAAQS currently in effect for each criteria pollutant, as well as the CAAQS (discussed further below).

Non-road Diesel Rule

EPA has established a series of increasingly strict emissions standards for new off-road diesel equipment, on-road diesel trucks, and locomotives. New equipment, including heavy-duty trucks and off-road construction, is required to comply with these emissions standards.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy Standards (CAFE) were first enacted in 1975 to improve the average fuel economy of cars and light duty trucks. The National Highway Traffic Safety Administration (NHTSA) sets the CAFE standards, which are regularly updated to require additional improvements in fuel economy. The standards were last updated in October 2012 to apply to new

passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2017 through 2025, and are equivalent to 54.5 miles per gallon.

Table 4. Federal and State Ambient Air Quality Standards

Criteria Pollutant	Average Time	California Standards	National Standards[a]	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	None[b]	None[b]
	8–hour	0.070 ppm	0.070 ppm	0.070 ppm
CO	8-hour	9.0 ppm	9 ppm	None
	1-hour	20 ppm	35 ppm	None
PM10	24-hour	50 µg/m3	150 µg/m3	150 µg/m3
	Annual mean	20 µg/m3	None	None
PM2.5	24-hour	None	35 µg/m3	35 µg/m3
	Annual mean	12 µg/m3	12.0 µg/m3	15 µg/m3
NO_2	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	None
SO_2[c]	Annual mean	None	0.030 ppm	None
	24-hour	0.04 ppm	0.14 ppm	None
	3-hour	None	None	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	None
Lead	30-day average	1.5 µg/m3	None	None
	Calendar quarter	None	1.5 µg/m3	1.5 µg/m3
	3-month average	None	0.15 µg/m3	0.15 µg/m3
Sulfates	24-hour	25 µg/m3	None	None
Visibility-reducing particles	8-hour	-[d]	None	None
Hydrogen sulfide	1-hour	0.03 ppm	None	None
Vinyl chloride	24-hour	0.01 ppm	None	None

Source: California Air Resources Board. 2016. Ambient Air Quality Standards. May 4. Available: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed: October 29, 2021.

[a] National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

[b] The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced because it was employed for such a long period and is a benchmark for SIPs.

[c] The annual and 24-hour NAAQS for SO2 only apply for 1 year after designation of the new 1-hour standard to those areas that were previously in nonattainment for 24-hour and annual NAAQS.

[d] CAAQSs for visibility-reducing particles is defined by an extinction coefficient of 0.23 per kilometer, which is visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.

ppm = parts per million; µg/m3 = micrograms per cubic meter; mg/m3 = milligrams per cubic meter.

However, On August 2, 2018, NHTSA and EPA proposed to amend the fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current model year 2020 standards through 2026 per the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. On September 19, 2019, EPA and NHTSA issued a final action on the One National Program Rule, which is considered Part 1 of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables

EPA/NHTSA to provide nationwide uniform fuel economy and GHG vehicle standards, specifically by 1) clarifying that federal law preempts state and local tailpipe GHG standards, 2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and 3) withdrawing California's CAA preemption waiver to set state-specific standards.

EPA and NHTSA published their decisions to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019, per Title 84 of the Federal Register Section 51310. The agencies also announced that they will later publish the second part of the SAFE Vehicles Rule (i.e., the standards). California, 22 other states, the District of Columbia, and two cities filed suit against the proposed One National Program Rule on September 20, 2019.[13] The lawsuit requests a "permanent injunction prohibiting Defendants from implementing or relying on the Preemption Regulation," but does not stay its implementation during legal deliberations. Part 1 of the SAFE Vehicles Rule went into effect on November 26, 2019, and Part 2 went into effect on March 30, 2020. The revised rule changes the national fuel economy standards for light-duty vehicles from 46.7 miles per gallon (mpg) to 40.4 mpg in future years. California, 22 other states, and the District of Columbia filed a petition for review of the final rule on May 27, 2020.[14]

On April 22, 2021, NHTSA announced that it proposes to repeal the SAFE Vehicles Rule, Part One, allowing California the right to set its own standards.[15] On December 12, 2021, NHTSA repealed the SAFE Vehicles Rule, Part One. On December 19, 2021, NTSA finalized its vehicle efficiency standards rule to reach a projected industry-wide target of 40 miles per gallon by 2026, an approximately 25 percent increase over the prior SAFE rule. Lastly, on March 9, 2022, the EPA reinstated California's authority under the CAA to implement its own GHG emission standards and zero emission vehicles (ZEV) sales mandate. This action concludes the EPA reconsideration of 2019's SAFE Vehicles Rule, Part One by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded. [16]

State

California Clean Air Act and California Ambient Air Quality Standards

In 1988, the California State Legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program. The CCAA requires all air districts in the state to endeavor to meet the CAAQS by the earliest practical date. Unlike the CAA, the CCAA does not set precise attainment deadlines. Instead, the CCAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards. CAAQS are generally more stringent than NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. The CAAQS and NAAQS are shown in Table 4, above.

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[13] C*alifornia et al. v. United States Department of Transportation et al.,* 1:19-cv-02826, U.S. District Court for the District of Columbia.

[14] *California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia.

[15] U.S. Department of Transportation, National Highway Transportation Safety Administration. 2021. *Corporate Average Fuel Economy Preemption.* Available: https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/cafe_preemption_nprm_04222021_1.pdf. Accessed: July 1, 2021.

[16] U.S. Environmental Protection Agency. 2022. *EPA Restores California's authority to Enforce Greenhouse Gas Emission Standards for Cars and Light Trucks*. March 9. Available: https://www.epa.gov/newsreleases/epa-restores-californias-authority-enforce-greenhouse-gas-emission-standards-cars-and. Accessed: March 2022.

CARB and local air districts bear responsibility for meeting the CAAQS, which are to be achieved through district-level air quality management plans incorporated into a SIP. In California, EPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB traditionally has established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emissions inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The CCAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution.

Statewide Truck and Bus Regulation

Originally adopted in 2005, the on-road truck and bus regulation requires heavy trucks to be retrofitted with PM filters. The regulation applies to privately and federally owned diesel-fueled trucks with a gross vehicle weight rating greater than 14,000 pounds. Compliance with the regulation can be reached through one of two paths: (1) vehicle retrofits according to engine year, or (2) phase-in schedule. Compliance paths ensure that by January 2023, nearly all trucks and buses will have 2010 model year engines or newer.

State Tailpipe Emissions Standards

Like EPA at the federal level, CARB has established a series of increasingly strict emissions standards for new off-road diesel equipment and on-road diesel trucks operating in California. New equipment used to construct the proposed project would be required to comply with the standards.

Carl Moyer Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a voluntary program that offers grants to owners of heavy-duty vehicles and equipment. The program is a partnership between CARB and the local air districts throughout the state to reduce air pollution emissions from heavy-duty engines. Locally, the air districts administer the Carl Moyer Program.

Toxic Air Contaminant Regulation

California regulates TACs primarily through the Toxic Air Contaminant Identification and Control Act (Tanner Act) and the Air Toxics "Hot Spots" Information and Assessment Act of 1987 ("Hot Spots" Act). In the early 1980s, CARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Tanner Act created California's program to reduce exposure to air toxics. The "Hot Spots" Act supplements the Tanner Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

CARB has identified DPM as a TAC and has approved a comprehensive Diesel Risk Reduction Plan to reduce emissions from both new and existing diesel-fueled engines and vehicles.[17] The goal of the plan is to reduce DPM emissions and the associated health risk by 75 percent by 2010 and by 85 percent by 2020. The plan identifies 14 measures that CARB will implement over the next several years. The proposed project would be required to comply with any applicable diesel control measures from the Diesel Risk Reduction Plan.

Regional

Bay Area Air Quality Management District

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents required by CEQA. The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

The proposed project falls under the jurisdiction of BAAQMD. BAAQMD has local air quality jurisdiction over projects in the SFBAAB including San Mateo County. BAAQMD developed advisory emissions thresholds to assist CEQA lead agencies in determining the level of significance of a project's emissions, which are outlined in its California Environmental Quality Act Air Quality Guidelines (CEQA Guidelines).[18] BAAQMD has also adopted air quality plans to improve air quality, protect public health, and protect the climate, including the 2017 Clean Air Plan: Spare the Air, Cool the Climate.[19]

The 2017 Clean Air Plan was adopted by BAAQMD on April 19, 2017. The 2017 Clean Air Plan updates the prior 2010 Bay Area ozone plan and outlines feasible measures to reduce ozone; provides a control strategy to reduce particulate matter, air toxics, and GHGs in a single, integrated plan; and establishes emissions control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals; consistency with these goals is evaluated in this section.

- Protect Air Quality and Health at the Regional and Local Scale. Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from TACs
- Protect the Climate. Reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050; the 2017 Clean Air Plan is the most current applicable air quality plan for the air basin and consistency with this plan is the basis for

[17] California Air Resources Board. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engine and Vehicles.* October. Available: https://ww3.arb.ca.gov/diesel/documents/rrpfinal.pdf. Accessed: March 29, 2022.

[18] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act. Air Quality Guidelines.* May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

[19] Bay Area Air Quality Management District. 2017a. *Final 2017 Clean Air Plan.* Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: March 28, 2022.

determining whether the project would conflict with or obstruct implementation of an air quality plan

In addition to air quality plans, BAAQMD also adopts rules and regulations to improve existing and future air quality. The proposed project may be subject to the following district rules.

- Regulation 2, Rule 2 (New Source Review)—This regulation contains requirements for Best Available Control Technology and emission offsets.
- Regulation 2, Rule 5 (New Source Review of Toxic Air Contaminates)—This regulation outlines guidance for evaluating TAC emissions and their potential health risks.
- Regulation 6, Rule 1 (PM)—This regulation restricts emissions of PM darker than a 1 on the Ringlemann Chart to less than 3 minutes in any 1 hour.
- Regulation 7 (Odorous Substances). This regulation establishes general odor limitations on odorous substances and specific emission limitations on certain odorous compounds.
- Regulation 8, Rule 3 (Architectural Coatings). This regulation limits the quantity of ROG in architectural coatings.
- Regulation 9, Rule 6 (NO_X Emission from Natural Gas–Fired Boilers and Water Heaters). This regulation limits emissions of NO_X generated by natural gas–fired boilers.
- Regulation 9, Rule 8 (Stationary Internal Combustion Engines). This regulation limits emissions of NOX and CO from stationary internal combustion engines of more than 50 horsepower.
- Regulation 11, Rule (Hazardous Pollutants – Asbestos Demolition, Renovation, and Manufacturing). This regulation, which incorporates EPA's asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations, controls emissions of asbestos to the atmosphere during demolition, renovation, and transport activities.

Greenhouse Gases

Federal

There is currently no federal overarching law specifically related to climate change or reductions in GHG emissions. Under the Obama administration, the EPA had been developing regulations under the CAA. There have also been settlement agreements between EPA, several states, and nongovernmental organizations to address GHG emissions from electric generating units and refineries, in addition to EPA's issuance of an Endangerment Finding and a Cause or Contribute Finding. EPA has also adopted a Mandatory Reporting Rule and Clean Power Plan. Under the Clean Power Plan, EPA issued regulations to control CO_2 emissions from new and existing coal-fired power plants.

State

Executive Order S-03-05

Executive Order (EO) S-3-05 asserted that California is vulnerable to the effects of climate change. To combat this concern, the order established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels,
- By 2020, reduce GHG emissions to 1990 levels, and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32—California Global Warming Solutions Act

Assembly Bill (AB) 32 (Health and Safety Code Section 38500 et seq.) codified the state's GHG emissions target by requiring that the state's global warming emissions be reduced to 1990 levels by 2020. Since adoption, CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and Building Standards Commission have been developing regulations that will help meet the goals of AB 32 and EO S-03-05. The AB 32 Climate Change Scoping Plan (Scoping Plan) identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires CARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. Specifically, the Scoping Plan articulates a key role for local governments, recommending they establish GHG reduction goals for both their municipal operations and the community consistent with those of the state.

The second update to the Scoping Plan, the 2017 Climate Change Scoping Plan (2017 Scoping Plan), was released in 2017. The 2017 Scoping Plan is discussed below in the context of Senate Bill (SB) 32.

Executive Order S-01-07—Low-Carbon Fuel Standard

With EO S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California in 2007. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Senate Bill 375—Sustainable Communities Strategy

SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans (RTPs), and funding priorities in order to help California meet the GHG reduction goals established in AB 32.[20] SB 375 requires RTPs, developed by metropolitan planning organizations, to incorporate a sustainable communities strategy (SCS). The goal of the SCS is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. SB 375 requires the Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG and MTC, respectively) to identify strategies that will reduce per capita GHG emissions from passenger vehicles by approximately 19 percent by 2035 over base year 2005. ABAG and MTC jointly issued their SCS as part of Plan Bay Area 2050.

Senate Bill X7-7

SB X7-7, the Water Conservation Act of 2009, sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The state is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This is an implementing measure of the Water Sector in the 2017 Scoping Plan that will continue to be implemented beyond 2020. Reduction in water consumption reduces the energy necessary and the

[20] California Government Code Sections 14522.1, 14522.2, 65080, 65080, 65080.01, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588 and Public Resources Code Sections 2161.3, 21155, 21159.28.

associated emissions to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment.

Assembly Bill 1493—Pavley Rules

Known as Pavley I, AB 1493 standards are the nation's first GHG standards for automobiles. AB 1493 requires CARB to adopt vehicle standards that lower GHG emissions from new light-duty vehicles to the maximum extent feasible, beginning in 2009. Additional strengthening of the Pavley standards (previously referred to as Pavley II, now referred to as the Advanced Clean Cars measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025.

Senate Bills 1078/107/X 1-2, Renewable Portfolio Standard and Renewable Energy Resources Act

SBs 1078 and 107, California's Renewable Portfolio Standard (RPS), obligated investor-owned utilities energy service providers and Community Choice Aggregations to procure an additional 1 percent of retail sales per year from eligible renewable sources until 20 percent was reached (by 2010). CPUC and CEC are jointly responsible for implementing the program. SB X 1-2, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33 percent of their energy from renewable resources by 2020.

Assembly Bills 939 and 341

To minimize the amount of solid waste that must be disposed of in landfills, the California State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to state agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate 4 cubic yards or more of commercial solid waste per week must arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed-waste processing. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939.

Senate Bill 743—Steinberg

SB 743 requires changes to the CEQA Guidelines regarding the analysis of transportation impacts. Under the bill, the criteria for determining the significance of the transportation impacts of a project include promotion of reductions in GHG emissions, development of multi-modal transportation networks, and diversification of land uses. In response, the Governor's Office of Planning and Research (OPR), proposed changes to the CEQA Guidelines that identify VMT as the most

appropriate metric to evaluate a project's transportation impacts. The previously used transportation impact indicator of automobile delay, level of service, no longer constitutes a significant environmental impact under CEQA. In 2018, OPR released a technical advisory outlining potential VMT significance thresholds for different project types.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Code, Title 24 Update

The Green Building Standards Code (CALGreen) applies to the planning, design, operation, construction, use, and occupancy of newly constructed buildings and requires the installation of energy- and water-efficient indoor infrastructure for all new projects after January 1, 2011. CALGreen also requires newly constructed buildings to develop a waste management plan and divert at least 50 percent of the construction materials generated during project construction.

Administrative regulations related to CALGreen Part 11 and the 2016 Building Energy Efficiency Standards were adopted in 2016 (effective January 1, 2017). The 2016 standards resulted in residential construction that was 25 percent more efficient than previous residential construction. Part 11 also established voluntary standards, which became mandatory in the 2010 edition of the code, including planning and designing for sustainable site development, energy efficiency, water conservation, material conservation, and reductions in internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features to reduce energy consumption in homes and businesses.

On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020. The 2019 standards mandate higher efficiency levels and rooftop solar photovoltaic systems for all new residential buildings constructed in 2020 and beyond. The 2019 standards will result in residential buildings that are, on average, 53 percent more energy efficient than residential buildings built under the 2016 standards. Non-residential buildings will be 30 more energy efficient, because the standards will update indoor and outdoor lighting to make maximum use of LED technology.[21] Future standards are expected to result in zero net energy for newly constructed commercial buildings.

Senate Bill 350—De Leon (Clean Energy and Pollution Reduction Act of 2015)

SB 350 was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions require the following by 2030: (1) an RPS of 50 percent and (2) a doubling of energy efficiency (electrical and natural gas) by 2030, including improvements to the efficiency of existing buildings. These mandates will be implemented by future actions of the CPUC and CEC.

Senate Bill 32 and Assembly Bill 197

SB 32 requires CARB to ensure that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by 2030, consistent with the target set for in EO B-30-15.

[21] California Energy Commission. 2018. *2019 Building Energy Efficiency Standards*. Available: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed: March 28, 2022.

CARB adopted the Scoping Plan Update in November 2017 to meet the GHG reduction requirement set forth in SB 32. It proposes continuing the major programs of the previous Scoping Plan, including cap-and-trade regulation, low carbon fuel standard, and more efficient cars, trucks, and freight movement; implementing an RPS of 50 percent by 2030; and reducing CH4 emissions from agricultural and other wastes. The 2017 Scoping Plan Update also addresses, for the first time, GHG emissions from natural and working lands in California. The companion bill, AB 197, creates requirements to form a Joint Legislative Committee on Climate Change Policies, requires CARB to prioritize direct emissions reductions and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit, requires CARB to prepare reports on sources of GHGs and other pollutants, establishes 6-year terms for voting members of CARB, and adds two legislators as non-voting members of CARB.

Short-Lived Climate Pollutant Reduction Strategy

In 2014, SB 605 directed CARB, in coordination with other state agencies and local air districts, to develop a comprehensive SLCP Reduction Strategy. In 2016, SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve the following reductions in SLCPs:

- 40 percent reduction in CH4 relative to 2013 levels by 2030,
- 40 percent reduction in HFC gases relative to 2013 levels by 2030, and
- 50 percent reduction in anthropogenic black carbon relative to 2013 levels by 2030.

SB 1383 also establishes the following targets for reducing organic waste in landfills as well as CH4 emissions from dairy and livestock operations, as follows:

- 50 percent reduction in organic waste disposal relative to 2014 levels by 2020,
- 75 percent reduction in organic waste disposal relative to 2014 levels by 2025, and
- 40 percent reduction in CH4 emissions form livestock and dairy manure management operations relative to the livestock and dairy sectors levels by 2030.

CARB and CalRecycle are currently developing regulations to achieve the organic waste reduction goals under SB 1383. In January 2019 and June 2019, CalRecycle proposed new and amended regulations to CCR Title 14 and Title 27. Among other things, the regulations set forth minimum standards for organic waste collection, hauling, and composting. The final regulations will take effect on or after January 1, 2022; the final regulations are not currently in effect.

CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the CH4, HFC, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to reduce SLCPs, which fit within a wide range of ongoing planning efforts throughout the state, including CARB's and CalRecycle's proposed rulemaking on organic waste diversion.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018

SB 100 builds on SB 350, the Clean Energy and Pollution Reduction Act of 2015, which required the following by 2030: (1) an RPS of 50 percent and (2) a doubling of energy efficiency (electrical and natural gas) by 2030, including improvements to the efficiency of existing buildings. SB 100

increases the 2030 RPS target set in SB 350 to 60 percent and requires an RPS of 100 percent by 2045.

Executive Order B-55-18

EO B-55-18 establishes a statewide goal to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. This goal is in addition to the statewide targets for reducing GHGs set in EO S-3-05 and SB 32. The EO charges CARB with developing a framework for implementing and tracking progress towards these goals. This EO extends EO S-3-05 but is binding only on state agencies.

Regional and Local

Metropolitan Transportation Commission

MTC is the metropolitan planning organization for the nine counties that comprise the Bay Area and the SFBAAB, which includes the City of Belmont. The first per-capita GHG emissions reduction targets for the SFBAAB were 7 percent by 2020 and 15 percent by 2035 from 2005 levels. MTC adopted an SCS as part of its RTP for the SFBAAB in 2021 known as Plan Bay Area 2050. Plan Bay Area 2050 includes transportation and environmental strategies that support active and shared modes of travel combined with a transit-supportive land use pattern that places housing near transportation centers. Implementation of these strategies are forecasted to lower the share of Bay Area residents that drive to work alone from 50 percent in 2015 to 33 percent in 2050. Leading to a 20 percent decrease in GHG emissions compared to 2005, meeting the state mandate of a 19 percent decrease in GHG emissions by 2050.[22]

Bay Area Air Quality Management District

BAAQMD released its *Draft Justification Report CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (BAAQMD Justification Report) in February 2022.[23] The BAAQMD Justification Report introduces proposed updates to the CEQA GHG thresholds from the 2017 CEQA Guidelines, which were not consistent with the statewide GHG target established by SB 32. These proposed GHG thresholds of significance were updated to consider newer state reduction targets (e.g., SB 32) and eventual carbon neutrality by 2045 (e.g., EO B-55-18), as well as evolving case law. In summary, the updated thresholds emphasize (1) avoiding wasting electricity and developing fossil fuel infrastructure in new buildings that will be in place for decades and thus conflict with carbon neutrality by 2045, (2) compliance with CALGreen Tier 2 electric vehicle requirements and per capita VMT reductions consistent with SB 743, and (3) consistency with a qualified greenhouse reduction strategy (also known as a Climate Action Plan).

The BAAQMD's CEQA Guidelines also outline methods for quantifying GHG emissions, as well as potential mitigation measures. As noted above, the BAAQMD has also adopted air quality plans to

[22] Metropolitan Transportation Commission and Association of Bay Area Governments. 2021. Plan Bay Area 2050. Adopted October 2021. Available: https://www.planbayarea.org/finalplan2050. Accessed April 5, 2022.

[23] Bay Area Air Quality Management District. 2022. *Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans.* February. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/~/media/ffb719cfa04a438d9c7be10007a5abdf.ashx. Accessed: March 25, 2022.

protect the climate, including the 2017 Clean Air Plan: Spare the Air, Cool the Climate.[24] The 2017 Clean Air Plan outlines feasible measures to reduce GHGs to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

City of Belmont Climate Action Plan

The City of Belmont Climate Action Plan (CAP) was adopted in 2017 to reduce community and municipal GHG emissions. The City of Belmont's CAP is a roadmap that outlines a path for the City to achieve its community-wide per-service-population GHG emissions reduction goal of 15 percent below 2005 levels by 2020 and 50 percent below 2005 levels by 2035. The Belmont CAP features 23 recommended GHG emissions reduction measures within four sectors of community and municipal operations (i.e., energy, transportation and land use, solid waste, all sectors).

Discussion of Threshold Approaches

Air Quality

This analysis evaluates the impacts of regional emissions generated by the project using a two-tiered approach that considers guidance recommended by BAAQMD in the agency's CEQA Air Quality Guidelines.[25] First, this analysis considers whether the proposed project would conflict with the most recent air quality plan.[26] Specifically, the impact analysis evaluates whether the project would support the primary goals of the 2017 Clean Air Plan, including applicable control measures, and whether it would disrupt or hinder implementation of any control measures. Second, calculated regional criteria pollutant emissions[27] are compared with BAAQMD's project-level thresholds. BAAQMD's thresholds, as summarized in Table 5, are recommended by the agency to evaluate the significance of a project's regional criteria pollutant emissions. According to BAAQMD, projects with emissions in excess of the project-level thresholds, shown in Table 5, would be expected to have a significant cumulative impact on regional air quality because an exceedance of the thresholds is anticipated to contribute to NAAQS and CAAQS violations.

[24] Bay Area Air Quality Management District. 2017a. *Final 2017 Clean Air Plan*. Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: March 28, 2022.

[25] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act Air Quality Guidelines.* May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

[26] Bay Area Air Quality Management District. 2017a. *Final 2017 Clean Air Plan.* Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: March 28, 2022.

[27] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act Air Quality Guidelines.* May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

Table 5. BAAQMD Project-Level Regional Criteria Pollutant Emissions Thresholds

Analysis	Thresholds
Regional Criteria Pollutants (Construction)	• Reactive Organic Gases (ROG): 54 pounds/day • Nitrogen Oxides: 54 pounds/day • Particulate Matter (PM_{10}): 82 pounds/day (exhaust only); compliance with best management practices (fugitive dust) • Fine Particulate Matter ($PM_{2.5}$): 54 pounds/day (exhaust only); compliance with best management practices (fugitive dust)
Regional Criteria Pollutants (Operations)	• Reactive Organic Gases (ROG): Same as construction • Nitrogen Oxides (NO_X): Same as construction • Particulate Matter (PM_{10}): 82 pounds/day • Fine Particulate Matter ($PM_{2.5}$): 54 pounds/day

Source: Bay Area Air Quality Management District 2017b[28]

Significance thresholds established by an air district are used to manage total regional and local emissions within an air basin, based on the air basin's attainment status for criteria air pollutants. The project-level emission thresholds, shown in Table 5, were established for individual development projects that could contribute to regional and local emissions and adversely affect or delay the air basin's projected attainment target goals for nonattainment criteria air pollutants.

Because of the conservative nature of the significance thresholds, as well as the basin-wide context of individual development project emissions, there is no direct correlation between a single project and localized air quality–related health effects. One individual project that generates emissions that exceed a threshold does not necessarily result in adverse health effects for residents in the vicinity. This condition is especially true when the criteria air pollutants that exceed thresholds are those with regional effects, such as O_3 precursors (e.g., oxides of nitrogen [NOX] and reactive organic gases [ROGs]). Furthermore, by its very nature, air pollution is largely a cumulative impact. No single project is large enough by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality is considered significant. In developing thresholds of significance for air pollutants, the air districts have considered the emission levels at which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts on the region's existing air quality conditions.

Health-Based Thresholds for Project-Generated Pollutants of Human Health Concern

The California Supreme Court's 2018 decision in *Sierra Club v. County of Fresno* (6 Cal.5th 502), hereafter referred to as the Friant Ranch Decision, included review of the long-term regional air quality analysis contained in the EIR for the proposed Community Plan Update and Friant Ranch

[28] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act Air Quality Guidelines*. May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

Specific Plan (Friant Ranch Project). The Friant Ranch Project proposed a 942-acre master-plan development in unincorporated Fresno County, within the San Joaquin Valley Air Basin, which is currently designated as a nonattainment area with respect to the NAAQS and CAAQS for O_3 and $PM_{2.5}$. The court found that the EIR's air quality analysis was inadequate because it failed to provide enough detail "for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time." The court's decision notes that environmental documents must attempt to connect a project's air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis.

All criteria pollutants generated by the Proposed Project are associated with some form of health risk (e.g., asthma, lower respiratory problems). Criteria pollutants can be classified as either regional pollutants or localized pollutants. Regional pollutants can be transported over long distances and affect ambient air quality far from the emissions source. Localized pollutants affect ambient air quality near the emissions source. O_3 is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and lead are localized pollutants. Particulate matter can be both a local and a regional pollutant, depending on its composition. The primary criteria pollutants of concern generated by the proposed project would be O_3 precursors (i.e., ROG and NO_X), CO, and particulate matter, including DPM.

The sections that follow discuss thresholds and analysis considerations for regional and local project-generated criteria pollutants with respect to their human health implications.

Regional Project-Generated Criteria Pollutants (Ozone Precursors and Regional Particulate Matter)

Adverse health effects from regional criteria pollutant emissions, such as O_3 precursors and particulate matter, generated by the proposed project are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and characteristics of exposed individuals [e.g., age, gender]). Therefore, O_3 precursors (ROG and NO_X) contribute to the formation of ground-borne O_3 on a regional scale. Emissions of ROG and NO_X generated in an area may not correlate to a specific O_3 concentration in that same area. Similarly, some types of particulate pollutant may be transported over long distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased O_3 or regional particulate matter concentrations are the product of emissions generated by numerous sources throughout a region, as opposed to a single individual project. Moreover, exposure to regional air pollution does not guarantee that an individual will experience an adverse health effect. As discussed above, there are large individual differences in the intensity of symptomatic responses to air pollutants. These differences are influenced, in part, by the underlying health condition of an individual, which cannot be known.

Models and tools have been developed to correlate regional criteria pollutant emissions to potential community health impacts. Although models are capable of quantifying O_3 and any secondary particulate matter formation and associated health effects, these tools were developed to support large regional planning and policy analysis and have limited sensitivity to small changes in criteria pollutant concentrations induced by individual projects. As of the preparation of this Air Quality Technical Report, BAAQMD has not approved a quantitative method for accurately correlating criteria pollutant emissions generated by an individual project to specific health outcomes or changes in nonattainment days.

As discussed above, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations as well as attainment or nonattainment designations under the NAAQS and CAAQS. The NAAQS and CAAQS are informed by a wide range of scientific evidence that demonstrates that there are known safe concentrations of criteria pollutants. Although recognizing that air quality is a cumulative problem, air districts typically consider projects that generate criteria pollutant and O_3 precursor emissions that are below the thresholds to be minor in nature. Such projects would not adversely affect air quality or exceed the NAAQS or CAAQS. Emissions generated by the proposed project could increase photochemical reactions and the formation of tropospheric O_3 and secondary particulate matter, which, at certain concentrations, could lead to increased incidences of specific health consequences. Although these health effects are associated with O_3 and particulate pollution, the effects are a result of cumulative and regional emissions. Therefore, a quantitative correlation of project-generated regional criteria pollutant emissions to specific human health impacts is not included in this analysis. It is foreseeable that unmitigated construction-related and operational emissions of O_3 precursors and particulate matter, in excess of BAAQMD thresholds, could contribute to cumulative and regional health impacts. In such cases, all feasible reduction measures would be applied, and emissions would be reduced to the extent possible.

Localized Project-Generated Criteria Pollutant Emissions (Carbon Monoxide and Particulate Matter) and Air Toxics (Diesel Particulate Matter)

Localized pollutants generated by a project can be deposited near the emissions source, potentially affecting the nearby population. Although these pollutants dissipate with distance, emissions from individual projects can result in direct and material health impacts on adjacent sensitive receptors. The localized pollutants of concern that would be generated by the project are CO, particulate matter, and DPM. The applicable thresholds for each pollutant are described below.

Carbon Monoxide

Heavy traffic congestion can contribute to high levels of CO. Individuals exposed to such "hot spots" may have a greater likelihood of developing adverse health effects. BAAQMD has adopted screening criteria that provide a conservative indication of whether project-generated traffic would cause a potential CO hot spot. If the screening criteria are not met, a quantitative analysis, through site-specific dispersion modeling of project-related CO concentrations, would not be necessary. A project would not cause localized violations of the CAAQS for CO if the BAAQMD's CO screening criteria, summarized below, are met.[29]

- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., a tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

[29] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act Air Quality Guidelines.* May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

- The project would be consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.

BAAQMD does not consider construction-generated CO to be a significant pollutant of concern because construction activities typically do not generate substantial quantities of this particular pollutant.[30]

Particulate Matter

BAAQMD adopted an incremental PM2.5 concentration-based significance threshold in which a "substantial" contribution at the project level for an individual source is defined as total (i.e., exhaust and fugitive) PM2.5 concentrations exceeding 0.3 micrograms per cubic meter ($\mu g/m^3$). In addition, BAAQMD considers projects to have a cumulatively considerable PM2.5 impact if sensitive receptors are exposed to PM2.5 concentrations from local sources within 1,000 feet, including existing sources, project-related sources, and reasonably foreseeable future sources, that exceed 0.8 $\mu g/m^3$.[31]

BAAQMD has not established PM10 thresholds of significance. BAAQMD's PM2.5 thresholds apply to both new receptors and new sources. However, BAAQMD considers impacts related to fugitive PM10 from earthmoving activities to be less than significant with application of BAAQMD's basic construction measures.

Diesel Particle Matter

DPM has been identified as a TAC. It is particularly concerning because long-term exposure can lead to cancer, birth defects, and damage to the brain and nervous systems. BAAQMD has adopted incremental cancer and hazard thresholds to evaluate receptor exposure to single sources of DPM emissions. The "substantial" DPM threshold defined by BAAQMD is exposure of a sensitive receptor to an individual emissions source, resulting in an excess cancer risk level of more than 10 in 1 million or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0.[32] BAAQMD also considers projects to have a cumulatively considerable DPM impact if they contribute to DPM emissions that, when combined with cumulative sources within 1,000 feet of sensitive receptors, result in excess cancer risk levels of more than 100 in 1 million or an hazard index greater than 10.0. BAAQMD considers projects to have a significant cumulative impact if they introduce new receptors at a location where the combined exposure to all cumulative sources within 1,000 feet is in excess of cumulative thresholds.[33]

Asbestos

- BAAQMD considers a project to have a significant impact if it does not comply with the applicable regulatory requirements outlined in BAAQMD's Regulation 11, Rule 2, which incorporates EPA's asbestos NESHAP regulations, controls emissions of asbestos to the atmosphere during demolition, renovation, and transport activities.

[30] Ibid.
[31] Ibid.
[32] Ibid.
[33] Ibid.

Odors

BAAQMD[34] and CARB[35] have identified several types of land uses as being commonly associated with odors, such as landfills, wastewater treatment facilities, and animal processing centers. BAAQMD's CEQA Air Quality Guidelines recommend that project analyses identify the location of existing and planned odor sources and include policies to reduce potential odor impacts in the project site.

Greenhouse Gases

Compliance with a qualified GHG reduction strategy

The City of Belmont CAP was prepared consistent with CEQA Guidelines Sections 15183.5 and includes a 2020 GHG reduction target (15 percent below 2005 levels), which is based on AB 32 goals. Projects that are consistent with the CAP may tier from the environmental analysis prepared for the CAP and determine GHG impacts in 2020 to be less than cumulatively considerable. The CAP includes a post-2020 target (50 percent below 2005 levels by 2035). As stated in the Program Environmental Impact Report (State Clearinghouse No. 2016082075) for the Belmont General Plan Update, Phase I/II Interim Zoning, Belmont Village Specific Plan, and CAP (General Plan EIR), this target is consistent with reductions required by SB 32 (2030) and the trajectory of statewide climate change legislation, as defined by EO S-3-05.[36] Because the CAP is consistent with SB 32 and is a qualified GHG reduction strategy, the proposed project can use the CAP to evaluate the impact significance of full-build emissions. This approach is applicable to the proposed project and used to evaluate non-stationary-source GHG emissions.

Compliance with Regulatory Programs

In addition to the evaluation of consistency with the City's CAP, this analysis also discusses the proposed project's compliance with regulatory programs designed to reduce GHG emissions from particular activities (e.g., building efficiency, transportation, water usage) to further substantiate the significance determinations concluded for the proposed project. To the extent that the proposed project's design features comply with or exceed the regulations adopted by CARB or other state agencies, the City could rely on this compliance to show that the proposed project is reducing emissions consistent with statewide legislation.

Stationary Sources Threshold

BAAQMD has adopted a threshold of 10,000 metric tons CO_2e for stationary source projects.[37] This threshold is consistent with stationary source thresholds adopted by other air quality management districts throughout the state. The threshold level is intended to capture 95 percent of all GHG

[34] Ibid.

[35] California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April. Available: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed: March 28, 2022.

[36] Butterworth, Benjamin. Sustainable Buildings & Communities Consultant. DNV GL. San Francisco, CA. December 16, 2016—email message to ICF.

[37] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act. Air Quality Guidelines.* May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: March 28, 2022.

emissions from new permit applications from stationary sources in the air basin and would do so by capturing only the large, significant projects since permit applications with emissions above the 10,000 metric tons CO_2e threshold account for less than 10 percent of applications. The emergency generators included as part of the proposed project would be permitted sources, and as such, the BAAQMD's 10,000 metric tons CO_2e threshold is appropriate for analyzing the significance of emissions generated by the generators. Stationary source emissions would be considered less than significant if emissions are less than 10,000 metric tons CO_2e.

Chapter 6
Air Quality and Greenhouse Gas Methods and Impacts

Methodology

Mass Emissions Modeling of Construction Activities

Criteria Air Pollutants

Criteria pollutant emissions generated by construction activities were quantified using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. Assumptions related to construction activity and scheduling (i.e., construction phase start and end dates) were based on project-specific information provided by the project applicant and model defaults where project-specific information was not available.

The data used in the construction analysis are provided in Appendix A of this report. Construction is expected to consist of five main phases of construction activities, including Phase 1 (demolition and site clearing/shoring/mass excavation), Phase 2 (building construction), Phase 3 (building exteriors), Phase 4 (building interiors), and Phase 5 (off and on-site improvements).

Each phase has discrete start and end dates, and, overall, construction would start in early 2024 and be completed by summer 2026. Multiple phases would occur simultaneously. Based on input from the project applicant, the analysis assumes that construction would occur 5 days a week, Monday through Friday. The construction assumptions for the project are summarized below. Additionally, the data used in the construction analysis are provided in Appendix A of this report.

- Heavy-Duty Construction Equipment. The project applicant provided information regarding the number of pieces of equipment, equipment horsepower, fuel type, and hours per day for each phase of construction.
- Construction Workers' Vehicle Trips. Emissions calculations were based on the number of daily workers per phase provided by the project applicant (ranging from 10 to 45), number of trips per day (two one-way trips per worker), trip length (11 miles one way), and fleet mix (e.g., light-duty autos and light-duty trucks). Emissions were calculated in CalEEMod using the vehicle emissions factors from EMFAC2017.
- Construction Vendor Truck Trips. Emissions calculations were based on the number of daily vendors per phase provided by the project applicant (ranging from 4 to 65), number of trips per day (two one-way trips), trip length (7 miles one way), and fleet mix (e.g., heavy-heavy duty trucks, medium-heavy duty trucks). Emissions were calculated in CalEEMod using the vehicle emissions factors from EMFAC 2017.
- Construction Haul Truck Trips. Emissions calculations were based on the total number of haul trucks calculated by CalEEMod, trip lengths, and fleet mix (e.g., heavy-heavy duty trucks). The trips for the haul trucks would be from the project site to the nearest material disposal facilities, which is 23 miles away for demolition materials and 19 miles away for soil hauling, based on input from the project sponsor.

- Paving. Paving activities would result in the emissions of ROGs. Approximately 1 acre of the project site would be paved during the paving phase.
- Architectural Coating. Architectural coating activities would result in the emissions of ROGs. The activities would take place during exterior and interior building construction activities.
- Earthmoving. Earthmoving activities would result in the emissions of particulate matter dust. Earthmoving activities include grading of the project site during the first phase and exporting 10,000 cubic yards of soil.
- Demolition. Removal of the existing structure would result in the emissions of particulate matter dust. Approximately 148,919 square feet of existing structure would be demolished and exported off-site during the demolition phase.

To evaluate construction emissions, it was assumed that the mitigation measures from Section 4.2, *Air Quality*, of the City's General Plan EIR would be implemented.[38] The measures applicable to the proposed project are as follows.

- Mitigation Measure AQ-1: Require Tier 4 engines on Construction Equipment
- Mitigation Measure AQ-3: Require Low-VOC Coatings during Construction
- Mitigation Measure AQ-4: Require Fugitive Dust Best Management Practices

For Mitigation Measure AQ-1, mitigated emissions were calculated using the methodology described above and the off-road equipment emissions factors, representative of Tier 4 engines from CalEEMod.

Mitigation Measure AQ-4 is also consistent with Policy 5.10-3 of the General Plan[39] which requires the City to ensure that construction and grading activities minimize short-term impacts on air quality by employing appropriate mitigation measures and best practices.

Although Section 4.2, *Air Quality*, of the General Plan EIR, includes an additional construction-related mitigation measure (Mitigation Measure AQ-2: Require Construction Fleet to Use Renewable Diesel), this measure was not incorporated into the modeling analysis because it would not result in any further pollutant reductions when combined with Tier 4 engines in construction equipment.

Greenhouse Gases

Construction GHG emissions were quantified using the same methods described for the analysis of criteria pollutant emissions, outlined previously in the Mass Emissions Modeling of Construction section.

Indirect GHG emissions occur during the use of electricity. Electricity emissions would be generated from construction equipment and mobile offices, totaling 691,600 kilowatts per hour (kWh), based

[38] City of Belmont. 2017. *Draft Environmental Impact Report for the Belmont General Plan Update, Phase I/Interim Zoning, Belmont Village Specific Plan, and Climate Action Plan.* Available: https://www.belmont.gov/home/showpublisheddocument/16597/636680209325230000. Accessed: April 20, 2022.

[39] City of Belmont. 2017. *2035 General Plan: Section 5 Conservation Element*. Available: https://www.belmont.gov/home/showpublisheddocument/16485/636651106502170000. Accessed: April 20, 2022.

on input from the project applicant.[40] Peninsula Clean Energy provides electrical service to the project site. From 2021 forward, Peninsula Clean Energy is providing 100 percent carbon free electricity to their customers, which means there will not be any indirect GHG emissions for this project from the use of electricity.

Mass Emissions Modeling of Operations

Criteria pollutant emissions generated by operation activities were quantified using CalEEMod and an external spreadsheet for fugitive ROG emissions from the proposed laboratory space. Assumptions related to operational activity were based on project-specific information provided by the project applicant, the project traffic consultant (Hexagon Transportation Consultants, Inc.), and model defaults where project-specific information was not available. The data used in the operations analysis are provided in Appendix A of this report. The operational assumptions for the project are summarized below.

- Stationary Sources. Five emergency diesel generators would be used in the event of power grid failure. Four generators would have a 1,250-kW capacity and one generator would have a 500-kW capacity. All of the generators would be housed in individual enclosures located in outdoor generator yards, with two generators adjacent to Building 1, two generators adjacent to Building 2, and one generator adjacent to the parking garage (Figure 1). Each of the generators would regularly undergo maintenance testing at an average rate of 30 minutes per month, for a total of 6 hours per year per generator.
- Mobile Sources. Vehicle trips would include daily ongoing employee commuting to and from the project site. During normal operations after full buildout, the proposed project is anticipated to result in 5,012 trips per day. For the existing uses, there are 1,614 trips per day; thus, the project would result in a net increase of 3,398 trips per day. This analysis assumes that the average trip distance would be approximately 11 miles.[41] The CalEEMod default fleet mix of vehicle categories was used to calculate mobile source emissions.
- Area Sources. Normal facility operation and maintenance include area sources such as landscaping activities that require gasoline-powered mowers and trimmers. Area-source emissions were calculated using CalEEMod, based on the size of the proposed buildings and the proposed parking garage.
- Energy Sources. CalEEMod does not calculate criteria pollutant emissions associated with electricity consumption. Therefore, energy-source criteria pollutant emissions in CalEEMod include only the emissions from natural gas combustion on-site. Based on information provided by the project applicant, natural gas would be consumed at the project site and CalEEMod default emission factors were used to calculate emissions.
- Laboratory Uses. The proposed Type I/II laboratory uses would emit TAC and ROG emissions during project operations. These emissions were quantified using an external

[40] Payne, Ryan. Principal. Four Corner Properties. January 4, 2022—Email to Claudia Garcia, ICF.

[41] Sivaraj, Selvanayagam, Engineer, Hexagon Transportation Consultants, Inc. Email to Claudia Garcia of ICF on March 29, 2022 regarding project trips and VMT.

spreadsheet based off information from the UC Davis HRA.[42,43] Specifically, emissions rates in pounds per hour per square foot for the TACs listed in Table 1 were calculated from the UC Davis HRA. These emissions rates were then multiplied by the worst-case laboratory footprint of 50 percent of Building 1 and 50 percent of Building 2, or approximately 264,800 square feet, and the assumption that emissions would occur for approximately 12 hours a day, 5 days a week, 260 days a year. These assumptions represent a conservative scenario, because it is likely that laboratory uses would generate emissions for less than 12 hours.

Section 4.2, *Air Quality*, of the General Plan EIR, includes a mitigation measure that is applicable to the proposed project,[44] but this measure, Mitigation Measure AQ-5: Promote Green Consumer Products, was not included in the modeling analysis. As noted on page 4.2-44 of the City's General Plan EIR, this type of mitigation measure cannot be quantified, because project developers do not have the authority to require green consumer products. Consequently, this measure is not reflected in the operational emissions analysis.

Greenhouse Gases

Operational GHG emissions were generally quantified using the same methods described for the analysis of criteria pollutant emissions outlined above. Further assumptions were necessary to evaluate the additional emissions associated with indirect electricity consumption, water consumption, and solid waste generation. Assumptions related to operational activity were based on project-specific information provided by the project applicant and model defaults where project specific information was not available. Additional operational assumptions unique to the analysis of GHG emissions are provided below.

Energy

Based on CalEEMod default information, approximately 8,909,790 kWh would be used per year by the proposed project. This estimate includes electricity use from project building and the elevator and other energy required for the enclosed parking garage. Additionally, according to CalEEMod default information for the research and development land use, approximately 132,612 therms of natural gas would be user per year.[45]

Water and Wastewater

Water consumption requires electricity to supply, pre-treat, and distribute the water prior to being consumed and treat wastewater subsequent to being consumed. The electricity consumed for these

[42] It was conservatively modeled that 100 percent of these TAC emissions would also be ROG emissions.

[43] Yorke Engineering. Health Risk Assessment for the University of California, Davis 2017 Long Range Development Plan. https://ucdavis.app.box.com/s/uc2zwm2hmfgou618dme9wt04bqkal6qk. Accessed: March 28, 2022.

[44] City of Belmont. 2017. *Draft Environmental Impact Report for the Belmont General Plan Update, Phase I/Interim Zoning, Belmont Village Specific Plan, and Climate Action Plan.* Available: https://www.belmont.gov/home/showpublisheddocument/16597/636680209325230000. Accessed: April 20, 2022.

[45] CalEEMod gives natural gas energy use in kBtu. One kBtu is equal to 1,000 Btu and approximately 13,261,200,000 Btu will be used per year. One Btu is equal to 0.00001 therms. The research and development natural gas default information was used in place of the office land use default information to account for a worst case scenario.

water processes results in indirect GHG emissions. Based on CalEEMod default information, approximately 318,092,200 gallons (976.2 acre-feet) of water per year would be used indoors.

Waste

Based on CalEEMod default information, daily operations at the office and life sciences building would generate approximately 492.5 tons of waste per year, resulting in fugitive GHG emissions during decomposition of the waste once it is deposited in a landfill.

Health Risk Assessment Modeling

An HRA was prepared to quantify the levels of exposure at nearby sensitive receptors from emissions of TACs and PM2.5 generated during both project construction and operation.

Diesel Particulate Matter and PM2.5

The proposed project would generate DPM, TAC, and PM2.5 emissions during construction and operations. Because the proposed project would introduce DPM, PM2.5, TAC emissions in an area near existing sensitive receptors, a construction and operations HRA was conducted. The HRA used EPA's most recent air dispersion model, AERMOD (version 21112); cancer and chronic risk assessment values for DPM provided by OEHHA; and other assumptions for model inputs recommended in BAAQMD's Health Risk Assessment Modeling Protocol.[46] The HRA applies the most recent guidance and calculation methods from OEHHA's Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.[47] The HRA consists of three parts: an emissions inventory, air dispersion modeling, and risk calculations. A description of each of these parts follows.

Emissions Inventory

The emissions inventory includes DPM and PM2.5 emissions from construction, as well as DPM, PM2.5, and TAC emissions during operations. During construction, DPM emissions would be generated by off-road equipment and on-road travel by heavy-duty trucks. The construction PM2.5 inventory consists of PM2.5 exhaust and fugitive dust emissions from off-road equipment, on-site soil movement, and on-road travel by heavy-duty trucks and workers' vehicles.

The operational TAC inventory includes DPM emissions from maintenance and testing of the emergency generators, as well as TAC emissions from the operation of the Type I/II laboratory space.[48] The operational PM2.5 inventory consists of PM2.5 exhaust emissions from the emergency generators and PM2.5 exhaust and fugitive dust emissions from on-road travel by employees' vehicles.

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[46] Bay Area Air Quality Management District. 2020. *Health Risk Assessment Modeling Protocol*. December. Available: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed: April 2022.

[47] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments*. February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: April 2022.

[48] Refer to Table 1 for the full list of TACs that were modeled for the Lab I/II laboratory space.

Air Dispersion Modeling

The HRA used EPA's AERMOD model, version 21112, to model annual average DPM and PM2.5 concentrations at nearby receptors. Modeling inputs, including emissions rates in grams of pollutant emitted per second, and source characteristics (e.g., release height, stack diameter, plume width) were based on guidance provided by OEHHA, BAAQMD, and the SCAQMD. Meteorological data were obtained from CARB for the San Carlos Airport. This meteorological station is the nearest monitoring station (0.9 miles east of the project site). In addition, the proposed project building footprints were modeled using the AERMOD Building Profile input Program.

Construction

On-site construction emissions from off-road equipment were characterized as a polygon area source that outlined the footprint of the project site. A release height of 5.0 meters represented exhaust emissions, and a release height of 0 meters represented on-site fugitive dust emissions.[49] The release height represents the height above the ground at which pollutants are emitted. On-road travel emissions from haul and vendor trucks, as well as workers' vehicles for PM2.5 analysis, were characterized as line volume sources with release heights of 0.9 meter for fugitive dust emissions and 3.4 meters for exhaust emissions. Line volume sources represent a series of individual volumes sources.

To account for the plume rise associated with mechanically generated air turbulence from construction emissions for the AERMOD run, the initial vertical dimension of the area source was modeled at 1.4 meters for exhaust and 1.0 meters for fugitive dust; for the line volume, the sources were 3.2 meters for exhaust and 0.8 meter for fugitive dust. Plume rise is the height that pollutants rise above a release height. For exhaust, plume rise occurs because of the temperature of the exhaust gas. Exhaust gas temperatures can be high, which causes the plume to rise. For dust, plume rise accounts for the mechanical entrainment of dust in the wheels of equipment and trucks. Emissions from off-road equipment were assumed to be generated throughout the construction footprint. Emissions from offsite trucks were modeled along the road segments adjacent to the construction footprint.

The modeling of emissions from construction activities was based on typical construction hours and number of days (8 hours per day, 5 days per week). The urban dispersion option was used in the analysis because of the proposed project site's characteristics and because surrounding areas are developed with buildings and paved surfaces that can influence how pollutants are dispersed in the area. Off-site sensitive receptors were placed at individual homes within 1,000 feet of the project site using a 10-meter-by-10-meter receptor grid. Receptors were given a height of 1.5 meters to represent the average human breathing zone.[50]

[49] South Coast Air Quality Management District. 2008. *Final Localized Significance Threshold Methodology*. Revised July. Available: https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: April 27, 2022.

[50] Bay Area Air Quality Management District. 2020. *Health Risk Assessment Modeling Protocol*. December. Available: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed: April 27, 2022.

Operations

Similar to construction, the urban dispersion option used for this analysis considered the project site's characteristics. Off-site sensitive receptors were placed at individual homes within 1,000 feet of the project site using a 10-meter-by-10-meter receptor grid. Receptors were given a height of 1.5 meters to represent the average human breathing zone.[51] A complete list of dispersion modeling inputs is provided in Appendix B.

Emergency Generators and Mobile Emissions

Proposed project operations would generate DPM and PM2.5 from vehicle travel and testing and maintenance of emergency generators. On-road travel emissions from workers' vehicles for the PM2.5 analysis were characterized as line volume sources with release heights of 0.9 meter for fugitive dust emissions and 3.4 meters for exhaust emissions. To account for plume rise associated with mechanically generated air turbulence from operational emissions sources for the AERMOD run, the initial vertical dimension for the line volume sources was 3.2 meters for exhaust and 0.8 meter for fugitive dust.

The emergency generators would generate both DPM and PM2.5 emissions. The emergency generators were represented using point sources with a release height of 3.9 meters, an exhaust temp of 893 Kelvin, and an exhaust flow rate of 7,798 cubic feet per minute, consistent with the values provided by the project applicant.

Use of each of the proposed emergency generators would occur for up to 6 hours per year for maintenance testing. Additionally, BAAQMD Regulation 2, Rule 5, Section 302, specifies that an Authority to Construct permit or Permit to Operate from BAAQMD will be denied if any new and modified sources of TACs, including generators, in excess of 50 horsepower would result in health risks in excess of 10.0 in 1 million or an HI of 1.0. BAAQMD Regulation 2, Rule 5, Section 302, is cited as evidence in support of BAAQMD's health risk thresholds in the 2017 BAAQMD CEQA Guidelines.

Laboratory Usage

As discussed above, the proposed project would conservatively be approximately 544,000 square feet (combined square footage for Building 1 and Building 2)with up to 50 percent of this space being devoted to laboratory uses. As a core and shell building, the future tenants of this space are not currently known; thus, a worst case scenario was used for the laboratory usage. This worst-case scenario includes the assumption that approximately 50 percent of the total footprint would be Type I/II – Chemistry and Chemical Engineering/General Biological Sciences laboratory spaces with fume hoods connected to four exhaust vents on the roof of Building 1 and three exhaust vents on the roof of Building 2. These fume hoods and subsequent exhaust vents are anticipated to emit a variety of TAC emissions. It is assumed that these TAC emissions would occur 12 hours a day, 260 days a year.

Emissions factors for the TACs listed in Table 1, above, were calculated based off the UC Davis HRA[52] and are expressed as pounds per hour per square footage of wet laboratory space (pounds per

[51] Ibid.

[52] Yorke Engineering. Health Risk Assessment for the University of California, Davis 2017 Long Range Development Plan. https://ucdavis.app.box.com/s/uc2zwm2hmfgou618dme9wt04bqkal6qk. Accessed: March 28, 2022.

square foot). These emissions factors represent conservative estimates of evaporative chemical losses that might occur assuming relatively good to relatively poor laboratory practices.

Risk Calculations

The risk calculations incorporate OEHHA's age sensitivity factors, which account for increased sensitivity to carcinogens during early-in-life exposure. The approach for estimating cancer risk from long-term inhalation, including exposure to carcinogens, requires calculating a range of potential doses and multiplying by cancer potency factors in units corresponding to the inverse dose to obtain a range of cancer risks. For cancer risk, the risk for each age group is calculated using the appropriate daily breathing rates, age sensitivity factors, and exposure durations. The cancer risks calculated for individual age groups are summed to estimate the cancer risk for each receptor. Chronic cancer and hazard risks were calculated using values from OEHHA's 2015 HRA guidance.[53] In accordance with BAAQMD guidance, residential cancer risks conservatively assumed a 28-year exposure duration for the operational HRA. The residential cancer risk from construction assumed a 2.6-year exposure duration, consistent with the proposed project's construction schedule. Refer to Appendix B for the risk calculations and additional assumptions.

Localized Carbon Monoxide Impacts

Because the project does not meet the BAAQMD screening criteria discussed above, an analysis of CO impacts was conducted using CARB's EMFAC 2021 model, the CALINE4 dispersion model, and peak-hour turning movement data provided by the project traffic consultant.

Traffic conditions for the cumulative year were modeled to evaluate CO hot spot concentrations at the El Camino and Ralston Avenue intersection, because this intersection is considered a congestion management plan (CMP) intersection from the San Mateo County Congestion Management Program. Receptors were placed at each intersection corner. A standard receptor elevation of 5.9 feet was used consistent with CO protocol guidance[54]. Worst-case wind angles and meteorological conditions were modeled to estimate conservative CO concentrations at each receptor. CO concentrations from the nearest monitoring station to the project site(Redwood City monitoring station) for the last 3 years in which complete data are available (2018 through 2020) were gathered and converted into a 3-year average to represent background CO levels.

[53] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.* February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: April 27, 2022.

[54] Garza, V.J., Graney, P., and Sperling, D. 1997. *Transportation Project-Level Carbon Monoxide Protocol.* Available: https://www.co.monterey.ca.us/Home/ShowDocument?id=51022. Accessed: March 16, 2022.

Air Quality Impacts

Applicable Air Quality Plan Consistency

The CAA requires that a SIP or an air quality control plan be prepared for areas with air quality violating the NAAQS. The SIP sets forth the strategies and pollution control measures that states will use to attain the NAAQS. The CCAA requires attainment plans to demonstrate a 5 percent per year reduction in nonattainment air pollutants or their precursors, averaged every consecutive 3-year period, unless an approved alternative measure of progress is developed. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date. The current air quality attainment plan for the SFBAAB is the 2017 Clean Air Plan.[55]

Consistency with the Bay Area 2017 Clean Air Plan

BAAQMD adopted their 2017 Clean Air Plan on April 19, 2017. The 2017 Clean Air Plan updates the prior 2010 Bay Area ozone plan and outlines feasible measures to reduce ozone; provides a control strategy to reduce particulate matter, air toxics, and GHGs in a single, integrated plan; and establishes emissions control measures to be adopted or implemented. The 2017 Clean Air Plan is the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an air quality plan.

BAAQMD has adopted plan-level impact guidance to assist CEQA lead agencies in determining consistency with their 2010 Clean Air Plan, which is outlined in its CEQA Guidelines.[56] Since the adoption of the CEQA Guidelines, the 2017 Clean Air Plan was adopted by BAAQMD, and the consistency analysis is transferable to this latest air quality plan, as the stated questions ask generally about the air quality plan. For projects that require preparation of an air quality plan consistency determination, BAAQMD recommends that the agency approving the project analyze the project with respect to the questions listed below. Evaluation of the proposed project with respect to BAAQMDs recommended questions is also included below. If all the questions are concluded in the affirmative, and those conclusions are supported by substantial evidence, BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

1. Does the project support the primary goals of the AQP?

   The primary goals of the 2017 Clean Air Plan are (1) Protect Air Quality and Health at the Regional and Local Scale: Attain all state and national air quality standards and eliminate disparities among Bay Area communities in cancer health risk from TACs; and (2) Protect the Climate: Reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

[55] Bay Area Air Quality Management District. 2017a. *Final 2017 Clean Air Plan.* Adopted April 19. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: April 27, 2022.

[56] Bay Area Air Quality Management District. 2017b. California Environmental Quality Act Air Quality Guidelines. May. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: April 27, 2012.

Project Evaluation

The proposed project would support the primary goals of the 2017 Clean Air Plan, because it proposes to redevelop an infill site. The existing uses include commercial operations. The proposed project would construct two seven-story buildings and an eight-story parking garage, replacing one four-story building, thereby densifying development in the area. Proposed uses include office and R&D. Additionally, the nearest bus stop is 0.6 miles away at Marine Parkway and Twin Dolphin Drive.

The proposed project would include other sustainability features that would support sustainable building design and a reduction in GHG emissions. Specifically, the proposed project would be designed to exceed Title 24 and ASHRAE 90.1 requirements and would minimize energy loads by including optimized insulation, electric lighting, and electric loads; tuned fenestration; external shading; and demand controlled ventilation. The project would also include passive features, such as daylighting and passive solar, as well as active features, such as daylight responsive controls, Variable-Air-Volume (VAV) high performance HVAC systems, VAV fume hoods, and automation. Also, the parking garage would be designed to be ready for photovoltaics. Furthermore, the proposed project would comply with all applicable city and state measures, including Title 24, Part 6, of the California Energy Code baseline standard requirements for energy efficiency.

2. Does the project include applicable control measures from the air quality plan?

Project Evaluation

To meet the primary goals, the 2017 Clean Air Plan recommends specific control measures and actions. These control measures are grouped into various categories and include stationary source measures, mobile-source measures, and transportation control measures (TCMs). The 2017 Clean Air Plan recognizes that community design dictates individual travel mode and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and GHGs from motor vehicles is to channel future Bay Area growth into vibrant urban communities where goods and services are close at hand and people have a range of viable transportation options. To this end, the 2017 Clean Air Plan includes control measures that are aimed at reducing air pollution in the SFBAAB.

The TDM plan for proposed project includes measures that will be implemented to reduce vehicle trips to help alleviate traffic congestions and air pollution. Consistent with TCM-C1: Voluntary Employer-Based Trip Reduction Program and TCM-C3: Ridesharing Services and Incentives, the project would provide a carpool/vanpool shuttle program, transit or ridesharing passes/subsidies, and pre-tax transportation benefits. Implementation of these measures help These reduce the use of single-occupancy vehicles. In addition, consistent with TCM-D1: Bicycle Access and Facilities Improvements and TCM-D2: Pedestrian Access and Facilities Improvements, the project would improve conditions for walking and biking by providing secure bicycle storage, and showers, lockers, and changing room for cyclists; and designing streets to encourage bike/pedestrian access.

Finally, the proposed project would also provide preferential parking for carpools consistent with TCM-E2: Parking Policies to Reduce VMT.

3. Does the project disrupt or hinder implementation of any AQP control measures?

Project Evaluation

The proposed project does not hinder the implementation of any control measures in the 2017 Clean Air Plan. Rather, the project includes TDM measures that are consistent with TCM-C1: Voluntary Employer-Based Trip Reduction Program, TCM-C3: Ridesharing Services and Incentives, TCM-D1: Bicycle Access and Facilities Improvements, TCM-D2: Pedestrian Access and Facilities Improvements, and TCM-E2: Parking Policies to Reduce VMT. Other control measures are not applicable to the project, such as those involving stationary sources, or those that are policies for BAAQMD to adopt. Although these measures are not applicable to the project, the project would not hinder these measures from being implemented.

Conclusion

Based on the discussion above, the proposed project would support the primary goals of the 2017 Clean Air Plan, would incorporate all applicable control measures, and would not disrupt or hinder the implementation of any control measures. Thus, the proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan.

Mass Emissions of Criteria Air Pollutants

The mass emissions thresholds developed by BAAQMD to assess the potential for a project to violate the local air quality standards or contribute to an air quality standard violation correlate to the planned increases in air pollutant emissions that are assumed in the 2017 Clean Air Plan. According to the BAAQMD, projects with emissions in excess of their thresholds would be expected to have a significant cumulative impact on regional air quality, because an exceedance of the thresholds is anticipated to contribute to CAAQS and NAAQS violations.

Construction Impacts

Project construction has the potential to create air quality impacts through the use of heavy-duty construction equipment, construction workers' vehicle trips, on-road trips, paving, and architectural coatings. In addition, fugitive dust emissions would result from removal of the existing structures and earthmoving activities. Emissions may vary substantially, depending on the level of activity, length of the individual construction activity, types of equipment, number of personnel, and soil moisture content.

Construction-related emissions for the proposed project have been calculated using the methods described above. To evaluate construction emissions, it was assumed that the Mitigation Measures AQ-1, AQ-3, and AQ-4 from the City's General Plan EIR would be implemented, as required under CEQA for all development occurring under the General Plan. Estimated construction emissions for the project assume implementation of these measures and are summarized in Table 6 by year in which construction would occur, and each year is compared individually to the applicable BAAQMD threshold. Emissions are presented by each year of construction to capture the sum of emissions from multiple activity categories that occur within the same year.

Table 6. Maximum Daily Construction Criteria Pollutant Emissions from the Proposed Project (pounds per day)[a,b,c,d]

Construction Year	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust
2024	3	21	<1	<1
2025	6	33	<1	<1
2026	4	18	<1	<1
BAAQMD threshold	54	54	82	54
Exceeds threshold?	No	No	No	No

[a] Emissions are rounded to the nearest whole number.

[b] Exceedances are underlined.

[c] The modeling output files are included in Appendix A of this report.

[d] Emissions reported in this table are based on implementation of Mitigation Measures AQ-1, AQ-3, and AQ-4 from the General Plan EIR.

ROG = reactive organic gas; NOx = nitrogen oxides; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter

As shown in Table 6, emissions would be below the BAAQMD threshold for all pollutant emissions for all years, and, as noted above, best management practices during construction activities would be implemented in accordance with BAAQMD guidelines. With implementation of the mitigation measures already required by the City's General Plan EIR, further measures would not be required.

Operational Impacts

Operation of the proposed project would generate emissions associated primarily with mobile, energy, and stationary sources. Each of these sources was included in the quantification of the project's long-term operational emissions, as described below.

Stationary-, Mobile-, and Area-Source Emissions

The proposed project would result in stationary-source emissions from the operation of the emergency diesel generators to be used in the event of power grid failure. The proposed project would also result in mobile-source emissions associated with daily ongoing employee trips to and from the project site. Area-source emissions would occur during normal facility operation and maintenance. Lastly, the laboratory operations would emit fugitive ROG emissions. Existing uses at the project site would result in some of the same emissions sources (area, energy, and mobile), but there are no known stationary or laboratory emissions at the existing uses.

The net effect of the proposed project is determined by evaluating estimated operational emissions from the existing land uses to be replaced by the proposed project and subtracting those from the proposed project's estimated operational emissions. Area, mobile, and stationary, laboratory sources daily emissions are shown in Table 7 and compared to the applicable BAAQMD thresholds. Table 7 shows the existing land use emissions, the proposed project emissions, and the difference between the two, which is the net impact of the proposed project.

Table 7. Maximum Daily Net Operational Criteria Pollutant Emissions (pounds per day)[a,b]

Source	ROG	NO_X	PM10	PM2.5
Existing Land Uses				
Area sources	4	<1	<1	<1
Energy sources[c]	<1	1	<1	<1
Mobile sources	5	7	15	4
Total Existing	**9**	**8**	**15**	**4**
Proposed Project				
Area sources	13	<1	<1	<1
Energy sources[c]	<1	4	<1	<1
Mobile sources	15	16	47	13
Stationary sources	6	26	<1	<1
Laboratory sources	25	-	-	-
Total Project	**60**	**46**	**48**	**14**
Net Project Emissions	**51**	**38**	**33**	**10**
BAAQMD threshold	54	54	82	82
Exceeds threshold?	No	No	No	No

[a] Emissions are rounded to the nearest whole number.

[b] The modeling output files are included in Appendix A of this report.

[c] Criteria pollutant emissions from energy sources are calculated in CalEEMod only for natural gas use.

As shown in Table 7, daily emissions would not exceed the BAAQMD thresholds. Because operation of the proposed project would not generate ROG, NOX, or PM emissions in excess of BAAQMD's numeric thresholds, no measures to reduce emissions would be required.

Cumulative Impacts on Regional and Local Air Quality

In developing thresholds of significance for air pollutants, BAAQMD considered the emissions levels for which a project's individual emissions would be cumulatively considerable. If a project would not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less-than-significant air quality impacts on the region's existing air quality conditions. As noted above, construction of the project would use Tier 4 engines in heavy-duty equipment, low-VOC coatings, and control fugitive dust with BMPs, consistent with General Plan EIR Mitigation Measures AQ-1, AQ-3, and AQ-4. Neither construction nor operation of the project would result in ROG, NO_X, or PM emissions in excess of BAAQMD's numeric thresholds. Accordingly, implementation of the project would not result in a cumulative considerable impact with respect to ROG, NO_X, or PM emissions.

Community Risk Impacts

Diesel Particulate Matter and Localized PM2.5

Construction Impacts

DPM is a carcinogen emitted by diesel internal combustion engines. Construction activities would generate DPM (i.e. PM2.5 in exhaust from diesel-fueled vehicles)[57] that could expose adjacent receptors to substantial health risks beginning in 2024. DPM concentrations would be dramatically reduced, even at distances of 500 feet, as explained in BAAQMD's CEQA Air Quality Guidelines:

> Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel particulate matter emissions are typically reduced by 70 percent at a distance of approximately 500 feet. In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risks.[58]

Table 8 presents the maximum construction-related health risks for the maximum exposed off-site receptor within 1,000 feet of construction activities, resulting from exposure to DPM and PM2.5. The modeling assumes implementation of General Plan EIR Mitigation Measures AQ-1 and AQ-4 as discussed above.[59] As shown in Table 8, the construction of the project would not result in an exceedance of any of the BAAQMD's health-related thresholds.

Operational Impacts

Table 8 presents the incremental increase in health risks for maximally affected residential receptors with respect to operational emissions. This includes the operational emissions from the five emergency generators and the fugitive emissions from the laboratory space. This analysis also includes the potential acute risk from the different TACs that would be emitted from the laboratory uses. As shown in Table 9, the health risk from operations would be less than all BAAQMD-recommended health risk thresholds. Therefore, operational emissions would not expose sensitive receptors to substantial pollutant concentrations.

[57] Per BAAQMD guidance, PM2.5 exhaust is used as a surrogate for DPM.

[58] Bay Area Air Quality Management District. 2017b. *California Environmental Quality Act Air Quality Guidelines.* May. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: April 2021.

[59] Mitigation Measure AQ-3 would not result in a reduction in DPM or PM2.5 emissions during construction and was thus not included in the modeling

Table 8. Estimated Construction and Operational Health Impacts at the Maximally Exposed Individual Resident

Location	Cancer Risk Impact (per one million)	Acute Non-Cancer Hazard Index (unitless)	Chronic Non-Cancer Hazard Index (unitless)	Annual PM2.5 Concentration (µg/m3)
Construction				
Maximally exposed individual resident[a]	5.4	N/A	0.003	0.1
Operations				
Maximally exposed individual resident[b]	2.0	0.008	0.065	0.02
Construction + Operations				
Maximally exposed individual resident[a]	7.4	0.008	0.068	0.14
BAAQMD threshold	10	1.0	1.0	0.3
Exceed threshold?	No	No	No	No

Source: Appendix B.

µg = microgram; m = meter; MEIR = maximally exposed individual resident.

Table 8 also presents the incremental increase in health risks for maximally affected residential receptors for the combined effect of construction and operations, and, as shown in Table 8, the health risk from construction + operations would be less than all BAAQMD-recommended health risk thresholds. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations.

Cumulative Community Risk

There are multiple sources of cumulative (existing sources and future planned) DPM emissions within 1,000 feet of the proposed project. Total cumulative health risks were calculated by adding the sources of background health risks to the health risks and hazard impacts of the project. Table 9 summarizes the results of the cumulative analysis.

Nearby TAC sources as well as the proposed project's construction and operational emissions could contribute to a cumulative health risk for sensitive receptors near the project site. BAAQMD's inventory of stationary health risks were used to estimate the combined levels of health risk from existing stationary sources in combination with the proposed project. Geographic information system (GIS) raster files provided by BAAQMD were used to estimate roadway and railway emissions.[60] The methods used to estimate project-related TAC emissions are described under the Methodology Section.

The results of the cumulative impact assessment are summarized in Table 9. This table shows the health risk values for the proposed project's maximally affected receptors and the health risk contributions from existing sources. The sum of the health risks contributions from the proposed

[60] Winkel, Jackie. Principal environmental planner, Bay Area Air Quality Management District. April 12, 2018—email to Darrin Trageser, ICF, Sacramento, CA, regarding GIS files containing data regarding background health risks from railroads, major roads, and highway sources within BAAQMD jurisdiction.

project and the existing background were compared to BAAQMD cumulative thresholds. Individual background contributions from existing sources are included in Appendix B.

Table 9. Estimated Cumulative Health Impacts at the Maximally Exposed Individual Resident

Location	Cancer Risk Impact (per million)	Chronic Non-Cancer Hazard Index (unitless)	Acute Non-Cancer Hazard Index (unitless)	Annual PM2.5 Concentration (µg/m3)
Cumulative Impacts[a]				
Stationary Source	3.4	0.03	<0.01	<0.01
Roadway Source	71.4	-	NA	1.40
Rail Source	10.3	-	NA	0.02
Project construction + operations	7.4	0.07	0.01	0.14
Total cumulative	92.5	0.10	0.01	1.56
BAAQMD threshold	100	10	10	0.8
Exceeds threshold?	No	No	No	Yes

Source: Appendices B and C.
µg = microgram; m = meter; NA = not available.

As shown in Table 9, the combined level of health risks from the proposed project and other local sources of TACs would exceed the BAAQMD-recommended cumulative health risk threshold for PM2.5. The predominant source of PM2.5 concentration is from US-101 and, to a lesser extent, other roads in the area. In total, roadways contribute about 90 percent of the PM2.5 concentrations at the MEIR, while the project contributes approximately 9 percent. As such, the vast majority of the pollutant concentration at the MEIR is from existing, background sources of pollution, principally, US-101. This would be considered an existing cumulative impact, because the exposure of PM2.5 concentrations on sensitive receptors would occur with or without the project. The project would contribute to that cumulative impact, but the contribution would be relatively minor (i.e. less than 9 percent). The project-only contribution is well below the project-level threshold. . Additionally, the construction of the project would minorly contribute to the PM2.5 impact for a temporary period of 2.6 years. After construction is completed, the project would contribute an even smaller amount of PM2.5, 0.02 µg/m^3, indefinitely. The operational contribution of 0.02 µg/m^3 would be approximately one percent of the contribution from existing sources, and reporting the 0.02 µg/m^3 contribution with the same number of significant digits as the BAAQMD threshold of 0.8 µg/m^3 would result in a number of 0.0 µg/m^3. Despite the modeled existing PM2.5 concentration exceeding the 0.8 µg/m^3 threshold, it should be noted that the annual average measured ambient PM2.5 concentration at the Redwood City monitoring station have been below the NAAQS and CAAAQS for the previous three years, as shown in Table 2 above. Therefore, it is reasonable to conclude that such a contribution would not result in a sustained worsening of the existing impact because it would not make a substantial contribution to the existing driver of the cumulative impact (US 101). The project's contribution to the significant cumulative impact would not be cumulatively considerable.

As such, the levels of pollutant concentrations emitted by other nearby TAC sources would result in a cumulative local health risk at nearby sensitive land uses; however, the project would not result in a cumulatively considerable contribution to that impact.

Localized Carbon Monoxide Impacts

Continuous engine exhaust may elevate localized CO concentrations, resulting in "hot spots." Receptors exposed to these CO hot spots may have a greater likelihood of developing adverse health effects. CO hot spots are typically observed at heavily congested intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations throughout the day. The BAAQMD's screening criteria for CO hot spots is 44,000 vehicles per hour at affected intersections and 24,000 vehicles per hour at affected intersections where vertical or horizontal mixing is limited (i.e., a tunnel).

In order to use the BAAQMD's quantitative screening criteria to evaluate CO hot spots, a project must be consistent with an applicable CMP. In the proposed project site, one intersection is considered a CMP intersection from the San Mateo County CMP. According to the project TIA,[61] the CMP intersection of El Camino Real and Ralston Avenue, for both cumulative and cumulative with project conditions, would operate at LOS F, which is not at an acceptable level of service for CMP intersections (i.e., LOS E or better). Although the intersection would operate at LOS F with or without the project, the project would worsen delay at this intersection and thus cause a worsening of an existing impact. Consequently, the project would not be consistent with the applicable CMP, and BAAQMD quantitative screening values were not used to evaluate the project's potential to create CO hot spots. As discussed below, the project's potential to create CO hot spots was evaluated quantitatively by modeling the dispersion of CO at the El Camino Real and Ralston Avenue intersection. The modeling exercise conducted is a conclusive method for determining the CO-related impacts at an intersection and provides a more comprehensive assessment of CO concentrations compared to use of the BAAQMD's screening criteria.

Peak hour traffic volume data at the intersections in the project site, provided by the traffic engineers, indicate that volumes at all intersections would be below both the 44,000 and 24,000 vehicle per hour levels. However, given that the project would worsen an impact at an existing CMP intersection, the BAAQMD screening criteria cannot be relied on to determine the significance of CO impacts. Consequently, the potential for traffic generated by the proposed project and background traffic to create CO hot spots at the intersection of El Camino Real and Ralston Avenue has been analyzed quantitatively. CO impacts were analyzed using the peak-hour traffic volumes for cumulative conditions. Table 10 presents project CO concentrations summed with the background CO levels and compared against the CAAQS and NAAQS.

[61] Hexagon Transportation Consultants, Inc. *Office Development at 1301 Shoreway Drive – Draft Transportation Impact Analysis.* March 11, 2022.

Table 10. CO Concentrations at El Camino Real and Ralston Avenue (parts per million)

Intersection	Receptor	1-Hour	8-Hour
		Opening Year with Project (2035)	Opening Year with Project (2035)
El Camino Real and Ralston Avenue	1	2.8	1.9
	2	2.8	1.9
	3	2.8	1.9
	4	2.8	1.9
CAAQS Threshold		20	9.0
Exceeds CAAQS?		No	No
NAAQS Threshold		35	9
Exceeds NAAQS?		No	No

Notes: Receptors are located at each of the four corners of the intersection. All intersections modeled have two intersecting roadways.

The average 1-hour background concentration between 2018 and 2020 was 9.9 ppm. The average 8-hour background concentration between 2018 and 2020 was 6.3 ppm (U.S. Environmental Protection Agency 2022).

As shown in Table 8, the CO concentrations are not expected to contribute to any new localized violations of the 1-hour or 8-hour ambient state or federal air quality standards. Accordingly, sensitive receptors would not be exposed to substantial concentrations of CO.

Odor Impacts

Offensive odors rarely cause physical harm, but they can be unpleasant and lead to considerable distress among the public. This distress often generates citizen complaints to local governments and air districts. According to CARB's 2005 Air Quality and Land Use Handbook, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, manufacturing plants, and agricultural activities.[62] CARB provides recommended screening distances for siting new receptors near existing odor sources. The project would not site any new sensitive receptors near an existing odor source because the project includes office and life sciences buildings and does not include sensitive land uses (e.g., schools or residences). BAAQMD's Regulation 7 (Odorous Substances) establishes general odor limitations on odorous substances and specific emissions limitations on certain odorous compounds.

The land use designation and zoning district for the project site is Regional Commercial (RC) under the Belmont General Plan. The project, two office buildings with laboratory uses such as fume hoods, are land uses that are not typically associated with odor complaints, based on CARB's Air Quality and Land Use Handbook. During construction, diesel-powered equipment, exhaust from haul vehicles, and architectural coatings may generate temporary odors. During project operations, startup and maintenance testing of emergency generators may also result in temporary odors. Both construction equipment- and generator-related odors would be temporary and would dissipate rapidly as a function of distance. The nearest sensitive receptors are 300 feet from the project site (Figure 2); at this distance, the odors would most likely not be strong enough to be considered offensive. When compared with existing odor sources in the vicinity of the project site, including

[62] California Air Resources Board. 2005. *Air Quality and Land Use Handbook*. Available: http://www.arb.ca.gov/ch/handbook.pdf. Accessed: March 28, 2022.

industrial land uses, odor impacts from project operations would be similar to current conditions. The proposed project would comply, as applicable, with BAAQMD's Regulation 7, which limits emissions of odorous compounds from all non-exempt entities within BAAQMD jurisdiction. Accordingly, construction and operation of the project is not expected to create objectionable odors affecting a substantial amount of people.

Greenhouse Gas Impacts

Emissions of Greenhouse Gases Generated during Construction and Operation that may have a Significant Impact on the Environment

Construction Emissions

Construction activities would generate emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment, and employee vehicles and haul trucks. The construction modeling outputs and detailed assumptions are included in Appendix A. Estimated construction emissions for the project are summarized in Table 11 by year in which construction would occur.

Table 9. Estimated GHG Emissions from Project Construction (metric tons per year)

Construction Year	CO_2	CH_4	N_2O	CO_2e
2024	1,558	<1	<1	1,579
2025	1,904	<1	<1	1,927
2026	885	<1	<1	895
Total	**4,347**	**1**	**<1**	**4,402**

CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent, including the relative warming capacity (i.e., global warming potential) of each GHG

As shown in Table 11, it is estimated that construction of the project would generate approximately 4,402 metric tons of CO_2e for the entire construction period. This is equivalent to adding 948 typical passenger vehicles to the road for 1 year.[63] The emissions generated during construction of the project would result primarily from the use of diesel-powered construction equipment (e.g., excavators). Construction emissions would cease once construction of the project is complete and are considered short-term.

BAAQMD CEQA Guidelines do not identify a GHG emissions threshold for construction-related emissions; however, they do recommend that GHG emissions from construction be quantified and disclosed and a determination regarding the significance of the GHG emissions be made with respect to whether the project in question is consistent with state goals regarding reductions in GHG emissions.

If a project does not implement feasible best management practices, it is anticipated that it would conflict with statewide emissions goals. Therefore, implementation of the following measure would

[63] Environmental Protection Agency. n.d. *Greenhouse Gas Equivalencies Calculator.* Available: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator. Accessed: April 25, 2022.

ensure that GHG emissions during construction would be minimized, which would avoid any conflict with statewide emissions reduction goals.

Implement BAAQMD's best management practices to reduce GHG emissions from construction.

- Use alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment (at least 15 percent of the Project's construction fleet).
- Use local (within 200 miles) building materials (at least 10 percent).
- Recycle at least 50 percent of construction waste or demolition materials.

Operational Emissions

Area, energy, water, and waste emissions were estimated using CalEEMod. Area sources include gas- and diesel-powered landscaping equipment. Energy sources are associated with the combustion of natural gas as well as the use of electricity. Water consumption results in indirect GHG emissions from the conveyance and treatment of water. Waste generation results in fugitive CH4 and N2O emissions from the decomposition of organic matter. Net emissions associated with the project were calculated by estimated the difference between existing land uses emissions and proposed land uses emissions.

Table 12 shows the existing land use emissions, the proposed project emissions, and the difference between the two, which is the net impact of the proposed project. The operational modeling outputs and detailed assumptions are included in Appendix A.

Table 10. Annual On-Site Net Operational Greenhouse Gas Emissions (metric tons per year)

Source	CO2	CH4	N2O	CO2e
Existing Land Uses				
Area Sources	<1	<1	-	<1
Energy Use	203	<1	<1	205
Mobile Sources	1,578	<1	<1	1,599
Solid Waste Generation	-	<1	-	6
Water Use	-	<1	<1	1
Total Existing On-Site Operational Emissions (per year)	1,781	<1	<1	1,810
Proposed Project				
Area Sources	<1	<1	-	<1
Energy Use	728	<1	<1	733
Mobile Sources	4,649	<1	<1	4,707
Stationary Sources	17	<1	-	17
Solid Waste Generation	-	6	-	152
Water Use	-	9	<1	280
Total Project On-Site Operational Emissions (per year)	5,394	15	<1	5,889
Net Project Emissions	**3,613**	**15**	**<1**	**4,079**

CH4 = methane; CO2 = carbon dioxide; CO2e = carbon dioxide equivalent; N2O = nitrous oxide

As shown in Table 12, existing uses would result in approximately 1,810 metric tons of CO2e per year, while the proposed project would result in approximately 5,889 metric tons of CO2e per year. Net emissions associated with the project are estimated by subtracting emissions associated with existing land uses from the proposed project land uses. The net project emissions are 4,079 metric tons of CO_2e per year.

Consistency with the City of Belmont Climate Action Plan

This analysis evaluates operational GHG impacts, based on compliance with the Belmont CAP, which is recognized by the Supreme Court as an acceptable pathway for evaluating project-level GHG emissions under CEQA (Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company). In addition, where applicable, the analysis considers guidance issued by CARB, such as the 2017 Climate Change Scoping Plan, and OPR's 2018 Discussion Draft CEQA and Climate Change Advisory. The proposed project's operational emissions are discussed by sector (e.g., mobile sources, energy, etc.) and CAP consistency evaluation is included below.

Mobile-Source Emissions

As shown in Table 12, emissions associated with mobile sources would amount to approximately 4,707 metric tons of CO2e per year, a net increase amounting to 3,109 metric tons of CO2e relative to existing conditions. The TDM plan for the proposed project would reduce per capita VMT by 7.4 percent, in accordance with the City of Belmont's General Plan Goal 3.2, resulting in a total per capita VMT that would be 15 percent below the county average. The TDM plan includes 13 measures that will be implemented to reduce trips, which include adding pedestrian breezeways, on-street bicycle racks, shower and locker facilities, etc.

Additionally, the Belmont CAP has six Transportation and Land Use measures. Although many of the measures require action on the City' part to create policies and incentive programs, the proposed project supports all four of the measures that are considered applicable, as stated in Table 13 below.

Table 11. Consistency of the Project with the City of Belmont's Transportation and Land Use Measures

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
Transportation and Land Use	TL1 – Establish a Smart Growth Policy that prioritizes infill, higher density, transportation oriented and mixed-use development.	Yes	Although this measure is an action item for the City, the mixed-use, seven-story buildings will replace one existing four-story building which is consistent with the City's goals for higher density development.	Yes
Transportation and Land Use	TL2 – Remake urban landscape to ensure Complete Streets, with bike lanes, bike parking, traffic calming, beautification, etc.	Yes	The proposed project will improve conditions for walking and biking, by providing on-street bicycle racks/lockers, as well as long-term bicycle racks for workers, and orienting the	Yes

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
	Continue to support Paper Trails and Safe Routes to School to encourage walking		building to be sidewalk-facing with multiple pedestrian entrances.	
Transportation and Land Use	TL3 – Incentivize City Car Sharing Companies to open pods in town. Explore Bike Share program.	Yes	Although this measure is an action for the City, the proposed project will provide a carpool/vanpool shuttle program and matching services, curbside carpool/vanpool/rideshare loading zones and preferential parking, and guaranteed emergency rides, which supports this measure's goal to reduce single-occupancy vehicle driving.	Yes
Transportation and Land Use (Municipal)	TM1 – Prioritize purchase of efficient vehicles and alternative fuel vehicles (including off-road equipment). Maintain existing vehicles for optimum mileage. Encourage staff to drive minimally and efficiently. Establish government operations idling policy.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A
Transportation and Land Use (Municipal)	TM2 – Establish alternative work schedules to reduce employee commute.	Yes	Although this measure applies to municipal development, the proposed project will allow telecommuting and flexible work schedules, which supports this measure's goal of reducing employee commutes.	Yes
Transportation and Land Use (Municipal)	TM4 – Target purchase or lease of new or conversion of existing government vehicles to more efficient vehicles.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A

Note:
NA = not applicable

In addition, federal, state, and local regulatory efforts target three elements of emissions reduction: vehicle fuel efficiency, the carbon content of fuels, and VMT. Most adopted programs and regulations

focus on fuel efficiency (e.g., CAFE standards, Pavley standard) and the carbon intensity of transportation fuels (e.g., low-carbon fuel standard). Vehicle electrification is also rapidly becoming part of the state's approach to reducing mobile-source emissions (e.g., Title 24). The proposed project would not include any features that would conflict with these programs. Rather, it is implementing a TDM plan that would reduce per capita VMT by 15 percent below the countywide average VMT.

A recent CARB assessment makes clear that the state is "not on track to meet greenhouse gas reductions expected under SB 375." SB 743 is intended to close the VMT and emissions reduction gap. There is therefore a nexus between SB 743 and state goals to reduce mobile-source GHG emissions. In response to SB 743, OPR released its technical advisory on evaluating transportation impacts under CEQA in December 2018. The advisory indicates that "achieving 15 percent lower per capita (residential) or per employee (office) VMT than existing development is both generally achievable and is supported by evidence that connects this level of reduction to the state's emissions goals." This reduction goal is consistent with recent CARB (2019) analysis, which demonstrates that a 14.3 percent reduction in VMT per capita by 2050 (compared to a 2015–2018 average) would be needed statewide to meet the GHG planning goals.

The proposed project would meet the City's VMT reduction target of 15 percent, which is designed to meet statewide VMT reduction goals. Therefore, it would not conflict with the state's long-term emissions reduction trajectory for mobile sources.

Area Emissions

As shown in Table 12, the proposed project's emissions associated with area sources would amount to approximately less than 1 metric ton of CO2e per year. Area sources include gasoline-powered landscaping equipment (e.g., trimmers, mowers) and natural-gas hearths. Area-source emissions are based on CalEEMod's default assumptions, which represent a conservative estimate of equipment usage as it corresponds to the square footage of new building space.

The Belmont CAP does not include measures specific to area source emissions. Additionally, there are no relevant measures in the scoping plan for landscaping equipment. Although an inevitable transition away from fossil-fuel equipment will be needed to achieve carbon neutrality by 2045, the scoping plan did not assume all-electric landscaping equipment in its 2030 reduction analysis. The proposed project's use of a mix of trees, shrubs, and lawns would reduce landscaping emissions compared with projects that plant only grass. This is consistent with the scoping plan's overall goal of reducing emissions from fossil-fuel landscaping equipment.

Energy Emissions

As shown in Table 12, building energy emissions would amount to approximately 733 metric tons of CO_2e per year, a net increase amounting to approximately 528 metric tons of CO2e relative to existing conditions. The Belmont CAP has 13 energy measures,[64] and many of the measures require actions on the City's part to create policies and incentive programs. Further, five of the energy-related measures are applicable to improving City municipal buildings and are thus not applicable. The proposed project supports both of the measures that are considered applicable, as stated in Table 14 below.

[64] Two of the Energy Measures relate to water emissions, and they are discussed in the *Water Emissions* section.

Table 12. Consistency of the Project with the City of Belmont's Energy Measures

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
Energy (Community)	EC1 – Adopt CALGreen for non-residential buildings triennially. Work to mandate achievement of CALGreen Tier 1 energy performance.	Yes	The proposed project will implement the most recent CALGreen codes as adopted by the City and the project would also implement CALGreen Tier 1 energy performance, which would help the City achieve this measure's goal.	Yes
Energy (Community)	EC2 – Update CALGreen for residential buildings triennially. Work to mandate achievement of CALGreen Tier 1 energy performance.	No	This measure applies to residential buildings and would not be applicable to this project.	N/A
Energy (Community)	EC3 – Provide financial incentives for solar PV and hot water system installation.	No	This measure is an action the City will perform and does not apply to this project.	N/A
Energy (Community)	EC4 – Provide or encourage residential energy audits and retrofits. Leverage existing rebates/add additional rebates for energy efficient retrofits.	No	This measure applies to residential buildings and would not be applicable to the proposed project.	N/A
Energy (Community)	EC5 – Promote and assist with marketing and outreach for PG&E energy efficiency and demand response programs for the nonresidential sector. Leverage existing rebates/add additional rebates for energy efficient retrofits.	No	This measure is an action the City will perform and does not apply to this project.	N/A
Energy (Community)	EC6 – Continue to be part of the Peninsula Clean Energy (PCE) Community Choice Aggregation (CCA) Program and continue to opt for the ECO100 option (100% renewable energy) for all City facilities.	Yes	The proposed project will be served by PCE , which would help the City reach this measure's goal of proving carbon free and renewable electricity.	Yes
Energy (Municipal)	EM1 – Replace street, signal lights, parks and parking lot lighting with efficient	No	This measure applies to municipal development and would not be	N/A

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
	lighting (LEDs, induction, etc.).		applicable to the proposed project.	
Energy (Municipal)	EM2 – Implement a sustainable purchasing policy that emphasizes recycled materials and Energy Star equipment.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A
Energy (Municipal)	EM3 – Work to mandate all new municipal buildings achievement of CALGreen Tier 1 energy performance.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A
Energy (Municipal)	EM4 – Complete feasibility studies on the installation of solar or other renewable energy projects at City facilities and install where feasible. Set a goal for renewable energy purchase if installation is not viable.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A
Energy (Municipal)	EM5 – Participate in San Mateo County Energy Watch and leveraged benchmarking to identify EE audit and retrofit projects and track energy performance.	No	This measure applies to municipal development and would not be applicable to the proposed project.	N/A

Note:
NA = not applicable

In addition, OPR's 2018 Discussion Draft CEQA and Climate Change Advisory states that a land use development project that "achieves applicable building energy efficiency standards, uses no natural gas or other fossil fuels, and includes Energy Star appliances where available, may be able to demonstrate a less-than-significant greenhouse gas impact associated with project operation." Although OPR recommends that fossil fuels not be used in new buildings, the 2017 Climate Change Scoping Plan does not assume all-electric buildings in its 2030 reduction analysis. Rather, the 2017 Climate Change Scoping Plan assumes that any new gas appliances will be high-efficiency units.

Additionally, San Mateo County amended the California Energy Code to allow for non-electric space conditioning systems in non-residential buildings for laboratory uses.

Waste Emissions

As shown in Table 12, existing emissions from solid waste amounts to approximately 152 metric tons of CO2e per year, a net increase of 146 metric tons of CO2e relative to existing conditions. The Belmont CAP has three waste measures, and many of the measures require action on the City's part to create policies and incentive programs. The proposed project supports all three of the measures that are considered applicable, as stated in Table 15 below.

Table 13. Consistency of the Project with the City of Belmont's Waste Measures

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
Solid Waste (Community)	WC1 – Increase participation in recycling programs and ensure weekly collection of recyclables and organic waste.	Yes	Although this measure is an action item for the City, the proposed project will have recycling containers , which supports the City's goal to increase participation in recycling and organic waste programs.	Yes
Solid Waste (Community)	WC2 – Mandate businesses recycle and provide staff or contractor to verify compliance.	Yes	Although this measure is an action item for the City, the proposed project will have recycling containers, which supports the City's goal of increasing recycling for businesses.	Yes
Solid Waste (Community)	WC4 – Increase diversion/recycling of yard waste by landscapers and landscape maintenance businesses and food scraps by residents and businesses. Explore a ban on these organics from landfill.	Yes	Although this measure is an action item for the City, the proposed Project would be required comply with SB 1383 which requires a 50 percent reduction in organic waste. The project would provide organics/composting waste services, which supports the City's goal to divert organics from the landfill.	Yes

Note:
NA = not applicable

The features described (e.g. recycling and organic waste collection) above are consistent with the scoping plan's overall goal of reducing waste emissions and its specific strategy to avoid landfill CH4 emissions by reducing the disposal of landfill waste and organics. In addition, these features would comply with AB 341's mandatory recycling requirement and support the state's recycling goal.

Water Emissions

As shown in Table 12, emissions associated with water use would amount to approximately 280 metric tons of CO2e per year, a net increase of 279 metric tons of CO2e relative to existing conditions. The Belmont CAP has two measures related to the water sector. Although both measures require action on the City's to create policies and incentive programs, the proposed project supports the one measure that is considered applicable, as stated in Table 16.

Table 14. Consistency of the Project with the City of Belmont's Water Measures

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
Energy (Water)	EW1 – Promote existing and/or new rebates for water efficient appliances and fixtures.	No	This measure is an action the City will perform and does not apply to the proposed project.	N/A
Energy (Water)	EW2 – Adopt Bay Area Water Supply and Conservation Agency (BAWSCA) Ordinances or triennial CALGreen codes that apply to water.	Yes	The proposed project will implement the current Mid-Peninsula Water District adopted BAWSCA outdoor water ordinance, which supports this measures goal of reducing energy through water conservation.	Yes

Note:
NA = not applicable

Additionally, the proposed project would include several water conservation features. The proposed project would be required to comply with all applicable City and state water conservation measures (indoor and outdoor), including Title 24, Part 6, the California Energy Code baseline standards for energy efficiency, as based on the 2019 Energy Efficiency Standards, and the 2019 California Green Building Standards Code, commonly referred to as CALGreen. These features are consistent with the scoping plan's overall goal of reducing water emissions and serve to support ongoing regulatory programs (e.g., SB X7-7, Title 24) that aim to reduce GHG emissions associated with conveying and distributing water.

Stationary Sources Emissions

As shown in Table 12, stationary sources (i.e., the proposed emergency diesel generators) would generate approximately 17 metric tons of CO_2e annually. This net increase is substantially below the BAAQMD's stationary source threshold of 10,000 metric tons of CO_2e per year.

Other Sectors and Conclusion

The Belmont CAP has one measure that is applicable to all sectors, which is not applicable to the proposed project, as stated in Table 17.

Table 15. Consistency of the Project with the City of Belmont's All-Sector Measure

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
All Sectors	A1 – Establish voluntary program that allows businesses to brand themselves as green by following sustainable practices.	No	This measure is directed toward business owners, and the future business owner of the building	N/A

Measure Category	Description of Measure	Applicable?	Project Implementation	Consistent?
			is unknown at this time.	

Note:
N/A = not applicable

The proposed project is consistent with and supports all measures that are applicable from the Belmont CAP. Similarly, the Project's sustainability measures represent a robust suite of strategies that would be consistent with applicable polices from the 2017 Climate Change Scoping Plan and other regulatory programs for the area, energy, water, and waste. With respect to mobile sources, the proposed project would achieve the City's VMT reduction target, which would ensure that the proposed project would be consistent with relevant regulatory programs, such as SB 743, that expressly aim to reduce VMT.

Consistency with Applicable Plans, Policies, and Regulations Adopted for the Purpose of Reducing GHG Emissions

At the local level, the City of Belmont's 2017 Climate Action Plan (Belmont CAP) is the City's plan for reducing GHG emissions. At the state level, AB 32 and SB 32 are the state's plans for reducing GHG emissions. The Project's consistency with the Belmont CAP, AB 32, and SB 32 (including the 2017 Climate Change Scoping Plan) has been assessed to determine the significance of this impact. In addition, the Project's consistency with BAAQMD's 2017 Clean Air Plan, and Plan Bay Area 2040/SB 375.

City of Belmont 2017 Climate Action Plan

As discussed above, the City of Belmont's CAP is a roadmap that outlines a path for the City to use to achieve its community-wide per-service-population GHG emissions reduction goal of 15% below 2005 levels by 2020 and 50% below 2005 levels by 2035. The Belmont CAP features 23 recommended GHG emissions reduction measures within four sectors of community and municipal operations (i.e., energy, transportation and land use, solid waste, all sectors).

As discussed in the analysis above, the proposed project would be consistent with all applicable measures in the Belmont CAP. Thirteen of the measures are not applicable to the proposed project; therefore, consistency with these measures does not apply, but the proposed project would not conflict with or prevent implementation of these measures. Because the project is consistent with all applicable Belmont CAP measures, it would not conflict with the Belmont CAP.

Assembly Bill 32 and Senate Bill 32

AB 32 and SB 32 outline the state's GHG emissions reduction targets for 2020 and 2030, respectively. Although not legislatively adopted, EO S-03-05 establishes the state's long-term goal to reduce GHG emissions 80 percent from 1990 levels by 2050. EO B-55-18 sets a more ambitious state goal of net zero GHG emissions by 2045.

In 2008 and 2014, CARB adopted the original Scoping Plan and First Update, respectively, as a framework for achieving AB 32. The Scoping Plan and First Update outline a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. CARB adopted the 2017

Climate Change Scoping Plan in November 2017 as a framework to achieve the 2030 GHG reduction goal described in SB 32. There is no state plan for addressing GHG reductions beyond 2030.

The 2017 Climate Change Scoping Plan carries forward GHG emissions reduction measures from the 2014 first update as well as new measures to help achieve the state's 2030 target across all sectors of the California economy, including transportation, energy, and industry.

GHG emissions generated by proposed project construction activities would be short term and would cease once construction is complete. As discussed above, implementation of the recommended measure, Implement BAAQMD's best management practices to reduce GHG emissions from construction, would avoid any conflict with statewide emissions reduction goals during construction.

As discussed above, stationary source emissions would be below the BAAQMD's stationary source threshold. In addition, the proposed project would achieve a per capita VMT reduction of 15 percent, which is consistent with OPR's technical advisory stating that a 15 percent lower per capita VMT than existing development is supported by evidence that connects this level of reduction to the state's emissions goals. The proposed project would also implement sustainability measures, including waste diversion measures, and water reduction features that are consistent with the 2017 Climate Change Scoping Plan and would reduce GHG emissions. These reductions would assist the state with meeting its GHG reduction goals and would thus not conflict with any adopted statewide plans.

Plan Bay Area 2050/California Senate Bill 375

Plan Bay Area 2050 is consistent with SB 375, which requires MTC to adopt an SCS that outlines policies to reduce per capita GHG emissions from automobiles and light trucks. Environment and transportation are two of four elements discussed in MTC's Plan Bay Area 2050. Both of these elements are comprised of a set of strategies aiming to reduce both VMT and emissions. The strategies include a mix of measures that encourage compact growth patterns, alternative transportation, transit, mobility and access, network expansion, and transportation investment.

It is estimated that the project would generate up to 3,3,98 net daily trips.[65] To reduce VMT and associated emissions, the project would help to improve conditions for walking and biking, by providing on-street bicycle racks/lockers, as well as long-term bicycle racks for workers, and orienting the building to be sidewalk-facing with multiple pedestrian entrances. The proposed project would be infill, involving the redevelopment and densification of the site. Overall, the project will incorporate 13 TDM features, which are anticipated to reduce per capita VMT by approximately 7.4 percent, resulting in a total per capita VMT that would be 15 percent below the county average. This reduction percentage is consistent with the City's VMT reduction target of 15 percent, which is designed to meet statewide VMT reduction goals.

These policies would support alternative transportation within the community, which could help reduce VMT and per capita GHG emissions from passenger vehicles, consistent with Plan Bay Area 2050.

[65] Hexagon Transportation Consultants, Inc. *Office Development at 1301 Shoreway Drive – Draft Transportation Impact Analysis.* March 11, 2022.

Other State Regulations

As discussed above in the analysis of consistency with SB 32, systemic changes will be required at the state level to achieve statewide future GHG reduction goals. Regulations such as the SB 100–mandated 100 percent carbon-free RPS by 2045; implementation of the state's SLCP Reduction Strategy, including forthcoming regulations for composting and organics diversion; and future updates to the state's Title 24 standards, including requirements for net-zero energy, will be necessary to attain the magnitude of reductions required by the state's goals. The proposed project would be required to comply with these regulations in new construction (e.g., in the case of updated Title 24 standards) or be directly affected by the outcomes (e.g., energy consumption would be less carbon intensive with the increasingly stringent RPSs). Unlike the scoping plans, which explicitly call for additional emissions reductions from local governments and new projects, none of these state regulations identify specific requirements or commitments for new development beyond what is already required by existing regulations or will be required in forthcoming regulation. Therefore, for the foreseeable future, the proposed project would not conflict with any state-level regulations pertaining to GHGs in the post-2020 era.

Conclusion

The project includes measures that would be consistent with state regulations to reduce GHG emissions (e.g., SB 100, SLCP Reduction Strategy) and the Belmont CAP, applicable policies described in the scoping plans for AB 32, SB 32, the 2017 CAP, and Plan Bay Area 2050. Therefore, the project would not conflict with achievement of AB 32 reduction goals for 2020, SB 32 reduction goals for 2030, or the RTP/SCS reduction goals for 2035 and 2050.

Appendix A

Construction and Operations Emissions Modeling Output Files

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1301 Shoreway Road Project

San Mateo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	545.00	1000sqft	12.51	545,000.00	0
Enclosed Parking with Elevator	469.00	1000sqft	10.77	469,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Pollutants - Test2

Land Use - Land Use - 2 Buildings Totaling 545,000 GSF; Parking Structure: 8 Levels 469,000 GSF

Construction Phase - Construction Phase - All info provided by applicant

Off-road Equipment - Structural concrete + Building Construction - all info provided by applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - .

Off-road Equipment - Demolition - this phase used only for demo truck trips. Demo equipment included with grading phase.

Off-road Equipment - Grading - all info provided by applicant

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1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Off and On-Site Improvements - all info provided by applicant

Trips and VMT - Trips and VMT - all info provided by applicant

On-road Fugitive Dust -

Demolition - Demolition - all info provided by applicant

Grading - Dust from Material Movement - all info provided by applicant

Architectural Coating - Belmont General Plan Mitigation Measure AQ-3 (Low-VOC)

Paving - Test11

Vehicle Trips - Vehicle Trips - all info provided by applicant

Vehicle Emission Factors - .

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Energy Use - used 6.9 for natural gas use to account for potential research and development portion of project

Water And Wastewater - Waste and Wastewater - Used 267,973,201.23 for indoor water use to account for research and development portion of project

Construction Off-road Equipment Mitigation - .

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps - Converted from 500 kW and 2,000 kW

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	150.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	35.00	169.00
tblConstructionPhase	NumDays	370.00	260.00
tblConstructionPhase	NumDays	370.00	262.00
tblConstructionPhase	NumDays	20.00	262.00

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	20.00	261.00
tblEnergyUse	NT24NG	1.01	6.90
tblGrading	MaterialExported	0.00	10,000.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	275.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	187.00	185.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	228.00
tblOffRoadEquipment	HorsePower	367.00	239.00
tblOffRoadEquipment	HorsePower	97.00	64.00
tblOffRoadEquipment	HorsePower	97.00	88.00
tblOffRoadEquipment	HorsePower	63.00	45.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	8.00	405.00
tblOffRoadEquipment	HorsePower	8.00	130.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	263.00	65.00
tblOffRoadEquipment	HorsePower	64.00	80.00
tblOffRoadEquipment	HorsePower	97.00	174.00
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tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,682.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	671.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	19.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	166.00	130.00
tblTripsAndVMT	VendorTripNumber	166.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	100.00
tblTripsAndVMT	WorkerTripNumber	30.00	20.00
tblTripsAndVMT	WorkerTripNumber	371.00	90.00
tblTripsAndVMT	WorkerTripNumber	371.00	40.00
tblTripsAndVMT	WorkerTripNumber	74.00	24.00
tblTripsAndVMT	WorkerTripNumber	28.00	80.00
tblVehicleTrips	CC_TL	7.30	11.80
tblVehicleTrips	CNW_TL	7.30	11.80
tblVehicleTrips	CW_TL	9.50	11.80
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	9.46
tblWater	IndoorWaterUseRate	96,864,892.66	267,973,201.23

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	7.8076	73.3077	52.0733	0.2155	13.8147	2.5151	15.4226	4.4274	2.3566	6.6530	0.0000	22,481.4839	22,481.4839	3.7521	0.6452	22,767.5420
2025	10.2327	70.1593	78.1023	0.2840	3.8016	2.0081	5.8097	1.0507	1.9132	2.9639	0.0000	30,513.3027	30,513.3027	3.4286	0.9622	30,885.7360
2026	6.6197	40.7851	51.4115	0.1623	2.1835	1.1955	3.3791	0.6017	1.1295	1.7312	0.0000	17,306.4916	17,306.4916	2.3525	0.5048	17,515.7347
Maximum	**10.2327**	**73.3077**	**78.1023**	**0.2840**	**13.8147**	**2.5151**	**15.4226**	**4.4274**	**2.3566**	**6.6530**	**0.0000**	**30,513.3027**	**30,513.3027**	**3.7521**	**0.9622**	**30,885.7360**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.5853	21.3600	84.5607	0.2155	6.6528	0.3266	6.8210	2.2548	0.3243	2.5791	0.0000	22,481.4839	22,481.4839	3.7521	0.6452	22,767.5420
2025	5.5282	32.7018	120.3695	0.2840	3.8016	0.4185	4.2201	1.0507	0.4149	1.4656	0.0000	30,513.3027	30,513.3027	3.4286	0.9622	30,885.7360
2026	4.0447	18.2702	75.1376	0.1623	2.1835	0.2419	2.4254	0.6017	0.2399	0.8416	0.0000	17,306.4916	17,306.4916	2.3525	0.5048	17,515.7347
Maximum	**5.5282**	**32.7018**	**120.3695**	**0.2840**	**6.6528**	**0.4185**	**6.8210**	**2.2548**	**0.4149**	**2.5791**	**0.0000**	**30,513.3027**	**30,513.3027**	**3.7521**	**0.9622**	**30,885.7360**

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**50.70**	**60.74**	**-54.23**	**0.00**	**36.17**	**82.74**	**45.28**	**35.73**	**81.87**	**56.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Energy	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Mobile	14.9711	16.1021	170.3494	0.3753	46.5494	0.2326	46.7820	12.3919	0.2161	12.6080		39,377.3197	39,377.3197	2.2509	1.5469	39,894.5621
Stationary	4.9519	21.2214	12.6264	0.0238		0.7284	0.7284		0.7284	0.7284		2,533.2339	2,533.2339	0.3552		2,542.1129
Total	**33.7756**	**40.9900**	**186.1581**	**0.4211**	**46.5494**	**1.2399**	**47.7894**	**12.3919**	**1.2235**	**13.6154**		**46,309.4217**	**46,309.4217**	**2.6910**	**1.6275**	**46,861.6965**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Area	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Energy	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Mobile	14.9711	16.1021	170.3494	0.3753	46.5494	0.2326	46.7820	12.3919	0.2161	12.6080		39,377.3197	39,377.3197	2.2509	1.5469	39,894.5621
Stationary	4.9519	21.2214	12.6264	0.0238		0.7284	0.7284		0.7284	0.7284		2,533.2339	2,533.2339	0.3552		2,542.1129
Total	**33.7756**	**40.9900**	**186.1581**	**0.4211**	**46.5494**	**1.2399**	**47.7894**	**12.3919**	**1.2235**	**13.6154**		**46,309.4217**	**46,309.4217**	**2.6910**	**1.6275**	**46,861.6965**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	3/1/2024	5	45	
2	Demo/Site Clearing/Shoring/Mass Excavation	Grading	1/1/2024	8/22/2024	5	169	
3	Building Construction	Building Construction	6/22/2024	6/22/2025	5	260	
4	Building Exterior	Building Construction	4/22/2025	4/22/2026	5	262	
5	Building Interior	Architectural Coating	4/22/2025	4/22/2026	5	262	
6	Off and On-Site Improvements	Paving	6/22/2025	6/22/2026	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 591.5

Acres of Paving: 10.77

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 817,500; Non-Residential Outdoor: 272,500; Striped Parking Area: 28,140

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demo/Site Clearing/Shoring/Mass Excavation	Bore/Drill Rigs	1	8.00	205	0.50
Demo/Site Clearing/Shoring/Mass Excavation	Cranes	1	8.00	225	0.29
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	2	8.00	275	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	1	8.00	185	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Graders	2	8.00	185	0.41
Demo/Site Clearing/Shoring/Mass Excavation	Plate Compactors	1	8.00	405	0.43
Demo/Site Clearing/Shoring/Mass Excavation	Rubber Tired Dozers	1	8.00	228	0.40
Demo/Site Clearing/Shoring/Mass Excavation	Scrapers	2	8.00	239	0.48
Demo/Site Clearing/Shoring/Mass Excavation	Sweepers/Scrubbers	1	8.00	80	0.46
Building Construction	Cranes	1	8.00	225	0.29
Building Construction	Cranes	1	4.00	225	0.29
Building Construction	Excavators	1	8.00	185	0.38
Building Construction	Excavators	1	4.00	185	0.38
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Surfacing Equipment	2	8.00	65	0.30
Building Construction	Welders	2	8.00	46	0.45
Building Exterior	Aerial Lifts	6	8.00	45	0.31
Building Exterior	Cranes	1	8.00	225	0.29
Building Exterior	Excavators	2	4.00	185	0.38
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	64	0.37
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	88	0.37
Building Interior	Air Compressors	0	6.00	78	0.48

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Interior	Excavators	1	4.00	185	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Pavers	1	8.00	125	0.42
Off and On-Site Improvements	Plate Compactors	1	8.00	130	0.43
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Rollers	1	8.00	80	0.38
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	682.00	10.80	7.30	23.00	LD_Mix	HDT_Mix	HHDT
Demo/Site Clearing/Shoring/Mass	12	20.00	30.00	1,250.00	10.80	7.30	19.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	90.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	11	40.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	24.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Off and On-Site Improvements	11	80.00	100.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2024

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2812	0.0000	3.2812	0.4968	0.0000	0.4968			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.2812**	**0.0000**	**3.2812**	**0.4968**	**0.0000**	**0.4968**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0376	2.7040	0.8960	0.0109	0.3035	0.0180	0.3215	0.0831	0.0172	0.1003		1,281.0739	1,281.0739	0.1345	0.2067	1,346.0200
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0376**	**2.7040**	**0.8960**	**0.0109**	**0.3035**	**0.0180**	**0.3215**	**0.0831**	**0.0172**	**0.1003**		**1,281.0739**	**1,281.0739**	**0.1345**	**0.2067**	**1,346.0200**

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.4765**	**0.0000**	**1.4765**	**0.2236**	**0.0000**	**0.2236**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0376	2.7040	0.8960	0.0109	0.3035	0.0180	0.3215	0.0831	0.0172	0.1003		1,281.0739	1,281.0739	0.1345	0.2067	1,346.0200
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0376**	**2.7040**	**0.8960**	**0.0109**	**0.3035**	**0.0180**	**0.3215**	**0.0831**	**0.0172**	**0.1003**		**1,281.0739**	**1,281.0739**	**0.1345**	**0.2067**	**1,346.0200**

3.3 Demo/Site Clearing/Shoring/Mass Excavation - 2024

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1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.7405	0.0000	9.7405	3.7120	0.0000	3.7120			0.0000			0.0000
Off-Road	3.9155	38.6234	24.0048	0.0821		1.5746	1.5746		1.4486	1.4486		7,950.1219	7,950.1219	2.5712		8,014.4027
Total	**3.9155**	**38.6234**	**24.0048**	**0.0821**	**9.7405**	**1.5746**	**11.3151**	**3.7120**	**1.4486**	**5.1606**		**7,950.1219**	**7,950.1219**	**2.5712**		**8,014.4027**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0161	1.1135	0.3769	4.4300e-003	0.1224	7.2700e-003	0.1297	0.0335	6.9600e-003	0.0405		519.6339	519.6339	0.0543	0.0838	545.9714
Vendor	0.0307	1.4239	0.5129	6.1600e-003	0.2028	7.3300e-003	0.2101	0.0584	7.0100e-003	0.0654		690.3362	690.3362	0.0442	0.1020	721.8223
Worker	0.0452	0.0274	0.3807	1.2300e-003	0.1643	7.3000e-004	0.1650	0.0436	6.7000e-004	0.0443		126.9693	126.9693	3.1600e-003	3.2000e-003	128.0012
Total	**0.0920**	**2.5649**	**1.2705**	**0.0118**	**0.4895**	**0.0153**	**0.5048**	**0.1354**	**0.0146**	**0.1501**		**1,336.9395**	**1,336.9395**	**0.1017**	**0.1890**	**1,395.7949**

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3832	0.0000	4.3832	1.6704	0.0000	1.6704			0.0000			0.0000
Off-Road	1.0119	4.3847	38.0750	0.0821		0.1349	0.1349		0.1349	0.1349	0.0000	7,950.1219	7,950.1219	2.5712		8,014.4026
Total	**1.0119**	**4.3847**	**38.0750**	**0.0821**	**4.3832**	**0.1349**	**4.5182**	**1.6704**	**0.1349**	**1.8053**	**0.0000**	**7,950.1219**	**7,950.1219**	**2.5712**		**8,014.4026**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0161	1.1135	0.3769	4.4300e-003	0.1224	7.2700e-003	0.1297	0.0335	6.9600e-003	0.0405		519.6339	519.6339	0.0543	0.0838	545.9714
Vendor	0.0307	1.4239	0.5129	6.1600e-003	0.2028	7.3300e-003	0.2101	0.0584	7.0100e-003	0.0654		690.3362	690.3362	0.0442	0.1020	721.8223
Worker	0.0452	0.0274	0.3807	1.2300e-003	0.1643	7.3000e-004	0.1650	0.0436	6.7000e-004	0.0443		126.9693	126.9693	3.1600e-003	3.2000e-003	128.0012
Total	**0.0920**	**2.5649**	**1.2705**	**0.0118**	**0.4895**	**0.0153**	**0.5048**	**0.1354**	**0.0146**	**0.1501**		**1,336.9395**	**1,336.9395**	**0.1017**	**0.1890**	**1,395.7949**

3.4 Building Construction - 2024

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1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4636	25.8256	22.8625	0.0893		0.8902	0.8902		0.8600	0.8600		9,631.6034	9,631.6034	0.8736		9,653.4426
Total	**3.4636**	**25.8256**	**22.8625**	**0.0893**		**0.8902**	**0.8902**		**0.8600**	**0.8600**		**9,631.6034**	**9,631.6034**	**0.8736**		**9,653.4426**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1331	6.1704	2.2227	0.0267	0.8787	0.0318	0.9105	0.2529	0.0304	0.2832		2,991.4571	2,991.4571	0.1914	0.4418	3,127.8964
Worker	0.2035	0.1234	1.7130	5.5400e-003	0.7393	3.2700e-003	0.7426	0.1961	3.0100e-003	0.1991		571.3621	571.3621	0.0142	0.0144	576.0054
Total	**0.3365**	**6.2938**	**3.9356**	**0.0322**	**1.6181**	**0.0350**	**1.6531**	**0.4490**	**0.0334**	**0.4823**		**3,562.8191**	**3,562.8191**	**0.2057**	**0.4562**	**3,703.9019**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1449	8.1166	41.2796	0.0893		0.1413	0.1413		0.1413	0.1413	0.0000	9,631.6034	9,631.6034	0.8736		9,653.4426
Total	**1.1449**	**8.1166**	**41.2796**	**0.0893**		**0.1413**	**0.1413**		**0.1413**	**0.1413**	**0.0000**	**9,631.6034**	**9,631.6034**	**0.8736**		**9,653.4426**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1331	6.1704	2.2227	0.0267	0.8787	0.0318	0.9105	0.2529	0.0304	0.2832		2,991.4571	2,991.4571	0.1914	0.4418	3,127.8964
Worker	0.2035	0.1234	1.7130	5.5400e-003	0.7393	3.2700e-003	0.7426	0.1961	3.0100e-003	0.1991		571.3621	571.3621	0.0142	0.0144	576.0054
Total	**0.3365**	**6.2938**	**3.9356**	**0.0322**	**1.6181**	**0.0350**	**1.6531**	**0.4490**	**0.0334**	**0.4823**		**3,562.8191**	**3,562.8191**	**0.2057**	**0.4562**	**3,703.9019**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2744	23.0591	22.7386	0.0893		0.7772	0.7772		0.7500	0.7500		9,632.8166	9,632.8166	0.8710		9,654.5925
Total	**3.2744**	**23.0591**	**22.7386**	**0.0893**		**0.7772**	**0.7772**		**0.7500**	**0.7500**		**9,632.8166**	**9,632.8166**	**0.8710**		**9,654.5925**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1291	6.1000	2.2211	0.0261	0.8788	0.0317	0.9106	0.2529	0.0304	0.2832		2,932.8139	2,932.8139	0.1954	0.4335	3,066.8755
Worker	0.1949	0.1118	1.6185	5.3500e-003	0.7393	3.1300e-003	0.7425	0.1961	2.8800e-003	0.1990		557.7536	557.7536	0.0129	0.0135	562.1069
Total	**0.3240**	**6.2118**	**3.8396**	**0.0315**	**1.6182**	**0.0349**	**1.6530**	**0.4490**	**0.0332**	**0.4822**		**3,490.5675**	**3,490.5675**	**0.2083**	**0.4470**	**3,628.9824**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1449	8.1166	41.2796	0.0893		0.1413	0.1413		0.1413	0.1413	0.0000	9,632.8165	9,632.8165	0.8710		9,654.5925
Total	**1.1449**	**8.1166**	**41.2796**	**0.0893**		**0.1413**	**0.1413**		**0.1413**	**0.1413**	**0.0000**	**9,632.8165**	**9,632.8165**	**0.8710**		**9,654.5925**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1291	6.1000	2.2211	0.0261	0.8788	0.0317	0.9106	0.2529	0.0304	0.2832		2,932.8139	2,932.8139	0.1954	0.4335	3,066.8755
Worker	0.1949	0.1118	1.6185	5.3500e-003	0.7393	3.1300e-003	0.7425	0.1961	2.8800e-003	0.1990		557.7536	557.7536	0.0129	0.0135	562.1069
Total	**0.3240**	**6.2118**	**3.8396**	**0.0315**	**1.6182**	**0.0349**	**1.6530**	**0.4490**	**0.0332**	**0.4822**		**3,490.5675**	**3,490.5675**	**0.2083**	**0.4470**	**3,628.9824**

3.5 Building Exterior - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9006	10.6204	11.0851	0.0246		0.2857	0.2857		0.2628	0.2628		2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.9006**	**10.6204**	**11.0851**	**0.0246**		**0.2857**	**0.2857**		**0.2628**	**0.2628**		**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0397	1.8769	0.6834	8.0300e-003	0.2704	9.7600e-003	0.2802	0.0778	9.3400e-003	0.0872		902.4043	902.4043	0.0601	0.1334	943.6540
Worker	0.0866	0.0497	0.7193	2.3800e-003	0.3286	1.3900e-003	0.3300	0.0872	1.2800e-003	0.0884		247.8905	247.8905	5.7500e-003	6.0100e-003	249.8253
Total	**0.1263**	**1.9266**	**1.4028**	**0.0104**	**0.5990**	**0.0112**	**0.6102**	**0.1650**	**0.0106**	**0.1756**		**1,150.2948**	**1,150.2948**	**0.0659**	**0.1394**	**1,193.4793**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4052	5.9748	14.9821	0.0246		0.0389	0.0389		0.0389	0.0389	0.0000	2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.4052**	**5.9748**	**14.9821**	**0.0246**		**0.0389**	**0.0389**		**0.0389**	**0.0389**	**0.0000**	**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0397	1.8769	0.6834	8.0300e-003	0.2704	9.7600e-003	0.2802	0.0778	9.3400e-003	0.0872		902.4043	902.4043	0.0601	0.1334	943.6540
Worker	0.0866	0.0497	0.7193	2.3800e-003	0.3286	1.3900e-003	0.3300	0.0872	1.2800e-003	0.0884		247.8905	247.8905	5.7500e-003	6.0100e-003	249.8253
Total	**0.1263**	**1.9266**	**1.4028**	**0.0104**	**0.5990**	**0.0112**	**0.6102**	**0.1650**	**0.0106**	**0.1756**		**1,150.2948**	**1,150.2948**	**0.0659**	**0.1394**	**1,193.4793**

3.5 Building Exterior - 2026

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9006	10.6204	11.0851	0.0246		0.2857	0.2857		0.2628	0.2628		2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.9006**	**10.6204**	**11.0851**	**0.0246**		**0.2857**	**0.2857**		**0.2628**	**0.2628**		**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0387	1.8529	0.6856	7.8600e-003	0.2704	9.7000e-003	0.2801	0.0778	9.2800e-003	0.0871		884.8966	884.8966	0.0615	0.1309	925.4350
Worker	0.0836	0.0457	0.6858	2.3100e-003	0.3286	1.3200e-003	0.3299	0.0872	1.2200e-003	0.0884		242.7103	242.7103	5.2800e-003	5.7100e-003	244.5431
Total	**0.1223**	**1.8986**	**1.3714**	**0.0102**	**0.5990**	**0.0110**	**0.6101**	**0.1650**	**0.0105**	**0.1755**		**1,127.6069**	**1,127.6069**	**0.0667**	**0.1366**	**1,169.9780**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4052	5.9748	14.9821	0.0246		0.0389	0.0389		0.0389	0.0389	0.0000	2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.4052**	**5.9748**	**14.9821**	**0.0246**		**0.0389**	**0.0389**		**0.0389**	**0.0389**	**0.0000**	**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0387	1.8529	0.6856	7.8600e-003	0.2704	9.7000e-003	0.2801	0.0778	9.2800e-003	0.0871		884.8966	884.8966	0.0615	0.1309	925.4350
Worker	0.0836	0.0457	0.6858	2.3100e-003	0.3286	1.3200e-003	0.3299	0.0872	1.2200e-003	0.0884		242.7103	242.7103	5.2800e-003	5.7100e-003	244.5431
Total	**0.1223**	**1.8986**	**1.3714**	**0.0102**	**0.5990**	**0.0110**	**0.6101**	**0.1650**	**0.0105**	**0.1755**		**1,127.6069**	**1,127.6069**	**0.0667**	**0.1366**	**1,169.9780**

3.6 Building Interior - 2025

Unmitigated Construction On-Site

Date: 5/13/2022 12:35 PM

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0811	0.5965	0.6704	3.0300e-003		0.0196	0.0196		0.0180	0.0180		292.9587	292.9587	0.0948		295.3274
Total	**2.0591**	**0.5965**	**0.6704**	**3.0300e-003**		**0.0196**	**0.0196**		**0.0180**	**0.0180**		**292.9587**	**292.9587**	**0.0948**		**295.3274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9400e-003	0.3754	0.1367	1.6100e-003	0.0541	1.9500e-003	0.0560	0.0156	1.8700e-003	0.0174		180.4809	180.4809	0.0120	0.0267	188.7308
Worker	0.0520	0.0298	0.4316	1.4300e-003	0.1972	8.4000e-004	0.1980	0.0523	7.7000e-004	0.0531		148.7343	148.7343	3.4500e-003	3.6100e-003	149.8952
Total	**0.0599**	**0.4052**	**0.5683**	**3.0400e-003**	**0.2512**	**2.7900e-003**	**0.2540**	**0.0679**	**2.6400e-003**	**0.0705**		**329.2152**	**329.2152**	**0.0155**	**0.0303**	**338.6260**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0372	0.1612	1.3639	3.0300e-003		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003	0.0000	292.9587	292.9587	0.0948		295.3274
Total	**2.0153**	**0.1612**	**1.3639**	**3.0300e-003**		**4.9600e-003**	**4.9600e-003**		**4.9600e-003**	**4.9600e-003**	**0.0000**	**292.9587**	**292.9587**	**0.0948**		**295.3274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9400e-003	0.3754	0.1367	1.6100e-003	0.0541	1.9500e-003	0.0560	0.0156	1.8700e-003	0.0174		180.4809	180.4809	0.0120	0.0267	188.7308
Worker	0.0520	0.0298	0.4316	1.4300e-003	0.1972	8.4000e-004	0.1980	0.0523	7.7000e-004	0.0531		148.7343	148.7343	3.4500e-003	3.6100e-003	149.8952
Total	**0.0599**	**0.4052**	**0.5683**	**3.0400e-003**	**0.2512**	**2.7900e-003**	**0.2540**	**0.0679**	**2.6400e-003**	**0.0705**		**329.2152**	**329.2152**	**0.0155**	**0.0303**	**338.6260**

3.6 Building Interior - 2026

Unmitigated Construction On-Site

Date: 5/13/2022 12:35 PM

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0811	0.5965	0.6704	3.0300e-003		0.0196	0.0196		0.0180	0.0180		292.9587	292.9587	0.0948		295.3274
Total	**2.0591**	**0.5965**	**0.6704**	**3.0300e-003**		**0.0196**	**0.0196**		**0.0180**	**0.0180**		**292.9587**	**292.9587**	**0.0948**		**295.3274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7400e-003	0.3706	0.1371	1.5700e-003	0.0541	1.9400e-003	0.0560	0.0156	1.8600e-003	0.0174		176.9793	176.9793	0.0123	0.0262	185.0870
Worker	0.0502	0.0274	0.4115	1.3900e-003	0.1972	7.9000e-004	0.1980	0.0523	7.3000e-004	0.0530		145.6262	145.6262	3.1700e-003	3.4200e-003	146.7258
Total	**0.0579**	**0.3980**	**0.5486**	**2.9600e-003**	**0.2512**	**2.7300e-003**	**0.2540**	**0.0679**	**2.5900e-003**	**0.0704**		**322.6055**	**322.6055**	**0.0155**	**0.0296**	**331.8128**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0372	0.1612	1.3639	3.0300e-003		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003	0.0000	292.9587	292.9587	0.0948		295.3274
Total	**2.0153**	**0.1612**	**1.3639**	**3.0300e-003**		**4.9600e-003**	**4.9600e-003**		**4.9600e-003**	**4.9600e-003**	**0.0000**	**292.9587**	**292.9587**	**0.0948**		**295.3274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7400e-003	0.3706	0.1371	1.5700e-003	0.0541	1.9400e-003	0.0560	0.0156	1.8600e-003	0.0174		176.9793	176.9793	0.0123	0.0262	185.0870
Worker	0.0502	0.0274	0.4115	1.3900e-003	0.1972	7.9000e-004	0.1980	0.0523	7.3000e-004	0.0530		145.6262	145.6262	3.1700e-003	3.4200e-003	146.7258
Total	**0.0579**	**0.3980**	**0.5486**	**2.9600e-003**	**0.2512**	**2.7300e-003**	**0.2540**	**0.0679**	**2.5900e-003**	**0.0704**		**322.6055**	**322.6055**	**0.0155**	**0.0296**	**331.8128**

3.7 Off and On-Site Improvements - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2158	22.5480	34.6503	0.0973		0.8496	0.8496		0.8100	0.8100		10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2158**	**22.5480**	**34.6503**	**0.0973**		**0.8496**	**0.8496**		**0.8100**	**0.8100**		**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0993	4.6923	1.7086	0.0201	0.6760	0.0244	0.7004	0.1945	0.0234	0.2179		2,256.0107	2,256.0107	0.1503	0.3335	2,359.1350
Worker	0.1732	0.0994	1.4387	4.7600e-003	0.6572	2.7800e-003	0.6600	0.1743	2.5600e-003	0.1769		495.7810	495.7810	0.0115	0.0120	499.6506
Total	**0.2725**	**4.7917**	**3.1472**	**0.0248**	**1.3332**	**0.0272**	**1.3604**	**0.3689**	**0.0259**	**0.3948**		**2,751.7917**	**2,751.7917**	**0.1618**	**0.3455**	**2,858.7856**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1802	5.1140	53.7860	0.0973		0.1574	0.1574		0.1574	0.1574	0.0000	10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1802**	**5.1140**	**53.7860**	**0.0973**		**0.1574**	**0.1574**		**0.1574**	**0.1574**	**0.0000**	**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0993	4.6923	1.7086	0.0201	0.6760	0.0244	0.7004	0.1945	0.0234	0.2179		2,256.0107	2,256.0107	0.1503	0.3335	2,359.1350
Worker	0.1732	0.0994	1.4387	4.7600e-003	0.6572	2.7800e-003	0.6600	0.1743	2.5600e-003	0.1769		495.7810	495.7810	0.0115	0.0120	499.6506
Total	**0.2725**	**4.7917**	**3.1472**	**0.0248**	**1.3332**	**0.0272**	**1.3604**	**0.3689**	**0.0259**	**0.3948**		**2,751.7917**	**2,751.7917**	**0.1618**	**0.3455**	**2,858.7856**

3.7 Off and On-Site Improvements - 2026

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2158	22.5480	34.6503	0.0973		0.8496	0.8496		0.8100	0.8100		10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2158**	**22.5480**	**34.6503**	**0.0973**		**0.8496**	**0.8496**		**0.8100**	**0.8100**		**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0967	4.6323	1.7141	0.0197	0.6761	0.0243	0.7004	0.1946	0.0232	0.2178		2,212.2415	2,212.2415	0.1536	0.3272	2,313.5875
Worker	0.1672	0.0913	1.3716	4.6200e-003	0.6572	2.6500e-003	0.6598	0.1743	2.4300e-003	0.1768		485.4206	485.4206	0.0106	0.0114	489.0861
Total	**0.2639**	**4.7236**	**3.0857**	**0.0243**	**1.3333**	**0.0269**	**1.3602**	**0.3689**	**0.0256**	**0.3945**		**2,697.6622**	**2,697.6622**	**0.1642**	**0.3386**	**2,802.6736**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1802	5.1140	53.7860	0.0973		0.1574	0.1574		0.1574	0.1574	0.0000	10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1802**	**5.1140**	**53.7860**	**0.0973**		**0.1574**	**0.1574**		**0.1574**	**0.1574**	**0.0000**	**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0967	4.6323	1.7141	0.0197	0.6761	0.0243	0.7004	0.1946	0.0232	0.2178		2,212.2415	2,212.2415	0.1536	0.3272	2,313.5875
Worker	0.1672	0.0913	1.3716	4.6200e-003	0.6572	2.6500e-003	0.6598	0.1743	2.4300e-003	0.1768		485.4206	485.4206	0.0106	0.0114	489.0861
Total	**0.2639**	**4.7236**	**3.0857**	**0.0243**	**1.3333**	**0.0269**	**1.3602**	**0.3689**	**0.0256**	**0.3945**		**2,697.6622**	**2,697.6622**	**0.1642**	**0.3386**	**2,802.6736**

4.0 Operational Detail - Mobile

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	14.9711	16.1021	170.3494	0.3753	46.5494	0.2326	46.7820	12.3919	0.2161	12.6080		39,377.3197	39,377.3197	2.2509	1.5469	39,894.5621
Unmitigated	14.9711	16.1021	170.3494	0.3753	46.5494	0.2326	46.7820	12.3919	0.2161	12.6080		39,377.3197	39,377.3197	2.2509	1.5469	39,894.5621

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	5,155.70	0.00	0.00	15,817,688	15,817,688
Total	5,155.70	0.00	0.00	15,817,688	15,817,688

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	11.80	11.80	11.80	33.00	48.00	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710
General Office Building	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
NaturalGas Unmitigated	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	37388.5	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total		**0.4032**	**3.6655**	**3.0791**	**0.0220**		**0.2786**	**0.2786**		**0.2786**	**0.2786**		**4,398.6463**	**4,398.6463**	**0.0843**	**0.0806**	**4,424.7852**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	37.3885	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Total		**0.4032**	**3.6655**	**3.0791**	**0.0220**		**0.2786**	**0.2786**		**0.2786**	**0.2786**		**4,398.6463**	**4,398.6463**	**0.0843**	**0.0806**	**4,424.7852**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Unmitigated	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5100e-003	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Total	**13.4494**	**9.4000e-004**	**0.1033**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**		**0.2219**	**0.2219**	**5.8000e-004**		**0.2364**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Consumer Products	11.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5100e-003	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Total	**13.4494**	**9.4000e-004**	**0.1033**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**		**0.2219**	**0.2219**	**5.8000e-004**		**0.2364**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	6	671	0.73	Diesel
Emergency Generator	2	0.5	6	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

1301 Shoreway Road Project - San Mateo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (...	0.5506	1.5388	1.4039	2.6500e-003		0.0810	0.0810		0.0810	0.0810		281.6570	281.6570	0.0395		282.6442
Emergency Generator - Diesel (...	4.4013	19.6825	11.2225	0.0212		0.6475	0.6475		0.6475	0.6475		2,251.5769	2,251.5769	0.3157		2,259.4687
Total	**4.9519**	**21.2214**	**12.6264**	**0.0238**		**0.7284**	**0.7284**		**0.7284**	**0.7284**		**2,533.2339**	**2,533.2339**	**0.3552**		**2,542.1129**

11.0 Vegetation

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1301 Shoreway Road Project

San Mateo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	545.00	1000sqft	12.51	545,000.00	0
Enclosed Parking with Elevator	469.00	1000sqft	10.77	469,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Pollutants - Test2

Land Use - Land Use - 2 Buildings Totaling 545,000 GSF; Parking Structure: 8 Levels 469,000 GSF

Construction Phase - Construction Phase - All info provided by applicant

Off-road Equipment - Structural concrete + Building Construction - all info provided by applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - .

Off-road Equipment - Demolition - this phase used only for demo truck trips. Demo equipment included with grading phase.

Off-road Equipment - Grading - all info provided by applicant

Date: 5/13/2022 12:37 PM

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Off and On-Site Improvements - all info provided by applicant

Trips and VMT - Trips and VMT - all info provided by applicant

On-road Fugitive Dust -

Demolition - Demolition - all info provided by applicant

Grading - Dust from Material Movement - all info provided by applicant

Architectural Coating - Belmont General Plan Mitigation Measure AQ-3 (Low-VOC)

Paving - Test11

Vehicle Trips - Vehicle Trips - all info provided by applicant

Vehicle Emission Factors - .

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Energy Use - used 6.9 for natural gas use to account for potential research and development portion of project

Water And Wastewater - Waste and Wastewater - Used 267,973,201.23 for indoor water use to account for research and development portion of project

Construction Off-road Equipment Mitigation - .

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps - Converted from 500 kW and 2,000 kW

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	150.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	35.00	169.00
tblConstructionPhase	NumDays	370.00	260.00
tblConstructionPhase	NumDays	370.00	262.00
tblConstructionPhase	NumDays	20.00	262.00

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	20.00	261.00
tblEnergyUse	NT24NG	1.01	6.90
tblGrading	MaterialExported	0.00	10,000.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	275.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	187.00	185.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	228.00
tblOffRoadEquipment	HorsePower	367.00	239.00
tblOffRoadEquipment	HorsePower	97.00	64.00
tblOffRoadEquipment	HorsePower	97.00	88.00
tblOffRoadEquipment	HorsePower	63.00	45.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	8.00	405.00
tblOffRoadEquipment	HorsePower	8.00	130.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	263.00	65.00
tblOffRoadEquipment	HorsePower	64.00	80.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,682.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	671.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	19.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	166.00	130.00
tblTripsAndVMT	VendorTripNumber	166.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	100.00
tblTripsAndVMT	WorkerTripNumber	30.00	20.00
tblTripsAndVMT	WorkerTripNumber	371.00	90.00
tblTripsAndVMT	WorkerTripNumber	371.00	40.00
tblTripsAndVMT	WorkerTripNumber	74.00	24.00
tblTripsAndVMT	WorkerTripNumber	28.00	80.00
tblVehicleTrips	CC_TL	7.30	11.80
tblVehicleTrips	CNW_TL	7.30	11.80
tblVehicleTrips	CW_TL	9.50	11.80
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	9.46
tblWater	IndoorWaterUseRate	96,864,892.66	267,973,201.23

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	7.7890	72.8376	51.9926	0.2159	13.8147	2.5148	15.4225	4.4274	2.3564	6.6528	0.0000	22,519.4542	22,519.4542	3.7505	0.6419	22,804.5029
2025	10.1904	69.4413	77.9607	0.2848	3.8016	2.0077	5.8093	1.0507	1.9128	2.9635	0.0000	30,592.6355	30,592.6355	3.4253	0.9560	30,963.1542
2026	6.5929	40.4038	51.3340	0.1628	2.1835	1.1953	3.3789	0.6017	1.1293	1.7311	0.0000	17,354.3114	17,354.3114	2.3506	0.5013	17,562.4624
Maximum	**10.1904**	**72.8376**	**77.9607**	**0.2848**	**13.8147**	**2.5148**	**15.4225**	**4.4274**	**2.3564**	**6.6528**	**0.0000**	**30,592.6355**	**30,592.6355**	**3.7505**	**0.9560**	**30,963.1542**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.5666	20.8899	84.4800	0.2159	6.6528	0.3263	6.8209	2.2548	0.3240	2.5788	0.0000	22,519.4542	22,519.4542	3.7505	0.6419	22,804.5029
2025	5.4859	31.9838	120.2278	0.2848	3.8016	0.4181	4.2197	1.0507	0.4145	1.4652	0.0000	30,592.6355	30,592.6355	3.4253	0.9560	30,963.1542
2026	4.0179	17.8888	75.0601	0.1628	2.1835	0.2417	2.4252	0.6017	0.2397	0.8414	0.0000	17,354.3113	17,354.3113	2.3506	0.5013	17,562.4624
Maximum	**5.4859**	**31.9838**	**120.2278**	**0.2848**	**6.6528**	**0.4181**	**6.8209**	**2.2548**	**0.4145**	**2.5788**	**0.0000**	**30,592.6355**	**30,592.6355**	**3.7505**	**0.9560**	**30,963.1542**

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**50.88**	**61.26**	**-54.32**	**0.00**	**36.17**	**82.75**	**45.28**	**35.73**	**81.88**	**56.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Energy	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Mobile	15.3680	13.8915	160.4581	0.3919	46.5494	0.2325	46.7819	12.3919	0.2160	12.6079		41,122.9925	41,122.9925	2.0808	1.4176	41,597.4500
Stationary	4.9519	21.2214	12.6264	0.0238		0.7284	0.7284		0.7284	0.7284		2,533.2339	2,533.2339	0.3552		2,542.1129
Total	**34.1725**	**38.7793**	**176.2668**	**0.4377**	**46.5494**	**1.2399**	**47.7893**	**12.3919**	**1.2234**	**13.6153**		**48,055.0945**	**48,055.0945**	**2.5208**	**1.4982**	**48,564.5844**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Area	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Energy	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Mobile	15.3680	13.8915	160.4581	0.3919	46.5494	0.2325	46.7819	12.3919	0.2160	12.6079		41,122.9925	41,122.9925	2.0808	1.4176	41,597.4500
Stationary	4.9519	21.2214	12.6264	0.0238		0.7284	0.7284		0.7284	0.7284		2,533.2339	2,533.2339	0.3552		2,542.1129
Total	**34.1725**	**38.7793**	**176.2668**	**0.4377**	**46.5494**	**1.2399**	**47.7893**	**12.3919**	**1.2234**	**13.6153**		**48,055.0945**	**48,055.0945**	**2.5208**	**1.4982**	**48,564.5844**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	3/1/2024	5	45	
2	Demo/Site Clearing/Shoring/Mass Excavation	Grading	1/1/2024	8/22/2024	5	169	
3	Building Construction	Building Construction	6/22/2024	6/22/2025	5	260	
4	Building Exterior	Building Construction	4/22/2025	4/22/2026	5	262	
5	Building Interior	Architectural Coating	4/22/2025	4/22/2026	5	262	
6	Off and On-Site Improvements	Paving	6/22/2025	6/22/2026	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 591.5

Acres of Paving: 10.77

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 817,500; Non-Residential Outdoor: 272,500; Striped Parking Area: 28,140

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demo/Site Clearing/Shoring/Mass Excavation	Bore/Drill Rigs	1	8.00	205	0.50
Demo/Site Clearing/Shoring/Mass Excavation	Cranes	1	8.00	225	0.29
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	2	8.00	275	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	1	8.00	185	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Graders	2	8.00	185	0.41
Demo/Site Clearing/Shoring/Mass Excavation	Plate Compactors	1	8.00	405	0.43
Demo/Site Clearing/Shoring/Mass Excavation	Rubber Tired Dozers	1	8.00	228	0.40
Demo/Site Clearing/Shoring/Mass Excavation	Scrapers	2	8.00	239	0.48
Demo/Site Clearing/Shoring/Mass Excavation	Sweepers/Scrubbers	1	8.00	80	0.46
Building Construction	Cranes	1	8.00	225	0.29
Building Construction	Cranes	1	4.00	225	0.29
Building Construction	Excavators	1	8.00	185	0.38
Building Construction	Excavators	1	4.00	185	0.38
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Surfacing Equipment	2	8.00	65	0.30
Building Construction	Welders	2	8.00	46	0.45
Building Exterior	Aerial Lifts	6	8.00	45	0.31
Building Exterior	Cranes	1	8.00	225	0.29
Building Exterior	Excavators	2	4.00	185	0.38
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	64	0.37
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	88	0.37
Building Interior	Air Compressors	0	6.00	78	0.48

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Interior	Excavators	1	4.00	185	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Pavers	1	8.00	125	0.42
Off and On-Site Improvements	Plate Compactors	1	8.00	130	0.43
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Rollers	1	8.00	80	0.38
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	682.00	10.80	7.30	23.00	LD_Mix	HDT_Mix	HHDT
Demo/Site Clearing/Shoring/Mass	12	20.00	30.00	1,250.00	10.80	7.30	19.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	90.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	11	40.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	24.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Off and On-Site Improvements	11	80.00	100.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2024

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2812	0.0000	3.2812	0.4968	0.0000	0.4968			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.2812**	**0.0000**	**3.2812**	**0.4968**	**0.0000**	**0.4968**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0390	2.5643	0.8931	0.0109	0.3035	0.0179	0.3215	0.0831	0.0172	0.1003		1,280.6926	1,280.6926	0.1346	0.2066	1,345.6078
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0390**	**2.5643**	**0.8931**	**0.0109**	**0.3035**	**0.0179**	**0.3215**	**0.0831**	**0.0172**	**0.1003**		**1,280.6926**	**1,280.6926**	**0.1346**	**0.2066**	**1,345.6078**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.4765**	**0.0000**	**1.4765**	**0.2236**	**0.0000**	**0.2236**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0390	2.5643	0.8931	0.0109	0.3035	0.0179	0.3215	0.0831	0.0172	0.1003		1,280.6926	1,280.6926	0.1346	0.2066	1,345.6078
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0390**	**2.5643**	**0.8931**	**0.0109**	**0.3035**	**0.0179**	**0.3215**	**0.0831**	**0.0172**	**0.1003**		**1,280.6926**	**1,280.6926**	**0.1346**	**0.2066**	**1,345.6078**

3.3 Demo/Site Clearing/Shoring/Mass Excavation - 2024

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.7405	0.0000	9.7405	3.7120	0.0000	3.7120			0.0000			0.0000
Off-Road	3.9155	38.6234	24.0048	0.0821		1.5746	1.5746		1.4486	1.4486		7,950.1219	7,950.1219	2.5712		8,014.4027
Total	**3.9155**	**38.6234**	**24.0048**	**0.0821**	**9.7405**	**1.5746**	**11.3151**	**3.7120**	**1.4486**	**5.1606**		**7,950.1219**	**7,950.1219**	**2.5712**		**8,014.4027**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	1.0560	0.3750	4.4300e-003	0.1224	7.2500e-003	0.1297	0.0335	6.9400e-003	0.0405		519.4471	519.4471	0.0544	0.0838	545.7709
Vendor	0.0312	1.3519	0.4981	6.1600e-003	0.2028	7.2800e-003	0.2101	0.0584	6.9700e-003	0.0653		689.9459	689.9459	0.0443	0.1018	721.3824
Worker	0.0412	0.0223	0.3807	1.3000e-003	0.1643	7.3000e-004	0.1650	0.0436	6.7000e-004	0.0443		134.2855	134.2855	2.7800e-003	2.7800e-003	135.1844
Total	**0.0892**	**2.4302**	**1.2538**	**0.0119**	**0.4895**	**0.0153**	**0.5047**	**0.1354**	**0.0146**	**0.1500**		**1,343.6786**	**1,343.6786**	**0.1014**	**0.1883**	**1,402.3376**

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3832	0.0000	4.3832	1.6704	0.0000	1.6704			0.0000			0.0000
Off-Road	1.0119	4.3847	38.0750	0.0821		0.1349	0.1349		0.1349	0.1349	0.0000	7,950.1219	7,950.1219	2.5712		8,014.4026
Total	**1.0119**	**4.3847**	**38.0750**	**0.0821**	**4.3832**	**0.1349**	**4.5182**	**1.6704**	**0.1349**	**1.8053**	**0.0000**	**7,950.1219**	**7,950.1219**	**2.5712**		**8,014.4026**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	1.0560	0.3750	4.4300e-003	0.1224	7.2500e-003	0.1297	0.0335	6.9400e-003	0.0405		519.4471	519.4471	0.0544	0.0838	545.7709
Vendor	0.0312	1.3519	0.4981	6.1600e-003	0.2028	7.2800e-003	0.2101	0.0584	6.9700e-003	0.0653		689.9459	689.9459	0.0443	0.1018	721.3824
Worker	0.0412	0.0223	0.3807	1.3000e-003	0.1643	7.3000e-004	0.1650	0.0436	6.7000e-004	0.0443		134.2855	134.2855	2.7800e-003	2.7800e-003	135.1844
Total	**0.0892**	**2.4302**	**1.2538**	**0.0119**	**0.4895**	**0.0153**	**0.5047**	**0.1354**	**0.0146**	**0.1500**		**1,343.6786**	**1,343.6786**	**0.1014**	**0.1883**	**1,402.3376**

3.4 Building Construction - 2024

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1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4636	25.8256	22.8625	0.0893		0.8902	0.8902		0.8600	0.8600		9,631.6034	9,631.6034	0.8736		9,653.4426
Total	**3.4636**	**25.8256**	**22.8625**	**0.0893**		**0.8902**	**0.8902**		**0.8600**	**0.8600**		**9,631.6034**	**9,631.6034**	**0.8736**		**9,653.4426**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1353	5.8581	2.1584	0.0267	0.8787	0.0316	0.9103	0.2529	0.0302	0.2830		2,989.7657	2,989.7657	0.1918	0.4410	3,125.9903
Worker	0.1853	0.1003	1.7131	5.8600e-003	0.7393	3.2700e-003	0.7426	0.1961	3.0100e-003	0.1991		604.2847	604.2847	0.0125	0.0125	608.3297
Total	**0.3206**	**5.9584**	**3.8715**	**0.0325**	**1.6181**	**0.0348**	**1.6529**	**0.4490**	**0.0332**	**0.4822**		**3,594.0504**	**3,594.0504**	**0.2043**	**0.4536**	**3,734.3200**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1449	8.1166	41.2796	0.0893		0.1413	0.1413		0.1413	0.1413	0.0000	9,631.6034	9,631.6034	0.8736		9,653.4426
Total	**1.1449**	**8.1166**	**41.2796**	**0.0893**		**0.1413**	**0.1413**		**0.1413**	**0.1413**	**0.0000**	**9,631.6034**	**9,631.6034**	**0.8736**		**9,653.4426**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1353	5.8581	2.1584	0.0267	0.8787	0.0316	0.9103	0.2529	0.0302	0.2830		2,989.7657	2,989.7657	0.1918	0.4410	3,125.9903
Worker	0.1853	0.1003	1.7131	5.8600e-003	0.7393	3.2700e-003	0.7426	0.1961	3.0100e-003	0.1991		604.2847	604.2847	0.0125	0.0125	608.3297
Total	**0.3206**	**5.9584**	**3.8715**	**0.0325**	**1.6181**	**0.0348**	**1.6529**	**0.4490**	**0.0332**	**0.4822**		**3,594.0504**	**3,594.0504**	**0.2043**	**0.4536**	**3,734.3200**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2744	23.0591	22.7386	0.0893		0.7772	0.7772		0.7500	0.7500		9,632.8166	9,632.8166	0.8710		9,654.5925
Total	**3.2744**	**23.0591**	**22.7386**	**0.0893**		**0.7772**	**0.7772**		**0.7500**	**0.7500**		**9,632.8166**	**9,632.8166**	**0.8710**		**9,654.5925**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1317	5.7896	2.1581	0.0261	0.8788	0.0316	0.9104	0.2529	0.0302	0.2831		2,930.9351	2,930.9351	0.1958	0.4327	3,064.7828
Worker	0.1765	0.0909	1.6159	5.6600e-003	0.7393	3.1300e-003	0.7425	0.1961	2.8800e-003	0.1990		589.8115	589.8115	0.0113	0.0118	593.6044
Total	**0.3081**	**5.8805**	**3.7740**	**0.0318**	**1.6182**	**0.0347**	**1.6528**	**0.4490**	**0.0331**	**0.4821**		**3,520.7466**	**3,520.7466**	**0.2071**	**0.4445**	**3,658.3872**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1449	8.1166	41.2796	0.0893		0.1413	0.1413		0.1413	0.1413	0.0000	9,632.8165	9,632.8165	0.8710		9,654.5925
Total	**1.1449**	**8.1166**	**41.2796**	**0.0893**		**0.1413**	**0.1413**		**0.1413**	**0.1413**	**0.0000**	**9,632.8165**	**9,632.8165**	**0.8710**		**9,654.5925**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1317	5.7896	2.1581	0.0261	0.8788	0.0316	0.9104	0.2529	0.0302	0.2831		2,930.9351	2,930.9351	0.1958	0.4327	3,064.7828
Worker	0.1765	0.0909	1.6159	5.6600e-003	0.7393	3.1300e-003	0.7425	0.1961	2.8800e-003	0.1990		589.8115	589.8115	0.0113	0.0118	593.6044
Total	**0.3081**	**5.8805**	**3.7740**	**0.0318**	**1.6182**	**0.0347**	**1.6528**	**0.4490**	**0.0331**	**0.4821**		**3,520.7466**	**3,520.7466**	**0.2071**	**0.4445**	**3,658.3872**

3.5 Building Exterior - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9006	10.6204	11.0851	0.0246		0.2857	0.2857		0.2628	0.2628		2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.9006**	**10.6204**	**11.0851**	**0.0246**		**0.2857**	**0.2857**		**0.2628**	**0.2628**		**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0405	1.7814	0.6640	8.0300e-003	0.2704	9.7100e-003	0.2801	0.0778	9.2800e-003	0.0871		901.8262	901.8262	0.0602	0.1332	943.0101
Worker	0.0784	0.0404	0.7182	2.5200e-003	0.3286	1.3900e-003	0.3300	0.0872	1.2800e-003	0.0884		262.1384	262.1384	5.0400e-003	5.2300e-003	263.8242
Total	**0.1189**	**1.8218**	**1.3822**	**0.0106**	**0.5990**	**0.0111**	**0.6101**	**0.1650**	**0.0106**	**0.1755**		**1,163.9646**	**1,163.9646**	**0.0653**	**0.1384**	**1,206.8343**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4052	5.9748	14.9821	0.0246		0.0389	0.0389		0.0389	0.0389	0.0000	2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.4052**	**5.9748**	**14.9821**	**0.0246**		**0.0389**	**0.0389**		**0.0389**	**0.0389**	**0.0000**	**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0405	1.7814	0.6640	8.0300e-003	0.2704	9.7100e-003	0.2801	0.0778	9.2800e-003	0.0871		901.8262	901.8262	0.0602	0.1332	943.0101
Worker	0.0784	0.0404	0.7182	2.5200e-003	0.3286	1.3900e-003	0.3300	0.0872	1.2800e-003	0.0884		262.1384	262.1384	5.0400e-003	5.2300e-003	263.8242
Total	**0.1189**	**1.8218**	**1.3822**	**0.0106**	**0.5990**	**0.0111**	**0.6101**	**0.1650**	**0.0106**	**0.1755**		**1,163.9646**	**1,163.9646**	**0.0653**	**0.1384**	**1,206.8343**

3.5 Building Exterior - 2026

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9006	10.6204	11.0851	0.0246		0.2857	0.2857		0.2628	0.2628		2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.9006**	**10.6204**	**11.0851**	**0.0246**		**0.2857**	**0.2857**		**0.2628**	**0.2628**		**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0396	1.7582	0.6666	7.8500e-003	0.2704	9.6500e-003	0.2801	0.0778	9.2300e-003	0.0871		884.2705	884.2705	0.0616	0.1307	924.7431
Worker	0.0753	0.0371	0.6838	2.4400e-003	0.3286	1.3200e-003	0.3299	0.0872	1.2200e-003	0.0884		256.6371	256.6371	4.6100e-003	4.9700e-003	258.2341
Total	**0.1148**	**1.7953**	**1.3504**	**0.0103**	**0.5990**	**0.0110**	**0.6100**	**0.1650**	**0.0105**	**0.1754**		**1,140.9076**	**1,140.9076**	**0.0662**	**0.1356**	**1,182.9772**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4052	5.9748	14.9821	0.0246		0.0389	0.0389		0.0389	0.0389	0.0000	2,378.6761	2,378.6761	0.7693		2,397.9089
Total	**0.4052**	**5.9748**	**14.9821**	**0.0246**		**0.0389**	**0.0389**		**0.0389**	**0.0389**	**0.0000**	**2,378.6761**	**2,378.6761**	**0.7693**		**2,397.9089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0396	1.7582	0.6666	7.8500e-003	0.2704	9.6500e-003	0.2801	0.0778	9.2300e-003	0.0871		884.2705	884.2705	0.0616	0.1307	924.7431
Worker	0.0753	0.0371	0.6838	2.4400e-003	0.3286	1.3200e-003	0.3299	0.0872	1.2200e-003	0.0884		256.6371	256.6371	4.6100e-003	4.9700e-003	258.2341
Total	**0.1148**	**1.7953**	**1.3504**	**0.0103**	**0.5990**	**0.0110**	**0.6100**	**0.1650**	**0.0105**	**0.1754**		**1,140.9076**	**1,140.9076**	**0.0662**	**0.1356**	**1,182.9772**

3.6 Building Interior - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0811	0.5965	0.6704	3.0300e-003		0.0196	0.0196		0.0180	0.0180		292.9587	292.9587	0.0948		295.3274
Total	**2.0591**	**0.5965**	**0.6704**	**3.0300e-003**		**0.0196**	**0.0196**		**0.0180**	**0.0180**		**292.9587**	**292.9587**	**0.0948**		**295.3274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e-003	0.3563	0.1328	1.6100e-003	0.0541	1.9400e-003	0.0560	0.0156	1.8600e-003	0.0174		180.3652	180.3652	0.0121	0.0266	188.6020
Worker	0.0471	0.0242	0.4309	1.5100e-003	0.1972	8.4000e-004	0.1980	0.0523	7.7000e-004	0.0531		157.2831	157.2831	3.0200e-003	3.1400e-003	158.2945
Total	**0.0552**	**0.3805**	**0.5637**	**3.1200e-003**	**0.2512**	**2.7800e-003**	**0.2540**	**0.0679**	**2.6300e-003**	**0.0705**		**337.6483**	**337.6483**	**0.0151**	**0.0298**	**346.8965**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0372	0.1612	1.3639	3.0300e-003		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003	0.0000	292.9587	292.9587	0.0948		295.3274
Total	**2.0153**	**0.1612**	**1.3639**	**3.0300e-003**		**4.9600e-003**	**4.9600e-003**		**4.9600e-003**	**4.9600e-003**	**0.0000**	**292.9587**	**292.9587**	**0.0948**		**295.3274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e-003	0.3563	0.1328	1.6100e-003	0.0541	1.9400e-003	0.0560	0.0156	1.8600e-003	0.0174		180.3652	180.3652	0.0121	0.0266	188.6020
Worker	0.0471	0.0242	0.4309	1.5100e-003	0.1972	8.4000e-004	0.1980	0.0523	7.7000e-004	0.0531		157.2831	157.2831	3.0200e-003	3.1400e-003	158.2945
Total	**0.0552**	**0.3805**	**0.5637**	**3.1200e-003**	**0.2512**	**2.7800e-003**	**0.2540**	**0.0679**	**2.6300e-003**	**0.0705**		**337.6483**	**337.6483**	**0.0151**	**0.0298**	**346.8965**

3.6 Building Interior - 2026

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0811	0.5965	0.6704	3.0300e-003		0.0196	0.0196		0.0180	0.0180		292.9587	292.9587	0.0948		295.3274
Total	**2.0591**	**0.5965**	**0.6704**	**3.0300e-003**		**0.0196**	**0.0196**		**0.0180**	**0.0180**		**292.9587**	**292.9587**	**0.0948**		**295.3274**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9100e-003	0.3516	0.1333	1.5700e-003	0.0541	1.9300e-003	0.0560	0.0156	1.8500e-003	0.0174		176.8541	176.8541	0.0123	0.0261	184.9486
Worker	0.0452	0.0223	0.4103	1.4700e-003	0.1972	7.9000e-004	0.1980	0.0523	7.3000e-004	0.0530		153.9823	153.9823	2.7700e-003	2.9800e-003	154.9405
Total	**0.0531**	**0.3739**	**0.5436**	**3.0400e-003**	**0.2512**	**2.7200e-003**	**0.2540**	**0.0679**	**2.5800e-003**	**0.0704**		**330.8364**	**330.8364**	**0.0151**	**0.0291**	**339.8891**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0372	0.1612	1.3639	3.0300e-003		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003	0.0000	292.9587	292.9587	0.0948		295.3274
Total	**2.0153**	**0.1612**	**1.3639**	**3.0300e-003**		**4.9600e-003**	**4.9600e-003**		**4.9600e-003**	**4.9600e-003**	**0.0000**	**292.9587**	**292.9587**	**0.0948**		**295.3274**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9100e-003	0.3516	0.1333	1.5700e-003	0.0541	1.9300e-003	0.0560	0.0156	1.8500e-003	0.0174		176.8541	176.8541	0.0123	0.0261	184.9486
Worker	0.0452	0.0223	0.4103	1.4700e-003	0.1972	7.9000e-004	0.1980	0.0523	7.3000e-004	0.0530		153.9823	153.9823	2.7700e-003	2.9800e-003	154.9405
Total	**0.0531**	**0.3739**	**0.5436**	**3.0400e-003**	**0.2512**	**2.7200e-003**	**0.2540**	**0.0679**	**2.5800e-003**	**0.0704**		**330.8364**	**330.8364**	**0.0151**	**0.0291**	**339.8891**

3.7 Off and On-Site Improvements - 2025

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2158	22.5480	34.6503	0.0973		0.8496	0.8496		0.8100	0.8100		10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2158**	**22.5480**	**34.6503**	**0.0973**		**0.8496**	**0.8496**		**0.8100**	**0.8100**		**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1013	4.4536	1.6601	0.0201	0.6760	0.0243	0.7003	0.1945	0.0232	0.2177		2,254.5655	2,254.5655	0.1506	0.3329	2,357.5252
Worker	0.1569	0.0808	1.4364	5.0300e-003	0.6572	2.7800e-003	0.6600	0.1743	2.5600e-003	0.1769		524.2769	524.2769	0.0101	0.0105	527.6483
Total	**0.2581**	**4.5344**	**3.0964**	**0.0251**	**1.3332**	**0.0271**	**1.3603**	**0.3689**	**0.0258**	**0.3946**		**2,778.8424**	**2,778.8424**	**0.1607**	**0.3433**	**2,885.1736**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1802	5.1140	53.7860	0.0973		0.1574	0.1574		0.1574	0.1574	0.0000	10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1802**	**5.1140**	**53.7860**	**0.0973**		**0.1574**	**0.1574**		**0.1574**	**0.1574**	**0.0000**	**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1013	4.4536	1.6601	0.0201	0.6760	0.0243	0.7003	0.1945	0.0232	0.2177		2,254.5655	2,254.5655	0.1506	0.3329	2,357.5252
Worker	0.1569	0.0808	1.4364	5.0300e-003	0.6572	2.7800e-003	0.6600	0.1743	2.5600e-003	0.1769		524.2769	524.2769	0.0101	0.0105	527.6483
Total	**0.2581**	**4.5344**	**3.0964**	**0.0251**	**1.3332**	**0.0271**	**1.3603**	**0.3689**	**0.0258**	**0.3946**		**2,778.8424**	**2,778.8424**	**0.1607**	**0.3433**	**2,885.1736**

3.7 Off and On-Site Improvements - 2026

Unmitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2158	22.5480	34.6503	0.0973		0.8496	0.8496		0.8100	0.8100		10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2158**	**22.5480**	**34.6503**	**0.0973**		**0.8496**	**0.8496**		**0.8100**	**0.8100**		**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0989	4.3954	1.6666	0.0196	0.6761	0.0241	0.7002	0.1946	0.0231	0.2176		2,210.6762	2,210.6762	0.1539	0.3266	2,311.8577
Worker	0.1505	0.0743	1.3676	4.8900e-003	0.6572	2.6500e-003	0.6598	0.1743	2.4300e-003	0.1768		513.2742	513.2742	9.2300e-003	9.9400e-003	516.4683
Total	**0.2494**	**4.4697**	**3.0342**	**0.0245**	**1.3333**	**0.0268**	**1.3601**	**0.3689**	**0.0255**	**0.3944**		**2,723.9504**	**2,723.9504**	**0.1632**	**0.3366**	**2,828.3259**

Mitigated Construction On-Site

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1802	5.1140	53.7860	0.0973		0.1574	0.1574		0.1574	0.1574	0.0000	10,486.9822	10,486.9822	1.2421		10,518.0339
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1802**	**5.1140**	**53.7860**	**0.0973**		**0.1574**	**0.1574**		**0.1574**	**0.1574**	**0.0000**	**10,486.9822**	**10,486.9822**	**1.2421**		**10,518.0339**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0989	4.3954	1.6666	0.0196	0.6761	0.0241	0.7002	0.1946	0.0231	0.2176		2,210.6762	2,210.6762	0.1539	0.3266	2,311.8577
Worker	0.1505	0.0743	1.3676	4.8900e-003	0.6572	2.6500e-003	0.6598	0.1743	2.4300e-003	0.1768		513.2742	513.2742	9.2300e-003	9.9400e-003	516.4683
Total	**0.2494**	**4.4697**	**3.0342**	**0.0245**	**1.3333**	**0.0268**	**1.3601**	**0.3689**	**0.0255**	**0.3944**		**2,723.9504**	**2,723.9504**	**0.1632**	**0.3366**	**2,828.3259**

4.0 Operational Detail - Mobile

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	15.3680	13.8915	160.4581	0.3919	46.5494	0.2325	46.7819	12.3919	0.2160	12.6079		41,122.9925	41,122.9925	2.0808	1.4176	41,597.4500
Unmitigated	15.3680	13.8915	160.4581	0.3919	46.5494	0.2325	46.7819	12.3919	0.2160	12.6079		41,122.9925	41,122.9925	2.0808	1.4176	41,597.4500

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	5,155.70	0.00	0.00	15,817,688	15,817,688
Total	5,155.70	0.00	0.00	15,817,688	15,817,688

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	11.80	11.80	11.80	33.00	48.00	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710
General Office Building	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
NaturalGas Unmitigated	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	37388.5	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852

1301 Shoreway Road Project - San Mateo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total		**0.4032**	**3.6655**	**3.0791**	**0.0220**		**0.2786**	**0.2786**		**0.2786**	**0.2786**		**4,398.6463**	**4,398.6463**	**0.0843**	**0.0806**	**4,424.7852**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	37.3885	0.4032	3.6655	3.0791	0.0220		0.2786	0.2786		0.2786	0.2786		4,398.6463	4,398.6463	0.0843	0.0806	4,424.7852
Total		**0.4032**	**3.6655**	**3.0791**	**0.0220**		**0.2786**	**0.2786**		**0.2786**	**0.2786**		**4,398.6463**	**4,398.6463**	**0.0843**	**0.0806**	**4,424.7852**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Unmitigated	13.4494	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5100e-003	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Total	**13.4494**	**9.4000e-004**	**0.1033**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**		**0.2219**	**0.2219**	**5.8000e-004**		**0.2364**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Consumer Products	11.8291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5100e-003	9.4000e-004	0.1033	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2219	0.2219	5.8000e-004		0.2364
Total	**13.4494**	**9.4000e-004**	**0.1033**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**		**0.2219**	**0.2219**	**5.8000e-004**		**0.2364**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	6	671	0.73	Diesel
Emergency Generator	2	0.5	6	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (...	0.5506	1.5388	1.4039	2.6500e-003		0.0810	0.0810		0.0810	0.0810		281.6570	281.6570	0.0395		282.6442
Emergency Generator - Diesel (...	4.4013	19.6825	11.2225	0.0212		0.6475	0.6475		0.6475	0.6475		2,251.5769	2,251.5769	0.3157		2,259.4687
Total	**4.9519**	**21.2214**	**12.6264**	**0.0238**		**0.7284**	**0.7284**		**0.7284**	**0.7284**		**2,533.2339**	**2,533.2339**	**0.3552**		**2,542.1129**

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	545.00	1000sqft	12.51	545,000.00	0
Enclosed Parking with Elevator	469.00	1000sqft	10.77	469,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Pollutants - Test2

Land Use - Land Use - 2 Buildings Totaling 545,000 GSF; Parking Structure: 8 Levels 469,000 GSF

Construction Phase - Construction Phase - All info provided by applicant

Off-road Equipment - Structural concrete + Building Construction - all info provided by applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - Provided by project applicant

Off-road Equipment - .

Off-road Equipment - Demolition - this phase used only for demo truck trips. Demo equipment included with grading phase.

Off-road Equipment - Grading - all info provided by applicant

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Off and On-Site Improvements - all info provided by applicant

Trips and VMT - Trips and VMT - all info provided by applicant

On-road Fugitive Dust -

Demolition - Demolition - all info provided by applicant

Grading - Dust from Material Movement - all info provided by applicant

Architectural Coating - Belmont General Plan Mitigation Measure AQ-3 (Low-VOC)

Paving - Test11

Vehicle Trips - Vehicle Trips - all info provided by applicant

Vehicle Emission Factors - .

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Energy Use - used 6.9 for natural gas use to account for potential research and development portion of project

Water And Wastewater - Waste and Wastewater - Used 267,973,201.23 for indoor water use to account for research and development portion of project

Construction Off-road Equipment Mitigation - .

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps - Converted from 500 kW and 2,000 kW

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	150.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	35.00	169.00
tblConstructionPhase	NumDays	370.00	260.00
tblConstructionPhase	NumDays	370.00	262.00
tblConstructionPhase	NumDays	20.00	262.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	20.00	261.00
tblEnergyUse	NT24NG	1.01	6.90
tblGrading	MaterialExported	0.00	10,000.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	275.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	187.00	185.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	228.00
tblOffRoadEquipment	HorsePower	367.00	239.00
tblOffRoadEquipment	HorsePower	97.00	64.00
tblOffRoadEquipment	HorsePower	97.00	88.00
tblOffRoadEquipment	HorsePower	63.00	45.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	231.00	225.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	185.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	158.00	75.00
tblOffRoadEquipment	HorsePower	8.00	405.00
tblOffRoadEquipment	HorsePower	8.00	130.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	84.00	485.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	HorsePower	84.00	485.00
tblOffRoadEquipment	HorsePower	263.00	65.00
tblOffRoadEquipment	HorsePower	64.00	80.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	HorsePower	97.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,682.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	671.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00

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tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	19.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	166.00	130.00
tblTripsAndVMT	VendorTripNumber	166.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	100.00
tblTripsAndVMT	WorkerTripNumber	30.00	20.00
tblTripsAndVMT	WorkerTripNumber	371.00	90.00
tblTripsAndVMT	WorkerTripNumber	371.00	40.00
tblTripsAndVMT	WorkerTripNumber	74.00	24.00
tblTripsAndVMT	WorkerTripNumber	28.00	80.00
tblVehicleTrips	CC_TL	7.30	11.80
tblVehicleTrips	CNW_TL	7.30	11.80
tblVehicleTrips	CW_TL	9.50	11.80
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	9.46
tblWater	IndoorWaterUseRate	96,864,892.66	267,973,201.23

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.5982	5.7283	3.9826	0.0165	1.0500	0.1981	1.2481	0.3675	0.1852	0.5527	0.0000	1,558.0477	1,558.0477	0.2747	0.0470	1,578.9090
2025	0.7448	4.9016	5.4749	0.0196	0.2586	0.1395	0.3981	0.0717	0.1326	0.2043	0.0000	1,903.7109	1,903.7109	0.2260	0.0604	1,927.3620
2026	0.3381	2.2103	2.8607	9.1100e-003	0.1116	0.0667	0.1782	0.0309	0.0631	0.0941	0.0000	885.2286	885.2286	0.1128	0.0249	895.4533
Maximum	**0.7448**	**5.7283**	**5.4749**	**0.0196**	**1.0500**	**0.1981**	**1.2481**	**0.3675**	**0.1852**	**0.5527**	**0.0000**	**1,903.7109**	**1,903.7109**	**0.2747**	**0.0604**	**1,927.3620**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1940	1.6221	6.4331	0.0165	0.5567	0.0252	0.5818	0.1888	0.0250	0.2138	0.0000	1,558.0463	1,558.0463	0.2747	0.0470	1,578.9075
2025	0.4243	2.3174	8.3532	0.0196	0.2586	0.0288	0.2875	0.0717	0.0286	0.1003	0.0000	1,903.7092	1,903.7092	0.2260	0.0604	1,927.3603
2026	0.1913	0.9349	4.2211	9.1100e-003	0.1116	0.0136	0.1252	0.0309	0.0135	0.0444	0.0000	885.2278	885.2278	0.1128	0.0249	895.4524
Maximum	**0.4243**	**2.3174**	**8.3532**	**0.0196**	**0.5567**	**0.0288**	**0.5818**	**0.1888**	**0.0286**	**0.2138**	**0.0000**	**1,903.7092**	**1,903.7092**	**0.2747**	**0.0604**	**1,927.3603**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	51.84	62.04	-54.30	0.00	34.73	83.28	45.49	38.01	82.40	57.88	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	1.5286	0.3215
2	4-1-2024	6-30-2024	1.5787	0.3072
3	7-1-2024	9-30-2024	2.0216	0.6605
4	10-1-2024	12-31-2024	1.1802	0.5222
5	1-1-2025	3-31-2025	1.0565	0.5078
6	4-1-2025	6-30-2025	1.4761	0.7669
7	7-1-2025	9-30-2025	1.5479	0.7235
8	10-1-2025	12-31-2025	1.5615	0.7371
9	1-1-2026	3-31-2026	1.5237	0.7173
10	4-1-2026	6-30-2026	1.0334	0.4121
		Highest	2.0216	0.7669

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4536	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193
Energy	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728
Mobile	1.9137	1.9817	21.0090	0.0488	5.8008	0.0302	5.8310	1.5494	0.0281	1.5775	0.0000	4,648.5755	4,648.5755	0.2558	0.1762	4,707.4723

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Stationary	0.0297	0.1273	0.0758	1.4000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003	0.0000	13.7887	13.7887	1.9300e-003	0.0000	13.8370
Waste						0.0000	0.0000		0.0000	0.0000	102.8860	0.0000	102.8860	6.0804	0.0000	254.8956
Water						0.0000	0.0000		0.0000	0.0000	85.0155	0.0000	85.0155	8.7319	0.2062	364.7547
Total	**4.4706**	**2.7780**	**21.6560**	**0.0530**	**5.8008**	**0.0854**	**5.8862**	**1.5494**	**0.0833**	**1.6327**	**187.9015**	**5,390.6275**	**5,578.5290**	**15.0841**	**0.3957**	**6,073.5518**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4536	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193
Energy	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728
Mobile	1.9137	1.9817	21.0090	0.0488	5.8008	0.0302	5.8310	1.5494	0.0281	1.5775	0.0000	4,648.5755	4,648.5755	0.2558	0.1762	4,707.4723
Stationary	0.0297	0.1273	0.0758	1.4000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003	0.0000	13.7887	13.7887	1.9300e-003	0.0000	13.8370
Waste						0.0000	0.0000		0.0000	0.0000	102.8860	0.0000	102.8860	6.0804	0.0000	254.8956
Water						0.0000	0.0000		0.0000	0.0000	85.0155	0.0000	85.0155	8.7319	0.2062	364.7547
Total	**4.4706**	**2.7780**	**21.6560**	**0.0530**	**5.8008**	**0.0854**	**5.8862**	**1.5494**	**0.0833**	**1.6327**	**187.9015**	**5,390.6275**	**5,578.5290**	**15.0841**	**0.3957**	**6,073.5518**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

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Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	3/1/2024	5	45	
2	Demo/Site Clearing/Shoring/Mass Excavation	Grading	1/1/2024	8/22/2024	5	169	
3	Building Construction	Building Construction	6/22/2024	6/22/2025	5	260	
4	Building Exterior	Building Construction	4/22/2025	4/22/2026	5	262	
5	Building Interior	Architectural Coating	4/22/2025	4/22/2026	5	262	
6	Off and On-Site Improvements	Paving	6/22/2025	6/22/2026	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 591.5

Acres of Paving: 10.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 817,500; Non-Residential Outdoor: 272,500; Striped Parking Area: 28,140

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demo/Site Clearing/Shoring/Mass Excavation	Bore/Drill Rigs	1	8.00	205	0.50
Demo/Site Clearing/Shoring/Mass Excavation	Cranes	1	8.00	225	0.29
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	2	8.00	275	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Excavators	1	8.00	185	0.38
Demo/Site Clearing/Shoring/Mass Excavation	Graders	2	8.00	185	0.41
Demo/Site Clearing/Shoring/Mass Excavation	Plate Compactors	1	8.00	405	0.43

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Demo/Site Clearing/Shoring/Mass Excavation	Rubber Tired Dozers	1	8.00	228	0.40
Demo/Site Clearing/Shoring/Mass Excavation	Scrapers	2	8.00	239	0.48
Demo/Site Clearing/Shoring/Mass Excavation	Sweepers/Scrubbers	1	8.00	80	0.46
Building Construction	Cranes	1	8.00	225	0.29
Building Construction	Cranes	1	4.00	225	0.29
Building Construction	Excavators	1	8.00	185	0.38
Building Construction	Excavators	1	4.00	185	0.38
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Pumps	1	8.00	485	0.74
Building Construction	Surfacing Equipment	2	8.00	65	0.30
Building Construction	Welders	2	8.00	46	0.45
Building Exterior	Aerial Lifts	6	8.00	45	0.31
Building Exterior	Cranes	1	8.00	225	0.29
Building Exterior	Excavators	2	4.00	185	0.38
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	64	0.37
Building Exterior	Tractors/Loaders/Backhoes	1	8.00	88	0.37
Building Interior	Air Compressors	0	6.00	78	0.48
Building Interior	Excavators	1	4.00	185	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Excavators	1	8.00	75	0.38
Off and On-Site Improvements	Pavers	1	8.00	125	0.42
Off and On-Site Improvements	Plate Compactors	1	8.00	130	0.43
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Pumps	1	8.00	485	0.74
Off and On-Site Improvements	Rollers	1	8.00	80	0.38
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37
Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37

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Off and On-Site Improvements	Tractors/Loaders/Backhoes	1	8.00	174	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	682.00	10.80	7.30	23.00	LD_Mix	HDT_Mix	HHDT
Demo/Site Clearing/Shoring/Mass	12	20.00	30.00	1,250.00	10.80	7.30	19.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	90.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	11	40.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	24.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Off and On-Site Improvements	11	80.00	100.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0738	0.0000	0.0738	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0738**	**0.0000**	**0.0738**	**0.0112**	**0.0000**	**0.0112**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0598	0.0201	2.5000e-004	6.5800e-003	4.0000e-004	6.9900e-003	1.8100e-003	3.9000e-004	2.2000e-003	0.0000	26.1443	26.1443	2.7500e-003	4.2200e-003	27.4697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.6000e-004**	**0.0598**	**0.0201**	**2.5000e-004**	**6.5800e-003**	**4.0000e-004**	**6.9900e-003**	**1.8100e-003**	**3.9000e-004**	**2.2000e-003**	**0.0000**	**26.1443**	**26.1443**	**2.7500e-003**	**4.2200e-003**	**27.4697**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0332	0.0000	0.0332	5.0300e-003	0.0000	5.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0332**	**0.0000**	**0.0332**	**5.0300e-003**	**0.0000**	**5.0300e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0598	0.0201	2.5000e-004	6.5800e-003	4.0000e-004	6.9900e-003	1.8100e-003	3.9000e-004	2.2000e-003	0.0000	26.1443	26.1443	2.7500e-003	4.2200e-003	27.4697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.6000e-004**	**0.0598**	**0.0201**	**2.5000e-004**	**6.5800e-003**	**4.0000e-004**	**6.9900e-003**	**1.8100e-003**	**3.9000e-004**	**2.2000e-003**	**0.0000**	**26.1443**	**26.1443**	**2.7500e-003**	**4.2200e-003**	**27.4697**

3.3 Demo/Site Clearing/Shoring/Mass Excavation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8231	0.0000	0.8231	0.3137	0.0000	0.3137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3309	3.2637	2.0284	6.9400e-003		0.1331	0.1331		0.1224	0.1224	0.0000	609.4334	609.4334	0.1971	0.0000	614.3610
Total	**0.3309**	**3.2637**	**2.0284**	**6.9400e-003**	**0.8231**	**0.1331**	**0.9561**	**0.3137**	**0.1224**	**0.4361**	**0.0000**	**609.4334**	**609.4334**	**0.1971**	**0.0000**	**614.3610**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0925	0.0317	3.7000e-004	9.9700e-003	6.1000e-004	0.0106	2.7400e-003	5.9000e-004	3.3300e-003	0.0000	39.8253	39.8253	4.1700e-003	6.4200e-003	41.8437
Vendor	2.6100e-003	0.1182	0.0427	5.2000e-004	0.0166	6.2000e-004	0.0172	4.7900e-003	5.9000e-004	5.3800e-003	0.0000	52.9017	52.9017	3.3900e-003	7.8100e-003	55.3137
Worker	3.4600e-003	2.1400e-003	0.0309	1.0000e-004	0.0133	6.0000e-005	0.0134	3.5400e-003	6.0000e-005	3.6000e-003	0.0000	9.7636	9.7636	2.3000e-004	2.3000e-004	9.8384
Total	**7.4600e-003**	**0.2128**	**0.1053**	**9.9000e-004**	**0.0398**	**1.2900e-003**	**0.0411**	**0.0111**	**1.2400e-003**	**0.0123**	**0.0000**	**102.4905**	**102.4905**	**7.7900e-003**	**0.0145**	**106.9958**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3704	0.0000	0.3704	0.1412	0.0000	0.1412	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0855	0.3705	3.2173	6.9400e-003		0.0114	0.0114		0.0114	0.0114	0.0000	609.4327	609.4327	0.1971	0.0000	614.3602
Total	**0.0855**	**0.3705**	**3.2173**	**6.9400e-003**	**0.3704**	**0.0114**	**0.3818**	**0.1412**	**0.0114**	**0.1526**	**0.0000**	**609.4327**	**609.4327**	**0.1971**	**0.0000**	**614.3602**

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0925	0.0317	3.7000e-004	9.9700e-003	6.1000e-004	0.0106	2.7400e-003	5.9000e-004	3.3300e-003	0.0000	39.8253	39.8253	4.1700e-003	6.4200e-003	41.8437
Vendor	2.6100e-003	0.1182	0.0427	5.2000e-004	0.0166	6.2000e-004	0.0172	4.7900e-003	5.9000e-004	5.3800e-003	0.0000	52.9017	52.9017	3.3900e-003	7.8100e-003	55.3137
Worker	3.4600e-003	2.1400e-003	0.0309	1.0000e-004	0.0133	6.0000e-005	0.0134	3.5400e-003	6.0000e-005	3.6000e-003	0.0000	9.7636	9.7636	2.3000e-004	2.3000e-004	9.8384
Total	**7.4600e-003**	**0.2128**	**0.1053**	**9.9000e-004**	**0.0398**	**1.2900e-003**	**0.0411**	**0.0111**	**1.2400e-003**	**0.0123**	**0.0000**	**102.4905**	**102.4905**	**7.7900e-003**	**0.0145**	**106.9958**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2373	1.7691	1.5661	6.1200e-003		0.0610	0.0610		0.0589	0.0589	0.0000	598.5286	598.5286	0.0543	0.0000	599.8857
Total	**0.2373**	**1.7691**	**1.5661**	**6.1200e-003**		**0.0610**	**0.0610**		**0.0589**	**0.0589**	**0.0000**	**598.5286**	**598.5286**	**0.0543**	**0.0000**	**599.8857**

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1600e-003	0.4152	0.1498	1.8300e-003	0.0581	2.1700e-003	0.0603	0.0168	2.0700e-003	0.0189	0.0000	185.8342	185.8342	0.0119	0.0274	194.3071
Worker	0.0126	7.7900e-003	0.1129	3.8000e-004	0.0485	2.2000e-004	0.0488	0.0129	2.1000e-004	0.0131	0.0000	35.6167	35.6167	8.3000e-004	8.5000e-004	35.8898
Total	**0.0218**	**0.4229**	**0.2627**	**2.2100e-003**	**0.1067**	**2.3900e-003**	**0.1091**	**0.0297**	**2.2800e-003**	**0.0320**	**0.0000**	**221.4509**	**221.4509**	**0.0127**	**0.0283**	**230.1968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0784	0.5560	2.8277	6.1200e-003		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	598.5279	598.5279	0.0543	0.0000	599.8850
Total	**0.0784**	**0.5560**	**2.8277**	**6.1200e-003**		**9.6800e-003**	**9.6800e-003**		**9.6800e-003**	**9.6800e-003**	**0.0000**	**598.5279**	**598.5279**	**0.0543**	**0.0000**	**599.8850**

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1600e-003	0.4152	0.1498	1.8300e-003	0.0581	2.1700e-003	0.0603	0.0168	2.0700e-003	0.0189	0.0000	185.8342	185.8342	0.0119	0.0274	194.3071
Worker	0.0126	7.7900e-003	0.1129	3.8000e-004	0.0485	2.2000e-004	0.0488	0.0129	2.1000e-004	0.0131	0.0000	35.6167	35.6167	8.3000e-004	8.5000e-004	35.8898
Total	**0.0218**	**0.4229**	**0.2627**	**2.2100e-003**	**0.1067**	**2.3900e-003**	**0.1091**	**0.0297**	**2.2800e-003**	**0.0320**	**0.0000**	**221.4509**	**221.4509**	**0.0127**	**0.0283**	**230.1968**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2014	1.4181	1.3984	5.4900e-003		0.0478	0.0478		0.0461	0.0461	0.0000	537.4328	537.4328	0.0486	0.0000	538.6477
Total	**0.2014**	**1.4181**	**1.3984**	**5.4900e-003**		**0.0478**	**0.0478**		**0.0461**	**0.0461**	**0.0000**	**537.4328**	**537.4328**	**0.0486**	**0.0000**	**538.6477**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3684	0.1345	1.6100e-003	0.0522	1.9400e-003	0.0541	0.0151	1.8600e-003	0.0170	0.0000	163.5660	163.5660	0.0109	0.0242	171.0403
Worker	0.0108	6.3400e-003	0.0957	3.3000e-004	0.0436	1.9000e-004	0.0438	0.0116	1.8000e-004	0.0118	0.0000	31.2153	31.2153	6.8000e-004	7.1000e-004	31.4451
Total	**0.0188**	**0.3747**	**0.2302**	**1.9400e-003**	**0.0958**	**2.1300e-003**	**0.0979**	**0.0267**	**2.0400e-003**	**0.0287**	**0.0000**	**194.7813**	**194.7813**	**0.0116**	**0.0249**	**202.4854**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0704	0.4992	2.5387	5.4900e-003		8.6900e-003	8.6900e-003		8.6900e-003	8.6900e-003	0.0000	537.4321	537.4321	0.0486	0.0000	538.6471
Total	**0.0704**	**0.4992**	**2.5387**	**5.4900e-003**		**8.6900e-003**	**8.6900e-003**		**8.6900e-003**	**8.6900e-003**	**0.0000**	**537.4321**	**537.4321**	**0.0486**	**0.0000**	**538.6471**

Mitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3684	0.1345	1.6100e-003	0.0522	1.9400e-003	0.0541	0.0151	1.8600e-003	0.0170	0.0000	163.5660	163.5660	0.0109	0.0242	171.0403
Worker	0.0108	6.3400e-003	0.0957	3.3000e-004	0.0436	1.9000e-004	0.0438	0.0116	1.8000e-004	0.0118	0.0000	31.2153	31.2153	6.8000e-004	7.1000e-004	31.4451
Total	**0.0188**	**0.3747**	**0.2302**	**1.9400e-003**	**0.0958**	**2.1300e-003**	**0.0979**	**0.0267**	**2.0400e-003**	**0.0287**	**0.0000**	**194.7813**	**194.7813**	**0.0116**	**0.0249**	**202.4854**

3.5 Building Exterior - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0820	0.9665	1.0087	2.2400e-003		0.0260	0.0260		0.0239	0.0239	0.0000	196.3688	196.3688	0.0635	0.0000	197.9565
Total	**0.0820**	**0.9665**	**1.0087**	**2.2400e-003**		**0.0260**	**0.0260**		**0.0239**	**0.0239**	**0.0000**	**196.3688**	**196.3688**	**0.0635**	**0.0000**	**197.9565**

Unmitigated Construction Off-Site

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1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6400e-003	0.1677	0.0612	7.3000e-004	0.0238	8.9000e-004	0.0247	6.8700e-003	8.5000e-004	7.7200e-003	0.0000	74.4691	74.4691	4.9700e-003	0.0110	77.8720
Worker	7.1100e-003	4.1700e-003	0.0629	2.2000e-004	0.0287	1.3000e-004	0.0288	7.6300e-003	1.2000e-004	7.7400e-003	0.0000	20.5282	20.5282	4.5000e-004	4.7000e-004	20.6794
Total	**0.0108**	**0.1719**	**0.1242**	**9.5000e-004**	**0.0524**	**1.0200e-003**	**0.0534**	**0.0145**	**9.7000e-004**	**0.0155**	**0.0000**	**94.9973**	**94.9973**	**5.4200e-003**	**0.0115**	**98.5514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.5437	1.3634	2.2400e-003		3.5400e-003	3.5400e-003		3.5400e-003	3.5400e-003	0.0000	196.3686	196.3686	0.0635	0.0000	197.9563
Total	**0.0369**	**0.5437**	**1.3634**	**2.2400e-003**		**3.5400e-003**	**3.5400e-003**		**3.5400e-003**	**3.5400e-003**	**0.0000**	**196.3686**	**196.3686**	**0.0635**	**0.0000**	**197.9563**

Mitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6400e-003	0.1677	0.0612	7.3000e-004	0.0238	8.9000e-004	0.0247	6.8700e-003	8.5000e-004	7.7200e-003	0.0000	74.4691	74.4691	4.9700e-003	0.0110	77.8720
Worker	7.1100e-003	4.1700e-003	0.0629	2.2000e-004	0.0287	1.3000e-004	0.0288	7.6300e-003	1.2000e-004	7.7400e-003	0.0000	20.5282	20.5282	4.5000e-004	4.7000e-004	20.6794
Total	**0.0108**	**0.1719**	**0.1242**	**9.5000e-004**	**0.0524**	**1.0200e-003**	**0.0534**	**0.0145**	**9.7000e-004**	**0.0155**	**0.0000**	**94.9973**	**94.9973**	**5.4200e-003**	**0.0115**	**98.5514**

3.5 Building Exterior - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0360	0.4248	0.4434	9.8000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	86.3160	86.3160	0.0279	0.0000	87.0139
Total	**0.0360**	**0.4248**	**0.4434**	**9.8000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**86.3160**	**86.3160**	**0.0279**	**0.0000**	**87.0139**

Unmitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5600e-003	0.0728	0.0270	3.1000e-004	0.0105	3.9000e-004	0.0108	3.0200e-003	3.7000e-004	3.3900e-003	0.0000	32.0973	32.0973	2.2300e-003	4.7500e-003	33.5673
Worker	3.0100e-003	1.6800e-003	0.0264	9.0000e-005	0.0126	5.0000e-005	0.0127	3.3500e-003	5.0000e-005	3.4000e-003	0.0000	8.8348	8.8348	1.8000e-004	2.0000e-004	8.8978
Total	**4.5700e-003**	**0.0745**	**0.0534**	**4.0000e-004**	**0.0231**	**4.4000e-004**	**0.0235**	**6.3700e-003**	**4.2000e-004**	**6.7900e-003**	**0.0000**	**40.9322**	**40.9322**	**2.4100e-003**	**4.9500e-003**	**42.4651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0162	0.2390	0.5993	9.8000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	86.3158	86.3158	0.0279	0.0000	87.0138
Total	**0.0162**	**0.2390**	**0.5993**	**9.8000e-004**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**86.3158**	**86.3158**	**0.0279**	**0.0000**	**87.0138**

Mitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5600e-003	0.0728	0.0270	3.1000e-004	0.0105	3.9000e-004	0.0108	3.0200e-003	3.7000e-004	3.3900e-003	0.0000	32.0973	32.0973	2.2300e-003	4.7500e-003	33.5673
Worker	3.0100e-003	1.6800e-003	0.0264	9.0000e-005	0.0126	5.0000e-005	0.0127	3.3500e-003	5.0000e-005	3.4000e-003	0.0000	8.8348	8.8348	1.8000e-004	2.0000e-004	8.8978
Total	**4.5700e-003**	**0.0745**	**0.0534**	**4.0000e-004**	**0.0231**	**4.4000e-004**	**0.0235**	**6.3700e-003**	**4.2000e-004**	**6.7900e-003**	**0.0000**	**40.9322**	**40.9322**	**2.4100e-003**	**4.9500e-003**	**42.4651**

3.6 Building Interior - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3800e-003	0.0543	0.0610	2.8000e-004		1.7800e-003	1.7800e-003		1.6400e-003	1.6400e-003	0.0000	24.1849	24.1849	7.8200e-003	0.0000	24.3804
Total	**0.1874**	**0.0543**	**0.0610**	**2.8000e-004**		**1.7800e-003**	**1.7800e-003**		**1.6400e-003**	**1.6400e-003**	**0.0000**	**24.1849**	**24.1849**	**7.8200e-003**	**0.0000**	**24.3804**

Unmitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3000e-004	0.0336	0.0123	1.5000e-004	4.7500e-003	1.8000e-004	4.9300e-003	1.3700e-003	1.7000e-004	1.5400e-003	0.0000	14.8938	14.8938	9.9000e-004	2.2000e-003	15.5744
Worker	4.2600e-003	2.5000e-003	0.0378	1.3000e-004	0.0172	8.0000e-005	0.0173	4.5800e-003	7.0000e-005	4.6500e-003	0.0000	12.3169	12.3169	2.7000e-004	2.8000e-004	12.4076
Total	**4.9900e-003**	**0.0361**	**0.0500**	**2.8000e-004**	**0.0219**	**2.6000e-004**	**0.0222**	**5.9500e-003**	**2.4000e-004**	**6.1900e-003**	**0.0000**	**27.2108**	**27.2108**	**1.2600e-003**	**2.4800e-003**	**27.9820**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3800e-003	0.0147	0.1241	2.8000e-004		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	24.1848	24.1848	7.8200e-003	0.0000	24.3804
Total	**0.1834**	**0.0147**	**0.1241**	**2.8000e-004**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**24.1848**	**24.1848**	**7.8200e-003**	**0.0000**	**24.3804**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3000e-004	0.0336	0.0123	1.5000e-004	4.7500e-003	1.8000e-004	4.9300e-003	1.3700e-003	1.7000e-004	1.5400e-003	0.0000	14.8938	14.8938	9.9000e-004	2.2000e-003	15.5744
Worker	4.2600e-003	2.5000e-003	0.0378	1.3000e-004	0.0172	8.0000e-005	0.0173	4.5800e-003	7.0000e-005	4.6500e-003	0.0000	12.3169	12.3169	2.7000e-004	2.8000e-004	12.4076
Total	**4.9900e-003**	**0.0361**	**0.0500**	**2.8000e-004**	**0.0219**	**2.6000e-004**	**0.0222**	**5.9500e-003**	**2.4000e-004**	**6.1900e-003**	**0.0000**	**27.2108**	**27.2108**	**1.2600e-003**	**2.4800e-003**	**27.9820**

3.6 Building Interior - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0791					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2400e-003	0.0239	0.0268	1.2000e-004		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	10.6307	10.6307	3.4400e-003	0.0000	10.7167
Total	**0.0824**	**0.0239**	**0.0268**	**1.2000e-004**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**10.6307**	**10.6307**	**3.4400e-003**	**0.0000**	**10.7167**

Unmitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0146	5.4000e-003	6.0000e-005	2.0900e-003	8.0000e-005	2.1700e-003	6.0000e-004	7.0000e-005	6.8000e-004	0.0000	6.4195	6.4195	4.5000e-004	9.5000e-004	6.7135
Worker	1.8000e-003	1.0100e-003	0.0158	6.0000e-005	7.5600e-003	3.0000e-005	7.5900e-003	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	5.3009	5.3009	1.1000e-004	1.2000e-004	5.3387
Total	**2.1100e-003**	**0.0156**	**0.0212**	**1.2000e-004**	**9.6500e-003**	**1.1000e-004**	**9.7600e-003**	**2.6100e-003**	**1.0000e-004**	**2.7200e-003**	**0.0000**	**11.7204**	**11.7204**	**5.6000e-004**	**1.0700e-003**	**12.0521**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0791					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4900e-003	6.4500e-003	0.0546	1.2000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	10.6307	10.6307	3.4400e-003	0.0000	10.7167
Total	**0.0806**	**6.4500e-003**	**0.0546**	**1.2000e-004**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**10.6307**	**10.6307**	**3.4400e-003**	**0.0000**	**10.7167**

Mitigated Construction Off-Site

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0146	5.4000e-003	6.0000e-005	2.0900e-003	8.0000e-005	2.1700e-003	6.0000e-004	7.0000e-005	6.8000e-004	0.0000	6.4195	6.4195	4.5000e-004	9.5000e-004	6.7135
Worker	1.8000e-003	1.0100e-003	0.0158	6.0000e-005	7.5600e-003	3.0000e-005	7.5900e-003	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	5.3009	5.3009	1.1000e-004	1.2000e-004	5.3387
Total	**2.1100e-003**	**0.0156**	**0.0212**	**1.2000e-004**	**9.6500e-003**	**1.1000e-004**	**9.7600e-003**	**2.6100e-003**	**1.0000e-004**	**2.7200e-003**	**0.0000**	**11.7204**	**11.7204**	**5.6000e-004**	**1.0700e-003**	**12.0521**

3.7 Off and On-Site Improvements - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2219	1.5558	2.3909	6.7100e-003		0.0586	0.0586		0.0559	0.0559	0.0000	656.4405	656.4405	0.0778	0.0000	658.3842
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2219**	**1.5558**	**2.3909**	**6.7100e-003**		**0.0586**	**0.0586**		**0.0559**	**0.0559**	**0.0000**	**656.4405**	**656.4405**	**0.0778**	**0.0000**	**658.3842**

Unmitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9000e-003	0.3179	0.1161	1.3900e-003	0.0451	1.6800e-003	0.0467	0.0130	1.6100e-003	0.0146	0.0000	141.1639	141.1639	9.4200e-003	0.0209	147.6145
Worker	0.0108	6.3200e-003	0.0954	3.3000e-004	0.0435	1.9000e-004	0.0437	0.0116	1.8000e-004	0.0117	0.0000	31.1307	31.1307	6.8000e-004	7.1000e-004	31.3599
Total	**0.0177**	**0.3243**	**0.2115**	**1.7200e-003**	**0.0885**	**1.8700e-003**	**0.0904**	**0.0246**	**1.7900e-003**	**0.0264**	**0.0000**	**172.2946**	**172.2946**	**0.0101**	**0.0216**	**178.9744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0814	0.3529	3.7112	6.7100e-003		0.0109	0.0109		0.0109	0.0109	0.0000	656.4397	656.4397	0.0778	0.0000	658.3834
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0814**	**0.3529**	**3.7112**	**6.7100e-003**		**0.0109**	**0.0109**		**0.0109**	**0.0109**	**0.0000**	**656.4397**	**656.4397**	**0.0778**	**0.0000**	**658.3834**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9000e-003	0.3179	0.1161	1.3900e-003	0.0451	1.6800e-003	0.0467	0.0130	1.6100e-003	0.0146	0.0000	141.1639	141.1639	9.4200e-003	0.0209	147.6145
Worker	0.0108	6.3200e-003	0.0954	3.3000e-004	0.0435	1.9000e-004	0.0437	0.0116	1.8000e-004	0.0117	0.0000	31.1307	31.1307	6.8000e-004	7.1000e-004	31.3599
Total	**0.0177**	**0.3243**	**0.2115**	**1.7200e-003**	**0.0885**	**1.8700e-003**	**0.0904**	**0.0246**	**1.7900e-003**	**0.0264**	**0.0000**	**172.2946**	**172.2946**	**0.0101**	**0.0216**	**178.9744**

3.7 Off and On-Site Improvements - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1978	1.3867	2.1310	5.9900e-003		0.0523	0.0523		0.0498	0.0498	0.0000	585.0883	585.0883	0.0693	0.0000	586.8207
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1978**	**1.3867**	**2.1310**	**5.9900e-003**		**0.0523**	**0.0523**		**0.0498**	**0.0498**	**0.0000**	**585.0883**	**585.0883**	**0.0693**	**0.0000**	**586.8207**

Unmitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-003	0.2797	0.1038	1.2100e-003	0.0402	1.4900e-003	0.0416	0.0116	1.4200e-003	0.0130	0.0000	123.3741	123.3741	8.5800e-003	0.0182	129.0243
Worker	9.2400e-003	5.1800e-003	0.0811	2.9000e-004	0.0387	1.6000e-004	0.0389	0.0103	1.5000e-004	0.0105	0.0000	27.1671	27.1671	5.5000e-004	6.0000e-004	27.3606
Total	**0.0152**	**0.2849**	**0.1849**	**1.5000e-003**	**0.0789**	**1.6500e-003**	**0.0805**	**0.0219**	**1.5700e-003**	**0.0235**	**0.0000**	**150.5412**	**150.5412**	**9.1300e-003**	**0.0188**	**156.3849**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0726	0.3145	3.3078	5.9900e-003		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	585.0876	585.0876	0.0693	0.0000	586.8200
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0726**	**0.3145**	**3.3078**	**5.9900e-003**		**9.6800e-003**	**9.6800e-003**		**9.6800e-003**	**9.6800e-003**	**0.0000**	**585.0876**	**585.0876**	**0.0693**	**0.0000**	**586.8200**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-003	0.2797	0.1038	1.2100e-003	0.0402	1.4900e-003	0.0416	0.0116	1.4200e-003	0.0130	0.0000	123.3741	123.3741	8.5800e-003	0.0182	129.0243
Worker	9.2400e-003	5.1800e-003	0.0811	2.9000e-004	0.0387	1.6000e-004	0.0389	0.0103	1.5000e-004	0.0105	0.0000	27.1671	27.1671	5.5000e-004	6.0000e-004	27.3606
Total	**0.0152**	**0.2849**	**0.1849**	**1.5000e-003**	**0.0789**	**1.6500e-003**	**0.0805**	**0.0219**	**1.5700e-003**	**0.0235**	**0.0000**	**150.5412**	**150.5412**	**9.1300e-003**	**0.0188**	**156.3849**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9137	1.9817	21.0090	0.0488	5.8008	0.0302	5.8310	1.5494	0.0281	1.5775	0.0000	4,648.5755	4,648.5755	0.2558	0.1762	4,707.4723
Unmitigated	1.9137	1.9817	21.0090	0.0488	5.8008	0.0302	5.8310	1.5494	0.0281	1.5775	0.0000	4,648.5755	4,648.5755	0.2558	0.1762	4,707.4723

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	5,155.70	0.00	0.00	15,817,688	15,817,688
Total	5,155.70	0.00	0.00	15,817,688	15,817,688

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	11.80	11.80	11.80	33.00	48.00	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710
General Office Building	0.457911	0.074699	0.239011	0.149017	0.025897	0.006576	0.010546	0.001994	0.001422	0.000553	0.029236	0.000429	0.002710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728
NaturalGas Unmitigated	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.36468e+007	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728
Total		**0.0736**	**0.6690**	**0.5619**	**4.0100e-003**		**0.0508**	**0.0508**		**0.0508**	**0.0508**	**0.0000**	**728.2452**	**728.2452**	**0.0140**	**0.0134**	**732.5728**

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.36468e+007	0.0736	0.6690	0.5619	4.0100e-003		0.0508	0.0508		0.0508	0.0508	0.0000	728.2452	728.2452	0.0140	0.0134	732.5728
Total		**0.0736**	**0.6690**	**0.5619**	**4.0100e-003**		**0.0508**	**0.0508**		**0.0508**	**0.0508**	**0.0000**	**728.2452**	**728.2452**	**0.0140**	**0.0134**	**732.5728**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	2.55136e+006	0.0000	0.0000	0.0000	0.0000
General Office Building	6.5618e+006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	2.55136e+006	0.0000	0.0000	0.0000	0.0000
General Office Building	6.5618e+006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4536	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193
Unmitigated	2.4536	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193

6.2 Area by SubCategory

Unmitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1588					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.6000e-004	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193
Total	**2.4536**	**8.0000e-005**	**9.2900e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**5.0000e-005**	**0.0000**	**0.0193**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1588					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.6000e-004	8.0000e-005	9.2900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0181	0.0181	5.0000e-005	0.0000	0.0193
Total	**2.4536**	**8.0000e-005**	**9.2900e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**5.0000e-005**	**0.0000**	**0.0193**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	85.0155	8.7319	0.2062	364.7547
Unmitigated	85.0155	8.7319	0.2062	364.7547

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	267.973 / 59.3688	85.0155	8.7319	0.2062	364.7547
Total		**85.0155**	**8.7319**	**0.2062**	**364.7547**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	267.973 / 59.3688	85.0155	8.7319	0.2062	364.7547
Total		**85.0155**	**8.7319**	**0.2062**	**364.7547**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	102.8860	6.0804	0.0000	254.8956
Unmitigated	102.8860	6.0804	0.0000	254.8956

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	506.85	102.8860	6.0804	0.0000	254.8956
Total		**102.8860**	**6.0804**	**0.0000**	**254.8956**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	506.85	102.8860	6.0804	0.0000	254.8956
Total		**102.8860**	**6.0804**	**0.0000**	**254.8956**

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	6	671	0.73	Diesel
Emergency Generator	2	0.5	6	2682	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (600 - 750 HP)	3.3000e-003	9.2300e-003	8.4200e-003	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5331	1.5331	2.1000e-004	0.0000	1.5385
Emergency Generator - Diesel (750 - 9999 HP)	0.0264	0.1181	0.0673	1.3000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	12.2556	12.2556	1.7200e-003	0.0000	12.2985

1301 Shoreway Road Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.0297	0.1273	0.0758	1.5000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003	0.0000	13.7887	13.7887	1.9300e-003	0.0000	13.8370

11.0 Vegetation

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2035 - Ralston and El Camino Real
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 4.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	1591	1.1	2.0	13.3
B. EBD	*	0	-7	1000	-7	* AG	1839	1.1	2.0	20.6
C. WBA	*	1000	4	0	4	* AG	1641	1.1	2.0	13.3
D. WBD	*	0	7	-1000	7	* AG	1362	1.1	2.0	20.6
E. SBA	*	-4	1000	-4	0	* AG	2301	1.1	2.0	13.3
F. SBD	*	-7	0	-7	-1000	* AG	1881	1.1	2.0	20.6
G. NBA	*	5	-1000	5	0	* AG	1754	1.1	2.0	17.0
H. NBD	*	7	0	7	1000	* AG	2205	1.1	2.0	20.6

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. R_001	*	-10	18	1.8
2. R_002	*	18	10	1.8
3. R_003	*	-18	-10	1.8
4. R_004	*	14	-18	1.8

JOB: 2035 - Ralston and El Camino Real
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	PRED BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	175.	0.6	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.0
2. R_002	265.	0.6	0.1	0.0	0.1	0.2	0.1	0.0	0.0	0.1
3. R_003	85.	0.6	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0
4. R_004	355.	0.6	0.0	0.1	0.1	0.0	0.2	0.0	0.1	0.3

Appendix B
Health Risk Assessment Methodology, Input, Output, and Calculations

Health Risk Assessment Methodology, Input, Output, and Calculations

Construction HRA Analysis

Mitigated

Offroad DPM

	tons/yr	grams/sec	grams/sec/m^2
2024	0.02108	2.27E-03	8.71E-08
2025	0.02358	2.54E-03	9.74E-08
2026	0.01143	1.23E-03	4.72E-08

Offroad Fugitive PM2.5

	tons/yr	grams/sec	grams/sec/m^2
2024	0.14623	1.57E-02	6.04E-07
2025	0	0.00E+00	0.00E+00
2026	0	0.00E+00	0.00E+00

Onroad DPM

		tons/yr	grams/sec	grams/sec/m^2
Haul/Vendor	2024	1.59E-04	1.71E-05	2.76E-09
	2025	2.37E-04	2.55E-05	4.12E-09
	2026	9.80E-05	1.06E-05	1.70E-09

Onroad Fugitive PM2.5

		tons/yr	grams/sec	grams/sec/m^2
Haul/Vendor	2024	1.22E-03	1.32E-04	2.13E-08
	2025	1.91E-03	2.06E-04	3.33E-08
	2026	8.02E-04	8.64E-05	1.40E-08

Onroad Fugitive PM2.5

		tons/yr	grams/sec	grams/sec/m^2
40%	Worker_MarinePkwy	2024	1.61E-04	1.73E-05	4.07E-09
		2025	3.46E-04	3.73E-05	8.78E-09
		2026	1.53E-04	1.65E-05	3.88E-09
60%	Worker_HollySt	2024	3.51E-04	3.78E-05	6.11E-09
		2025	7.57E-04	8.15E-05	1.32E-08
		2026	3.35E-04	3.60E-05	5.82E-09

Onroad Exhaust PM2.5

		tons/yr	grams/sec	grams/sec/m^2
40%	Worker_MarinePkwy	2024	2.64E-06	2.84E-07	6.69E-11
		2025	5.38E-06	5.79E-07	1.36E-10
		2026	2.25E-06	2.42E-07	5.70E-11
60%	Worker_HollySt	2024	5.77E-06	6.21E-07	1.00E-10
		2025	1.18E-05	1.27E-06	2.04E-10
		2026	4.91E-06	5.29E-07	8.55E-11

total length and area of AERMOD onroad line area sources

Haul/Vendor	1238	meters				
	6190	square meters				
Worker_MarinePkwy	849.4	meters				
	4247	square meters				
Worker_HolySt	1238	meters				
	6190	square meters				
Onsite Area	26071	square meters				

total length of haul route

Haul	40.8240166	miles	1 mile	=	1609.34	meters
	65699.7228	meters				
Vendor	14.6	miles	1 mile	=	1609.34	meters
	23496.364	meters				
Worker_MarinePkwy	21.6	miles	1 mile	=	1609.34	meters
	34761.744	meters				
Worker_HolySt	21.6	miles	1 mile	=	1609.34	meters
	34761.744	meters				

fraction of AERMOD line area source lengths to trip route length

Haul	0.01884331
Vendor	0.052689
Worker_MarinePkwy	0.02443491
Worker_HolySt	0.03561386

1 ton = 907185 grams

assume 8am to 5pm operation of haul trucks and offroad equip Mon-Fri

8424000 operational seconds/year

total tons PM25 exhaust haul

2024	0.00098
2025	0
2026	0

total tons PM25 exhaust vendor

2024	0.00266
2025	0.00449
2026	0.00186

total tons PM25 fugitive haul

2024	0.00455
2025	0
2026	0

total tons PM25 fugitive vendor

2024	0.02159
2025	0.03634
2026	0.01522

total tons PM25 fugitive worker

2024	0.01644
2025	0.03541
2026	0.01566

total tons PM25 exhaust worker

2024	0.00027
2025	0.00055
2026	0.00023

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.07027	3.21	3.21	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153037	0.07412	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153047	0.07035	3.09	3.09	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153047	0.07532	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153047	0.07989	2.93	2.93	1.5	ANNUAL	PM25_24	5
RESIDENT	564818.1	4153047	0.08354	3.06	3.06	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153057	0.06914	3.1	3.1	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153057	0.07501	2.98	2.98	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153057	0.08073	2.93	2.93	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153057	0.0861	2.89	2.89	1.5	ANNUAL	PM25_24	5
RESIDENT	564818.1	4153057	0.09052	3.04	3.04	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153067	0.06685	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153067	0.07341	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153067	0.0801	2.87	2.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153067	0.08666	2.86	2.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153067	0.09298	2.84	2.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564818.1	4153067	0.09833	3.03	3.03	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153077	0.06348	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153077	0.07061	3.04	3.04	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153077	0.07801	2.91	2.91	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153077	0.08563	2.78	2.78	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153077	0.09314	2.81	2.81	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153077	0.10056	2.83	2.83	1.5	ANNUAL	PM25_24	5
RESIDENT	564818.1	4153077	0.10709	3.04	3.04	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153087	0.05919	3.09	3.09	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153087	0.06667	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153087	0.07461	2.92	2.92	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153087	0.08294	2.83	2.83	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153087	0.09157	2.74	2.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153087	0.10013	2.86	2.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153087	0.10871	2.99	2.99	1.5	ANNUAL	PM25_24	5
RESIDENT	564818.1	4153087	0.11674	3.18	3.18	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153097	0.00724	3.79	3.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153097	0.05414	3.06	3.06	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153097	0.06175	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153097	0.07002	2.87	2.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153097	0.07888	2.8	2.8	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153097	0.08822	2.75	2.75	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153097	0.09805	2.69	2.69	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153097	0.10779	2.92	2.92	1.5	ANNUAL	PM25_24	5
RESIDENT	564808.1	4153097	0.11774	3.15	3.15	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153107	0.00684	3.87	3.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153107	0.00731	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153107	0.00784	3.57	3.57	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153107	0.04225	3.12	3.12	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153107	0.04871	3.04	3.04	1.5	ANNUAL	PM25_24	5

RESIDENT	564738.1	4153107	0.05608	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153107	0.06439	2.86	2.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153107	0.07355	2.75	2.75	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153107	0.08339	2.7	2.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153107	0.09385	2.7	2.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153107	0.10496	2.7	2.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564798.1	4153107	0.11613	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153117	0.00651	3.87	3.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153117	0.00693	3.79	3.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153117	0.00739	3.68	3.68	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153117	0.00791	3.55	3.55	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153117	0.0085	3.43	3.43	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153117	0.03742	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153117	0.04324	3.06	3.06	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153117	0.0501	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153117	0.05804	2.93	2.93	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153117	0.06709	2.83	2.83	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153117	0.07716	2.73	2.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153117	0.08802	2.74	2.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153117	0.09953	2.88	2.88	1.5	ANNUAL	PM25_24	5
RESIDENT	564788.1	4153117	0.11189	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153127	0.00661	3.76	3.76	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153127	0.00703	3.71	3.71	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153127	0.00749	3.63	3.63	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153127	0.00801	3.53	3.53	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153127	0.00859	3.44	3.44	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153127	0.00925	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153127	0.03304	3.11	3.11	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153127	0.03812	3.06	3.06	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153127	0.04422	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153127	0.0515	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153127	0.06006	2.9	2.9	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153127	0.06993	2.8	2.8	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153127	0.08104	2.7	2.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153127	0.09302	2.78	2.78	1.5	ANNUAL	PM25_24	5
RESIDENT	564778.1	4153127	0.1057	3.05	3.05	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153137	0.00632	3.71	3.71	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153137	0.00671	3.68	3.68	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153137	0.00713	3.65	3.65	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153137	0.0076	3.6	3.6	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153137	0.00812	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153137	0.0087	3.44	3.44	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153137	0.00936	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153137	0.01011	3.25	3.25	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153137	0.02913	3.03	3.03	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153137	0.03351	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153137	0.03878	2.98	2.98	1.5	ANNUAL	PM25_24	5

RESIDENT	564718.1	4153137	0.04517	2.95	2.95	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153137	0.0529	2.91	2.91	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153137	0.06211	2.87	2.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153137	0.07288	2.79	2.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153137	0.08517	2.69	2.69	1.5	ANNUAL	PM25_24	5
RESIDENT	564768.1	4153137	0.09843	2.84	2.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153147	0.00601	3.86	3.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153147	0.00639	3.76	3.76	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153147	0.00679	3.71	3.71	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153147	0.00723	3.65	3.65	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153147	0.00771	3.59	3.59	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153147	0.00823	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153147	0.00882	3.44	3.44	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153147	0.00948	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153147	0.01023	3.29	3.29	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153147	0.01107	3.26	3.26	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153147	0.0256	3.12	3.12	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153147	0.02938	2.99	2.99	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153147	0.03389	2.97	2.97	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153147	0.03935	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153147	0.04604	2.94	2.94	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153147	0.05425	2.88	2.88	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153147	0.06418	2.83	2.83	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153147	0.07578	2.89	2.89	1.5	ANNUAL	PM25_24	5
RESIDENT	564758.1	4153147	0.0891	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153157	0.00571	3.84	3.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153157	0.00606	3.83	3.83	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153157	0.00644	3.81	3.81	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153157	0.00685	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153157	0.00731	3.65	3.65	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153157	0.0078	3.58	3.58	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153157	0.00835	3.51	3.51	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153157	0.00894	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153157	0.00961	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153157	0.01035	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153157	0.0112	3.27	3.27	1.5	ANNUAL	PM25_24	5
RESIDENT	564608.1	4153157	0.01217	3.2	3.2	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153157	0.0226	3.18	3.18	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153157	0.02576	3.06	3.06	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153157	0.02961	2.94	2.94	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153157	0.03423	2.94	2.94	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153157	0.03988	2.95	2.95	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153157	0.04686	2.93	2.93	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153157	0.05555	2.85	2.85	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153157	0.06625	2.78	2.78	1.5	ANNUAL	PM25_24	5
RESIDENT	564748.1	4153157	0.07872	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153167	0.00541	3.86	3.86	1.5	ANNUAL	PM25_24	5

RESIDENT	564498.1	4153167	0.00574	3.75	3.75	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153167	0.00609	3.8	3.8	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153167	0.00647	3.84	3.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153167	0.0069	3.74	3.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153167	0.00737	3.64	3.64	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153167	0.00788	3.57	3.57	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153167	0.00844	3.51	3.51	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153167	0.00905	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153167	0.00973	3.41	3.41	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153167	0.01048	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153167	0.01134	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564608.1	4153167	0.01232	3.17	3.17	1.5	ANNUAL	PM25_24	5
RESIDENT	564618.1	4153167	0.01344	3.12	3.12	1.5	ANNUAL	PM25_24	5
RESIDENT	564658.1	4153167	0.02013	3.2	3.2	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153167	0.02274	3.1	3.1	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153167	0.02592	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153167	0.02981	2.9	2.9	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153167	0.03453	2.91	2.91	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153167	0.04035	2.93	2.93	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153167	0.04762	2.91	2.91	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153167	0.0568	2.82	2.82	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153167	0.06828	2.74	2.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153177	0.00511	4.04	4.04	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153177	0.00542	3.84	3.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153177	0.00575	3.74	3.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153177	0.00611	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153177	0.0065	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153177	0.00693	3.65	3.65	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153177	0.00741	3.58	3.58	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153177	0.00793	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153177	0.0085	3.46	3.46	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153177	0.00913	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153177	0.00983	3.4	3.4	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153177	0.0106	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153177	0.01147	3.3	3.3	1.5	ANNUAL	PM25_24	5
RESIDENT	564608.1	4153177	0.01246	3.2	3.2	1.5	ANNUAL	PM25_24	5
RESIDENT	564618.1	4153177	0.01358	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564648.1	4153177	0.01812	3.23	3.23	1.5	ANNUAL	PM25_24	5
RESIDENT	564658.1	4153177	0.02025	3.18	3.18	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153177	0.02284	3.11	3.11	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153177	0.02602	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153177	0.02994	2.9	2.9	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153177	0.03476	2.87	2.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153177	0.04077	2.86	2.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153177	0.04827	2.89	2.89	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153177	0.05769	2.99	2.99	1.5	ANNUAL	PM25_24	5
RESIDENT	564738.1	4153177	0.06965	3.08	3.08	1.5	ANNUAL	PM25_24	5

RESIDENT	564468.1	4153187	0.00484	4.09	4.09	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153187	0.00512	3.95	3.95	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153187	0.00542	3.82	3.82	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153187	0.00575	3.72	3.72	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153187	0.00611	3.67	3.67	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153187	0.00651	3.62	3.62	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153187	0.00695	3.56	3.56	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153187	0.00742	3.51	3.51	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153187	0.00795	3.47	3.47	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153187	0.00854	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153187	0.00918	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153187	0.00989	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153187	0.01067	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153187	0.01157	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564608.1	4153187	0.01257	3.23	3.23	1.5	ANNUAL	PM25_24	5
RESIDENT	564618.1	4153187	0.01371	3.17	3.17	1.5	ANNUAL	PM25_24	5
RESIDENT	564648.1	4153187	0.01826	3.17	3.17	1.5	ANNUAL	PM25_24	5
RESIDENT	564658.1	4153187	0.02037	3.16	3.16	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153187	0.02293	3.11	3.11	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153187	0.02609	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153187	0.03002	2.89	2.89	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153187	0.0349	2.84	2.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153187	0.04105	2.79	2.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564718.1	4153187	0.04874	2.88	2.88	1.5	ANNUAL	PM25_24	5
RESIDENT	564728.1	4153187	0.05836	3.15	3.15	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153197	0.00459	4.09	4.09	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153197	0.00485	3.95	3.95	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153197	0.00512	3.87	3.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153197	0.00542	3.79	3.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153197	0.00575	3.7	3.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153197	0.00611	3.6	3.6	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153197	0.00651	3.51	3.51	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153197	0.00695	3.48	3.48	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153197	0.00742	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153197	0.00795	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153197	0.00854	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153197	0.00919	3.36	3.36	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153197	0.00991	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153197	0.01071	3.4	3.4	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153197	0.01162	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564608.1	4153197	0.01265	3.26	3.26	1.5	ANNUAL	PM25_24	5
RESIDENT	564658.1	4153197	0.02049	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153197	0.02301	3.12	3.12	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153197	0.02615	3	3	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153197	0.03005	2.89	2.89	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153197	0.03495	2.8	2.8	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153197	0.0412	2.72	2.72	1.5	ANNUAL	PM25_24	5

RESIDENT	564718.1	4153197	0.049	2.87	2.87	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153207	0.00459	4.02	4.02	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153207	0.00484	3.88	3.88	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153207	0.00512	3.81	3.81	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153207	0.00542	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153207	0.00575	3.64	3.64	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153207	0.00611	3.54	3.54	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153207	0.00651	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153207	0.00694	3.43	3.43	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153207	0.00741	3.41	3.41	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153207	0.00794	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153207	0.00853	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153207	0.00919	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153207	0.00991	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153207	0.01072	3.34	3.34	1.5	ANNUAL	PM25_24	5
RESIDENT	564598.1	4153207	0.01164	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564668.1	4153207	0.02311	3.13	3.13	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153207	0.02622	2.99	2.99	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153207	0.0301	2.84	2.84	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153207	0.03486	2.9	2.9	1.5	ANNUAL	PM25_24	5
RESIDENT	564708.1	4153207	0.04096	2.98	2.98	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153217	0.00458	3.94	3.94	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153217	0.00483	3.82	3.82	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153217	0.00511	3.75	3.75	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153217	0.00541	3.67	3.67	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153217	0.00573	3.58	3.58	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153217	0.0061	3.48	3.48	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153217	0.00649	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153217	0.00692	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153217	0.0074	3.38	3.38	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153217	0.00793	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153217	0.00852	3.31	3.31	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153217	0.00917	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153217	0.0099	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564588.1	4153217	0.01072	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564678.1	4153217	0.02632	2.97	2.97	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153217	0.03017	2.79	2.79	1.5	ANNUAL	PM25_24	5
RESIDENT	564698.1	4153217	0.03476	3.01	3.01	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153227	0.00456	3.86	3.86	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153227	0.00482	3.75	3.75	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153227	0.00509	3.68	3.68	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153227	0.00539	3.62	3.62	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153227	0.00572	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153227	0.00608	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153227	0.00648	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153227	0.0069	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153227	0.00738	3.34	3.34	1.5	ANNUAL	PM25_24	5

RESIDENT	564548.1	4153227	0.00791	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153227	0.0085	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153227	0.00915	3.24	3.24	1.5	ANNUAL	PM25_24	5
RESIDENT	564578.1	4153227	0.00989	3.23	3.23	1.5	ANNUAL	PM25_24	5
RESIDENT	564688.1	4153227	0.03024	2.74	2.74	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153237	0.00453	3.81	3.81	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153237	0.00478	3.73	3.73	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153237	0.00506	3.64	3.64	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153237	0.00536	3.55	3.55	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153237	0.00569	3.47	3.47	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153237	0.00605	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153237	0.00645	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153237	0.00688	3.31	3.31	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153237	0.00735	3.31	3.31	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153237	0.00788	3.29	3.29	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153237	0.00847	3.26	3.26	1.5	ANNUAL	PM25_24	5
RESIDENT	564568.1	4153237	0.00912	3.24	3.24	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153247	0.00449	3.76	3.76	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153247	0.00474	3.7	3.7	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153247	0.00502	3.59	3.59	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153247	0.00532	3.48	3.48	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153247	0.00565	3.41	3.41	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153247	0.00601	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153247	0.0064	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153247	0.00683	3.3	3.3	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153247	0.00731	3.27	3.27	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153247	0.00784	3.25	3.25	1.5	ANNUAL	PM25_24	5
RESIDENT	564558.1	4153247	0.00842	3.24	3.24	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153257	0.00444	3.71	3.71	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153257	0.00469	3.68	3.68	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153257	0.00497	3.55	3.55	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153257	0.00527	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153257	0.0056	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153257	0.00595	3.34	3.34	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153257	0.00634	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153257	0.00677	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153257	0.00724	3.24	3.24	1.5	ANNUAL	PM25_24	5
RESIDENT	564548.1	4153257	0.00777	3.22	3.22	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153267	0.00439	3.65	3.65	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153267	0.00464	3.6	3.6	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153267	0.00491	3.5	3.5	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153267	0.00521	3.4	3.4	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153267	0.00553	3.32	3.32	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153267	0.00589	3.26	3.26	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153267	0.00627	3.21	3.21	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153267	0.00669	3.21	3.21	1.5	ANNUAL	PM25_24	5
RESIDENT	564538.1	4153267	0.00715	3.22	3.22	1.5	ANNUAL	PM25_24	5

RESIDENT	564458.1	4153277	0.00433	3.58	3.58	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153277	0.00458	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153277	0.00485	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153277	0.00514	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153277	0.00546	3.29	3.29	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153277	0.00581	3.17	3.17	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153277	0.00619	3.08	3.08	1.5	ANNUAL	PM25_24	5
RESIDENT	564528.1	4153277	0.0066	3.14	3.14	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153287	0.00428	3.52	3.52	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153287	0.00453	3.45	3.45	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153287	0.00479	3.41	3.41	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153287	0.00507	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153287	0.00538	3.25	3.25	1.5	ANNUAL	PM25_24	5
RESIDENT	564508.1	4153287	0.00573	3.08	3.08	1.5	ANNUAL	PM25_24	5
RESIDENT	564518.1	4153287	0.0061	2.96	2.96	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153297	0.00424	3.47	3.47	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153297	0.00448	3.39	3.39	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153297	0.00473	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153297	0.00501	3.35	3.35	1.5	ANNUAL	PM25_24	5
RESIDENT	564498.1	4153297	0.00531	3.28	3.28	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153307	0.00419	3.42	3.42	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153307	0.00443	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153307	0.00468	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564488.1	4153307	0.00495	3.33	3.33	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153317	0.00414	3.37	3.37	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153317	0.00437	3.27	3.27	1.5	ANNUAL	PM25_24	5
RESIDENT	564478.1	4153317	0.00462	3.29	3.29	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153327	0.00409	3.34	3.34	1.5	ANNUAL	PM25_24	5
RESIDENT	564468.1	4153327	0.00431	3.26	3.26	1.5	ANNUAL	PM25_24	5
RESIDENT	564458.1	4153337	0.00404	3.31	3.31	1.5	ANNUAL	PM25_24	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.0109	3.21	3.21	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153037	0.01152	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153047	0.01095	3.09	3.09	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153047	0.01171	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153047	0.01243	2.93	2.93	1.5	ANNUAL	PM25_25	5
RESIDENT	564818.1	4153047	0.01308	3.06	3.06	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153057	0.01084	3.1	3.1	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153057	0.01172	2.98	2.98	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153057	0.01258	2.93	2.93	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153057	0.01342	2.89	2.89	1.5	ANNUAL	PM25_25	5
RESIDENT	564818.1	4153057	0.01419	3.04	3.04	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153067	0.01057	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153067	0.01155	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153067	0.01255	2.87	2.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153067	0.01354	2.86	2.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153067	0.01453	2.84	2.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564818.1	4153067	0.01543	3.03	3.03	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153077	0.01017	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153077	0.01121	3.04	3.04	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153077	0.01232	2.91	2.91	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153077	0.01346	2.78	2.78	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153077	0.0146	2.81	2.81	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153077	0.01575	2.83	2.83	1.5	ANNUAL	PM25_25	5
RESIDENT	564818.1	4153077	0.01683	3.04	3.04	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153087	0.00965	3.09	3.09	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153087	0.01074	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153087	0.01191	2.92	2.92	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153087	0.01315	2.83	2.83	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153087	0.01445	2.74	2.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153087	0.01575	2.86	2.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153087	0.01708	2.99	2.99	1.5	ANNUAL	PM25_25	5
RESIDENT	564818.1	4153087	0.01838	3.18	3.18	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153097	0.00128	3.79	3.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153097	0.00902	3.06	3.06	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153097	0.01014	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153097	0.01135	2.87	2.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153097	0.01266	2.8	2.8	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153097	0.01405	2.75	2.75	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153097	0.01553	2.69	2.69	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153097	0.01701	2.92	2.92	1.5	ANNUAL	PM25_25	5
RESIDENT	564808.1	4153097	0.01855	3.15	3.15	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153107	0.00119	3.87	3.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153107	0.00128	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153107	0.00138	3.57	3.57	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153107	0.00732	3.12	3.12	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153107	0.00831	3.04	3.04	1.5	ANNUAL	PM25_25	5

RESIDENT	564738.1	4153107	0.00942	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153107	0.01065	2.86	2.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153107	0.012	2.75	2.75	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153107	0.01346	2.7	2.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153107	0.01502	2.7	2.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153107	0.0167	2.7	2.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564798.1	4153107	0.01839	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153117	0.00112	3.87	3.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153117	0.0012	3.79	3.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153117	0.00129	3.68	3.68	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153117	0.00139	3.55	3.55	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153117	0.0015	3.43	3.43	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153117	0.00662	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153117	0.00755	3.06	3.06	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153117	0.00862	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153117	0.00983	2.93	2.93	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153117	0.01118	2.83	2.83	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153117	0.01268	2.73	2.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153117	0.0143	2.74	2.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153117	0.01602	2.88	2.88	1.5	ANNUAL	PM25_25	5
RESIDENT	564788.1	4153117	0.01788	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153127	0.00113	3.76	3.76	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153127	0.00121	3.71	3.71	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153127	0.0013	3.63	3.63	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153127	0.0014	3.53	3.53	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153127	0.00151	3.44	3.44	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153127	0.00163	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153127	0.00592	3.11	3.11	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153127	0.00678	3.06	3.06	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153127	0.00779	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153127	0.00894	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153127	0.01025	2.9	2.9	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153127	0.01174	2.8	2.8	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153127	0.01341	2.7	2.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153127	0.0152	2.78	2.78	1.5	ANNUAL	PM25_25	5
RESIDENT	564778.1	4153127	0.0171	3.05	3.05	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153137	0.00106	3.71	3.71	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153137	0.00114	3.68	3.68	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153137	0.00122	3.65	3.65	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153137	0.0013	3.6	3.6	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153137	0.0014	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153137	0.00152	3.44	3.44	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153137	0.00164	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153137	0.00178	3.25	3.25	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153137	0.00526	3.03	3.03	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153137	0.00604	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153137	0.00695	2.98	2.98	1.5	ANNUAL	PM25_25	5

RESIDENT	564718.1	4153137	0.00802	2.95	2.95	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153137	0.00926	2.91	2.91	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153137	0.01069	2.87	2.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153137	0.01233	2.79	2.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153137	0.01418	2.69	2.69	1.5	ANNUAL	PM25_25	5
RESIDENT	564768.1	4153137	0.01618	2.84	2.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153147	0.001	3.86	3.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153147	0.00107	3.76	3.76	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153147	0.00114	3.71	3.71	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153147	0.00122	3.65	3.65	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153147	0.00131	3.59	3.59	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153147	0.00141	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153147	0.00152	3.44	3.44	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153147	0.00165	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153147	0.00179	3.29	3.29	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153147	0.00195	3.26	3.26	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153147	0.00465	3.12	3.12	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153147	0.00533	2.99	2.99	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153147	0.00614	2.97	2.97	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153147	0.0071	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153147	0.00824	2.94	2.94	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153147	0.00958	2.88	2.88	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153147	0.01115	2.83	2.83	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153147	0.01292	2.89	2.89	1.5	ANNUAL	PM25_25	5
RESIDENT	564758.1	4153147	0.01493	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153157	0.00095	3.84	3.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153157	0.00101	3.83	3.83	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153157	0.00107	3.81	3.81	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153157	0.00115	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153157	0.00123	3.65	3.65	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153157	0.00132	3.58	3.58	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153157	0.00142	3.51	3.51	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153157	0.00153	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153157	0.00166	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153157	0.0018	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153157	0.00196	3.27	3.27	1.5	ANNUAL	PM25_25	5
RESIDENT	564608.1	4153157	0.00215	3.2	3.2	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153157	0.00411	3.18	3.18	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153157	0.00469	3.06	3.06	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153157	0.0054	2.94	2.94	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153157	0.00623	2.94	2.94	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153157	0.00724	2.95	2.95	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153157	0.00846	2.93	2.93	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153157	0.00991	2.85	2.85	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153157	0.01162	2.78	2.78	1.5	ANNUAL	PM25_25	5
RESIDENT	564748.1	4153157	0.01353	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153167	0.00089	3.86	3.86	1.5	ANNUAL	PM25_25	5

RESIDENT	564498.1	4153167	0.00095	3.75	3.75	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153167	0.00101	3.8	3.8	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153167	0.00108	3.84	3.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153167	0.00115	3.74	3.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153167	0.00123	3.64	3.64	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153167	0.00132	3.57	3.57	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153167	0.00142	3.51	3.51	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153167	0.00154	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153167	0.00166	3.41	3.41	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153167	0.00181	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153167	0.00197	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564608.1	4153167	0.00216	3.17	3.17	1.5	ANNUAL	PM25_25	5
RESIDENT	564618.1	4153167	0.00237	3.12	3.12	1.5	ANNUAL	PM25_25	5
RESIDENT	564658.1	4153167	0.00365	3.2	3.2	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153167	0.00414	3.1	3.1	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153167	0.00473	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153167	0.00545	2.9	2.9	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153167	0.00632	2.91	2.91	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153167	0.00738	2.93	2.93	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153167	0.00867	2.91	2.91	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153167	0.01023	2.82	2.82	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153167	0.0121	2.74	2.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153177	0.00084	4.04	4.04	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153177	0.00089	3.84	3.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153177	0.00095	3.74	3.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153177	0.00101	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153177	0.00108	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153177	0.00115	3.65	3.65	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153177	0.00124	3.58	3.58	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153177	0.00133	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153177	0.00143	3.46	3.46	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153177	0.00154	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153177	0.00167	3.4	3.4	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153177	0.00181	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153177	0.00198	3.3	3.3	1.5	ANNUAL	PM25_25	5
RESIDENT	564608.1	4153177	0.00216	3.2	3.2	1.5	ANNUAL	PM25_25	5
RESIDENT	564618.1	4153177	0.00238	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564648.1	4153177	0.00325	3.23	3.23	1.5	ANNUAL	PM25_25	5
RESIDENT	564658.1	4153177	0.00366	3.18	3.18	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153177	0.00416	3.11	3.11	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153177	0.00476	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153177	0.00549	2.9	2.9	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153177	0.00639	2.87	2.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153177	0.0075	2.86	2.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153177	0.00886	2.89	2.89	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153177	0.0105	2.99	2.99	1.5	ANNUAL	PM25_25	5
RESIDENT	564738.1	4153177	0.01248	3.08	3.08	1.5	ANNUAL	PM25_25	5

RESIDENT	564468.1	4153187	0.00079	4.09	4.09	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153187	0.00084	3.95	3.95	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153187	0.00089	3.82	3.82	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153187	0.00095	3.72	3.72	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153187	0.00101	3.67	3.67	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153187	0.00108	3.62	3.62	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153187	0.00116	3.56	3.56	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153187	0.00124	3.51	3.51	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153187	0.00133	3.47	3.47	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153187	0.00144	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153187	0.00155	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153187	0.00168	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153187	0.00182	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153187	0.00198	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564608.1	4153187	0.00217	3.23	3.23	1.5	ANNUAL	PM25_25	5
RESIDENT	564618.1	4153187	0.00238	3.17	3.17	1.5	ANNUAL	PM25_25	5
RESIDENT	564648.1	4153187	0.00326	3.17	3.17	1.5	ANNUAL	PM25_25	5
RESIDENT	564658.1	4153187	0.00367	3.16	3.16	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153187	0.00417	3.11	3.11	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153187	0.00478	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153187	0.00553	2.89	2.89	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153187	0.00645	2.84	2.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153187	0.00761	2.79	2.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564718.1	4153187	0.00903	2.88	2.88	1.5	ANNUAL	PM25_25	5
RESIDENT	564728.1	4153187	0.01075	3.15	3.15	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153197	0.00075	4.09	4.09	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153197	0.00079	3.95	3.95	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153197	0.00084	3.87	3.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153197	0.00089	3.79	3.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153197	0.00095	3.7	3.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153197	0.00101	3.6	3.6	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153197	0.00108	3.51	3.51	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153197	0.00116	3.48	3.48	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153197	0.00124	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153197	0.00133	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153197	0.00144	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153197	0.00155	3.36	3.36	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153197	0.00168	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153197	0.00182	3.4	3.4	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153197	0.00199	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564608.1	4153197	0.00218	3.26	3.26	1.5	ANNUAL	PM25_25	5
RESIDENT	564658.1	4153197	0.00368	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153197	0.00417	3.12	3.12	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153197	0.00479	3	3	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153197	0.00555	2.89	2.89	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153197	0.0065	2.8	2.8	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153197	0.0077	2.72	2.72	1.5	ANNUAL	PM25_25	5

RESIDENT	564718.1	4153197	0.00918	2.87	2.87	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153207	0.00075	4.02	4.02	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153207	0.00079	3.88	3.88	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153207	0.00084	3.81	3.81	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153207	0.00089	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153207	0.00095	3.64	3.64	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153207	0.00101	3.54	3.54	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153207	0.00108	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153207	0.00116	3.43	3.43	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153207	0.00124	3.41	3.41	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153207	0.00133	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153207	0.00144	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153207	0.00156	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153207	0.00168	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153207	0.00183	3.34	3.34	1.5	ANNUAL	PM25_25	5
RESIDENT	564598.1	4153207	0.00199	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564668.1	4153207	0.00417	3.13	3.13	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153207	0.00479	2.99	2.99	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153207	0.00556	2.84	2.84	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153207	0.00651	2.9	2.9	1.5	ANNUAL	PM25_25	5
RESIDENT	564708.1	4153207	0.00771	2.98	2.98	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153217	0.00074	3.94	3.94	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153217	0.00079	3.82	3.82	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153217	0.00084	3.75	3.75	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153217	0.00089	3.67	3.67	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153217	0.00095	3.58	3.58	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153217	0.00101	3.48	3.48	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153217	0.00108	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153217	0.00115	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153217	0.00124	3.38	3.38	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153217	0.00133	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153217	0.00144	3.31	3.31	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153217	0.00155	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153217	0.00168	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564588.1	4153217	0.00183	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564678.1	4153217	0.00479	2.97	2.97	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153217	0.00557	2.79	2.79	1.5	ANNUAL	PM25_25	5
RESIDENT	564698.1	4153217	0.0065	3.01	3.01	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153227	0.00074	3.86	3.86	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153227	0.00078	3.75	3.75	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153227	0.00083	3.68	3.68	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153227	0.00088	3.62	3.62	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153227	0.00094	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153227	0.001	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153227	0.00107	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153227	0.00115	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153227	0.00123	3.34	3.34	1.5	ANNUAL	PM25_25	5

RESIDENT	564548.1	4153227	0.00133	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153227	0.00143	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153227	0.00155	3.24	3.24	1.5	ANNUAL	PM25_25	5
RESIDENT	564578.1	4153227	0.00168	3.23	3.23	1.5	ANNUAL	PM25_25	5
RESIDENT	564688.1	4153227	0.00557	2.74	2.74	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153237	0.00074	3.81	3.81	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153237	0.00078	3.73	3.73	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153237	0.00083	3.64	3.64	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153237	0.00088	3.55	3.55	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153237	0.00094	3.47	3.47	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153237	0.001	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153237	0.00107	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153237	0.00114	3.31	3.31	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153237	0.00123	3.31	3.31	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153237	0.00132	3.29	3.29	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153237	0.00143	3.26	3.26	1.5	ANNUAL	PM25_25	5
RESIDENT	564568.1	4153237	0.00154	3.24	3.24	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153247	0.00073	3.76	3.76	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153247	0.00078	3.7	3.7	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153247	0.00082	3.59	3.59	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153247	0.00087	3.48	3.48	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153247	0.00093	3.41	3.41	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153247	0.00099	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153247	0.00106	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153247	0.00114	3.3	3.3	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153247	0.00122	3.27	3.27	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153247	0.00131	3.25	3.25	1.5	ANNUAL	PM25_25	5
RESIDENT	564558.1	4153247	0.00142	3.24	3.24	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153257	0.00073	3.71	3.71	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153257	0.00077	3.68	3.68	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153257	0.00082	3.55	3.55	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153257	0.00087	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153257	0.00092	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153257	0.00099	3.34	3.34	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153257	0.00105	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153257	0.00113	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153257	0.00121	3.24	3.24	1.5	ANNUAL	PM25_25	5
RESIDENT	564548.1	4153257	0.0013	3.22	3.22	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153267	0.00072	3.65	3.65	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153267	0.00076	3.6	3.6	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153267	0.00081	3.5	3.5	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153267	0.00086	3.4	3.4	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153267	0.00092	3.32	3.32	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153267	0.00098	3.26	3.26	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153267	0.00104	3.21	3.21	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153267	0.00112	3.21	3.21	1.5	ANNUAL	PM25_25	5
RESIDENT	564538.1	4153267	0.0012	3.22	3.22	1.5	ANNUAL	PM25_25	5

RESIDENT	564458.1	4153277	0.00072	3.58	3.58	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153277	0.00076	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153277	0.0008	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153277	0.00085	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153277	0.00091	3.29	3.29	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153277	0.00097	3.17	3.17	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153277	0.00103	3.08	3.08	1.5	ANNUAL	PM25_25	5
RESIDENT	564528.1	4153277	0.00111	3.14	3.14	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153287	0.00071	3.52	3.52	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153287	0.00075	3.45	3.45	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153287	0.00079	3.41	3.41	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153287	0.00084	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153287	0.0009	3.25	3.25	1.5	ANNUAL	PM25_25	5
RESIDENT	564508.1	4153287	0.00096	3.08	3.08	1.5	ANNUAL	PM25_25	5
RESIDENT	564518.1	4153287	0.00102	2.96	2.96	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153297	0.0007	3.47	3.47	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153297	0.00074	3.39	3.39	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153297	0.00079	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153297	0.00083	3.35	3.35	1.5	ANNUAL	PM25_25	5
RESIDENT	564498.1	4153297	0.00089	3.28	3.28	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153307	0.00069	3.42	3.42	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153307	0.00073	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153307	0.00078	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564488.1	4153307	0.00082	3.33	3.33	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153317	0.00069	3.37	3.37	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153317	0.00073	3.27	3.27	1.5	ANNUAL	PM25_25	5
RESIDENT	564478.1	4153317	0.00077	3.29	3.29	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153327	0.00068	3.34	3.34	1.5	ANNUAL	PM25_25	5
RESIDENT	564468.1	4153327	0.00072	3.26	3.26	1.5	ANNUAL	PM25_25	5
RESIDENT	564458.1	4153337	0.00067	3.31	3.31	1.5	ANNUAL	PM25_25	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.00518	3.21	3.21	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153037	0.00548	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153047	0.00521	3.09	3.09	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153047	0.00557	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153047	0.00591	2.93	2.93	1.5	ANNUAL	PM25_26	5
RESIDENT	564818.1	4153047	0.00622	3.06	3.06	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153057	0.00516	3.1	3.1	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153057	0.00558	2.98	2.98	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153057	0.00599	2.93	2.93	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153057	0.00638	2.89	2.89	1.5	ANNUAL	PM25_26	5
RESIDENT	564818.1	4153057	0.00674	3.04	3.04	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153067	0.00503	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153067	0.0055	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153067	0.00597	2.87	2.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153067	0.00644	2.86	2.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153067	0.00691	2.84	2.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564818.1	4153067	0.00733	3.03	3.03	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153077	0.00484	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153077	0.00534	3.04	3.04	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153077	0.00586	2.91	2.91	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153077	0.00641	2.78	2.78	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153077	0.00695	2.81	2.81	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153077	0.00749	2.83	2.83	1.5	ANNUAL	PM25_26	5
RESIDENT	564818.1	4153077	0.00799	3.04	3.04	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153087	0.00459	3.09	3.09	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153087	0.00511	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153087	0.00567	2.92	2.92	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153087	0.00625	2.83	2.83	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153087	0.00687	2.74	2.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153087	0.00749	2.86	2.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153087	0.00812	2.99	2.99	1.5	ANNUAL	PM25_26	5
RESIDENT	564818.1	4153087	0.00873	3.18	3.18	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153097	0.00061	3.79	3.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153097	0.00429	3.06	3.06	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153097	0.00482	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153097	0.0054	2.87	2.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153097	0.00602	2.8	2.8	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153097	0.00668	2.75	2.75	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153097	0.00739	2.69	2.69	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153097	0.00809	2.92	2.92	1.5	ANNUAL	PM25_26	5
RESIDENT	564808.1	4153097	0.00882	3.15	3.15	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153107	0.00057	3.87	3.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153107	0.00061	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153107	0.00066	3.57	3.57	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153107	0.00348	3.12	3.12	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153107	0.00395	3.04	3.04	1.5	ANNUAL	PM25_26	5

RESIDENT	564738.1	4153107	0.00447	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153107	0.00506	2.86	2.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153107	0.00571	2.75	2.75	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153107	0.0064	2.7	2.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153107	0.00714	2.7	2.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153107	0.00794	2.7	2.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564798.1	4153107	0.00875	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153117	0.00053	3.87	3.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153117	0.00057	3.79	3.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153117	0.00061	3.68	3.68	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153117	0.00066	3.55	3.55	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153117	0.00071	3.43	3.43	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153117	0.00314	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153117	0.00358	3.06	3.06	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153117	0.00409	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153117	0.00467	2.93	2.93	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153117	0.00531	2.83	2.83	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153117	0.00602	2.73	2.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153117	0.0068	2.74	2.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153117	0.00761	2.88	2.88	1.5	ANNUAL	PM25_26	5
RESIDENT	564788.1	4153117	0.0085	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153127	0.00054	3.76	3.76	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153127	0.00058	3.71	3.71	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153127	0.00062	3.63	3.63	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153127	0.00066	3.53	3.53	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153127	0.00072	3.44	3.44	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153127	0.00078	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153127	0.00281	3.11	3.11	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153127	0.00322	3.06	3.06	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153127	0.00369	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153127	0.00424	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153127	0.00486	2.9	2.9	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153127	0.00557	2.8	2.8	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153127	0.00637	2.7	2.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153127	0.00722	2.78	2.78	1.5	ANNUAL	PM25_26	5
RESIDENT	564778.1	4153127	0.00812	3.05	3.05	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153137	0.00051	3.71	3.71	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153137	0.00054	3.68	3.68	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153137	0.00058	3.65	3.65	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153137	0.00062	3.6	3.6	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153137	0.00067	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153137	0.00072	3.44	3.44	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153137	0.00078	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153137	0.00085	3.25	3.25	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153137	0.00249	3.03	3.03	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153137	0.00286	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153137	0.00329	2.98	2.98	1.5	ANNUAL	PM25_26	5

RESIDENT	564718.1	4153137	0.0038	2.95	2.95	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153137	0.00439	2.91	2.91	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153137	0.00507	2.87	2.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153137	0.00585	2.79	2.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153137	0.00673	2.69	2.69	1.5	ANNUAL	PM25_26	5
RESIDENT	564768.1	4153137	0.00768	2.84	2.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153147	0.00048	3.86	3.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153147	0.00051	3.76	3.76	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153147	0.00054	3.71	3.71	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153147	0.00058	3.65	3.65	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153147	0.00062	3.59	3.59	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153147	0.00067	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153147	0.00072	3.44	3.44	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153147	0.00078	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153147	0.00085	3.29	3.29	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153147	0.00093	3.26	3.26	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153147	0.0022	3.12	3.12	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153147	0.00253	2.99	2.99	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153147	0.00291	2.97	2.97	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153147	0.00336	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153147	0.0039	2.94	2.94	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153147	0.00454	2.88	2.88	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153147	0.00528	2.83	2.83	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153147	0.00612	2.89	2.89	1.5	ANNUAL	PM25_26	5
RESIDENT	564758.1	4153147	0.00708	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153157	0.00045	3.84	3.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153157	0.00048	3.83	3.83	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153157	0.00051	3.81	3.81	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153157	0.00055	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153157	0.00058	3.65	3.65	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153157	0.00063	3.58	3.58	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153157	0.00067	3.51	3.51	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153157	0.00073	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153157	0.00079	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153157	0.00085	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153157	0.00093	3.27	3.27	1.5	ANNUAL	PM25_26	5
RESIDENT	564608.1	4153157	0.00102	3.2	3.2	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153157	0.00195	3.18	3.18	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153157	0.00222	3.06	3.06	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153157	0.00256	2.94	2.94	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153157	0.00295	2.94	2.94	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153157	0.00343	2.95	2.95	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153157	0.004	2.93	2.93	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153157	0.00469	2.85	2.85	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153157	0.0055	2.78	2.78	1.5	ANNUAL	PM25_26	5
RESIDENT	564748.1	4153157	0.00641	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153167	0.00042	3.86	3.86	1.5	ANNUAL	PM25_26	5

RESIDENT	564498.1	4153167	0.00045	3.75	3.75	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153167	0.00048	3.8	3.8	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153167	0.00051	3.84	3.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153167	0.00055	3.74	3.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153167	0.00059	3.64	3.64	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153167	0.00063	3.57	3.57	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153167	0.00068	3.51	3.51	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153167	0.00073	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153167	0.00079	3.41	3.41	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153167	0.00086	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153167	0.00094	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564608.1	4153167	0.00102	3.17	3.17	1.5	ANNUAL	PM25_26	5
RESIDENT	564618.1	4153167	0.00113	3.12	3.12	1.5	ANNUAL	PM25_26	5
RESIDENT	564658.1	4153167	0.00173	3.2	3.2	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153167	0.00196	3.1	3.1	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153167	0.00224	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153167	0.00258	2.9	2.9	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153167	0.00299	2.91	2.91	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153167	0.00349	2.93	2.93	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153167	0.0041	2.91	2.91	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153167	0.00484	2.82	2.82	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153167	0.00572	2.74	2.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153177	0.0004	4.04	4.04	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153177	0.00043	3.84	3.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153177	0.00045	3.74	3.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153177	0.00048	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153177	0.00051	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153177	0.00055	3.65	3.65	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153177	0.00059	3.58	3.58	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153177	0.00063	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153177	0.00068	3.46	3.46	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153177	0.00073	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153177	0.00079	3.4	3.4	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153177	0.00086	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153177	0.00094	3.3	3.3	1.5	ANNUAL	PM25_26	5
RESIDENT	564608.1	4153177	0.00103	3.2	3.2	1.5	ANNUAL	PM25_26	5
RESIDENT	564618.1	4153177	0.00113	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564648.1	4153177	0.00154	3.23	3.23	1.5	ANNUAL	PM25_26	5
RESIDENT	564658.1	4153177	0.00174	3.18	3.18	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153177	0.00197	3.11	3.11	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153177	0.00225	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153177	0.0026	2.9	2.9	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153177	0.00302	2.87	2.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153177	0.00355	2.86	2.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153177	0.00419	2.89	2.89	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153177	0.00496	2.99	2.99	1.5	ANNUAL	PM25_26	5
RESIDENT	564738.1	4153177	0.0059	3.08	3.08	1.5	ANNUAL	PM25_26	5

RESIDENT	564468.1	4153187	0.00038	4.09	4.09	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153187	0.0004	3.95	3.95	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153187	0.00043	3.82	3.82	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153187	0.00045	3.72	3.72	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153187	0.00048	3.67	3.67	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153187	0.00051	3.62	3.62	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153187	0.00055	3.56	3.56	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153187	0.00059	3.51	3.51	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153187	0.00063	3.47	3.47	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153187	0.00068	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153187	0.00074	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153187	0.0008	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153187	0.00086	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153187	0.00094	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564608.1	4153187	0.00103	3.23	3.23	1.5	ANNUAL	PM25_26	5
RESIDENT	564618.1	4153187	0.00113	3.17	3.17	1.5	ANNUAL	PM25_26	5
RESIDENT	564648.1	4153187	0.00155	3.17	3.17	1.5	ANNUAL	PM25_26	5
RESIDENT	564658.1	4153187	0.00174	3.16	3.16	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153187	0.00197	3.11	3.11	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153187	0.00226	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153187	0.00261	2.89	2.89	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153187	0.00305	2.84	2.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153187	0.00359	2.79	2.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564718.1	4153187	0.00426	2.88	2.88	1.5	ANNUAL	PM25_26	5
RESIDENT	564728.1	4153187	0.00507	3.15	3.15	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153197	0.00036	4.09	4.09	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153197	0.00038	3.95	3.95	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153197	0.0004	3.87	3.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153197	0.00042	3.79	3.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153197	0.00045	3.7	3.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153197	0.00048	3.6	3.6	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153197	0.00051	3.51	3.51	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153197	0.00055	3.48	3.48	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153197	0.00059	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153197	0.00063	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153197	0.00068	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153197	0.00074	3.36	3.36	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153197	0.0008	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153197	0.00087	3.4	3.4	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153197	0.00094	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564608.1	4153197	0.00103	3.26	3.26	1.5	ANNUAL	PM25_26	5
RESIDENT	564658.1	4153197	0.00174	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153197	0.00198	3.12	3.12	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153197	0.00226	3	3	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153197	0.00262	2.89	2.89	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153197	0.00307	2.8	2.8	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153197	0.00363	2.72	2.72	1.5	ANNUAL	PM25_26	5

RESIDENT	564718.1	4153197	0.00433	2.87	2.87	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153207	0.00036	4.02	4.02	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153207	0.00038	3.88	3.88	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153207	0.0004	3.81	3.81	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153207	0.00042	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153207	0.00045	3.64	3.64	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153207	0.00048	3.54	3.54	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153207	0.00051	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153207	0.00055	3.43	3.43	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153207	0.00059	3.41	3.41	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153207	0.00063	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153207	0.00068	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153207	0.00074	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153207	0.0008	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153207	0.00087	3.34	3.34	1.5	ANNUAL	PM25_26	5
RESIDENT	564598.1	4153207	0.00095	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564668.1	4153207	0.00198	3.13	3.13	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153207	0.00227	2.99	2.99	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153207	0.00263	2.84	2.84	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153207	0.00307	2.9	2.9	1.5	ANNUAL	PM25_26	5
RESIDENT	564708.1	4153207	0.00363	2.98	2.98	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153217	0.00035	3.94	3.94	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153217	0.00038	3.82	3.82	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153217	0.0004	3.75	3.75	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153217	0.00042	3.67	3.67	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153217	0.00045	3.58	3.58	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153217	0.00048	3.48	3.48	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153217	0.00051	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153217	0.00055	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153217	0.00059	3.38	3.38	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153217	0.00063	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153217	0.00068	3.31	3.31	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153217	0.00074	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153217	0.0008	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564588.1	4153217	0.00087	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564678.1	4153217	0.00227	2.97	2.97	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153217	0.00263	2.79	2.79	1.5	ANNUAL	PM25_26	5
RESIDENT	564698.1	4153217	0.00307	3.01	3.01	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153227	0.00035	3.86	3.86	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153227	0.00037	3.75	3.75	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153227	0.0004	3.68	3.68	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153227	0.00042	3.62	3.62	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153227	0.00045	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153227	0.00048	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153227	0.00051	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153227	0.00055	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153227	0.00059	3.34	3.34	1.5	ANNUAL	PM25_26	5

RESIDENT	564548.1	4153227	0.00063	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153227	0.00068	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153227	0.00074	3.24	3.24	1.5	ANNUAL	PM25_26	5
RESIDENT	564578.1	4153227	0.0008	3.23	3.23	1.5	ANNUAL	PM25_26	5
RESIDENT	564688.1	4153227	0.00263	2.74	2.74	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153237	0.00035	3.81	3.81	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153237	0.00037	3.73	3.73	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153237	0.00039	3.64	3.64	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153237	0.00042	3.55	3.55	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153237	0.00045	3.47	3.47	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153237	0.00048	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153237	0.00051	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153237	0.00054	3.31	3.31	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153237	0.00058	3.31	3.31	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153237	0.00063	3.29	3.29	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153237	0.00068	3.26	3.26	1.5	ANNUAL	PM25_26	5
RESIDENT	564568.1	4153237	0.00073	3.24	3.24	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153247	0.00035	3.76	3.76	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153247	0.00037	3.7	3.7	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153247	0.00039	3.59	3.59	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153247	0.00042	3.48	3.48	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153247	0.00044	3.41	3.41	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153247	0.00047	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153247	0.0005	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153247	0.00054	3.3	3.3	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153247	0.00058	3.27	3.27	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153247	0.00062	3.25	3.25	1.5	ANNUAL	PM25_26	5
RESIDENT	564558.1	4153247	0.00067	3.24	3.24	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153257	0.00035	3.71	3.71	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153257	0.00037	3.68	3.68	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153257	0.00039	3.55	3.55	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153257	0.00041	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153257	0.00044	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153257	0.00047	3.34	3.34	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153257	0.0005	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153257	0.00054	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153257	0.00058	3.24	3.24	1.5	ANNUAL	PM25_26	5
RESIDENT	564548.1	4153257	0.00062	3.22	3.22	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153267	0.00034	3.65	3.65	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153267	0.00036	3.6	3.6	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153267	0.00039	3.5	3.5	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153267	0.00041	3.4	3.4	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153267	0.00044	3.32	3.32	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153267	0.00046	3.26	3.26	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153267	0.0005	3.21	3.21	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153267	0.00053	3.21	3.21	1.5	ANNUAL	PM25_26	5
RESIDENT	564538.1	4153267	0.00057	3.22	3.22	1.5	ANNUAL	PM25_26	5

RESIDENT	564458.1	4153277	0.00034	3.58	3.58	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153277	0.00036	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153277	0.00038	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153277	0.00041	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153277	0.00043	3.29	3.29	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153277	0.00046	3.17	3.17	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153277	0.00049	3.08	3.08	1.5	ANNUAL	PM25_26	5
RESIDENT	564528.1	4153277	0.00053	3.14	3.14	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153287	0.00034	3.52	3.52	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153287	0.00036	3.45	3.45	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153287	0.00038	3.41	3.41	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153287	0.0004	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153287	0.00043	3.25	3.25	1.5	ANNUAL	PM25_26	5
RESIDENT	564508.1	4153287	0.00046	3.08	3.08	1.5	ANNUAL	PM25_26	5
RESIDENT	564518.1	4153287	0.00049	2.96	2.96	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153297	0.00033	3.47	3.47	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153297	0.00035	3.39	3.39	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153297	0.00037	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153297	0.0004	3.35	3.35	1.5	ANNUAL	PM25_26	5
RESIDENT	564498.1	4153297	0.00042	3.28	3.28	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153307	0.00033	3.42	3.42	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153307	0.00035	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153307	0.00037	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564488.1	4153307	0.00039	3.33	3.33	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153317	0.00033	3.37	3.37	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153317	0.00035	3.27	3.27	1.5	ANNUAL	PM25_26	5
RESIDENT	564478.1	4153317	0.00037	3.29	3.29	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153327	0.00032	3.34	3.34	1.5	ANNUAL	PM25_26	5
RESIDENT	564468.1	4153327	0.00034	3.26	3.26	1.5	ANNUAL	PM25_26	5
RESIDENT	564458.1	4153337	0.00032	3.31	3.31	1.5	ANNUAL	PM25_26	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.00836	3.21	3.21	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153037	0.0088	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153047	0.00843	3.09	3.09	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153047	0.00898	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153047	0.0095	2.93	2.93	1.5	ANNUAL	DPM_24	5
RESIDENT	564818.1	4153047	0.00993	3.06	3.06	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153057	0.00834	3.1	3.1	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153057	0.00901	2.98	2.98	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153057	0.00965	2.93	2.93	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153057	0.01025	2.89	2.89	1.5	ANNUAL	DPM_24	5
RESIDENT	564818.1	4153057	0.01076	3.04	3.04	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153067	0.00812	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153067	0.00888	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153067	0.00965	2.87	2.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153067	0.01038	2.86	2.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153067	0.01109	2.84	2.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564818.1	4153067	0.01169	3.03	3.03	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153077	0.00779	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153077	0.0086	3.04	3.04	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153077	0.00946	2.91	2.91	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153077	0.01033	2.78	2.78	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153077	0.01119	2.81	2.81	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153077	0.01201	2.83	2.83	1.5	ANNUAL	DPM_24	5
RESIDENT	564818.1	4153077	0.01274	3.04	3.04	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153087	0.00735	3.09	3.09	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153087	0.0082	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153087	0.00912	2.92	2.92	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153087	0.01008	2.83	2.83	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153087	0.01107	2.74	2.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153087	0.01205	2.86	2.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153087	0.01301	2.99	2.99	1.5	ANNUAL	DPM_24	5
RESIDENT	564818.1	4153087	0.0139	3.18	3.18	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153097	0.00096	3.79	3.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153097	0.00682	3.06	3.06	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153097	0.0077	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153097	0.00865	2.87	2.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153097	0.00966	2.8	2.8	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153097	0.01074	2.75	2.75	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153097	0.01188	2.69	2.69	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153097	0.013	2.92	2.92	1.5	ANNUAL	DPM_24	5
RESIDENT	564808.1	4153097	0.01412	3.15	3.15	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153107	0.0009	3.87	3.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153107	0.00097	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153107	0.00104	3.57	3.57	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153107	0.00547	3.12	3.12	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153107	0.00624	3.04	3.04	1.5	ANNUAL	DPM_24	5

RESIDENT	564738.1	4153107	0.0071	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153107	0.00806	2.86	2.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153107	0.00911	2.75	2.75	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153107	0.01025	2.7	2.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153107	0.01145	2.7	2.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153107	0.01274	2.7	2.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564798.1	4153107	0.01402	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153117	0.00085	3.87	3.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153117	0.00091	3.79	3.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153117	0.00097	3.68	3.68	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153117	0.00105	3.55	3.55	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153117	0.00113	3.43	3.43	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153117	0.00491	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153117	0.00562	3.06	3.06	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153117	0.00644	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153117	0.00737	2.93	2.93	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153117	0.00842	2.83	2.83	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153117	0.00959	2.73	2.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153117	0.01084	2.74	2.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153117	0.01217	2.88	2.88	1.5	ANNUAL	DPM_24	5
RESIDENT	564788.1	4153117	0.01359	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153127	0.00085	3.76	3.76	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153127	0.00091	3.71	3.71	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153127	0.00098	3.63	3.63	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153127	0.00105	3.53	3.53	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153127	0.00113	3.44	3.44	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153127	0.00122	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153127	0.00437	3.11	3.11	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153127	0.00501	3.06	3.06	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153127	0.00576	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153127	0.00664	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153127	0.00765	2.9	2.9	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153127	0.0088	2.8	2.8	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153127	0.01009	2.7	2.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153127	0.01147	2.78	2.78	1.5	ANNUAL	DPM_24	5
RESIDENT	564778.1	4153127	0.01293	3.05	3.05	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153137	0.00081	3.71	3.71	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153137	0.00086	3.68	3.68	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153137	0.00092	3.65	3.65	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153137	0.00098	3.6	3.6	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153137	0.00106	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153137	0.00114	3.44	3.44	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153137	0.00123	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153137	0.00133	3.25	3.25	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153137	0.00386	3.03	3.03	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153137	0.00443	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153137	0.0051	2.98	2.98	1.5	ANNUAL	DPM_24	5

RESIDENT	564718.1	4153137	0.0059	2.95	2.95	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153137	0.00684	2.91	2.91	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153137	0.00793	2.87	2.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153137	0.00919	2.79	2.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153137	0.01061	2.69	2.69	1.5	ANNUAL	DPM_24	5
RESIDENT	564768.1	4153137	0.01214	2.84	2.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153147	0.00076	3.86	3.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153147	0.00081	3.76	3.76	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153147	0.00086	3.71	3.71	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153147	0.00092	3.65	3.65	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153147	0.00099	3.59	3.59	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153147	0.00106	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153147	0.00114	3.44	3.44	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153147	0.00123	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153147	0.00134	3.29	3.29	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153147	0.00145	3.26	3.26	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153147	0.0034	3.12	3.12	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153147	0.0039	2.99	2.99	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153147	0.00448	2.97	2.97	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153147	0.00518	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153147	0.00602	2.94	2.94	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153147	0.00703	2.88	2.88	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153147	0.00821	2.83	2.83	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153147	0.00956	2.89	2.89	1.5	ANNUAL	DPM_24	5
RESIDENT	564758.1	4153147	0.0111	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153157	0.00072	3.84	3.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153157	0.00076	3.83	3.83	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153157	0.00081	3.81	3.81	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153157	0.00087	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153157	0.00092	3.65	3.65	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153157	0.00099	3.58	3.58	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153157	0.00106	3.51	3.51	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153157	0.00115	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153157	0.00124	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153157	0.00134	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153157	0.00146	3.27	3.27	1.5	ANNUAL	DPM_24	5
RESIDENT	564608.1	4153157	0.00159	3.2	3.2	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153157	0.003	3.18	3.18	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153157	0.00342	3.06	3.06	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153157	0.00392	2.94	2.94	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153157	0.00452	2.94	2.94	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153157	0.00525	2.95	2.95	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153157	0.00613	2.93	2.93	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153157	0.00721	2.85	2.85	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153157	0.00849	2.78	2.78	1.5	ANNUAL	DPM_24	5
RESIDENT	564748.1	4153157	0.00994	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153167	0.00068	3.86	3.86	1.5	ANNUAL	DPM_24	5

RESIDENT	564498.1	4153167	0.00072	3.75	3.75	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153167	0.00076	3.8	3.8	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153167	0.00081	3.84	3.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153167	0.00087	3.74	3.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153167	0.00093	3.64	3.64	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153167	0.00099	3.57	3.57	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153167	0.00107	3.51	3.51	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153167	0.00115	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153167	0.00124	3.41	3.41	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153167	0.00134	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153167	0.00146	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564608.1	4153167	0.0016	3.17	3.17	1.5	ANNUAL	DPM_24	5
RESIDENT	564618.1	4153167	0.00175	3.12	3.12	1.5	ANNUAL	DPM_24	5
RESIDENT	564658.1	4153167	0.00266	3.2	3.2	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153167	0.00301	3.1	3.1	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153167	0.00343	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153167	0.00394	2.9	2.9	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153167	0.00456	2.91	2.91	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153167	0.00531	2.93	2.93	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153167	0.00623	2.91	2.91	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153167	0.00737	2.82	2.82	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153167	0.00876	2.74	2.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153177	0.00064	4.04	4.04	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153177	0.00068	3.84	3.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153177	0.00072	3.74	3.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153177	0.00076	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153177	0.00081	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153177	0.00087	3.65	3.65	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153177	0.00093	3.58	3.58	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153177	0.001	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153177	0.00107	3.46	3.46	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153177	0.00115	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153177	0.00124	3.4	3.4	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153177	0.00135	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153177	0.00146	3.3	3.3	1.5	ANNUAL	DPM_24	5
RESIDENT	564608.1	4153177	0.0016	3.2	3.2	1.5	ANNUAL	DPM_24	5
RESIDENT	564618.1	4153177	0.00175	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564648.1	4153177	0.00237	3.23	3.23	1.5	ANNUAL	DPM_24	5
RESIDENT	564658.1	4153177	0.00266	3.18	3.18	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153177	0.00301	3.11	3.11	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153177	0.00343	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153177	0.00395	2.9	2.9	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153177	0.00458	2.87	2.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153177	0.00535	2.86	2.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153177	0.00631	2.89	2.89	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153177	0.00748	2.99	2.99	1.5	ANNUAL	DPM_24	5
RESIDENT	564738.1	4153177	0.00892	3.08	3.08	1.5	ANNUAL	DPM_24	5

RESIDENT	564468.1	4153187	0.0006	4.09	4.09	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153187	0.00064	3.95	3.95	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153187	0.00068	3.82	3.82	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153187	0.00072	3.72	3.72	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153187	0.00076	3.67	3.67	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153187	0.00081	3.62	3.62	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153187	0.00087	3.56	3.56	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153187	0.00093	3.51	3.51	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153187	0.001	3.47	3.47	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153187	0.00107	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153187	0.00115	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153187	0.00124	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153187	0.00135	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153187	0.00147	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564608.1	4153187	0.0016	3.23	3.23	1.5	ANNUAL	DPM_24	5
RESIDENT	564618.1	4153187	0.00176	3.17	3.17	1.5	ANNUAL	DPM_24	5
RESIDENT	564648.1	4153187	0.00238	3.17	3.17	1.5	ANNUAL	DPM_24	5
RESIDENT	564658.1	4153187	0.00266	3.16	3.16	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153187	0.00301	3.11	3.11	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153187	0.00343	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153187	0.00395	2.89	2.89	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153187	0.00458	2.84	2.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153187	0.00538	2.79	2.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564718.1	4153187	0.00636	2.88	2.88	1.5	ANNUAL	DPM_24	5
RESIDENT	564728.1	4153187	0.00756	3.15	3.15	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153197	0.00057	4.09	4.09	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153197	0.0006	3.95	3.95	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153197	0.00064	3.87	3.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153197	0.00068	3.79	3.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153197	0.00072	3.7	3.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153197	0.00076	3.6	3.6	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153197	0.00081	3.51	3.51	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153197	0.00087	3.48	3.48	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153197	0.00093	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153197	0.001	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153197	0.00107	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153197	0.00115	3.36	3.36	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153197	0.00124	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153197	0.00135	3.4	3.4	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153197	0.00147	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564608.1	4153197	0.0016	3.26	3.26	1.5	ANNUAL	DPM_24	5
RESIDENT	564658.1	4153197	0.00266	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153197	0.003	3.12	3.12	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153197	0.00342	3	3	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153197	0.00394	2.89	2.89	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153197	0.00458	2.8	2.8	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153197	0.00539	2.72	2.72	1.5	ANNUAL	DPM_24	5

RESIDENT	564718.1	4153197	0.00638	2.87	2.87	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153207	0.00057	4.02	4.02	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153207	0.0006	3.88	3.88	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153207	0.00064	3.81	3.81	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153207	0.00068	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153207	0.00072	3.64	3.64	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153207	0.00076	3.54	3.54	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153207	0.00081	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153207	0.00087	3.43	3.43	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153207	0.00093	3.41	3.41	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153207	0.00099	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153207	0.00107	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153207	0.00115	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153207	0.00124	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153207	0.00135	3.34	3.34	1.5	ANNUAL	DPM_24	5
RESIDENT	564598.1	4153207	0.00146	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564668.1	4153207	0.00299	3.13	3.13	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153207	0.00341	2.99	2.99	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153207	0.00393	2.84	2.84	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153207	0.00455	2.9	2.9	1.5	ANNUAL	DPM_24	5
RESIDENT	564708.1	4153207	0.00533	2.98	2.98	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153217	0.00057	3.94	3.94	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153217	0.0006	3.82	3.82	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153217	0.00064	3.75	3.75	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153217	0.00067	3.67	3.67	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153217	0.00071	3.58	3.58	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153217	0.00076	3.48	3.48	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153217	0.00081	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153217	0.00086	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153217	0.00092	3.38	3.38	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153217	0.00099	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153217	0.00107	3.31	3.31	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153217	0.00115	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153217	0.00124	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564588.1	4153217	0.00134	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564678.1	4153217	0.00339	2.97	2.97	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153217	0.00391	2.79	2.79	1.5	ANNUAL	DPM_24	5
RESIDENT	564698.1	4153217	0.00451	3.01	3.01	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153227	0.00057	3.86	3.86	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153227	0.0006	3.75	3.75	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153227	0.00063	3.68	3.68	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153227	0.00067	3.62	3.62	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153227	0.00071	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153227	0.00076	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153227	0.00081	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153227	0.00086	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153227	0.00092	3.34	3.34	1.5	ANNUAL	DPM_24	5

RESIDENT	564548.1	4153227	0.00099	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153227	0.00106	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153227	0.00114	3.24	3.24	1.5	ANNUAL	DPM_24	5
RESIDENT	564578.1	4153227	0.00123	3.23	3.23	1.5	ANNUAL	DPM_24	5
RESIDENT	564688.1	4153227	0.00388	2.74	2.74	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153237	0.00056	3.81	3.81	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153237	0.00059	3.73	3.73	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153237	0.00063	3.64	3.64	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153237	0.00067	3.55	3.55	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153237	0.00071	3.47	3.47	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153237	0.00075	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153237	0.0008	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153237	0.00086	3.31	3.31	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153237	0.00091	3.31	3.31	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153237	0.00098	3.29	3.29	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153237	0.00105	3.26	3.26	1.5	ANNUAL	DPM_24	5
RESIDENT	564568.1	4153237	0.00113	3.24	3.24	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153247	0.00056	3.76	3.76	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153247	0.00059	3.7	3.7	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153247	0.00062	3.59	3.59	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153247	0.00066	3.48	3.48	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153247	0.0007	3.41	3.41	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153247	0.00075	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153247	0.00079	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153247	0.00085	3.3	3.3	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153247	0.00091	3.27	3.27	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153247	0.00097	3.25	3.25	1.5	ANNUAL	DPM_24	5
RESIDENT	564558.1	4153247	0.00104	3.24	3.24	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153257	0.00055	3.71	3.71	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153257	0.00058	3.68	3.68	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153257	0.00062	3.55	3.55	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153257	0.00066	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153257	0.0007	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153257	0.00074	3.34	3.34	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153257	0.00079	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153257	0.00084	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153257	0.0009	3.24	3.24	1.5	ANNUAL	DPM_24	5
RESIDENT	564548.1	4153257	0.00096	3.22	3.22	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153267	0.00055	3.65	3.65	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153267	0.00058	3.6	3.6	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153267	0.00061	3.5	3.5	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153267	0.00065	3.4	3.4	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153267	0.00069	3.32	3.32	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153267	0.00073	3.26	3.26	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153267	0.00078	3.21	3.21	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153267	0.00083	3.21	3.21	1.5	ANNUAL	DPM_24	5
RESIDENT	564538.1	4153267	0.00089	3.22	3.22	1.5	ANNUAL	DPM_24	5

RESIDENT	564458.1	4153277	0.00054	3.58	3.58	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153277	0.00057	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153277	0.00061	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153277	0.00064	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153277	0.00068	3.29	3.29	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153277	0.00072	3.17	3.17	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153277	0.00077	3.08	3.08	1.5	ANNUAL	DPM_24	5
RESIDENT	564528.1	4153277	0.00082	3.14	3.14	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153287	0.00054	3.52	3.52	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153287	0.00057	3.45	3.45	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153287	0.0006	3.41	3.41	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153287	0.00063	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153287	0.00067	3.25	3.25	1.5	ANNUAL	DPM_24	5
RESIDENT	564508.1	4153287	0.00072	3.08	3.08	1.5	ANNUAL	DPM_24	5
RESIDENT	564518.1	4153287	0.00076	2.96	2.96	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153297	0.00053	3.47	3.47	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153297	0.00056	3.39	3.39	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153297	0.00059	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153297	0.00063	3.35	3.35	1.5	ANNUAL	DPM_24	5
RESIDENT	564498.1	4153297	0.00066	3.28	3.28	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153307	0.00053	3.42	3.42	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153307	0.00055	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153307	0.00059	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564488.1	4153307	0.00062	3.33	3.33	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153317	0.00052	3.37	3.37	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153317	0.00055	3.27	3.27	1.5	ANNUAL	DPM_24	5
RESIDENT	564478.1	4153317	0.00058	3.29	3.29	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153327	0.00051	3.34	3.34	1.5	ANNUAL	DPM_24	5
RESIDENT	564468.1	4153327	0.00054	3.26	3.26	1.5	ANNUAL	DPM_24	5
RESIDENT	564458.1	4153337	0.00051	3.31	3.31	1.5	ANNUAL	DPM_24	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.00938	3.21	3.21	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153037	0.00988	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153047	0.00946	3.09	3.09	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153047	0.01008	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153047	0.01066	2.93	2.93	1.5	ANNUAL	DPM_25	5
RESIDENT	564818.1	4153047	0.01114	3.06	3.06	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153057	0.00936	3.1	3.1	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153057	0.01011	2.98	2.98	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153057	0.01083	2.93	2.93	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153057	0.0115	2.89	2.89	1.5	ANNUAL	DPM_25	5
RESIDENT	564818.1	4153057	0.01207	3.04	3.04	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153067	0.00911	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153067	0.00996	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153067	0.01082	2.87	2.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153067	0.01165	2.86	2.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153067	0.01244	2.84	2.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564818.1	4153067	0.01312	3.03	3.03	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153077	0.00874	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153077	0.00965	3.04	3.04	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153077	0.01061	2.91	2.91	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153077	0.01159	2.78	2.78	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153077	0.01255	2.81	2.81	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153077	0.01348	2.83	2.83	1.5	ANNUAL	DPM_25	5
RESIDENT	564818.1	4153077	0.0143	3.04	3.04	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153087	0.00825	3.09	3.09	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153087	0.0092	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153087	0.01023	2.92	2.92	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153087	0.0113	2.83	2.83	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153087	0.01242	2.74	2.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153087	0.01352	2.86	2.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153087	0.0146	2.99	2.99	1.5	ANNUAL	DPM_25	5
RESIDENT	564818.1	4153087	0.0156	3.18	3.18	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153097	0.00108	3.79	3.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153097	0.00766	3.06	3.06	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153097	0.00864	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153097	0.0097	2.87	2.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153097	0.01084	2.8	2.8	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153097	0.01205	2.75	2.75	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153097	0.01333	2.69	2.69	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153097	0.01458	2.92	2.92	1.5	ANNUAL	DPM_25	5
RESIDENT	564808.1	4153097	0.01584	3.15	3.15	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153107	0.00101	3.87	3.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153107	0.00108	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153107	0.00117	3.57	3.57	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153107	0.00614	3.12	3.12	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153107	0.007	3.04	3.04	1.5	ANNUAL	DPM_25	5

RESIDENT	564738.1	4153107	0.00796	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153107	0.00904	2.86	2.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153107	0.01022	2.75	2.75	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153107	0.0115	2.7	2.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153107	0.01285	2.7	2.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153107	0.01429	2.7	2.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564798.1	4153107	0.01573	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153117	0.00095	3.87	3.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153117	0.00102	3.79	3.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153117	0.00109	3.68	3.68	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153117	0.00117	3.55	3.55	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153117	0.00126	3.43	3.43	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153117	0.00551	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153117	0.00631	3.06	3.06	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153117	0.00723	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153117	0.00827	2.93	2.93	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153117	0.00945	2.83	2.83	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153117	0.01076	2.73	2.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153117	0.01216	2.74	2.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153117	0.01365	2.88	2.88	1.5	ANNUAL	DPM_25	5
RESIDENT	564788.1	4153117	0.01525	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153127	0.00096	3.76	3.76	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153127	0.00102	3.71	3.71	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153127	0.0011	3.63	3.63	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153127	0.00118	3.53	3.53	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153127	0.00127	3.44	3.44	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153127	0.00137	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153127	0.0049	3.11	3.11	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153127	0.00562	3.06	3.06	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153127	0.00647	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153127	0.00745	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153127	0.00858	2.9	2.9	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153127	0.00987	2.8	2.8	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153127	0.01132	2.7	2.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153127	0.01287	2.78	2.78	1.5	ANNUAL	DPM_25	5
RESIDENT	564778.1	4153127	0.01451	3.05	3.05	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153137	0.0009	3.71	3.71	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153137	0.00096	3.68	3.68	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153137	0.00103	3.65	3.65	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153137	0.0011	3.6	3.6	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153137	0.00118	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153137	0.00127	3.44	3.44	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153137	0.00138	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153137	0.00149	3.25	3.25	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153137	0.00434	3.03	3.03	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153137	0.00497	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153137	0.00573	2.98	2.98	1.5	ANNUAL	DPM_25	5

RESIDENT	564718.1	4153137	0.00662	2.95	2.95	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153137	0.00767	2.91	2.91	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153137	0.0089	2.87	2.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153137	0.01031	2.79	2.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153137	0.01191	2.69	2.69	1.5	ANNUAL	DPM_25	5
RESIDENT	564768.1	4153137	0.01363	2.84	2.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153147	0.00085	3.86	3.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153147	0.00091	3.76	3.76	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153147	0.00097	3.71	3.71	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153147	0.00103	3.65	3.65	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153147	0.00111	3.59	3.59	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153147	0.00119	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153147	0.00128	3.44	3.44	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153147	0.00138	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153147	0.0015	3.29	3.29	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153147	0.00163	3.26	3.26	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153147	0.00382	3.12	3.12	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153147	0.00438	2.99	2.99	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153147	0.00503	2.97	2.97	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153147	0.00582	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153147	0.00676	2.94	2.94	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153147	0.00789	2.88	2.88	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153147	0.00922	2.83	2.83	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153147	0.01073	2.89	2.89	1.5	ANNUAL	DPM_25	5
RESIDENT	564758.1	4153147	0.01246	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153157	0.0008	3.84	3.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153157	0.00085	3.83	3.83	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153157	0.00091	3.81	3.81	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153157	0.00097	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153157	0.00104	3.65	3.65	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153157	0.00111	3.58	3.58	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153157	0.00119	3.51	3.51	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153157	0.00128	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153157	0.00139	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153157	0.0015	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153157	0.00164	3.27	3.27	1.5	ANNUAL	DPM_25	5
RESIDENT	564608.1	4153157	0.00179	3.2	3.2	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153157	0.00337	3.18	3.18	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153157	0.00384	3.06	3.06	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153157	0.00441	2.94	2.94	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153157	0.00508	2.94	2.94	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153157	0.0059	2.95	2.95	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153157	0.00689	2.93	2.93	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153157	0.00809	2.85	2.85	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153157	0.00953	2.78	2.78	1.5	ANNUAL	DPM_25	5
RESIDENT	564748.1	4153157	0.01116	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153167	0.00076	3.86	3.86	1.5	ANNUAL	DPM_25	5

RESIDENT	564498.1	4153167	0.00081	3.75	3.75	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153167	0.00086	3.8	3.8	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153167	0.00091	3.84	3.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153167	0.00097	3.74	3.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153167	0.00104	3.64	3.64	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153167	0.00111	3.57	3.57	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153167	0.0012	3.51	3.51	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153167	0.00129	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153167	0.00139	3.41	3.41	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153167	0.00151	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153167	0.00164	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564608.1	4153167	0.00179	3.17	3.17	1.5	ANNUAL	DPM_25	5
RESIDENT	564618.1	4153167	0.00197	3.12	3.12	1.5	ANNUAL	DPM_25	5
RESIDENT	564658.1	4153167	0.00299	3.2	3.2	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153167	0.00338	3.1	3.1	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153167	0.00385	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153167	0.00443	2.9	2.9	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153167	0.00512	2.91	2.91	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153167	0.00596	2.93	2.93	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153167	0.007	2.91	2.91	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153167	0.00828	2.82	2.82	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153167	0.00983	2.74	2.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153177	0.00072	4.04	4.04	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153177	0.00076	3.84	3.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153177	0.00081	3.74	3.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153177	0.00086	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153177	0.00091	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153177	0.00097	3.65	3.65	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153177	0.00104	3.58	3.58	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153177	0.00112	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153177	0.0012	3.46	3.46	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153177	0.00129	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153177	0.00139	3.4	3.4	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153177	0.00151	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153177	0.00164	3.3	3.3	1.5	ANNUAL	DPM_25	5
RESIDENT	564608.1	4153177	0.0018	3.2	3.2	1.5	ANNUAL	DPM_25	5
RESIDENT	564618.1	4153177	0.00197	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564648.1	4153177	0.00266	3.23	3.23	1.5	ANNUAL	DPM_25	5
RESIDENT	564658.1	4153177	0.00299	3.18	3.18	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153177	0.00338	3.11	3.11	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153177	0.00386	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153177	0.00444	2.9	2.9	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153177	0.00514	2.87	2.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153177	0.00601	2.86	2.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153177	0.00708	2.89	2.89	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153177	0.0084	2.99	2.99	1.5	ANNUAL	DPM_25	5
RESIDENT	564738.1	4153177	0.01002	3.08	3.08	1.5	ANNUAL	DPM_25	5

RESIDENT	564468.1	4153187	0.00068	4.09	4.09	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153187	0.00072	3.95	3.95	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153187	0.00076	3.82	3.82	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153187	0.00081	3.72	3.72	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153187	0.00086	3.67	3.67	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153187	0.00091	3.62	3.62	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153187	0.00098	3.56	3.56	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153187	0.00104	3.51	3.51	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153187	0.00112	3.47	3.47	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153187	0.0012	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153187	0.00129	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153187	0.0014	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153187	0.00151	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153187	0.00164	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564608.1	4153187	0.0018	3.23	3.23	1.5	ANNUAL	DPM_25	5
RESIDENT	564618.1	4153187	0.00197	3.17	3.17	1.5	ANNUAL	DPM_25	5
RESIDENT	564648.1	4153187	0.00267	3.17	3.17	1.5	ANNUAL	DPM_25	5
RESIDENT	564658.1	4153187	0.00299	3.16	3.16	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153187	0.00338	3.11	3.11	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153187	0.00385	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153187	0.00443	2.89	2.89	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153187	0.00515	2.84	2.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153187	0.00604	2.79	2.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564718.1	4153187	0.00714	2.88	2.88	1.5	ANNUAL	DPM_25	5
RESIDENT	564728.1	4153187	0.00849	3.15	3.15	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153197	0.00064	4.09	4.09	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153197	0.00068	3.95	3.95	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153197	0.00072	3.87	3.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153197	0.00076	3.79	3.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153197	0.00081	3.7	3.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153197	0.00086	3.6	3.6	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153197	0.00091	3.51	3.51	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153197	0.00097	3.48	3.48	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153197	0.00104	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153197	0.00112	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153197	0.0012	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153197	0.00129	3.36	3.36	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153197	0.0014	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153197	0.00151	3.4	3.4	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153197	0.00164	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564608.1	4153197	0.0018	3.26	3.26	1.5	ANNUAL	DPM_25	5
RESIDENT	564658.1	4153197	0.00298	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153197	0.00337	3.12	3.12	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153197	0.00384	3	3	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153197	0.00442	2.89	2.89	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153197	0.00514	2.8	2.8	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153197	0.00605	2.72	2.72	1.5	ANNUAL	DPM_25	5

RESIDENT	564718.1	4153197	0.00717	2.87	2.87	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153207	0.00064	4.02	4.02	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153207	0.00068	3.88	3.88	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153207	0.00071	3.81	3.81	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153207	0.00076	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153207	0.0008	3.64	3.64	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153207	0.00086	3.54	3.54	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153207	0.00091	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153207	0.00097	3.43	3.43	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153207	0.00104	3.41	3.41	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153207	0.00112	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153207	0.0012	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153207	0.00129	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153207	0.00139	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153207	0.00151	3.34	3.34	1.5	ANNUAL	DPM_25	5
RESIDENT	564598.1	4153207	0.00164	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564668.1	4153207	0.00336	3.13	3.13	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153207	0.00383	2.99	2.99	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153207	0.00441	2.84	2.84	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153207	0.00511	2.9	2.9	1.5	ANNUAL	DPM_25	5
RESIDENT	564708.1	4153207	0.00599	2.98	2.98	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153217	0.00064	3.94	3.94	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153217	0.00067	3.82	3.82	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153217	0.00071	3.75	3.75	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153217	0.00075	3.67	3.67	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153217	0.0008	3.58	3.58	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153217	0.00085	3.48	3.48	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153217	0.00091	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153217	0.00097	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153217	0.00104	3.38	3.38	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153217	0.00111	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153217	0.00119	3.31	3.31	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153217	0.00129	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153217	0.00139	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564588.1	4153217	0.00151	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564678.1	4153217	0.00381	2.97	2.97	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153217	0.00439	2.79	2.79	1.5	ANNUAL	DPM_25	5
RESIDENT	564698.1	4153217	0.00506	3.01	3.01	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153227	0.00063	3.86	3.86	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153227	0.00067	3.75	3.75	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153227	0.00071	3.68	3.68	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153227	0.00075	3.62	3.62	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153227	0.0008	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153227	0.00085	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153227	0.0009	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153227	0.00097	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153227	0.00103	3.34	3.34	1.5	ANNUAL	DPM_25	5

RESIDENT	564548.1	4153227	0.00111	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153227	0.00119	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153227	0.00128	3.24	3.24	1.5	ANNUAL	DPM_25	5
RESIDENT	564578.1	4153227	0.00138	3.23	3.23	1.5	ANNUAL	DPM_25	5
RESIDENT	564688.1	4153227	0.00436	2.74	2.74	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153237	0.00063	3.81	3.81	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153237	0.00067	3.73	3.73	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153237	0.0007	3.64	3.64	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153237	0.00075	3.55	3.55	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153237	0.00079	3.47	3.47	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153237	0.00084	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153237	0.0009	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153237	0.00096	3.31	3.31	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153237	0.00103	3.31	3.31	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153237	0.0011	3.29	3.29	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153237	0.00118	3.26	3.26	1.5	ANNUAL	DPM_25	5
RESIDENT	564568.1	4153237	0.00127	3.24	3.24	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153247	0.00063	3.76	3.76	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153247	0.00066	3.7	3.7	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153247	0.0007	3.59	3.59	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153247	0.00074	3.48	3.48	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153247	0.00079	3.41	3.41	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153247	0.00084	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153247	0.00089	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153247	0.00095	3.3	3.3	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153247	0.00102	3.27	3.27	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153247	0.00109	3.25	3.25	1.5	ANNUAL	DPM_25	5
RESIDENT	564558.1	4153247	0.00117	3.24	3.24	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153257	0.00062	3.71	3.71	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153257	0.00066	3.68	3.68	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153257	0.00069	3.55	3.55	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153257	0.00074	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153257	0.00078	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153257	0.00083	3.34	3.34	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153257	0.00088	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153257	0.00094	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153257	0.00101	3.24	3.24	1.5	ANNUAL	DPM_25	5
RESIDENT	564548.1	4153257	0.00108	3.22	3.22	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153267	0.00062	3.65	3.65	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153267	0.00065	3.6	3.6	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153267	0.00069	3.5	3.5	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153267	0.00073	3.4	3.4	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153267	0.00077	3.32	3.32	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153267	0.00082	3.26	3.26	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153267	0.00087	3.21	3.21	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153267	0.00093	3.21	3.21	1.5	ANNUAL	DPM_25	5
RESIDENT	564538.1	4153267	0.001	3.22	3.22	1.5	ANNUAL	DPM_25	5

RESIDENT	564458.1	4153277	0.00061	3.58	3.58	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153277	0.00064	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153277	0.00068	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153277	0.00072	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153277	0.00076	3.29	3.29	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153277	0.00081	3.17	3.17	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153277	0.00087	3.08	3.08	1.5	ANNUAL	DPM_25	5
RESIDENT	564528.1	4153277	0.00092	3.14	3.14	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153287	0.0006	3.52	3.52	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153287	0.00064	3.45	3.45	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153287	0.00067	3.41	3.41	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153287	0.00071	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153287	0.00076	3.25	3.25	1.5	ANNUAL	DPM_25	5
RESIDENT	564508.1	4153287	0.0008	3.08	3.08	1.5	ANNUAL	DPM_25	5
RESIDENT	564518.1	4153287	0.00086	2.96	2.96	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153297	0.0006	3.47	3.47	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153297	0.00063	3.39	3.39	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153297	0.00066	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153297	0.0007	3.35	3.35	1.5	ANNUAL	DPM_25	5
RESIDENT	564498.1	4153297	0.00075	3.28	3.28	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153307	0.00059	3.42	3.42	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153307	0.00062	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153307	0.00066	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564488.1	4153307	0.00069	3.33	3.33	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153317	0.00058	3.37	3.37	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153317	0.00061	3.27	3.27	1.5	ANNUAL	DPM_25	5
RESIDENT	564478.1	4153317	0.00065	3.29	3.29	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153327	0.00057	3.34	3.34	1.5	ANNUAL	DPM_25	5
RESIDENT	564468.1	4153327	0.00061	3.26	3.26	1.5	ANNUAL	DPM_25	5
RESIDENT	564458.1	4153337	0.00057	3.31	3.31	1.5	ANNUAL	DPM_25	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.00454	3.21	3.21	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153037	0.00478	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153047	0.00457	3.09	3.09	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153047	0.00487	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153047	0.00515	2.93	2.93	1.5	ANNUAL	DPM_26	5
RESIDENT	564818.1	4153047	0.00539	3.06	3.06	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153057	0.00453	3.1	3.1	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153057	0.00489	2.98	2.98	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153057	0.00524	2.93	2.93	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153057	0.00556	2.89	2.89	1.5	ANNUAL	DPM_26	5
RESIDENT	564818.1	4153057	0.00584	3.04	3.04	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153067	0.00441	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153067	0.00482	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153067	0.00523	2.87	2.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153067	0.00563	2.86	2.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153067	0.00602	2.84	2.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564818.1	4153067	0.00635	3.03	3.03	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153077	0.00423	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153077	0.00467	3.04	3.04	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153077	0.00513	2.91	2.91	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153077	0.00561	2.78	2.78	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153077	0.00607	2.81	2.81	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153077	0.00652	2.83	2.83	1.5	ANNUAL	DPM_26	5
RESIDENT	564818.1	4153077	0.00692	3.04	3.04	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153087	0.00399	3.09	3.09	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153087	0.00445	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153087	0.00495	2.92	2.92	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153087	0.00547	2.83	2.83	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153087	0.00601	2.74	2.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153087	0.00654	2.86	2.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153087	0.00706	2.99	2.99	1.5	ANNUAL	DPM_26	5
RESIDENT	564818.1	4153087	0.00754	3.18	3.18	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153097	0.00052	3.79	3.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153097	0.0037	3.06	3.06	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153097	0.00418	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153097	0.00469	2.87	2.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153097	0.00524	2.8	2.8	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153097	0.00583	2.75	2.75	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153097	0.00645	2.69	2.69	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153097	0.00705	2.92	2.92	1.5	ANNUAL	DPM_26	5
RESIDENT	564808.1	4153097	0.00766	3.15	3.15	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153107	0.00049	3.87	3.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153107	0.00052	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153107	0.00056	3.57	3.57	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153107	0.00297	3.12	3.12	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153107	0.00339	3.04	3.04	1.5	ANNUAL	DPM_26	5

RESIDENT	564738.1	4153107	0.00385	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153107	0.00437	2.86	2.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153107	0.00494	2.75	2.75	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153107	0.00556	2.7	2.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153107	0.00621	2.7	2.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153107	0.00691	2.7	2.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564798.1	4153107	0.00761	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153117	0.00046	3.87	3.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153117	0.00049	3.79	3.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153117	0.00053	3.68	3.68	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153117	0.00057	3.55	3.55	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153117	0.00061	3.43	3.43	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153117	0.00266	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153117	0.00305	3.06	3.06	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153117	0.00349	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153117	0.004	2.93	2.93	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153117	0.00457	2.83	2.83	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153117	0.0052	2.73	2.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153117	0.00588	2.74	2.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153117	0.0066	2.88	2.88	1.5	ANNUAL	DPM_26	5
RESIDENT	564788.1	4153117	0.00738	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153127	0.00046	3.76	3.76	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153127	0.0005	3.71	3.71	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153127	0.00053	3.63	3.63	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153127	0.00057	3.53	3.53	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153127	0.00061	3.44	3.44	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153127	0.00066	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153127	0.00237	3.11	3.11	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153127	0.00272	3.06	3.06	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153127	0.00313	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153127	0.0036	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153127	0.00415	2.9	2.9	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153127	0.00477	2.8	2.8	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153127	0.00547	2.7	2.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153127	0.00623	2.78	2.78	1.5	ANNUAL	DPM_26	5
RESIDENT	564778.1	4153127	0.00702	3.05	3.05	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153137	0.00044	3.71	3.71	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153137	0.00047	3.68	3.68	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153137	0.0005	3.65	3.65	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153137	0.00053	3.6	3.6	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153137	0.00057	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153137	0.00062	3.44	3.44	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153137	0.00067	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153137	0.00072	3.25	3.25	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153137	0.0021	3.03	3.03	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153137	0.0024	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153137	0.00277	2.98	2.98	1.5	ANNUAL	DPM_26	5

RESIDENT	564718.1	4153137	0.0032	2.95	2.95	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153137	0.00371	2.91	2.91	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153137	0.0043	2.87	2.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153137	0.00499	2.79	2.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153137	0.00576	2.69	2.69	1.5	ANNUAL	DPM_26	5
RESIDENT	564768.1	4153137	0.00659	2.84	2.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153147	0.00041	3.86	3.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153147	0.00044	3.76	3.76	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153147	0.00047	3.71	3.71	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153147	0.0005	3.65	3.65	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153147	0.00054	3.59	3.59	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153147	0.00058	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153147	0.00062	3.44	3.44	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153147	0.00067	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153147	0.00073	3.29	3.29	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153147	0.00079	3.26	3.26	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153147	0.00185	3.12	3.12	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153147	0.00212	2.99	2.99	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153147	0.00243	2.97	2.97	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153147	0.00281	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153147	0.00327	2.94	2.94	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153147	0.00381	2.88	2.88	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153147	0.00446	2.83	2.83	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153147	0.00519	2.89	2.89	1.5	ANNUAL	DPM_26	5
RESIDENT	564758.1	4153147	0.00603	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153157	0.00039	3.84	3.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153157	0.00041	3.83	3.83	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153157	0.00044	3.81	3.81	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153157	0.00047	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153157	0.0005	3.65	3.65	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153157	0.00054	3.58	3.58	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153157	0.00058	3.51	3.51	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153157	0.00062	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153157	0.00067	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153157	0.00073	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153157	0.00079	3.27	3.27	1.5	ANNUAL	DPM_26	5
RESIDENT	564608.1	4153157	0.00086	3.2	3.2	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153157	0.00163	3.18	3.18	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153157	0.00186	3.06	3.06	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153157	0.00213	2.94	2.94	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153157	0.00246	2.94	2.94	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153157	0.00285	2.95	2.95	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153157	0.00333	2.93	2.93	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153157	0.00391	2.85	2.85	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153157	0.00461	2.78	2.78	1.5	ANNUAL	DPM_26	5
RESIDENT	564748.1	4153157	0.0054	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153167	0.00037	3.86	3.86	1.5	ANNUAL	DPM_26	5

RESIDENT	564498.1	4153167	0.00039	3.75	3.75	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153167	0.00041	3.8	3.8	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153167	0.00044	3.84	3.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153167	0.00047	3.74	3.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153167	0.0005	3.64	3.64	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153167	0.00054	3.57	3.57	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153167	0.00058	3.51	3.51	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153167	0.00062	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153167	0.00067	3.41	3.41	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153167	0.00073	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153167	0.00079	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564608.1	4153167	0.00087	3.17	3.17	1.5	ANNUAL	DPM_26	5
RESIDENT	564618.1	4153167	0.00095	3.12	3.12	1.5	ANNUAL	DPM_26	5
RESIDENT	564658.1	4153167	0.00144	3.2	3.2	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153167	0.00163	3.1	3.1	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153167	0.00186	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153167	0.00214	2.9	2.9	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153167	0.00247	2.91	2.91	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153167	0.00288	2.93	2.93	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153167	0.00338	2.91	2.91	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153167	0.004	2.82	2.82	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153167	0.00475	2.74	2.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153177	0.00035	4.04	4.04	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153177	0.00037	3.84	3.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153177	0.00039	3.74	3.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153177	0.00041	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153177	0.00044	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153177	0.00047	3.65	3.65	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153177	0.0005	3.58	3.58	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153177	0.00054	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153177	0.00058	3.46	3.46	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153177	0.00062	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153177	0.00067	3.4	3.4	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153177	0.00073	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153177	0.00079	3.3	3.3	1.5	ANNUAL	DPM_26	5
RESIDENT	564608.1	4153177	0.00087	3.2	3.2	1.5	ANNUAL	DPM_26	5
RESIDENT	564618.1	4153177	0.00095	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564648.1	4153177	0.00129	3.23	3.23	1.5	ANNUAL	DPM_26	5
RESIDENT	564658.1	4153177	0.00145	3.18	3.18	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153177	0.00163	3.11	3.11	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153177	0.00186	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153177	0.00214	2.9	2.9	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153177	0.00248	2.87	2.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153177	0.00291	2.86	2.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153177	0.00342	2.89	2.89	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153177	0.00406	2.99	2.99	1.5	ANNUAL	DPM_26	5
RESIDENT	564738.1	4153177	0.00484	3.08	3.08	1.5	ANNUAL	DPM_26	5

RESIDENT	564468.1	4153187	0.00033	4.09	4.09	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153187	0.00035	3.95	3.95	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153187	0.00037	3.82	3.82	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153187	0.00039	3.72	3.72	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153187	0.00041	3.67	3.67	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153187	0.00044	3.62	3.62	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153187	0.00047	3.56	3.56	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153187	0.0005	3.51	3.51	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153187	0.00054	3.47	3.47	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153187	0.00058	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153187	0.00063	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153187	0.00068	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153187	0.00073	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153187	0.0008	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564608.1	4153187	0.00087	3.23	3.23	1.5	ANNUAL	DPM_26	5
RESIDENT	564618.1	4153187	0.00095	3.17	3.17	1.5	ANNUAL	DPM_26	5
RESIDENT	564648.1	4153187	0.00129	3.17	3.17	1.5	ANNUAL	DPM_26	5
RESIDENT	564658.1	4153187	0.00145	3.16	3.16	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153187	0.00163	3.11	3.11	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153187	0.00186	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153187	0.00214	2.89	2.89	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153187	0.00249	2.84	2.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153187	0.00292	2.79	2.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564718.1	4153187	0.00345	2.88	2.88	1.5	ANNUAL	DPM_26	5
RESIDENT	564728.1	4153187	0.0041	3.15	3.15	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153197	0.00031	4.09	4.09	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153197	0.00033	3.95	3.95	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153197	0.00035	3.87	3.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153197	0.00037	3.79	3.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153197	0.00039	3.7	3.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153197	0.00041	3.6	3.6	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153197	0.00044	3.51	3.51	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153197	0.00047	3.48	3.48	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153197	0.0005	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153197	0.00054	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153197	0.00058	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153197	0.00063	3.36	3.36	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153197	0.00068	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153197	0.00073	3.4	3.4	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153197	0.0008	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564608.1	4153197	0.00087	3.26	3.26	1.5	ANNUAL	DPM_26	5
RESIDENT	564658.1	4153197	0.00144	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153197	0.00163	3.12	3.12	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153197	0.00186	3	3	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153197	0.00214	2.89	2.89	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153197	0.00249	2.8	2.8	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153197	0.00293	2.72	2.72	1.5	ANNUAL	DPM_26	5

RESIDENT	564718.1	4153197	0.00346	2.87	2.87	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153207	0.00031	4.02	4.02	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153207	0.00033	3.88	3.88	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153207	0.00035	3.81	3.81	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153207	0.00037	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153207	0.00039	3.64	3.64	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153207	0.00041	3.54	3.54	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153207	0.00044	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153207	0.00047	3.43	3.43	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153207	0.0005	3.41	3.41	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153207	0.00054	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153207	0.00058	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153207	0.00062	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153207	0.00067	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153207	0.00073	3.34	3.34	1.5	ANNUAL	DPM_26	5
RESIDENT	564598.1	4153207	0.00079	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564668.1	4153207	0.00162	3.13	3.13	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153207	0.00185	2.99	2.99	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153207	0.00213	2.84	2.84	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153207	0.00247	2.9	2.9	1.5	ANNUAL	DPM_26	5
RESIDENT	564708.1	4153207	0.0029	2.98	2.98	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153217	0.00031	3.94	3.94	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153217	0.00033	3.82	3.82	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153217	0.00034	3.75	3.75	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153217	0.00037	3.67	3.67	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153217	0.00039	3.58	3.58	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153217	0.00041	3.48	3.48	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153217	0.00044	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153217	0.00047	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153217	0.0005	3.38	3.38	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153217	0.00054	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153217	0.00058	3.31	3.31	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153217	0.00062	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153217	0.00067	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564588.1	4153217	0.00073	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564678.1	4153217	0.00184	2.97	2.97	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153217	0.00212	2.79	2.79	1.5	ANNUAL	DPM_26	5
RESIDENT	564698.1	4153217	0.00245	3.01	3.01	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153227	0.00031	3.86	3.86	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153227	0.00032	3.75	3.75	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153227	0.00034	3.68	3.68	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153227	0.00036	3.62	3.62	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153227	0.00039	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153227	0.00041	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153227	0.00044	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153227	0.00047	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153227	0.0005	3.34	3.34	1.5	ANNUAL	DPM_26	5

RESIDENT	564548.1	4153227	0.00054	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153227	0.00058	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153227	0.00062	3.24	3.24	1.5	ANNUAL	DPM_26	5
RESIDENT	564578.1	4153227	0.00067	3.23	3.23	1.5	ANNUAL	DPM_26	5
RESIDENT	564688.1	4153227	0.00211	2.74	2.74	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153237	0.00031	3.81	3.81	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153237	0.00032	3.73	3.73	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153237	0.00034	3.64	3.64	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153237	0.00036	3.55	3.55	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153237	0.00038	3.47	3.47	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153237	0.00041	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153237	0.00043	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153237	0.00046	3.31	3.31	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153237	0.0005	3.31	3.31	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153237	0.00053	3.29	3.29	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153237	0.00057	3.26	3.26	1.5	ANNUAL	DPM_26	5
RESIDENT	564568.1	4153237	0.00062	3.24	3.24	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153247	0.0003	3.76	3.76	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153247	0.00032	3.7	3.7	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153247	0.00034	3.59	3.59	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153247	0.00036	3.48	3.48	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153247	0.00038	3.41	3.41	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153247	0.0004	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153247	0.00043	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153247	0.00046	3.3	3.3	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153247	0.00049	3.27	3.27	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153247	0.00053	3.25	3.25	1.5	ANNUAL	DPM_26	5
RESIDENT	564558.1	4153247	0.00057	3.24	3.24	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153257	0.0003	3.71	3.71	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153257	0.00032	3.68	3.68	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153257	0.00034	3.55	3.55	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153257	0.00036	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153257	0.00038	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153257	0.0004	3.34	3.34	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153257	0.00043	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153257	0.00046	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153257	0.00049	3.24	3.24	1.5	ANNUAL	DPM_26	5
RESIDENT	564548.1	4153257	0.00052	3.22	3.22	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153267	0.0003	3.65	3.65	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153267	0.00031	3.6	3.6	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153267	0.00033	3.5	3.5	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153267	0.00035	3.4	3.4	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153267	0.00037	3.32	3.32	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153267	0.0004	3.26	3.26	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153267	0.00042	3.21	3.21	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153267	0.00045	3.21	3.21	1.5	ANNUAL	DPM_26	5
RESIDENT	564538.1	4153267	0.00048	3.22	3.22	1.5	ANNUAL	DPM_26	5

RESIDENT	564458.1	4153277	0.00029	3.58	3.58	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153277	0.00031	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153277	0.00033	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153277	0.00035	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153277	0.00037	3.29	3.29	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153277	0.00039	3.17	3.17	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153277	0.00042	3.08	3.08	1.5	ANNUAL	DPM_26	5
RESIDENT	564528.1	4153277	0.00045	3.14	3.14	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153287	0.00029	3.52	3.52	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153287	0.00031	3.45	3.45	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153287	0.00033	3.41	3.41	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153287	0.00034	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153287	0.00037	3.25	3.25	1.5	ANNUAL	DPM_26	5
RESIDENT	564508.1	4153287	0.00039	3.08	3.08	1.5	ANNUAL	DPM_26	5
RESIDENT	564518.1	4153287	0.00041	2.96	2.96	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153297	0.00029	3.47	3.47	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153297	0.0003	3.39	3.39	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153297	0.00032	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153297	0.00034	3.35	3.35	1.5	ANNUAL	DPM_26	5
RESIDENT	564498.1	4153297	0.00036	3.28	3.28	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153307	0.00029	3.42	3.42	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153307	0.0003	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153307	0.00032	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564488.1	4153307	0.00034	3.33	3.33	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153317	0.00028	3.37	3.37	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153317	0.0003	3.27	3.27	1.5	ANNUAL	DPM_26	5
RESIDENT	564478.1	4153317	0.00031	3.29	3.29	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153327	0.00028	3.34	3.34	1.5	ANNUAL	DPM_26	5
RESIDENT	564468.1	4153327	0.00029	3.26	3.26	1.5	ANNUAL	DPM_26	5
RESIDENT	564458.1	4153337	0.00027	3.31	3.31	1.5	ANNUAL	DPM_26	5

564798.1	4153037	9901	DieselExhP	0.00836	0	0	0	0
564808.1	4153037	9901	DieselExhP	0.0088	0	0	0	0
564788.1	4153047	9901	DieselExhP	0.00843	0	0	0	0
564798.1	4153047	9901	DieselExhP	0.00898	0	0	0	0
564808.1	4153047	9901	DieselExhP	0.0095	0	0	0	0
564818.1	4153047	9901	DieselExhP	0.00993	0	0	0	0
564778.1	4153057	9901	DieselExhP	0.00834	0	0	0	0
564788.1	4153057	9901	DieselExhP	0.00901	0	0	0	0
564798.1	4153057	9901	DieselExhP	0.00965	0	0	0	0
564808.1	4153057	9901	DieselExhP	0.01025	0	0	0	0
564818.1	4153057	9901	DieselExhP	0.01076	0	0	0	0
564768.1	4153067	9901	DieselExhP	0.00812	0	0	0	0
564778.1	4153067	9901	DieselExhP	0.00888	0	0	0	0
564788.1	4153067	9901	DieselExhP	0.00965	0	0	0	0
564798.1	4153067	9901	DieselExhP	0.01038	0	0	0	0
564808.1	4153067	9901	DieselExhP	0.01109	0	0	0	0
564818.1	4153067	9901	DieselExhP	0.01169	0	0	0	0
564758.1	4153077	9901	DieselExhP	0.00779	0	0	0	0
564768.1	4153077	9901	DieselExhP	0.0086	0	0	0	0
564778.1	4153077	9901	DieselExhP	0.00946	0	0	0	0
564788.1	4153077	9901	DieselExhP	0.01033	0	0	0	0
564798.1	4153077	9901	DieselExhP	0.01119	0	0	0	0
564808.1	4153077	9901	DieselExhP	0.01201	0	0	0	0
564818.1	4153077	9901	DieselExhP	0.01274	0	0	0	0
564748.1	4153087	9901	DieselExhP	0.00735	0	0	0	0
564758.1	4153087	9901	DieselExhP	0.0082	0	0	0	0
564768.1	4153087	9901	DieselExhP	0.00912	0	0	0	0
564778.1	4153087	9901	DieselExhP	0.01008	0	0	0	0
564788.1	4153087	9901	DieselExhP	0.01107	0	0	0	0
564798.1	4153087	9901	DieselExhP	0.01205	0	0	0	0
564808.1	4153087	9901	DieselExhP	0.01301	0	0	0	0
564818.1	4153087	9901	DieselExhP	0.0139	0	0	0	0
564548.1	4153097	9901	DieselExhP	0.00096	0	0	0	0
564738.1	4153097	9901	DieselExhP	0.00682	0	0	0	0
564748.1	4153097	9901	DieselExhP	0.0077	0	0	0	0
564758.1	4153097	9901	DieselExhP	0.00865	0	0	0	0
564768.1	4153097	9901	DieselExhP	0.00966	0	0	0	0
564778.1	4153097	9901	DieselExhP	0.01074	0	0	0	0
564788.1	4153097	9901	DieselExhP	0.01188	0	0	0	0
564798.1	4153097	9901	DieselExhP	0.013	0	0	0	0
564808.1	4153097	9901	DieselExhP	0.01412	0	0	0	0
564538.1	4153107	9901	DieselExhP	0.0009	0	0	0	0
564548.1	4153107	9901	DieselExhP	0.00097	0	0	0	0
564558.1	4153107	9901	DieselExhP	0.00104	0	0	0	0
564718.1	4153107	9901	DieselExhP	0.00547	0	0	0	0
564728.1	4153107	9901	DieselExhP	0.00624	0	0	0	0
564738.1	4153107	9901	DieselExhP	0.0071	0	0	0	0

564748.1	4153107	9901	DieselExhP	0.00806	0	0	0	0
564758.1	4153107	9901	DieselExhP	0.00911	0	0	0	0
564768.1	4153107	9901	DieselExhP	0.01025	0	0	0	0
564778.1	4153107	9901	DieselExhP	0.01145	0	0	0	0
564788.1	4153107	9901	DieselExhP	0.01274	0	0	0	0
564798.1	4153107	9901	DieselExhP	0.01402	0	0	0	0
564528.1	4153117	9901	DieselExhP	0.00085	0	0	0	0
564538.1	4153117	9901	DieselExhP	0.00091	0	0	0	0
564548.1	4153117	9901	DieselExhP	0.00097	0	0	0	0
564558.1	4153117	9901	DieselExhP	0.00105	0	0	0	0
564568.1	4153117	9901	DieselExhP	0.00113	0	0	0	0
564708.1	4153117	9901	DieselExhP	0.00491	0	0	0	0
564718.1	4153117	9901	DieselExhP	0.00562	0	0	0	0
564728.1	4153117	9901	DieselExhP	0.00644	0	0	0	0
564738.1	4153117	9901	DieselExhP	0.00737	0	0	0	0
564748.1	4153117	9901	DieselExhP	0.00842	0	0	0	0
564758.1	4153117	9901	DieselExhP	0.00959	0	0	0	0
564768.1	4153117	9901	DieselExhP	0.01084	0	0	0	0
564778.1	4153117	9901	DieselExhP	0.01217	0	0	0	0
564788.1	4153117	9901	DieselExhP	0.01359	0	0	0	0
564528.1	4153127	9901	DieselExhP	0.00085	0	0	0	0
564538.1	4153127	9901	DieselExhP	0.00091	0	0	0	0
564548.1	4153127	9901	DieselExhP	0.00098	0	0	0	0
564558.1	4153127	9901	DieselExhP	0.00105	0	0	0	0
564568.1	4153127	9901	DieselExhP	0.00113	0	0	0	0
564578.1	4153127	9901	DieselExhP	0.00122	0	0	0	0
564698.1	4153127	9901	DieselExhP	0.00437	0	0	0	0
564708.1	4153127	9901	DieselExhP	0.00501	0	0	0	0
564718.1	4153127	9901	DieselExhP	0.00576	0	0	0	0
564728.1	4153127	9901	DieselExhP	0.00664	0	0	0	0
564738.1	4153127	9901	DieselExhP	0.00765	0	0	0	0
564748.1	4153127	9901	DieselExhP	0.0088	0	0	0	0
564758.1	4153127	9901	DieselExhP	0.01009	0	0	0	0
564768.1	4153127	9901	DieselExhP	0.01147	0	0	0	0
564778.1	4153127	9901	DieselExhP	0.01293	0	0	0	0
564518.1	4153137	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153137	9901	DieselExhP	0.00086	0	0	0	0
564538.1	4153137	9901	DieselExhP	0.00092	0	0	0	0
564548.1	4153137	9901	DieselExhP	0.00098	0	0	0	0
564558.1	4153137	9901	DieselExhP	0.00106	0	0	0	0
564568.1	4153137	9901	DieselExhP	0.00114	0	0	0	0
564578.1	4153137	9901	DieselExhP	0.00123	0	0	0	0
564588.1	4153137	9901	DieselExhP	0.00133	0	0	0	0
564688.1	4153137	9901	DieselExhP	0.00386	0	0	0	0
564698.1	4153137	9901	DieselExhP	0.00443	0	0	0	0
564708.1	4153137	9901	DieselExhP	0.0051	0	0	0	0
564718.1	4153137	9901	DieselExhP	0.0059	0	0	0	0

564728.1	4153137	9901	DieselExhP	0.00684	0	0	0	0
564738.1	4153137	9901	DieselExhP	0.00793	0	0	0	0
564748.1	4153137	9901	DieselExhP	0.00919	0	0	0	0
564758.1	4153137	9901	DieselExhP	0.01061	0	0	0	0
564768.1	4153137	9901	DieselExhP	0.01214	0	0	0	0
564508.1	4153147	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153147	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153147	9901	DieselExhP	0.00086	0	0	0	0
564538.1	4153147	9901	DieselExhP	0.00092	0	0	0	0
564548.1	4153147	9901	DieselExhP	0.00099	0	0	0	0
564558.1	4153147	9901	DieselExhP	0.00106	0	0	0	0
564568.1	4153147	9901	DieselExhP	0.00114	0	0	0	0
564578.1	4153147	9901	DieselExhP	0.00123	0	0	0	0
564588.1	4153147	9901	DieselExhP	0.00134	0	0	0	0
564598.1	4153147	9901	DieselExhP	0.00145	0	0	0	0
564678.1	4153147	9901	DieselExhP	0.0034	0	0	0	0
564688.1	4153147	9901	DieselExhP	0.0039	0	0	0	0
564698.1	4153147	9901	DieselExhP	0.00448	0	0	0	0
564708.1	4153147	9901	DieselExhP	0.00518	0	0	0	0
564718.1	4153147	9901	DieselExhP	0.00602	0	0	0	0
564728.1	4153147	9901	DieselExhP	0.00703	0	0	0	0
564738.1	4153147	9901	DieselExhP	0.00821	0	0	0	0
564748.1	4153147	9901	DieselExhP	0.00956	0	0	0	0
564758.1	4153147	9901	DieselExhP	0.0111	0	0	0	0
564498.1	4153157	9901	DieselExhP	0.00072	0	0	0	0
564508.1	4153157	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153157	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153157	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153157	9901	DieselExhP	0.00092	0	0	0	0
564548.1	4153157	9901	DieselExhP	0.00099	0	0	0	0
564558.1	4153157	9901	DieselExhP	0.00106	0	0	0	0
564568.1	4153157	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153157	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153157	9901	DieselExhP	0.00134	0	0	0	0
564598.1	4153157	9901	DieselExhP	0.00146	0	0	0	0
564608.1	4153157	9901	DieselExhP	0.00159	0	0	0	0
564668.1	4153157	9901	DieselExhP	0.003	0	0	0	0
564678.1	4153157	9901	DieselExhP	0.00342	0	0	0	0
564688.1	4153157	9901	DieselExhP	0.00392	0	0	0	0
564698.1	4153157	9901	DieselExhP	0.00452	0	0	0	0
564708.1	4153157	9901	DieselExhP	0.00525	0	0	0	0
564718.1	4153157	9901	DieselExhP	0.00613	0	0	0	0
564728.1	4153157	9901	DieselExhP	0.00721	0	0	0	0
564738.1	4153157	9901	DieselExhP	0.00849	0	0	0	0
564748.1	4153157	9901	DieselExhP	0.00994	0	0	0	0
564488.1	4153167	9901	DieselExhP	0.00068	0	0	0	0
564498.1	4153167	9901	DieselExhP	0.00072	0	0	0	0

564508.1	4153167	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153167	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153167	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153167	9901	DieselExhP	0.00093	0	0	0	0
564548.1	4153167	9901	DieselExhP	0.00099	0	0	0	0
564558.1	4153167	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153167	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153167	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153167	9901	DieselExhP	0.00134	0	0	0	0
564598.1	4153167	9901	DieselExhP	0.00146	0	0	0	0
564608.1	4153167	9901	DieselExhP	0.0016	0	0	0	0
564618.1	4153167	9901	DieselExhP	0.00175	0	0	0	0
564658.1	4153167	9901	DieselExhP	0.00266	0	0	0	0
564668.1	4153167	9901	DieselExhP	0.00301	0	0	0	0
564678.1	4153167	9901	DieselExhP	0.00343	0	0	0	0
564688.1	4153167	9901	DieselExhP	0.00394	0	0	0	0
564698.1	4153167	9901	DieselExhP	0.00456	0	0	0	0
564708.1	4153167	9901	DieselExhP	0.00531	0	0	0	0
564718.1	4153167	9901	DieselExhP	0.00623	0	0	0	0
564728.1	4153167	9901	DieselExhP	0.00737	0	0	0	0
564738.1	4153167	9901	DieselExhP	0.00876	0	0	0	0
564478.1	4153177	9901	DieselExhP	0.00064	0	0	0	0
564488.1	4153177	9901	DieselExhP	0.00068	0	0	0	0
564498.1	4153177	9901	DieselExhP	0.00072	0	0	0	0
564508.1	4153177	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153177	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153177	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153177	9901	DieselExhP	0.00093	0	0	0	0
564548.1	4153177	9901	DieselExhP	0.001	0	0	0	0
564558.1	4153177	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153177	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153177	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153177	9901	DieselExhP	0.00135	0	0	0	0
564598.1	4153177	9901	DieselExhP	0.00146	0	0	0	0
564608.1	4153177	9901	DieselExhP	0.0016	0	0	0	0
564618.1	4153177	9901	DieselExhP	0.00175	0	0	0	0
564648.1	4153177	9901	DieselExhP	0.00237	0	0	0	0
564658.1	4153177	9901	DieselExhP	0.00266	0	0	0	0
564668.1	4153177	9901	DieselExhP	0.00301	0	0	0	0
564678.1	4153177	9901	DieselExhP	0.00343	0	0	0	0
564688.1	4153177	9901	DieselExhP	0.00395	0	0	0	0
564698.1	4153177	9901	DieselExhP	0.00458	0	0	0	0
564708.1	4153177	9901	DieselExhP	0.00535	0	0	0	0
564718.1	4153177	9901	DieselExhP	0.00631	0	0	0	0
564728.1	4153177	9901	DieselExhP	0.00748	0	0	0	0
564738.1	4153177	9901	DieselExhP	0.00892	0	0	0	0
564468.1	4153187	9901	DieselExhP	0.0006	0	0	0	0

564478.1	4153187	9901	DieselExhP	0.00064	0	0	0	0
564488.1	4153187	9901	DieselExhP	0.00068	0	0	0	0
564498.1	4153187	9901	DieselExhP	0.00072	0	0	0	0
564508.1	4153187	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153187	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153187	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153187	9901	DieselExhP	0.00093	0	0	0	0
564548.1	4153187	9901	DieselExhP	0.001	0	0	0	0
564558.1	4153187	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153187	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153187	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153187	9901	DieselExhP	0.00135	0	0	0	0
564598.1	4153187	9901	DieselExhP	0.00147	0	0	0	0
564608.1	4153187	9901	DieselExhP	0.0016	0	0	0	0
564618.1	4153187	9901	DieselExhP	0.00176	0	0	0	0
564648.1	4153187	9901	DieselExhP	0.00238	0	0	0	0
564658.1	4153187	9901	DieselExhP	0.00266	0	0	0	0
564668.1	4153187	9901	DieselExhP	0.00301	0	0	0	0
564678.1	4153187	9901	DieselExhP	0.00343	0	0	0	0
564688.1	4153187	9901	DieselExhP	0.00395	0	0	0	0
564698.1	4153187	9901	DieselExhP	0.00458	0	0	0	0
564708.1	4153187	9901	DieselExhP	0.00538	0	0	0	0
564718.1	4153187	9901	DieselExhP	0.00636	0	0	0	0
564728.1	4153187	9901	DieselExhP	0.00756	0	0	0	0
564458.1	4153197	9901	DieselExhP	0.00057	0	0	0	0
564468.1	4153197	9901	DieselExhP	0.0006	0	0	0	0
564478.1	4153197	9901	DieselExhP	0.00064	0	0	0	0
564488.1	4153197	9901	DieselExhP	0.00068	0	0	0	0
564498.1	4153197	9901	DieselExhP	0.00072	0	0	0	0
564508.1	4153197	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153197	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153197	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153197	9901	DieselExhP	0.00093	0	0	0	0
564548.1	4153197	9901	DieselExhP	0.001	0	0	0	0
564558.1	4153197	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153197	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153197	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153197	9901	DieselExhP	0.00135	0	0	0	0
564598.1	4153197	9901	DieselExhP	0.00147	0	0	0	0
564608.1	4153197	9901	DieselExhP	0.0016	0	0	0	0
564658.1	4153197	9901	DieselExhP	0.00266	0	0	0	0
564668.1	4153197	9901	DieselExhP	0.003	0	0	0	0
564678.1	4153197	9901	DieselExhP	0.00342	0	0	0	0
564688.1	4153197	9901	DieselExhP	0.00394	0	0	0	0
564698.1	4153197	9901	DieselExhP	0.00458	0	0	0	0
564708.1	4153197	9901	DieselExhP	0.00539	0	0	0	0
564718.1	4153197	9901	DieselExhP	0.00638	0	0	0	0

564458.1	4153207	9901	DieselExhP	0.00057	0	0	0	0
564468.1	4153207	9901	DieselExhP	0.0006	0	0	0	0
564478.1	4153207	9901	DieselExhP	0.00064	0	0	0	0
564488.1	4153207	9901	DieselExhP	0.00068	0	0	0	0
564498.1	4153207	9901	DieselExhP	0.00072	0	0	0	0
564508.1	4153207	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153207	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153207	9901	DieselExhP	0.00087	0	0	0	0
564538.1	4153207	9901	DieselExhP	0.00093	0	0	0	0
564548.1	4153207	9901	DieselExhP	0.00099	0	0	0	0
564558.1	4153207	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153207	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153207	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153207	9901	DieselExhP	0.00135	0	0	0	0
564598.1	4153207	9901	DieselExhP	0.00146	0	0	0	0
564668.1	4153207	9901	DieselExhP	0.00299	0	0	0	0
564678.1	4153207	9901	DieselExhP	0.00341	0	0	0	0
564688.1	4153207	9901	DieselExhP	0.00393	0	0	0	0
564698.1	4153207	9901	DieselExhP	0.00455	0	0	0	0
564708.1	4153207	9901	DieselExhP	0.00533	0	0	0	0
564458.1	4153217	9901	DieselExhP	0.00057	0	0	0	0
564468.1	4153217	9901	DieselExhP	0.0006	0	0	0	0
564478.1	4153217	9901	DieselExhP	0.00064	0	0	0	0
564488.1	4153217	9901	DieselExhP	0.00067	0	0	0	0
564498.1	4153217	9901	DieselExhP	0.00071	0	0	0	0
564508.1	4153217	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153217	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153217	9901	DieselExhP	0.00086	0	0	0	0
564538.1	4153217	9901	DieselExhP	0.00092	0	0	0	0
564548.1	4153217	9901	DieselExhP	0.00099	0	0	0	0
564558.1	4153217	9901	DieselExhP	0.00107	0	0	0	0
564568.1	4153217	9901	DieselExhP	0.00115	0	0	0	0
564578.1	4153217	9901	DieselExhP	0.00124	0	0	0	0
564588.1	4153217	9901	DieselExhP	0.00134	0	0	0	0
564678.1	4153217	9901	DieselExhP	0.00339	0	0	0	0
564688.1	4153217	9901	DieselExhP	0.00391	0	0	0	0
564698.1	4153217	9901	DieselExhP	0.00451	0	0	0	0
564458.1	4153227	9901	DieselExhP	0.00057	0	0	0	0
564468.1	4153227	9901	DieselExhP	0.0006	0	0	0	0
564478.1	4153227	9901	DieselExhP	0.00063	0	0	0	0
564488.1	4153227	9901	DieselExhP	0.00067	0	0	0	0
564498.1	4153227	9901	DieselExhP	0.00071	0	0	0	0
564508.1	4153227	9901	DieselExhP	0.00076	0	0	0	0
564518.1	4153227	9901	DieselExhP	0.00081	0	0	0	0
564528.1	4153227	9901	DieselExhP	0.00086	0	0	0	0
564538.1	4153227	9901	DieselExhP	0.00092	0	0	0	0
564548.1	4153227	9901	DieselExhP	0.00099	0	0	0	0

564558.1	4153227	9901	DieselExhP	0.00106	0	0	0	0
564568.1	4153227	9901	DieselExhP	0.00114	0	0	0	0
564578.1	4153227	9901	DieselExhP	0.00123	0	0	0	0
564688.1	4153227	9901	DieselExhP	0.00388	0	0	0	0
564458.1	4153237	9901	DieselExhP	0.00056	0	0	0	0
564468.1	4153237	9901	DieselExhP	0.00059	0	0	0	0
564478.1	4153237	9901	DieselExhP	0.00063	0	0	0	0
564488.1	4153237	9901	DieselExhP	0.00067	0	0	0	0
564498.1	4153237	9901	DieselExhP	0.00071	0	0	0	0
564508.1	4153237	9901	DieselExhP	0.00075	0	0	0	0
564518.1	4153237	9901	DieselExhP	0.0008	0	0	0	0
564528.1	4153237	9901	DieselExhP	0.00086	0	0	0	0
564538.1	4153237	9901	DieselExhP	0.00091	0	0	0	0
564548.1	4153237	9901	DieselExhP	0.00098	0	0	0	0
564558.1	4153237	9901	DieselExhP	0.00105	0	0	0	0
564568.1	4153237	9901	DieselExhP	0.00113	0	0	0	0
564458.1	4153247	9901	DieselExhP	0.00056	0	0	0	0
564468.1	4153247	9901	DieselExhP	0.00059	0	0	0	0
564478.1	4153247	9901	DieselExhP	0.00062	0	0	0	0
564488.1	4153247	9901	DieselExhP	0.00066	0	0	0	0
564498.1	4153247	9901	DieselExhP	0.0007	0	0	0	0
564508.1	4153247	9901	DieselExhP	0.00075	0	0	0	0
564518.1	4153247	9901	DieselExhP	0.00079	0	0	0	0
564528.1	4153247	9901	DieselExhP	0.00085	0	0	0	0
564538.1	4153247	9901	DieselExhP	0.00091	0	0	0	0
564548.1	4153247	9901	DieselExhP	0.00097	0	0	0	0
564558.1	4153247	9901	DieselExhP	0.00104	0	0	0	0
564458.1	4153257	9901	DieselExhP	0.00055	0	0	0	0
564468.1	4153257	9901	DieselExhP	0.00058	0	0	0	0
564478.1	4153257	9901	DieselExhP	0.00062	0	0	0	0
564488.1	4153257	9901	DieselExhP	0.00066	0	0	0	0
564498.1	4153257	9901	DieselExhP	0.0007	0	0	0	0
564508.1	4153257	9901	DieselExhP	0.00074	0	0	0	0
564518.1	4153257	9901	DieselExhP	0.00079	0	0	0	0
564528.1	4153257	9901	DieselExhP	0.00084	0	0	0	0
564538.1	4153257	9901	DieselExhP	0.0009	0	0	0	0
564548.1	4153257	9901	DieselExhP	0.00096	0	0	0	0
564458.1	4153267	9901	DieselExhP	0.00055	0	0	0	0
564468.1	4153267	9901	DieselExhP	0.00058	0	0	0	0
564478.1	4153267	9901	DieselExhP	0.00061	0	0	0	0
564488.1	4153267	9901	DieselExhP	0.00065	0	0	0	0
564498.1	4153267	9901	DieselExhP	0.00069	0	0	0	0
564508.1	4153267	9901	DieselExhP	0.00073	0	0	0	0
564518.1	4153267	9901	DieselExhP	0.00078	0	0	0	0
564528.1	4153267	9901	DieselExhP	0.00083	0	0	0	0
564538.1	4153267	9901	DieselExhP	0.00089	0	0	0	0
564458.1	4153277	9901	DieselExhP	0.00054	0	0	0	0

564468.1	4153277	9901	DieselExhP	0.00057	0	0	0	0
564478.1	4153277	9901	DieselExhP	0.00061	0	0	0	0
564488.1	4153277	9901	DieselExhP	0.00064	0	0	0	0
564498.1	4153277	9901	DieselExhP	0.00068	0	0	0	0
564508.1	4153277	9901	DieselExhP	0.00072	0	0	0	0
564518.1	4153277	9901	DieselExhP	0.00077	0	0	0	0
564528.1	4153277	9901	DieselExhP	0.00082	0	0	0	0
564458.1	4153287	9901	DieselExhP	0.00054	0	0	0	0
564468.1	4153287	9901	DieselExhP	0.00057	0	0	0	0
564478.1	4153287	9901	DieselExhP	0.0006	0	0	0	0
564488.1	4153287	9901	DieselExhP	0.00063	0	0	0	0
564498.1	4153287	9901	DieselExhP	0.00067	0	0	0	0
564508.1	4153287	9901	DieselExhP	0.00072	0	0	0	0
564518.1	4153287	9901	DieselExhP	0.00076	0	0	0	0
564458.1	4153297	9901	DieselExhP	0.00053	0	0	0	0
564468.1	4153297	9901	DieselExhP	0.00056	0	0	0	0
564478.1	4153297	9901	DieselExhP	0.00059	0	0	0	0
564488.1	4153297	9901	DieselExhP	0.00063	0	0	0	0
564498.1	4153297	9901	DieselExhP	0.00066	0	0	0	0
564458.1	4153307	9901	DieselExhP	0.00053	0	0	0	0
564468.1	4153307	9901	DieselExhP	0.00055	0	0	0	0
564478.1	4153307	9901	DieselExhP	0.00059	0	0	0	0
564488.1	4153307	9901	DieselExhP	0.00062	0	0	0	0
564458.1	4153317	9901	DieselExhP	0.00052	0	0	0	0
564468.1	4153317	9901	DieselExhP	0.00055	0	0	0	0
564478.1	4153317	9901	DieselExhP	0.00058	0	0	0	0
564458.1	4153327	9901	DieselExhP	0.00051	0	0	0	0
564468.1	4153327	9901	DieselExhP	0.00054	0	0	0	0
564458.1	4153337	9901	DieselExhP	0.00051	0	0	0	0

564798.1	4153037	9901	DieselExhP	0.00938	0	0	0	0
564808.1	4153037	9901	DieselExhP	0.00988	0	0	0	0
564788.1	4153047	9901	DieselExhP	0.00946	0	0	0	0
564798.1	4153047	9901	DieselExhP	0.01008	0	0	0	0
564808.1	4153047	9901	DieselExhP	0.01066	0	0	0	0
564818.1	4153047	9901	DieselExhP	0.01114	0	0	0	0
564778.1	4153057	9901	DieselExhP	0.00936	0	0	0	0
564788.1	4153057	9901	DieselExhP	0.01011	0	0	0	0
564798.1	4153057	9901	DieselExhP	0.01083	0	0	0	0
564808.1	4153057	9901	DieselExhP	0.0115	0	0	0	0
564818.1	4153057	9901	DieselExhP	0.01207	0	0	0	0
564768.1	4153067	9901	DieselExhP	0.00911	0	0	0	0
564778.1	4153067	9901	DieselExhP	0.00996	0	0	0	0
564788.1	4153067	9901	DieselExhP	0.01082	0	0	0	0
564798.1	4153067	9901	DieselExhP	0.01165	0	0	0	0
564808.1	4153067	9901	DieselExhP	0.01244	0	0	0	0
564818.1	4153067	9901	DieselExhP	0.01312	0	0	0	0
564758.1	4153077	9901	DieselExhP	0.00874	0	0	0	0
564768.1	4153077	9901	DieselExhP	0.00965	0	0	0	0
564778.1	4153077	9901	DieselExhP	0.01061	0	0	0	0
564788.1	4153077	9901	DieselExhP	0.01159	0	0	0	0
564798.1	4153077	9901	DieselExhP	0.01255	0	0	0	0
564808.1	4153077	9901	DieselExhP	0.01348	0	0	0	0
564818.1	4153077	9901	DieselExhP	0.0143	0	0	0	0
564748.1	4153087	9901	DieselExhP	0.00825	0	0	0	0
564758.1	4153087	9901	DieselExhP	0.0092	0	0	0	0
564768.1	4153087	9901	DieselExhP	0.01023	0	0	0	0
564778.1	4153087	9901	DieselExhP	0.0113	0	0	0	0
564788.1	4153087	9901	DieselExhP	0.01242	0	0	0	0
564798.1	4153087	9901	DieselExhP	0.01352	0	0	0	0
564808.1	4153087	9901	DieselExhP	0.0146	0	0	0	0
564818.1	4153087	9901	DieselExhP	0.0156	0	0	0	0
564548.1	4153097	9901	DieselExhP	0.00108	0	0	0	0
564738.1	4153097	9901	DieselExhP	0.00766	0	0	0	0
564748.1	4153097	9901	DieselExhP	0.00864	0	0	0	0
564758.1	4153097	9901	DieselExhP	0.0097	0	0	0	0
564768.1	4153097	9901	DieselExhP	0.01084	0	0	0	0
564778.1	4153097	9901	DieselExhP	0.01205	0	0	0	0
564788.1	4153097	9901	DieselExhP	0.01333	0	0	0	0
564798.1	4153097	9901	DieselExhP	0.01458	0	0	0	0
564808.1	4153097	9901	DieselExhP	0.01584	0	0	0	0
564538.1	4153107	9901	DieselExhP	0.00101	0	0	0	0
564548.1	4153107	9901	DieselExhP	0.00108	0	0	0	0
564558.1	4153107	9901	DieselExhP	0.00117	0	0	0	0
564718.1	4153107	9901	DieselExhP	0.00614	0	0	0	0
564728.1	4153107	9901	DieselExhP	0.007	0	0	0	0
564738.1	4153107	9901	DieselExhP	0.00796	0	0	0	0

564748.1	4153107	9901	DieselExhP	0.00904	0	0	0	0
564758.1	4153107	9901	DieselExhP	0.01022	0	0	0	0
564768.1	4153107	9901	DieselExhP	0.0115	0	0	0	0
564778.1	4153107	9901	DieselExhP	0.01285	0	0	0	0
564788.1	4153107	9901	DieselExhP	0.01429	0	0	0	0
564798.1	4153107	9901	DieselExhP	0.01573	0	0	0	0
564528.1	4153117	9901	DieselExhP	0.00095	0	0	0	0
564538.1	4153117	9901	DieselExhP	0.00102	0	0	0	0
564548.1	4153117	9901	DieselExhP	0.00109	0	0	0	0
564558.1	4153117	9901	DieselExhP	0.00117	0	0	0	0
564568.1	4153117	9901	DieselExhP	0.00126	0	0	0	0
564708.1	4153117	9901	DieselExhP	0.00551	0	0	0	0
564718.1	4153117	9901	DieselExhP	0.00631	0	0	0	0
564728.1	4153117	9901	DieselExhP	0.00723	0	0	0	0
564738.1	4153117	9901	DieselExhP	0.00827	0	0	0	0
564748.1	4153117	9901	DieselExhP	0.00945	0	0	0	0
564758.1	4153117	9901	DieselExhP	0.01076	0	0	0	0
564768.1	4153117	9901	DieselExhP	0.01216	0	0	0	0
564778.1	4153117	9901	DieselExhP	0.01365	0	0	0	0
564788.1	4153117	9901	DieselExhP	0.01525	0	0	0	0
564528.1	4153127	9901	DieselExhP	0.00096	0	0	0	0
564538.1	4153127	9901	DieselExhP	0.00102	0	0	0	0
564548.1	4153127	9901	DieselExhP	0.0011	0	0	0	0
564558.1	4153127	9901	DieselExhP	0.00118	0	0	0	0
564568.1	4153127	9901	DieselExhP	0.00127	0	0	0	0
564578.1	4153127	9901	DieselExhP	0.00137	0	0	0	0
564698.1	4153127	9901	DieselExhP	0.0049	0	0	0	0
564708.1	4153127	9901	DieselExhP	0.00562	0	0	0	0
564718.1	4153127	9901	DieselExhP	0.00647	0	0	0	0
564728.1	4153127	9901	DieselExhP	0.00745	0	0	0	0
564738.1	4153127	9901	DieselExhP	0.00858	0	0	0	0
564748.1	4153127	9901	DieselExhP	0.00987	0	0	0	0
564758.1	4153127	9901	DieselExhP	0.01132	0	0	0	0
564768.1	4153127	9901	DieselExhP	0.01287	0	0	0	0
564778.1	4153127	9901	DieselExhP	0.01451	0	0	0	0
564518.1	4153137	9901	DieselExhP	0.0009	0	0	0	0
564528.1	4153137	9901	DieselExhP	0.00096	0	0	0	0
564538.1	4153137	9901	DieselExhP	0.00103	0	0	0	0
564548.1	4153137	9901	DieselExhP	0.0011	0	0	0	0
564558.1	4153137	9901	DieselExhP	0.00118	0	0	0	0
564568.1	4153137	9901	DieselExhP	0.00127	0	0	0	0
564578.1	4153137	9901	DieselExhP	0.00138	0	0	0	0
564588.1	4153137	9901	DieselExhP	0.00149	0	0	0	0
564688.1	4153137	9901	DieselExhP	0.00434	0	0	0	0
564698.1	4153137	9901	DieselExhP	0.00497	0	0	0	0
564708.1	4153137	9901	DieselExhP	0.00573	0	0	0	0
564718.1	4153137	9901	DieselExhP	0.00662	0	0	0	0

564728.1	4153137	9901	DieselExhP	0.00767	0	0	0	0
564738.1	4153137	9901	DieselExhP	0.0089	0	0	0	0
564748.1	4153137	9901	DieselExhP	0.01031	0	0	0	0
564758.1	4153137	9901	DieselExhP	0.01191	0	0	0	0
564768.1	4153137	9901	DieselExhP	0.01363	0	0	0	0
564508.1	4153147	9901	DieselExhP	0.00085	0	0	0	0
564518.1	4153147	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153147	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153147	9901	DieselExhP	0.00103	0	0	0	0
564548.1	4153147	9901	DieselExhP	0.00111	0	0	0	0
564558.1	4153147	9901	DieselExhP	0.00119	0	0	0	0
564568.1	4153147	9901	DieselExhP	0.00128	0	0	0	0
564578.1	4153147	9901	DieselExhP	0.00138	0	0	0	0
564588.1	4153147	9901	DieselExhP	0.0015	0	0	0	0
564598.1	4153147	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153147	9901	DieselExhP	0.00382	0	0	0	0
564688.1	4153147	9901	DieselExhP	0.00438	0	0	0	0
564698.1	4153147	9901	DieselExhP	0.00503	0	0	0	0
564708.1	4153147	9901	DieselExhP	0.00582	0	0	0	0
564718.1	4153147	9901	DieselExhP	0.00676	0	0	0	0
564728.1	4153147	9901	DieselExhP	0.00789	0	0	0	0
564738.1	4153147	9901	DieselExhP	0.00922	0	0	0	0
564748.1	4153147	9901	DieselExhP	0.01073	0	0	0	0
564758.1	4153147	9901	DieselExhP	0.01246	0	0	0	0
564498.1	4153157	9901	DieselExhP	0.0008	0	0	0	0
564508.1	4153157	9901	DieselExhP	0.00085	0	0	0	0
564518.1	4153157	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153157	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153157	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153157	9901	DieselExhP	0.00111	0	0	0	0
564558.1	4153157	9901	DieselExhP	0.00119	0	0	0	0
564568.1	4153157	9901	DieselExhP	0.00128	0	0	0	0
564578.1	4153157	9901	DieselExhP	0.00139	0	0	0	0
564588.1	4153157	9901	DieselExhP	0.0015	0	0	0	0
564598.1	4153157	9901	DieselExhP	0.00164	0	0	0	0
564608.1	4153157	9901	DieselExhP	0.00179	0	0	0	0
564668.1	4153157	9901	DieselExhP	0.00337	0	0	0	0
564678.1	4153157	9901	DieselExhP	0.00384	0	0	0	0
564688.1	4153157	9901	DieselExhP	0.00441	0	0	0	0
564698.1	4153157	9901	DieselExhP	0.00508	0	0	0	0
564708.1	4153157	9901	DieselExhP	0.0059	0	0	0	0
564718.1	4153157	9901	DieselExhP	0.00689	0	0	0	0
564728.1	4153157	9901	DieselExhP	0.00809	0	0	0	0
564738.1	4153157	9901	DieselExhP	0.00953	0	0	0	0
564748.1	4153157	9901	DieselExhP	0.01116	0	0	0	0
564488.1	4153167	9901	DieselExhP	0.00076	0	0	0	0
564498.1	4153167	9901	DieselExhP	0.00081	0	0	0	0

564508.1	4153167	9901	DieselExhP	0.00086	0	0	0	0
564518.1	4153167	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153167	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153167	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153167	9901	DieselExhP	0.00111	0	0	0	0
564558.1	4153167	9901	DieselExhP	0.0012	0	0	0	0
564568.1	4153167	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153167	9901	DieselExhP	0.00139	0	0	0	0
564588.1	4153167	9901	DieselExhP	0.00151	0	0	0	0
564598.1	4153167	9901	DieselExhP	0.00164	0	0	0	0
564608.1	4153167	9901	DieselExhP	0.00179	0	0	0	0
564618.1	4153167	9901	DieselExhP	0.00197	0	0	0	0
564658.1	4153167	9901	DieselExhP	0.00299	0	0	0	0
564668.1	4153167	9901	DieselExhP	0.00338	0	0	0	0
564678.1	4153167	9901	DieselExhP	0.00385	0	0	0	0
564688.1	4153167	9901	DieselExhP	0.00443	0	0	0	0
564698.1	4153167	9901	DieselExhP	0.00512	0	0	0	0
564708.1	4153167	9901	DieselExhP	0.00596	0	0	0	0
564718.1	4153167	9901	DieselExhP	0.007	0	0	0	0
564728.1	4153167	9901	DieselExhP	0.00828	0	0	0	0
564738.1	4153167	9901	DieselExhP	0.00983	0	0	0	0
564478.1	4153177	9901	DieselExhP	0.00072	0	0	0	0
564488.1	4153177	9901	DieselExhP	0.00076	0	0	0	0
564498.1	4153177	9901	DieselExhP	0.00081	0	0	0	0
564508.1	4153177	9901	DieselExhP	0.00086	0	0	0	0
564518.1	4153177	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153177	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153177	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153177	9901	DieselExhP	0.00112	0	0	0	0
564558.1	4153177	9901	DieselExhP	0.0012	0	0	0	0
564568.1	4153177	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153177	9901	DieselExhP	0.00139	0	0	0	0
564588.1	4153177	9901	DieselExhP	0.00151	0	0	0	0
564598.1	4153177	9901	DieselExhP	0.00164	0	0	0	0
564608.1	4153177	9901	DieselExhP	0.0018	0	0	0	0
564618.1	4153177	9901	DieselExhP	0.00197	0	0	0	0
564648.1	4153177	9901	DieselExhP	0.00266	0	0	0	0
564658.1	4153177	9901	DieselExhP	0.00299	0	0	0	0
564668.1	4153177	9901	DieselExhP	0.00338	0	0	0	0
564678.1	4153177	9901	DieselExhP	0.00386	0	0	0	0
564688.1	4153177	9901	DieselExhP	0.00444	0	0	0	0
564698.1	4153177	9901	DieselExhP	0.00514	0	0	0	0
564708.1	4153177	9901	DieselExhP	0.00601	0	0	0	0
564718.1	4153177	9901	DieselExhP	0.00708	0	0	0	0
564728.1	4153177	9901	DieselExhP	0.0084	0	0	0	0
564738.1	4153177	9901	DieselExhP	0.01002	0	0	0	0
564468.1	4153187	9901	DieselExhP	0.00068	0	0	0	0

564478.1	4153187	9901	DieselExhP	0.00072	0	0	0	0
564488.1	4153187	9901	DieselExhP	0.00076	0	0	0	0
564498.1	4153187	9901	DieselExhP	0.00081	0	0	0	0
564508.1	4153187	9901	DieselExhP	0.00086	0	0	0	0
564518.1	4153187	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153187	9901	DieselExhP	0.00098	0	0	0	0
564538.1	4153187	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153187	9901	DieselExhP	0.00112	0	0	0	0
564558.1	4153187	9901	DieselExhP	0.0012	0	0	0	0
564568.1	4153187	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153187	9901	DieselExhP	0.0014	0	0	0	0
564588.1	4153187	9901	DieselExhP	0.00151	0	0	0	0
564598.1	4153187	9901	DieselExhP	0.00164	0	0	0	0
564608.1	4153187	9901	DieselExhP	0.0018	0	0	0	0
564618.1	4153187	9901	DieselExhP	0.00197	0	0	0	0
564648.1	4153187	9901	DieselExhP	0.00267	0	0	0	0
564658.1	4153187	9901	DieselExhP	0.00299	0	0	0	0
564668.1	4153187	9901	DieselExhP	0.00338	0	0	0	0
564678.1	4153187	9901	DieselExhP	0.00385	0	0	0	0
564688.1	4153187	9901	DieselExhP	0.00443	0	0	0	0
564698.1	4153187	9901	DieselExhP	0.00515	0	0	0	0
564708.1	4153187	9901	DieselExhP	0.00604	0	0	0	0
564718.1	4153187	9901	DieselExhP	0.00714	0	0	0	0
564728.1	4153187	9901	DieselExhP	0.00849	0	0	0	0
564458.1	4153197	9901	DieselExhP	0.00064	0	0	0	0
564468.1	4153197	9901	DieselExhP	0.00068	0	0	0	0
564478.1	4153197	9901	DieselExhP	0.00072	0	0	0	0
564488.1	4153197	9901	DieselExhP	0.00076	0	0	0	0
564498.1	4153197	9901	DieselExhP	0.00081	0	0	0	0
564508.1	4153197	9901	DieselExhP	0.00086	0	0	0	0
564518.1	4153197	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153197	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153197	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153197	9901	DieselExhP	0.00112	0	0	0	0
564558.1	4153197	9901	DieselExhP	0.0012	0	0	0	0
564568.1	4153197	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153197	9901	DieselExhP	0.0014	0	0	0	0
564588.1	4153197	9901	DieselExhP	0.00151	0	0	0	0
564598.1	4153197	9901	DieselExhP	0.00164	0	0	0	0
564608.1	4153197	9901	DieselExhP	0.0018	0	0	0	0
564658.1	4153197	9901	DieselExhP	0.00298	0	0	0	0
564668.1	4153197	9901	DieselExhP	0.00337	0	0	0	0
564678.1	4153197	9901	DieselExhP	0.00384	0	0	0	0
564688.1	4153197	9901	DieselExhP	0.00442	0	0	0	0
564698.1	4153197	9901	DieselExhP	0.00514	0	0	0	0
564708.1	4153197	9901	DieselExhP	0.00605	0	0	0	0
564718.1	4153197	9901	DieselExhP	0.00717	0	0	0	0

564458.1	4153207	9901	DieselExhP	0.00064	0	0	0	0
564468.1	4153207	9901	DieselExhP	0.00068	0	0	0	0
564478.1	4153207	9901	DieselExhP	0.00071	0	0	0	0
564488.1	4153207	9901	DieselExhP	0.00076	0	0	0	0
564498.1	4153207	9901	DieselExhP	0.0008	0	0	0	0
564508.1	4153207	9901	DieselExhP	0.00086	0	0	0	0
564518.1	4153207	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153207	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153207	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153207	9901	DieselExhP	0.00112	0	0	0	0
564558.1	4153207	9901	DieselExhP	0.0012	0	0	0	0
564568.1	4153207	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153207	9901	DieselExhP	0.00139	0	0	0	0
564588.1	4153207	9901	DieselExhP	0.00151	0	0	0	0
564598.1	4153207	9901	DieselExhP	0.00164	0	0	0	0
564668.1	4153207	9901	DieselExhP	0.00336	0	0	0	0
564678.1	4153207	9901	DieselExhP	0.00383	0	0	0	0
564688.1	4153207	9901	DieselExhP	0.00441	0	0	0	0
564698.1	4153207	9901	DieselExhP	0.00511	0	0	0	0
564708.1	4153207	9901	DieselExhP	0.00599	0	0	0	0
564458.1	4153217	9901	DieselExhP	0.00064	0	0	0	0
564468.1	4153217	9901	DieselExhP	0.00067	0	0	0	0
564478.1	4153217	9901	DieselExhP	0.00071	0	0	0	0
564488.1	4153217	9901	DieselExhP	0.00075	0	0	0	0
564498.1	4153217	9901	DieselExhP	0.0008	0	0	0	0
564508.1	4153217	9901	DieselExhP	0.00085	0	0	0	0
564518.1	4153217	9901	DieselExhP	0.00091	0	0	0	0
564528.1	4153217	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153217	9901	DieselExhP	0.00104	0	0	0	0
564548.1	4153217	9901	DieselExhP	0.00111	0	0	0	0
564558.1	4153217	9901	DieselExhP	0.00119	0	0	0	0
564568.1	4153217	9901	DieselExhP	0.00129	0	0	0	0
564578.1	4153217	9901	DieselExhP	0.00139	0	0	0	0
564588.1	4153217	9901	DieselExhP	0.00151	0	0	0	0
564678.1	4153217	9901	DieselExhP	0.00381	0	0	0	0
564688.1	4153217	9901	DieselExhP	0.00439	0	0	0	0
564698.1	4153217	9901	DieselExhP	0.00506	0	0	0	0
564458.1	4153227	9901	DieselExhP	0.00063	0	0	0	0
564468.1	4153227	9901	DieselExhP	0.00067	0	0	0	0
564478.1	4153227	9901	DieselExhP	0.00071	0	0	0	0
564488.1	4153227	9901	DieselExhP	0.00075	0	0	0	0
564498.1	4153227	9901	DieselExhP	0.0008	0	0	0	0
564508.1	4153227	9901	DieselExhP	0.00085	0	0	0	0
564518.1	4153227	9901	DieselExhP	0.0009	0	0	0	0
564528.1	4153227	9901	DieselExhP	0.00097	0	0	0	0
564538.1	4153227	9901	DieselExhP	0.00103	0	0	0	0
564548.1	4153227	9901	DieselExhP	0.00111	0	0	0	0

564558.1	4153227	9901	DieselExhP	0.00119	0	0	0	0
564568.1	4153227	9901	DieselExhP	0.00128	0	0	0	0
564578.1	4153227	9901	DieselExhP	0.00138	0	0	0	0
564688.1	4153227	9901	DieselExhP	0.00436	0	0	0	0
564458.1	4153237	9901	DieselExhP	0.00063	0	0	0	0
564468.1	4153237	9901	DieselExhP	0.00067	0	0	0	0
564478.1	4153237	9901	DieselExhP	0.0007	0	0	0	0
564488.1	4153237	9901	DieselExhP	0.00075	0	0	0	0
564498.1	4153237	9901	DieselExhP	0.00079	0	0	0	0
564508.1	4153237	9901	DieselExhP	0.00084	0	0	0	0
564518.1	4153237	9901	DieselExhP	0.0009	0	0	0	0
564528.1	4153237	9901	DieselExhP	0.00096	0	0	0	0
564538.1	4153237	9901	DieselExhP	0.00103	0	0	0	0
564548.1	4153237	9901	DieselExhP	0.0011	0	0	0	0
564558.1	4153237	9901	DieselExhP	0.00118	0	0	0	0
564568.1	4153237	9901	DieselExhP	0.00127	0	0	0	0
564458.1	4153247	9901	DieselExhP	0.00063	0	0	0	0
564468.1	4153247	9901	DieselExhP	0.00066	0	0	0	0
564478.1	4153247	9901	DieselExhP	0.0007	0	0	0	0
564488.1	4153247	9901	DieselExhP	0.00074	0	0	0	0
564498.1	4153247	9901	DieselExhP	0.00079	0	0	0	0
564508.1	4153247	9901	DieselExhP	0.00084	0	0	0	0
564518.1	4153247	9901	DieselExhP	0.00089	0	0	0	0
564528.1	4153247	9901	DieselExhP	0.00095	0	0	0	0
564538.1	4153247	9901	DieselExhP	0.00102	0	0	0	0
564548.1	4153247	9901	DieselExhP	0.00109	0	0	0	0
564558.1	4153247	9901	DieselExhP	0.00117	0	0	0	0
564458.1	4153257	9901	DieselExhP	0.00062	0	0	0	0
564468.1	4153257	9901	DieselExhP	0.00066	0	0	0	0
564478.1	4153257	9901	DieselExhP	0.00069	0	0	0	0
564488.1	4153257	9901	DieselExhP	0.00074	0	0	0	0
564498.1	4153257	9901	DieselExhP	0.00078	0	0	0	0
564508.1	4153257	9901	DieselExhP	0.00083	0	0	0	0
564518.1	4153257	9901	DieselExhP	0.00088	0	0	0	0
564528.1	4153257	9901	DieselExhP	0.00094	0	0	0	0
564538.1	4153257	9901	DieselExhP	0.00101	0	0	0	0
564548.1	4153257	9901	DieselExhP	0.00108	0	0	0	0
564458.1	4153267	9901	DieselExhP	0.00062	0	0	0	0
564468.1	4153267	9901	DieselExhP	0.00065	0	0	0	0
564478.1	4153267	9901	DieselExhP	0.00069	0	0	0	0
564488.1	4153267	9901	DieselExhP	0.00073	0	0	0	0
564498.1	4153267	9901	DieselExhP	0.00077	0	0	0	0
564508.1	4153267	9901	DieselExhP	0.00082	0	0	0	0
564518.1	4153267	9901	DieselExhP	0.00087	0	0	0	0
564528.1	4153267	9901	DieselExhP	0.00093	0	0	0	0
564538.1	4153267	9901	DieselExhP	0.001	0	0	0	0
564458.1	4153277	9901	DieselExhP	0.00061	0	0	0	0

564468.1	4153277	9901	DieselExhP	0.00064	0	0	0	0
564478.1	4153277	9901	DieselExhP	0.00068	0	0	0	0
564488.1	4153277	9901	DieselExhP	0.00072	0	0	0	0
564498.1	4153277	9901	DieselExhP	0.00076	0	0	0	0
564508.1	4153277	9901	DieselExhP	0.00081	0	0	0	0
564518.1	4153277	9901	DieselExhP	0.00087	0	0	0	0
564528.1	4153277	9901	DieselExhP	0.00092	0	0	0	0
564458.1	4153287	9901	DieselExhP	0.0006	0	0	0	0
564468.1	4153287	9901	DieselExhP	0.00064	0	0	0	0
564478.1	4153287	9901	DieselExhP	0.00067	0	0	0	0
564488.1	4153287	9901	DieselExhP	0.00071	0	0	0	0
564498.1	4153287	9901	DieselExhP	0.00076	0	0	0	0
564508.1	4153287	9901	DieselExhP	0.0008	0	0	0	0
564518.1	4153287	9901	DieselExhP	0.00086	0	0	0	0
564458.1	4153297	9901	DieselExhP	0.0006	0	0	0	0
564468.1	4153297	9901	DieselExhP	0.00063	0	0	0	0
564478.1	4153297	9901	DieselExhP	0.00066	0	0	0	0
564488.1	4153297	9901	DieselExhP	0.0007	0	0	0	0
564498.1	4153297	9901	DieselExhP	0.00075	0	0	0	0
564458.1	4153307	9901	DieselExhP	0.00059	0	0	0	0
564468.1	4153307	9901	DieselExhP	0.00062	0	0	0	0
564478.1	4153307	9901	DieselExhP	0.00066	0	0	0	0
564488.1	4153307	9901	DieselExhP	0.00069	0	0	0	0
564458.1	4153317	9901	DieselExhP	0.00058	0	0	0	0
564468.1	4153317	9901	DieselExhP	0.00061	0	0	0	0
564478.1	4153317	9901	DieselExhP	0.00065	0	0	0	0
564458.1	4153327	9901	DieselExhP	0.00057	0	0	0	0
564468.1	4153327	9901	DieselExhP	0.00061	0	0	0	0
564458.1	4153337	9901	DieselExhP	0.00057	0	0	0	0

564798.1	4153037	9901	DieselExhP	0.00454	0	0	0	0
564808.1	4153037	9901	DieselExhP	0.00478	0	0	0	0
564788.1	4153047	9901	DieselExhP	0.00457	0	0	0	0
564798.1	4153047	9901	DieselExhP	0.00487	0	0	0	0
564808.1	4153047	9901	DieselExhP	0.00515	0	0	0	0
564818.1	4153047	9901	DieselExhP	0.00539	0	0	0	0
564778.1	4153057	9901	DieselExhP	0.00453	0	0	0	0
564788.1	4153057	9901	DieselExhP	0.00489	0	0	0	0
564798.1	4153057	9901	DieselExhP	0.00524	0	0	0	0
564808.1	4153057	9901	DieselExhP	0.00556	0	0	0	0
564818.1	4153057	9901	DieselExhP	0.00584	0	0	0	0
564768.1	4153067	9901	DieselExhP	0.00441	0	0	0	0
564778.1	4153067	9901	DieselExhP	0.00482	0	0	0	0
564788.1	4153067	9901	DieselExhP	0.00523	0	0	0	0
564798.1	4153067	9901	DieselExhP	0.00563	0	0	0	0
564808.1	4153067	9901	DieselExhP	0.00602	0	0	0	0
564818.1	4153067	9901	DieselExhP	0.00635	0	0	0	0
564758.1	4153077	9901	DieselExhP	0.00423	0	0	0	0
564768.1	4153077	9901	DieselExhP	0.00467	0	0	0	0
564778.1	4153077	9901	DieselExhP	0.00513	0	0	0	0
564788.1	4153077	9901	DieselExhP	0.00561	0	0	0	0
564798.1	4153077	9901	DieselExhP	0.00607	0	0	0	0
564808.1	4153077	9901	DieselExhP	0.00652	0	0	0	0
564818.1	4153077	9901	DieselExhP	0.00692	0	0	0	0
564748.1	4153087	9901	DieselExhP	0.00399	0	0	0	0
564758.1	4153087	9901	DieselExhP	0.00445	0	0	0	0
564768.1	4153087	9901	DieselExhP	0.00495	0	0	0	0
564778.1	4153087	9901	DieselExhP	0.00547	0	0	0	0
564788.1	4153087	9901	DieselExhP	0.00601	0	0	0	0
564798.1	4153087	9901	DieselExhP	0.00654	0	0	0	0
564808.1	4153087	9901	DieselExhP	0.00706	0	0	0	0
564818.1	4153087	9901	DieselExhP	0.00754	0	0	0	0
564548.1	4153097	9901	DieselExhP	0.00052	0	0	0	0
564738.1	4153097	9901	DieselExhP	0.0037	0	0	0	0
564748.1	4153097	9901	DieselExhP	0.00418	0	0	0	0
564758.1	4153097	9901	DieselExhP	0.00469	0	0	0	0
564768.1	4153097	9901	DieselExhP	0.00524	0	0	0	0
564778.1	4153097	9901	DieselExhP	0.00583	0	0	0	0
564788.1	4153097	9901	DieselExhP	0.00645	0	0	0	0
564798.1	4153097	9901	DieselExhP	0.00705	0	0	0	0
564808.1	4153097	9901	DieselExhP	0.00766	0	0	0	0
564538.1	4153107	9901	DieselExhP	0.00049	0	0	0	0
564548.1	4153107	9901	DieselExhP	0.00052	0	0	0	0
564558.1	4153107	9901	DieselExhP	0.00056	0	0	0	0
564718.1	4153107	9901	DieselExhP	0.00297	0	0	0	0
564728.1	4153107	9901	DieselExhP	0.00339	0	0	0	0
564738.1	4153107	9901	DieselExhP	0.00385	0	0	0	0

564748.1	4153107	9901	DieselExhP	0.00437	0	0	0	0
564758.1	4153107	9901	DieselExhP	0.00494	0	0	0	0
564768.1	4153107	9901	DieselExhP	0.00556	0	0	0	0
564778.1	4153107	9901	DieselExhP	0.00621	0	0	0	0
564788.1	4153107	9901	DieselExhP	0.00691	0	0	0	0
564798.1	4153107	9901	DieselExhP	0.00761	0	0	0	0
564528.1	4153117	9901	DieselExhP	0.00046	0	0	0	0
564538.1	4153117	9901	DieselExhP	0.00049	0	0	0	0
564548.1	4153117	9901	DieselExhP	0.00053	0	0	0	0
564558.1	4153117	9901	DieselExhP	0.00057	0	0	0	0
564568.1	4153117	9901	DieselExhP	0.00061	0	0	0	0
564708.1	4153117	9901	DieselExhP	0.00266	0	0	0	0
564718.1	4153117	9901	DieselExhP	0.00305	0	0	0	0
564728.1	4153117	9901	DieselExhP	0.00349	0	0	0	0
564738.1	4153117	9901	DieselExhP	0.004	0	0	0	0
564748.1	4153117	9901	DieselExhP	0.00457	0	0	0	0
564758.1	4153117	9901	DieselExhP	0.0052	0	0	0	0
564768.1	4153117	9901	DieselExhP	0.00588	0	0	0	0
564778.1	4153117	9901	DieselExhP	0.0066	0	0	0	0
564788.1	4153117	9901	DieselExhP	0.00738	0	0	0	0
564528.1	4153127	9901	DieselExhP	0.00046	0	0	0	0
564538.1	4153127	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153127	9901	DieselExhP	0.00053	0	0	0	0
564558.1	4153127	9901	DieselExhP	0.00057	0	0	0	0
564568.1	4153127	9901	DieselExhP	0.00061	0	0	0	0
564578.1	4153127	9901	DieselExhP	0.00066	0	0	0	0
564698.1	4153127	9901	DieselExhP	0.00237	0	0	0	0
564708.1	4153127	9901	DieselExhP	0.00272	0	0	0	0
564718.1	4153127	9901	DieselExhP	0.00313	0	0	0	0
564728.1	4153127	9901	DieselExhP	0.0036	0	0	0	0
564738.1	4153127	9901	DieselExhP	0.00415	0	0	0	0
564748.1	4153127	9901	DieselExhP	0.00477	0	0	0	0
564758.1	4153127	9901	DieselExhP	0.00547	0	0	0	0
564768.1	4153127	9901	DieselExhP	0.00623	0	0	0	0
564778.1	4153127	9901	DieselExhP	0.00702	0	0	0	0
564518.1	4153137	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153137	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153137	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153137	9901	DieselExhP	0.00053	0	0	0	0
564558.1	4153137	9901	DieselExhP	0.00057	0	0	0	0
564568.1	4153137	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153137	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153137	9901	DieselExhP	0.00072	0	0	0	0
564688.1	4153137	9901	DieselExhP	0.0021	0	0	0	0
564698.1	4153137	9901	DieselExhP	0.0024	0	0	0	0
564708.1	4153137	9901	DieselExhP	0.00277	0	0	0	0
564718.1	4153137	9901	DieselExhP	0.0032	0	0	0	0

564728.1	4153137	9901	DieselExhP	0.00371	0	0	0	0
564738.1	4153137	9901	DieselExhP	0.0043	0	0	0	0
564748.1	4153137	9901	DieselExhP	0.00499	0	0	0	0
564758.1	4153137	9901	DieselExhP	0.00576	0	0	0	0
564768.1	4153137	9901	DieselExhP	0.00659	0	0	0	0
564508.1	4153147	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153147	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153147	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153147	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153147	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153147	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153147	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153147	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153147	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153147	9901	DieselExhP	0.00079	0	0	0	0
564678.1	4153147	9901	DieselExhP	0.00185	0	0	0	0
564688.1	4153147	9901	DieselExhP	0.00212	0	0	0	0
564698.1	4153147	9901	DieselExhP	0.00243	0	0	0	0
564708.1	4153147	9901	DieselExhP	0.00281	0	0	0	0
564718.1	4153147	9901	DieselExhP	0.00327	0	0	0	0
564728.1	4153147	9901	DieselExhP	0.00381	0	0	0	0
564738.1	4153147	9901	DieselExhP	0.00446	0	0	0	0
564748.1	4153147	9901	DieselExhP	0.00519	0	0	0	0
564758.1	4153147	9901	DieselExhP	0.00603	0	0	0	0
564498.1	4153157	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153157	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153157	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153157	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153157	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153157	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153157	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153157	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153157	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153157	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153157	9901	DieselExhP	0.00079	0	0	0	0
564608.1	4153157	9901	DieselExhP	0.00086	0	0	0	0
564668.1	4153157	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153157	9901	DieselExhP	0.00186	0	0	0	0
564688.1	4153157	9901	DieselExhP	0.00213	0	0	0	0
564698.1	4153157	9901	DieselExhP	0.00246	0	0	0	0
564708.1	4153157	9901	DieselExhP	0.00285	0	0	0	0
564718.1	4153157	9901	DieselExhP	0.00333	0	0	0	0
564728.1	4153157	9901	DieselExhP	0.00391	0	0	0	0
564738.1	4153157	9901	DieselExhP	0.00461	0	0	0	0
564748.1	4153157	9901	DieselExhP	0.0054	0	0	0	0
564488.1	4153167	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153167	9901	DieselExhP	0.00039	0	0	0	0

564508.1	4153167	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153167	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153167	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153167	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153167	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153167	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153167	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153167	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153167	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153167	9901	DieselExhP	0.00079	0	0	0	0
564608.1	4153167	9901	DieselExhP	0.00087	0	0	0	0
564618.1	4153167	9901	DieselExhP	0.00095	0	0	0	0
564658.1	4153167	9901	DieselExhP	0.00144	0	0	0	0
564668.1	4153167	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153167	9901	DieselExhP	0.00186	0	0	0	0
564688.1	4153167	9901	DieselExhP	0.00214	0	0	0	0
564698.1	4153167	9901	DieselExhP	0.00247	0	0	0	0
564708.1	4153167	9901	DieselExhP	0.00288	0	0	0	0
564718.1	4153167	9901	DieselExhP	0.00338	0	0	0	0
564728.1	4153167	9901	DieselExhP	0.004	0	0	0	0
564738.1	4153167	9901	DieselExhP	0.00475	0	0	0	0
564478.1	4153177	9901	DieselExhP	0.00035	0	0	0	0
564488.1	4153177	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153177	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153177	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153177	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153177	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153177	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153177	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153177	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153177	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153177	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153177	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153177	9901	DieselExhP	0.00079	0	0	0	0
564608.1	4153177	9901	DieselExhP	0.00087	0	0	0	0
564618.1	4153177	9901	DieselExhP	0.00095	0	0	0	0
564648.1	4153177	9901	DieselExhP	0.00129	0	0	0	0
564658.1	4153177	9901	DieselExhP	0.00145	0	0	0	0
564668.1	4153177	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153177	9901	DieselExhP	0.00186	0	0	0	0
564688.1	4153177	9901	DieselExhP	0.00214	0	0	0	0
564698.1	4153177	9901	DieselExhP	0.00248	0	0	0	0
564708.1	4153177	9901	DieselExhP	0.00291	0	0	0	0
564718.1	4153177	9901	DieselExhP	0.00342	0	0	0	0
564728.1	4153177	9901	DieselExhP	0.00406	0	0	0	0
564738.1	4153177	9901	DieselExhP	0.00484	0	0	0	0
564468.1	4153187	9901	DieselExhP	0.00033	0	0	0	0

564478.1	4153187	9901	DieselExhP	0.00035	0	0	0	0
564488.1	4153187	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153187	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153187	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153187	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153187	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153187	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153187	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153187	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153187	9901	DieselExhP	0.00063	0	0	0	0
564578.1	4153187	9901	DieselExhP	0.00068	0	0	0	0
564588.1	4153187	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153187	9901	DieselExhP	0.0008	0	0	0	0
564608.1	4153187	9901	DieselExhP	0.00087	0	0	0	0
564618.1	4153187	9901	DieselExhP	0.00095	0	0	0	0
564648.1	4153187	9901	DieselExhP	0.00129	0	0	0	0
564658.1	4153187	9901	DieselExhP	0.00145	0	0	0	0
564668.1	4153187	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153187	9901	DieselExhP	0.00186	0	0	0	0
564688.1	4153187	9901	DieselExhP	0.00214	0	0	0	0
564698.1	4153187	9901	DieselExhP	0.00249	0	0	0	0
564708.1	4153187	9901	DieselExhP	0.00292	0	0	0	0
564718.1	4153187	9901	DieselExhP	0.00345	0	0	0	0
564728.1	4153187	9901	DieselExhP	0.0041	0	0	0	0
564458.1	4153197	9901	DieselExhP	0.00031	0	0	0	0
564468.1	4153197	9901	DieselExhP	0.00033	0	0	0	0
564478.1	4153197	9901	DieselExhP	0.00035	0	0	0	0
564488.1	4153197	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153197	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153197	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153197	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153197	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153197	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153197	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153197	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153197	9901	DieselExhP	0.00063	0	0	0	0
564578.1	4153197	9901	DieselExhP	0.00068	0	0	0	0
564588.1	4153197	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153197	9901	DieselExhP	0.0008	0	0	0	0
564608.1	4153197	9901	DieselExhP	0.00087	0	0	0	0
564658.1	4153197	9901	DieselExhP	0.00144	0	0	0	0
564668.1	4153197	9901	DieselExhP	0.00163	0	0	0	0
564678.1	4153197	9901	DieselExhP	0.00186	0	0	0	0
564688.1	4153197	9901	DieselExhP	0.00214	0	0	0	0
564698.1	4153197	9901	DieselExhP	0.00249	0	0	0	0
564708.1	4153197	9901	DieselExhP	0.00293	0	0	0	0
564718.1	4153197	9901	DieselExhP	0.00346	0	0	0	0

564458.1	4153207	9901	DieselExhP	0.00031	0	0	0	0
564468.1	4153207	9901	DieselExhP	0.00033	0	0	0	0
564478.1	4153207	9901	DieselExhP	0.00035	0	0	0	0
564488.1	4153207	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153207	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153207	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153207	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153207	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153207	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153207	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153207	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153207	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153207	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153207	9901	DieselExhP	0.00073	0	0	0	0
564598.1	4153207	9901	DieselExhP	0.00079	0	0	0	0
564668.1	4153207	9901	DieselExhP	0.00162	0	0	0	0
564678.1	4153207	9901	DieselExhP	0.00185	0	0	0	0
564688.1	4153207	9901	DieselExhP	0.00213	0	0	0	0
564698.1	4153207	9901	DieselExhP	0.00247	0	0	0	0
564708.1	4153207	9901	DieselExhP	0.0029	0	0	0	0
564458.1	4153217	9901	DieselExhP	0.00031	0	0	0	0
564468.1	4153217	9901	DieselExhP	0.00033	0	0	0	0
564478.1	4153217	9901	DieselExhP	0.00034	0	0	0	0
564488.1	4153217	9901	DieselExhP	0.00037	0	0	0	0
564498.1	4153217	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153217	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153217	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153217	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153217	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153217	9901	DieselExhP	0.00054	0	0	0	0
564558.1	4153217	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153217	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153217	9901	DieselExhP	0.00067	0	0	0	0
564588.1	4153217	9901	DieselExhP	0.00073	0	0	0	0
564678.1	4153217	9901	DieselExhP	0.00184	0	0	0	0
564688.1	4153217	9901	DieselExhP	0.00212	0	0	0	0
564698.1	4153217	9901	DieselExhP	0.00245	0	0	0	0
564458.1	4153227	9901	DieselExhP	0.00031	0	0	0	0
564468.1	4153227	9901	DieselExhP	0.00032	0	0	0	0
564478.1	4153227	9901	DieselExhP	0.00034	0	0	0	0
564488.1	4153227	9901	DieselExhP	0.00036	0	0	0	0
564498.1	4153227	9901	DieselExhP	0.00039	0	0	0	0
564508.1	4153227	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153227	9901	DieselExhP	0.00044	0	0	0	0
564528.1	4153227	9901	DieselExhP	0.00047	0	0	0	0
564538.1	4153227	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153227	9901	DieselExhP	0.00054	0	0	0	0

564558.1	4153227	9901	DieselExhP	0.00058	0	0	0	0
564568.1	4153227	9901	DieselExhP	0.00062	0	0	0	0
564578.1	4153227	9901	DieselExhP	0.00067	0	0	0	0
564688.1	4153227	9901	DieselExhP	0.00211	0	0	0	0
564458.1	4153237	9901	DieselExhP	0.00031	0	0	0	0
564468.1	4153237	9901	DieselExhP	0.00032	0	0	0	0
564478.1	4153237	9901	DieselExhP	0.00034	0	0	0	0
564488.1	4153237	9901	DieselExhP	0.00036	0	0	0	0
564498.1	4153237	9901	DieselExhP	0.00038	0	0	0	0
564508.1	4153237	9901	DieselExhP	0.00041	0	0	0	0
564518.1	4153237	9901	DieselExhP	0.00043	0	0	0	0
564528.1	4153237	9901	DieselExhP	0.00046	0	0	0	0
564538.1	4153237	9901	DieselExhP	0.0005	0	0	0	0
564548.1	4153237	9901	DieselExhP	0.00053	0	0	0	0
564558.1	4153237	9901	DieselExhP	0.00057	0	0	0	0
564568.1	4153237	9901	DieselExhP	0.00062	0	0	0	0
564458.1	4153247	9901	DieselExhP	0.0003	0	0	0	0
564468.1	4153247	9901	DieselExhP	0.00032	0	0	0	0
564478.1	4153247	9901	DieselExhP	0.00034	0	0	0	0
564488.1	4153247	9901	DieselExhP	0.00036	0	0	0	0
564498.1	4153247	9901	DieselExhP	0.00038	0	0	0	0
564508.1	4153247	9901	DieselExhP	0.0004	0	0	0	0
564518.1	4153247	9901	DieselExhP	0.00043	0	0	0	0
564528.1	4153247	9901	DieselExhP	0.00046	0	0	0	0
564538.1	4153247	9901	DieselExhP	0.00049	0	0	0	0
564548.1	4153247	9901	DieselExhP	0.00053	0	0	0	0
564558.1	4153247	9901	DieselExhP	0.00057	0	0	0	0
564458.1	4153257	9901	DieselExhP	0.0003	0	0	0	0
564468.1	4153257	9901	DieselExhP	0.00032	0	0	0	0
564478.1	4153257	9901	DieselExhP	0.00034	0	0	0	0
564488.1	4153257	9901	DieselExhP	0.00036	0	0	0	0
564498.1	4153257	9901	DieselExhP	0.00038	0	0	0	0
564508.1	4153257	9901	DieselExhP	0.0004	0	0	0	0
564518.1	4153257	9901	DieselExhP	0.00043	0	0	0	0
564528.1	4153257	9901	DieselExhP	0.00046	0	0	0	0
564538.1	4153257	9901	DieselExhP	0.00049	0	0	0	0
564548.1	4153257	9901	DieselExhP	0.00052	0	0	0	0
564458.1	4153267	9901	DieselExhP	0.0003	0	0	0	0
564468.1	4153267	9901	DieselExhP	0.00031	0	0	0	0
564478.1	4153267	9901	DieselExhP	0.00033	0	0	0	0
564488.1	4153267	9901	DieselExhP	0.00035	0	0	0	0
564498.1	4153267	9901	DieselExhP	0.00037	0	0	0	0
564508.1	4153267	9901	DieselExhP	0.0004	0	0	0	0
564518.1	4153267	9901	DieselExhP	0.00042	0	0	0	0
564528.1	4153267	9901	DieselExhP	0.00045	0	0	0	0
564538.1	4153267	9901	DieselExhP	0.00048	0	0	0	0
564458.1	4153277	9901	DieselExhP	0.00029	0	0	0	0

564468.1	4153277	9901	DieselExhP	0.00031	0	0	0	0
564478.1	4153277	9901	DieselExhP	0.00033	0	0	0	0
564488.1	4153277	9901	DieselExhP	0.00035	0	0	0	0
564498.1	4153277	9901	DieselExhP	0.00037	0	0	0	0
564508.1	4153277	9901	DieselExhP	0.00039	0	0	0	0
564518.1	4153277	9901	DieselExhP	0.00042	0	0	0	0
564528.1	4153277	9901	DieselExhP	0.00045	0	0	0	0
564458.1	4153287	9901	DieselExhP	0.00029	0	0	0	0
564468.1	4153287	9901	DieselExhP	0.00031	0	0	0	0
564478.1	4153287	9901	DieselExhP	0.00033	0	0	0	0
564488.1	4153287	9901	DieselExhP	0.00034	0	0	0	0
564498.1	4153287	9901	DieselExhP	0.00037	0	0	0	0
564508.1	4153287	9901	DieselExhP	0.00039	0	0	0	0
564518.1	4153287	9901	DieselExhP	0.00041	0	0	0	0
564458.1	4153297	9901	DieselExhP	0.00029	0	0	0	0
564468.1	4153297	9901	DieselExhP	0.0003	0	0	0	0
564478.1	4153297	9901	DieselExhP	0.00032	0	0	0	0
564488.1	4153297	9901	DieselExhP	0.00034	0	0	0	0
564498.1	4153297	9901	DieselExhP	0.00036	0	0	0	0
564458.1	4153307	9901	DieselExhP	0.00029	0	0	0	0
564468.1	4153307	9901	DieselExhP	0.0003	0	0	0	0
564478.1	4153307	9901	DieselExhP	0.00032	0	0	0	0
564488.1	4153307	9901	DieselExhP	0.00034	0	0	0	0
564458.1	4153317	9901	DieselExhP	0.00028	0	0	0	0
564468.1	4153317	9901	DieselExhP	0.0003	0	0	0	0
564478.1	4153317	9901	DieselExhP	0.00031	0	0	0	0
564458.1	4153327	9901	DieselExhP	0.00028	0	0	0	0
564468.1	4153327	9901	DieselExhP	0.00029	0	0	0	0
564458.1	4153337	9901	DieselExhP	0.00027	0	0	0	0

*HARP - HRACalc v21081 4/20/2022 4:40:31 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00836	1.49E-06	1YrCancer[	*	1.49E-06
2	564808.1	4153037	9901	DieselExhP	0.0088	1.57E-06	1YrCancer[	*	1.57E-06
3	564788.1	4153047	9901	DieselExhP	0.00843	1.50E-06	1YrCancer[	*	1.50E-06
4	564798.1	4153047	9901	DieselExhP	0.00898	1.60E-06	1YrCancer[	*	1.60E-06
5	564808.1	4153047	9901	DieselExhP	0.0095	1.69E-06	1YrCancer[	*	1.69E-06
6	564818.1	4153047	9901	DieselExhP	0.00993	1.77E-06	1YrCancer[	*	1.77E-06
7	564778.1	4153057	9901	DieselExhP	0.00834	1.48E-06	1YrCancer[	*	1.48E-06
8	564788.1	4153057	9901	DieselExhP	0.00901	1.60E-06	1YrCancer[	*	1.60E-06
9	564798.1	4153057	9901	DieselExhP	0.00965	1.72E-06	1YrCancer[	*	1.72E-06
10	564808.1	4153057	9901	DieselExhP	0.01025	1.82E-06	1YrCancer[	*	1.82E-06
11	564818.1	4153057	9901	DieselExhP	0.01076	1.91E-06	1YrCancer[	*	1.91E-06
12	564768.1	4153067	9901	DieselExhP	0.00812	1.44E-06	1YrCancer[	*	1.44E-06
13	564778.1	4153067	9901	DieselExhP	0.00888	1.58E-06	1YrCancer[	*	1.58E-06
14	564788.1	4153067	9901	DieselExhP	0.00965	1.72E-06	1YrCancer[	*	1.72E-06
15	564798.1	4153067	9901	DieselExhP	0.01038	1.85E-06	1YrCancer[	*	1.85E-06
16	564808.1	4153067	9901	DieselExhP	0.01109	1.97E-06	1YrCancer[	*	1.97E-06
17	564818.1	4153067	9901	DieselExhP	0.01169	2.08E-06	1YrCancer[	*	2.08E-06
18	564758.1	4153077	9901	DieselExhP	0.00779	1.39E-06	1YrCancer[	*	1.39E-06
19	564768.1	4153077	9901	DieselExhP	0.0086	1.53E-06	1YrCancer[	*	1.53E-06
20	564778.1	4153077	9901	DieselExhP	0.00946	1.68E-06	1YrCancer[	*	1.68E-06
21	564788.1	4153077	9901	DieselExhP	0.01033	1.84E-06	1YrCancer[	*	1.84E-06
22	564798.1	4153077	9901	DieselExhP	0.01119	1.99E-06	1YrCancer[	*	1.99E-06
23	564808.1	4153077	9901	DieselExhP	0.01201	2.14E-06	1YrCancer[	*	2.14E-06
24	564818.1	4153077	9901	DieselExhP	0.01274	2.27E-06	1YrCancer[	*	2.27E-06
25	564748.1	4153087	9901	DieselExhP	0.00735	1.31E-06	1YrCancer[	*	1.31E-06
26	564758.1	4153087	9901	DieselExhP	0.0082	1.46E-06	1YrCancer[	*	1.46E-06
27	564768.1	4153087	9901	DieselExhP	0.00912	1.62E-06	1YrCancer[	*	1.62E-06
28	564778.1	4153087	9901	DieselExhP	0.01008	1.79E-06	1YrCancer[	*	1.79E-06
29	564788.1	4153087	9901	DieselExhP	0.01107	1.97E-06	1YrCancer[	*	1.97E-06
30	564798.1	4153087	9901	DieselExhP	0.01205	2.14E-06	1YrCancer[	*	2.14E-06
31	564808.1	4153087	9901	DieselExhP	0.01301	2.31E-06	1YrCancer[	*	2.31E-06
32	564818.1	4153087	9901	DieselExhP	0.0139	2.47E-06	1YrCancer[	*	2.47E-06
33	564548.1	4153097	9901	DieselExhP	0.00096	1.71E-07	1YrCancer[	*	1.71E-07
34	564738.1	4153097	9901	DieselExhP	0.00682	1.21E-06	1YrCancer[	*	1.21E-06
35	564748.1	4153097	9901	DieselExhP	0.0077	1.37E-06	1YrCancer[	*	1.37E-06
36	564758.1	4153097	9901	DieselExhP	0.00865	1.54E-06	1YrCancer[	*	1.54E-06
37	564768.1	4153097	9901	DieselExhP	0.00966	1.72E-06	1YrCancer[	*	1.72E-06
38	564778.1	4153097	9901	DieselExhP	0.01074	1.91E-06	1YrCancer[	*	1.91E-06
39	564788.1	4153097	9901	DieselExhP	0.01188	2.11E-06	1YrCancer[	*	2.11E-06
40	564798.1	4153097	9901	DieselExhP	0.013	2.31E-06	1YrCancer[	*	2.31E-06
41	564808.1	4153097	9901	DieselExhP	0.01412	2.51E-06	1YrCancer[	*	2.51E-06
42	564538.1	4153107	9901	DieselExhP	0.0009	1.60E-07	1YrCancer[	*	1.60E-07
43	564548.1	4153107	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
44	564558.1	4153107	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
45	564718.1	4153107	9901	DieselExhP	0.00547	9.73E-07	1YrCancer[	*	9.73E-07

46	564728.1	4153107	9901	DieselExhP	0.00624	1.11E-06	1YrCancer[	*	1.11E-06
47	564738.1	4153107	9901	DieselExhP	0.0071	1.26E-06	1YrCancer[	*	1.26E-06
48	564748.1	4153107	9901	DieselExhP	0.00806	1.43E-06	1YrCancer[	*	1.43E-06
49	564758.1	4153107	9901	DieselExhP	0.00911	1.62E-06	1YrCancer[	*	1.62E-06
50	564768.1	4153107	9901	DieselExhP	0.01025	1.82E-06	1YrCancer[	*	1.82E-06
51	564778.1	4153107	9901	DieselExhP	0.01145	2.04E-06	1YrCancer[	*	2.04E-06
52	564788.1	4153107	9901	DieselExhP	0.01274	2.27E-06	1YrCancer[	*	2.27E-06
53	564798.1	4153107	9901	DieselExhP	0.01402	2.49E-06	1YrCancer[	*	2.49E-06
54	564528.1	4153117	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
55	564538.1	4153117	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
56	564548.1	4153117	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
57	564558.1	4153117	9901	DieselExhP	0.00105	1.87E-07	1YrCancer[	*	1.87E-07
58	564568.1	4153117	9901	DieselExhP	0.00113	2.01E-07	1YrCancer[	*	2.01E-07
59	564708.1	4153117	9901	DieselExhP	0.00491	8.73E-07	1YrCancer[	*	8.73E-07
60	564718.1	4153117	9901	DieselExhP	0.00562	9.99E-07	1YrCancer[	*	9.99E-07
61	564728.1	4153117	9901	DieselExhP	0.00644	1.15E-06	1YrCancer[	*	1.15E-06
62	564738.1	4153117	9901	DieselExhP	0.00737	1.31E-06	1YrCancer[	*	1.31E-06
63	564748.1	4153117	9901	DieselExhP	0.00842	1.50E-06	1YrCancer[	*	1.50E-06
64	564758.1	4153117	9901	DieselExhP	0.00959	1.71E-06	1YrCancer[	*	1.71E-06
65	564768.1	4153117	9901	DieselExhP	0.01084	1.93E-06	1YrCancer[	*	1.93E-06
66	564778.1	4153117	9901	DieselExhP	0.01217	2.16E-06	1YrCancer[	*	2.16E-06
67	564788.1	4153117	9901	DieselExhP	0.01359	2.42E-06	1YrCancer[	*	2.42E-06
68	564528.1	4153127	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
69	564538.1	4153127	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
70	564548.1	4153127	9901	DieselExhP	0.00098	1.74E-07	1YrCancer[	*	1.74E-07
71	564558.1	4153127	9901	DieselExhP	0.00105	1.87E-07	1YrCancer[	*	1.87E-07
72	564568.1	4153127	9901	DieselExhP	0.00113	2.01E-07	1YrCancer[	*	2.01E-07
73	564578.1	4153127	9901	DieselExhP	0.00122	2.17E-07	1YrCancer[	*	2.17E-07
74	564698.1	4153127	9901	DieselExhP	0.00437	7.77E-07	1YrCancer[	*	7.77E-07
75	564708.1	4153127	9901	DieselExhP	0.00501	8.91E-07	1YrCancer[	*	8.91E-07
76	564718.1	4153127	9901	DieselExhP	0.00576	1.02E-06	1YrCancer[	*	1.02E-06
77	564728.1	4153127	9901	DieselExhP	0.00664	1.18E-06	1YrCancer[	*	1.18E-06
78	564738.1	4153127	9901	DieselExhP	0.00765	1.36E-06	1YrCancer[	*	1.36E-06
79	564748.1	4153127	9901	DieselExhP	0.0088	1.57E-06	1YrCancer[	*	1.57E-06
80	564758.1	4153127	9901	DieselExhP	0.01009	1.79E-06	1YrCancer[	*	1.79E-06
81	564768.1	4153127	9901	DieselExhP	0.01147	2.04E-06	1YrCancer[	*	2.04E-06
82	564778.1	4153127	9901	DieselExhP	0.01293	2.30E-06	1YrCancer[	*	2.30E-06
83	564518.1	4153137	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
84	564528.1	4153137	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
85	564538.1	4153137	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
86	564548.1	4153137	9901	DieselExhP	0.00098	1.74E-07	1YrCancer[	*	1.74E-07
87	564558.1	4153137	9901	DieselExhP	0.00106	1.89E-07	1YrCancer[	*	1.89E-07
88	564568.1	4153137	9901	DieselExhP	0.00114	2.03E-07	1YrCancer[	*	2.03E-07
89	564578.1	4153137	9901	DieselExhP	0.00123	2.19E-07	1YrCancer[	*	2.19E-07
90	564588.1	4153137	9901	DieselExhP	0.00133	2.37E-07	1YrCancer[	*	2.37E-07
91	564688.1	4153137	9901	DieselExhP	0.00386	6.86E-07	1YrCancer[	*	6.86E-07
92	564698.1	4153137	9901	DieselExhP	0.00443	7.88E-07	1YrCancer[	*	7.88E-07

93	564708.1	4153137	9901	DieselExhP	0.0051	9.07E-07	1YrCancer[	*	9.07E-07
94	564718.1	4153137	9901	DieselExhP	0.0059	1.05E-06	1YrCancer[	*	1.05E-06
95	564728.1	4153137	9901	DieselExhP	0.00684	1.22E-06	1YrCancer[	*	1.22E-06
96	564738.1	4153137	9901	DieselExhP	0.00793	1.41E-06	1YrCancer[	*	1.41E-06
97	564748.1	4153137	9901	DieselExhP	0.00919	1.63E-06	1YrCancer[	*	1.63E-06
98	564758.1	4153137	9901	DieselExhP	0.01061	1.89E-06	1YrCancer[	*	1.89E-06
99	564768.1	4153137	9901	DieselExhP	0.01214	2.16E-06	1YrCancer[	*	2.16E-06
100	564508.1	4153147	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
101	564518.1	4153147	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
102	564528.1	4153147	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
103	564538.1	4153147	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
104	564548.1	4153147	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
105	564558.1	4153147	9901	DieselExhP	0.00106	1.89E-07	1YrCancer[	*	1.89E-07
106	564568.1	4153147	9901	DieselExhP	0.00114	2.03E-07	1YrCancer[	*	2.03E-07
107	564578.1	4153147	9901	DieselExhP	0.00123	2.19E-07	1YrCancer[	*	2.19E-07
108	564588.1	4153147	9901	DieselExhP	0.00134	2.38E-07	1YrCancer[	*	2.38E-07
109	564598.1	4153147	9901	DieselExhP	0.00145	2.58E-07	1YrCancer[	*	2.58E-07
110	564678.1	4153147	9901	DieselExhP	0.0034	6.05E-07	1YrCancer[	*	6.05E-07
111	564688.1	4153147	9901	DieselExhP	0.0039	6.94E-07	1YrCancer[	*	6.94E-07
112	564698.1	4153147	9901	DieselExhP	0.00448	7.97E-07	1YrCancer[	*	7.97E-07
113	564708.1	4153147	9901	DieselExhP	0.00518	9.21E-07	1YrCancer[	*	9.21E-07
114	564718.1	4153147	9901	DieselExhP	0.00602	1.07E-06	1YrCancer[	*	1.07E-06
115	564728.1	4153147	9901	DieselExhP	0.00703	1.25E-06	1YrCancer[	*	1.25E-06
116	564738.1	4153147	9901	DieselExhP	0.00821	1.46E-06	1YrCancer[	*	1.46E-06
117	564748.1	4153147	9901	DieselExhP	0.00956	1.70E-06	1YrCancer[	*	1.70E-06
118	564758.1	4153147	9901	DieselExhP	0.0111	1.97E-06	1YrCancer[	*	1.97E-06
119	564498.1	4153157	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
120	564508.1	4153157	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
121	564518.1	4153157	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
122	564528.1	4153157	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
123	564538.1	4153157	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
124	564548.1	4153157	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
125	564558.1	4153157	9901	DieselExhP	0.00106	1.89E-07	1YrCancer[	*	1.89E-07
126	564568.1	4153157	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
127	564578.1	4153157	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
128	564588.1	4153157	9901	DieselExhP	0.00134	2.38E-07	1YrCancer[	*	2.38E-07
129	564598.1	4153157	9901	DieselExhP	0.00146	2.60E-07	1YrCancer[	*	2.60E-07
130	564608.1	4153157	9901	DieselExhP	0.00159	2.83E-07	1YrCancer[	*	2.83E-07
131	564668.1	4153157	9901	DieselExhP	0.003	5.34E-07	1YrCancer[	*	5.34E-07
132	564678.1	4153157	9901	DieselExhP	0.00342	6.08E-07	1YrCancer[	*	6.08E-07
133	564688.1	4153157	9901	DieselExhP	0.00392	6.97E-07	1YrCancer[	*	6.97E-07
134	564698.1	4153157	9901	DieselExhP	0.00452	8.04E-07	1YrCancer[	*	8.04E-07
135	564708.1	4153157	9901	DieselExhP	0.00525	9.34E-07	1YrCancer[	*	9.34E-07
136	564718.1	4153157	9901	DieselExhP	0.00613	1.09E-06	1YrCancer[	*	1.09E-06
137	564728.1	4153157	9901	DieselExhP	0.00721	1.28E-06	1YrCancer[	*	1.28E-06
138	564738.1	4153157	9901	DieselExhP	0.00849	1.51E-06	1YrCancer[	*	1.51E-06
139	564748.1	4153157	9901	DieselExhP	0.00994	1.77E-06	1YrCancer[	*	1.77E-06

140	564488.1	4153167	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
141	564498.1	4153167	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
142	564508.1	4153167	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
143	564518.1	4153167	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
144	564528.1	4153167	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
145	564538.1	4153167	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07
146	564548.1	4153167	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
147	564558.1	4153167	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
148	564568.1	4153167	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
149	564578.1	4153167	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
150	564588.1	4153167	9901	DieselExhP	0.00134	2.38E-07	1YrCancer[	*	2.38E-07
151	564598.1	4153167	9901	DieselExhP	0.00146	2.60E-07	1YrCancer[	*	2.60E-07
152	564608.1	4153167	9901	DieselExhP	0.0016	2.85E-07	1YrCancer[	*	2.85E-07
153	564618.1	4153167	9901	DieselExhP	0.00175	3.11E-07	1YrCancer[	*	3.11E-07
154	564658.1	4153167	9901	DieselExhP	0.00266	4.73E-07	1YrCancer[	*	4.73E-07
155	564668.1	4153167	9901	DieselExhP	0.00301	5.35E-07	1YrCancer[	*	5.35E-07
156	564678.1	4153167	9901	DieselExhP	0.00343	6.10E-07	1YrCancer[	*	6.10E-07
157	564688.1	4153167	9901	DieselExhP	0.00394	7.01E-07	1YrCancer[	*	7.01E-07
158	564698.1	4153167	9901	DieselExhP	0.00456	8.11E-07	1YrCancer[	*	8.11E-07
159	564708.1	4153167	9901	DieselExhP	0.00531	9.44E-07	1YrCancer[	*	9.44E-07
160	564718.1	4153167	9901	DieselExhP	0.00623	1.11E-06	1YrCancer[	*	1.11E-06
161	564728.1	4153167	9901	DieselExhP	0.00737	1.31E-06	1YrCancer[	*	1.31E-06
162	564738.1	4153167	9901	DieselExhP	0.00876	1.56E-06	1YrCancer[	*	1.56E-06
163	564478.1	4153177	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
164	564488.1	4153177	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
165	564498.1	4153177	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
166	564508.1	4153177	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
167	564518.1	4153177	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
168	564528.1	4153177	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
169	564538.1	4153177	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07
170	564548.1	4153177	9901	DieselExhP	0.001	1.78E-07	1YrCancer[	*	1.78E-07
171	564558.1	4153177	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
172	564568.1	4153177	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
173	564578.1	4153177	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
174	564588.1	4153177	9901	DieselExhP	0.00135	2.40E-07	1YrCancer[	*	2.40E-07
175	564598.1	4153177	9901	DieselExhP	0.00146	2.60E-07	1YrCancer[	*	2.60E-07
176	564608.1	4153177	9901	DieselExhP	0.0016	2.85E-07	1YrCancer[	*	2.85E-07
177	564618.1	4153177	9901	DieselExhP	0.00175	3.11E-07	1YrCancer[	*	3.11E-07
178	564648.1	4153177	9901	DieselExhP	0.00237	4.21E-07	1YrCancer[	*	4.21E-07
179	564658.1	4153177	9901	DieselExhP	0.00266	4.73E-07	1YrCancer[	*	4.73E-07
180	564668.1	4153177	9901	DieselExhP	0.00301	5.35E-07	1YrCancer[	*	5.35E-07
181	564678.1	4153177	9901	DieselExhP	0.00343	6.10E-07	1YrCancer[	*	6.10E-07
182	564688.1	4153177	9901	DieselExhP	0.00395	7.02E-07	1YrCancer[	*	7.02E-07
183	564698.1	4153177	9901	DieselExhP	0.00458	8.15E-07	1YrCancer[	*	8.15E-07
184	564708.1	4153177	9901	DieselExhP	0.00535	9.51E-07	1YrCancer[	*	9.51E-07
185	564718.1	4153177	9901	DieselExhP	0.00631	1.12E-06	1YrCancer[	*	1.12E-06
186	564728.1	4153177	9901	DieselExhP	0.00748	1.33E-06	1YrCancer[	*	1.33E-06

187	564738.1	4153177	9901	DieselExhP	0.00892	1.59E-06	1YrCancer[	*	1.59E-06
188	564468.1	4153187	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
189	564478.1	4153187	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
190	564488.1	4153187	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
191	564498.1	4153187	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
192	564508.1	4153187	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
193	564518.1	4153187	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
194	564528.1	4153187	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
195	564538.1	4153187	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07
196	564548.1	4153187	9901	DieselExhP	0.001	1.78E-07	1YrCancer[	*	1.78E-07
197	564558.1	4153187	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
198	564568.1	4153187	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
199	564578.1	4153187	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
200	564588.1	4153187	9901	DieselExhP	0.00135	2.40E-07	1YrCancer[	*	2.40E-07
201	564598.1	4153187	9901	DieselExhP	0.00147	2.61E-07	1YrCancer[	*	2.61E-07
202	564608.1	4153187	9901	DieselExhP	0.0016	2.85E-07	1YrCancer[	*	2.85E-07
203	564618.1	4153187	9901	DieselExhP	0.00176	3.13E-07	1YrCancer[	*	3.13E-07
204	564648.1	4153187	9901	DieselExhP	0.00238	4.23E-07	1YrCancer[	*	4.23E-07
205	564658.1	4153187	9901	DieselExhP	0.00266	4.73E-07	1YrCancer[	*	4.73E-07
206	564668.1	4153187	9901	DieselExhP	0.00301	5.35E-07	1YrCancer[	*	5.35E-07
207	564678.1	4153187	9901	DieselExhP	0.00343	6.10E-07	1YrCancer[	*	6.10E-07
208	564688.1	4153187	9901	DieselExhP	0.00395	7.02E-07	1YrCancer[	*	7.02E-07
209	564698.1	4153187	9901	DieselExhP	0.00458	8.15E-07	1YrCancer[	*	8.15E-07
210	564708.1	4153187	9901	DieselExhP	0.00538	9.57E-07	1YrCancer[	*	9.57E-07
211	564718.1	4153187	9901	DieselExhP	0.00636	1.13E-06	1YrCancer[	*	1.13E-06
212	564728.1	4153187	9901	DieselExhP	0.00756	1.34E-06	1YrCancer[	*	1.34E-06
213	564458.1	4153197	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
214	564468.1	4153197	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
215	564478.1	4153197	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
216	564488.1	4153197	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
217	564498.1	4153197	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
218	564508.1	4153197	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
219	564518.1	4153197	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
220	564528.1	4153197	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
221	564538.1	4153197	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07
222	564548.1	4153197	9901	DieselExhP	0.001	1.78E-07	1YrCancer[	*	1.78E-07
223	564558.1	4153197	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
224	564568.1	4153197	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
225	564578.1	4153197	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
226	564588.1	4153197	9901	DieselExhP	0.00135	2.40E-07	1YrCancer[	*	2.40E-07
227	564598.1	4153197	9901	DieselExhP	0.00147	2.61E-07	1YrCancer[	*	2.61E-07
228	564608.1	4153197	9901	DieselExhP	0.0016	2.85E-07	1YrCancer[	*	2.85E-07
229	564658.1	4153197	9901	DieselExhP	0.00266	4.73E-07	1YrCancer[	*	4.73E-07
230	564668.1	4153197	9901	DieselExhP	0.003	5.34E-07	1YrCancer[	*	5.34E-07
231	564678.1	4153197	9901	DieselExhP	0.00342	6.08E-07	1YrCancer[	*	6.08E-07
232	564688.1	4153197	9901	DieselExhP	0.00394	7.01E-07	1YrCancer[	*	7.01E-07
233	564698.1	4153197	9901	DieselExhP	0.00458	8.15E-07	1YrCancer[	*	8.15E-07

234	564708.1	4153197	9901	DieselExhP	0.00539	9.59E-07	1YrCancer[	*	9.59E-07
235	564718.1	4153197	9901	DieselExhP	0.00638	1.13E-06	1YrCancer[	*	1.13E-06
236	564458.1	4153207	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
237	564468.1	4153207	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
238	564478.1	4153207	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
239	564488.1	4153207	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
240	564498.1	4153207	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
241	564508.1	4153207	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
242	564518.1	4153207	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
243	564528.1	4153207	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
244	564538.1	4153207	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07
245	564548.1	4153207	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
246	564558.1	4153207	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
247	564568.1	4153207	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
248	564578.1	4153207	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
249	564588.1	4153207	9901	DieselExhP	0.00135	2.40E-07	1YrCancer[	*	2.40E-07
250	564598.1	4153207	9901	DieselExhP	0.00146	2.60E-07	1YrCancer[	*	2.60E-07
251	564668.1	4153207	9901	DieselExhP	0.00299	5.32E-07	1YrCancer[	*	5.32E-07
252	564678.1	4153207	9901	DieselExhP	0.00341	6.06E-07	1YrCancer[	*	6.06E-07
253	564688.1	4153207	9901	DieselExhP	0.00393	6.99E-07	1YrCancer[	*	6.99E-07
254	564698.1	4153207	9901	DieselExhP	0.00455	8.09E-07	1YrCancer[	*	8.09E-07
255	564708.1	4153207	9901	DieselExhP	0.00533	9.48E-07	1YrCancer[	*	9.48E-07
256	564458.1	4153217	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
257	564468.1	4153217	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
258	564478.1	4153217	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
259	564488.1	4153217	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
260	564498.1	4153217	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
261	564508.1	4153217	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
262	564518.1	4153217	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
263	564528.1	4153217	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
264	564538.1	4153217	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
265	564548.1	4153217	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
266	564558.1	4153217	9901	DieselExhP	0.00107	1.90E-07	1YrCancer[	*	1.90E-07
267	564568.1	4153217	9901	DieselExhP	0.00115	2.05E-07	1YrCancer[	*	2.05E-07
268	564578.1	4153217	9901	DieselExhP	0.00124	2.21E-07	1YrCancer[	*	2.21E-07
269	564588.1	4153217	9901	DieselExhP	0.00134	2.38E-07	1YrCancer[	*	2.38E-07
270	564678.1	4153217	9901	DieselExhP	0.00339	6.03E-07	1YrCancer[	*	6.03E-07
271	564688.1	4153217	9901	DieselExhP	0.00391	6.95E-07	1YrCancer[	*	6.95E-07
272	564698.1	4153217	9901	DieselExhP	0.00451	8.02E-07	1YrCancer[	*	8.02E-07
273	564458.1	4153227	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
274	564468.1	4153227	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
275	564478.1	4153227	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
276	564488.1	4153227	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
277	564498.1	4153227	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
278	564508.1	4153227	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
279	564518.1	4153227	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
280	564528.1	4153227	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07

281	564538.1	4153227	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
282	564548.1	4153227	9901	DieselExhP	0.00099	1.76E-07	1YrCancer[	*	1.76E-07
283	564558.1	4153227	9901	DieselExhP	0.00106	1.89E-07	1YrCancer[	*	1.89E-07
284	564568.1	4153227	9901	DieselExhP	0.00114	2.03E-07	1YrCancer[	*	2.03E-07
285	564578.1	4153227	9901	DieselExhP	0.00123	2.19E-07	1YrCancer[	*	2.19E-07
286	564688.1	4153227	9901	DieselExhP	0.00388	6.90E-07	1YrCancer[	*	6.90E-07
287	564458.1	4153237	9901	DieselExhP	0.00056	9.96E-08	1YrCancer[	*	9.96E-08
288	564468.1	4153237	9901	DieselExhP	0.00059	1.05E-07	1YrCancer[	*	1.05E-07
289	564478.1	4153237	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
290	564488.1	4153237	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
291	564498.1	4153237	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
292	564508.1	4153237	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
293	564518.1	4153237	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
294	564528.1	4153237	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
295	564538.1	4153237	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
296	564548.1	4153237	9901	DieselExhP	0.00098	1.74E-07	1YrCancer[	*	1.74E-07
297	564558.1	4153237	9901	DieselExhP	0.00105	1.87E-07	1YrCancer[	*	1.87E-07
298	564568.1	4153237	9901	DieselExhP	0.00113	2.01E-07	1YrCancer[	*	2.01E-07
299	564458.1	4153247	9901	DieselExhP	0.00056	9.96E-08	1YrCancer[	*	9.96E-08
300	564468.1	4153247	9901	DieselExhP	0.00059	1.05E-07	1YrCancer[	*	1.05E-07
301	564478.1	4153247	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
302	564488.1	4153247	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
303	564498.1	4153247	9901	DieselExhP	0.0007	1.24E-07	1YrCancer[	*	1.24E-07
304	564508.1	4153247	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
305	564518.1	4153247	9901	DieselExhP	0.00079	1.41E-07	1YrCancer[	*	1.41E-07
306	564528.1	4153247	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
307	564538.1	4153247	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
308	564548.1	4153247	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
309	564558.1	4153247	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
310	564458.1	4153257	9901	DieselExhP	0.00055	9.78E-08	1YrCancer[	*	9.78E-08
311	564468.1	4153257	9901	DieselExhP	0.00058	1.03E-07	1YrCancer[	*	1.03E-07
312	564478.1	4153257	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
313	564488.1	4153257	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
314	564498.1	4153257	9901	DieselExhP	0.0007	1.24E-07	1YrCancer[	*	1.24E-07
315	564508.1	4153257	9901	DieselExhP	0.00074	1.32E-07	1YrCancer[	*	1.32E-07
316	564518.1	4153257	9901	DieselExhP	0.00079	1.41E-07	1YrCancer[	*	1.41E-07
317	564528.1	4153257	9901	DieselExhP	0.00084	1.49E-07	1YrCancer[	*	1.49E-07
318	564538.1	4153257	9901	DieselExhP	0.0009	1.60E-07	1YrCancer[	*	1.60E-07
319	564548.1	4153257	9901	DieselExhP	0.00096	1.71E-07	1YrCancer[	*	1.71E-07
320	564458.1	4153267	9901	DieselExhP	0.00055	9.78E-08	1YrCancer[	*	9.78E-08
321	564468.1	4153267	9901	DieselExhP	0.00058	1.03E-07	1YrCancer[	*	1.03E-07
322	564478.1	4153267	9901	DieselExhP	0.00061	1.08E-07	1YrCancer[	*	1.08E-07
323	564488.1	4153267	9901	DieselExhP	0.00065	1.16E-07	1YrCancer[	*	1.16E-07
324	564498.1	4153267	9901	DieselExhP	0.00069	1.23E-07	1YrCancer[	*	1.23E-07
325	564508.1	4153267	9901	DieselExhP	0.00073	1.30E-07	1YrCancer[	*	1.30E-07
326	564518.1	4153267	9901	DieselExhP	0.00078	1.39E-07	1YrCancer[	*	1.39E-07
327	564528.1	4153267	9901	DieselExhP	0.00083	1.48E-07	1YrCancer[	*	1.48E-07

328	564538.1	4153267	9901	DieselExhP	0.00089	1.58E-07	1YrCancer[	*	1.58E-07
329	564458.1	4153277	9901	DieselExhP	0.00054	9.60E-08	1YrCancer[	*	9.60E-08
330	564468.1	4153277	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
331	564478.1	4153277	9901	DieselExhP	0.00061	1.08E-07	1YrCancer[	*	1.08E-07
332	564488.1	4153277	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
333	564498.1	4153277	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
334	564508.1	4153277	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
335	564518.1	4153277	9901	DieselExhP	0.00077	1.37E-07	1YrCancer[	*	1.37E-07
336	564528.1	4153277	9901	DieselExhP	0.00082	1.46E-07	1YrCancer[	*	1.46E-07
337	564458.1	4153287	9901	DieselExhP	0.00054	9.60E-08	1YrCancer[	*	9.60E-08
338	564468.1	4153287	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
339	564478.1	4153287	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
340	564488.1	4153287	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
341	564498.1	4153287	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
342	564508.1	4153287	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
343	564518.1	4153287	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
344	564458.1	4153297	9901	DieselExhP	0.00053	9.43E-08	1YrCancer[	*	9.43E-08
345	564468.1	4153297	9901	DieselExhP	0.00056	9.96E-08	1YrCancer[	*	9.96E-08
346	564478.1	4153297	9901	DieselExhP	0.00059	1.05E-07	1YrCancer[	*	1.05E-07
347	564488.1	4153297	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
348	564498.1	4153297	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
349	564458.1	4153307	9901	DieselExhP	0.00053	9.43E-08	1YrCancer[	*	9.43E-08
350	564468.1	4153307	9901	DieselExhP	0.00055	9.78E-08	1YrCancer[	*	9.78E-08
351	564478.1	4153307	9901	DieselExhP	0.00059	1.05E-07	1YrCancer[	*	1.05E-07
352	564488.1	4153307	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
353	564458.1	4153317	9901	DieselExhP	0.00052	9.25E-08	1YrCancer[	*	9.25E-08
354	564468.1	4153317	9901	DieselExhP	0.00055	9.78E-08	1YrCancer[	*	9.78E-08
355	564478.1	4153317	9901	DieselExhP	0.00058	1.03E-07	1YrCancer[	*	1.03E-07
356	564458.1	4153327	9901	DieselExhP	0.00051	9.07E-08	1YrCancer[	*	9.07E-08
357	564468.1	4153327	9901	DieselExhP	0.00054	9.60E-08	1YrCancer[	*	9.60E-08
358	564458.1	4153337	9901	DieselExhP	0.00051	9.07E-08	1YrCancer[	*	9.07E-08

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/20/2022 4:40:31 PM - Chronic Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	564798.1	4153037	9901	DieselExhP	0.00836	NonCancer	0.00E+00	0.00E+00	0.00E+00
2	564808.1	4153037	9901	DieselExhP	0.0088	NonCancer	0.00E+00	0.00E+00	0.00E+00
3	564788.1	4153047	9901	DieselExhP	0.00843	NonCancer	0.00E+00	0.00E+00	0.00E+00
4	564798.1	4153047	9901	DieselExhP	0.00898	NonCancer	0.00E+00	0.00E+00	0.00E+00
5	564808.1	4153047	9901	DieselExhP	0.0095	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	564818.1	4153047	9901	DieselExhP	0.00993	NonCancer	0.00E+00	0.00E+00	0.00E+00
7	564778.1	4153057	9901	DieselExhP	0.00834	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	564788.1	4153057	9901	DieselExhP	0.00901	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	564798.1	4153057	9901	DieselExhP	0.00965	NonCancer	0.00E+00	0.00E+00	0.00E+00
10	564808.1	4153057	9901	DieselExhP	0.01025	NonCancer	0.00E+00	0.00E+00	0.00E+00
11	564818.1	4153057	9901	DieselExhP	0.01076	NonCancer	0.00E+00	0.00E+00	0.00E+00
12	564768.1	4153067	9901	DieselExhP	0.00812	NonCancer	0.00E+00	0.00E+00	0.00E+00
13	564778.1	4153067	9901	DieselExhP	0.00888	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	564788.1	4153067	9901	DieselExhP	0.00965	NonCancer	0.00E+00	0.00E+00	0.00E+00
15	564798.1	4153067	9901	DieselExhP	0.01038	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	564808.1	4153067	9901	DieselExhP	0.01109	NonCancer	0.00E+00	0.00E+00	0.00E+00
17	564818.1	4153067	9901	DieselExhP	0.01169	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	564758.1	4153077	9901	DieselExhP	0.00779	NonCancer	0.00E+00	0.00E+00	0.00E+00
19	564768.1	4153077	9901	DieselExhP	0.0086	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	564778.1	4153077	9901	DieselExhP	0.00946	NonCancer	0.00E+00	0.00E+00	0.00E+00
21	564788.1	4153077	9901	DieselExhP	0.01033	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	564798.1	4153077	9901	DieselExhP	0.01119	NonCancer	0.00E+00	0.00E+00	0.00E+00
23	564808.1	4153077	9901	DieselExhP	0.01201	NonCancer	0.00E+00	0.00E+00	0.00E+00
24	564818.1	4153077	9901	DieselExhP	0.01274	NonCancer	0.00E+00	0.00E+00	0.00E+00
25	564748.1	4153087	9901	DieselExhP	0.00735	NonCancer	0.00E+00	0.00E+00	0.00E+00
26	564758.1	4153087	9901	DieselExhP	0.0082	NonCancer	0.00E+00	0.00E+00	0.00E+00
27	564768.1	4153087	9901	DieselExhP	0.00912	NonCancer	0.00E+00	0.00E+00	0.00E+00
28	564778.1	4153087	9901	DieselExhP	0.01008	NonCancer	0.00E+00	0.00E+00	0.00E+00
29	564788.1	4153087	9901	DieselExhP	0.01107	NonCancer	0.00E+00	0.00E+00	0.00E+00
30	564798.1	4153087	9901	DieselExhP	0.01205	NonCancer	0.00E+00	0.00E+00	0.00E+00
31	564808.1	4153087	9901	DieselExhP	0.01301	NonCancer	0.00E+00	0.00E+00	0.00E+00
32	564818.1	4153087	9901	DieselExhP	0.0139	NonCancer	0.00E+00	0.00E+00	0.00E+00
33	564548.1	4153097	9901	DieselExhP	0.00096	NonCancer	0.00E+00	0.00E+00	0.00E+00
34	564738.1	4153097	9901	DieselExhP	0.00682	NonCancer	0.00E+00	0.00E+00	0.00E+00
35	564748.1	4153097	9901	DieselExhP	0.0077	NonCancer	0.00E+00	0.00E+00	0.00E+00
36	564758.1	4153097	9901	DieselExhP	0.00865	NonCancer	0.00E+00	0.00E+00	0.00E+00
37	564768.1	4153097	9901	DieselExhP	0.00966	NonCancer	0.00E+00	0.00E+00	0.00E+00
38	564778.1	4153097	9901	DieselExhP	0.01074	NonCancer	0.00E+00	0.00E+00	0.00E+00
39	564788.1	4153097	9901	DieselExhP	0.01188	NonCancer	0.00E+00	0.00E+00	0.00E+00
40	564798.1	4153097	9901	DieselExhP	0.013	NonCancer	0.00E+00	0.00E+00	0.00E+00
41	564808.1	4153097	9901	DieselExhP	0.01412	NonCancer	0.00E+00	0.00E+00	0.00E+00
42	564538.1	4153107	9901	DieselExhP	0.0009	NonCancer	0.00E+00	0.00E+00	0.00E+00
43	564548.1	4153107	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
44	564558.1	4153107	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
45	564718.1	4153107	9901	DieselExhP	0.00547	NonCancer	0.00E+00	0.00E+00	0.00E+00

46	564728.1	4153107	9901	DieselExhP	0.00624	NonCancer	0.00E+00	0.00E+00	0.00E+00
47	564738.1	4153107	9901	DieselExhP	0.0071	NonCancer	0.00E+00	0.00E+00	0.00E+00
48	564748.1	4153107	9901	DieselExhP	0.00806	NonCancer	0.00E+00	0.00E+00	0.00E+00
49	564758.1	4153107	9901	DieselExhP	0.00911	NonCancer	0.00E+00	0.00E+00	0.00E+00
50	564768.1	4153107	9901	DieselExhP	0.01025	NonCancer	0.00E+00	0.00E+00	0.00E+00
51	564778.1	4153107	9901	DieselExhP	0.01145	NonCancer	0.00E+00	0.00E+00	0.00E+00
52	564788.1	4153107	9901	DieselExhP	0.01274	NonCancer	0.00E+00	0.00E+00	0.00E+00
53	564798.1	4153107	9901	DieselExhP	0.01402	NonCancer	0.00E+00	0.00E+00	0.00E+00
54	564528.1	4153117	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
55	564538.1	4153117	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
56	564548.1	4153117	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
57	564558.1	4153117	9901	DieselExhP	0.00105	NonCancer	0.00E+00	0.00E+00	0.00E+00
58	564568.1	4153117	9901	DieselExhP	0.00113	NonCancer	0.00E+00	0.00E+00	0.00E+00
59	564708.1	4153117	9901	DieselExhP	0.00491	NonCancer	0.00E+00	0.00E+00	0.00E+00
60	564718.1	4153117	9901	DieselExhP	0.00562	NonCancer	0.00E+00	0.00E+00	0.00E+00
61	564728.1	4153117	9901	DieselExhP	0.00644	NonCancer	0.00E+00	0.00E+00	0.00E+00
62	564738.1	4153117	9901	DieselExhP	0.00737	NonCancer	0.00E+00	0.00E+00	0.00E+00
63	564748.1	4153117	9901	DieselExhP	0.00842	NonCancer	0.00E+00	0.00E+00	0.00E+00
64	564758.1	4153117	9901	DieselExhP	0.00959	NonCancer	0.00E+00	0.00E+00	0.00E+00
65	564768.1	4153117	9901	DieselExhP	0.01084	NonCancer	0.00E+00	0.00E+00	0.00E+00
66	564778.1	4153117	9901	DieselExhP	0.01217	NonCancer	0.00E+00	0.00E+00	0.00E+00
67	564788.1	4153117	9901	DieselExhP	0.01359	NonCancer	0.00E+00	0.00E+00	0.00E+00
68	564528.1	4153127	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
69	564538.1	4153127	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
70	564548.1	4153127	9901	DieselExhP	0.00098	NonCancer	0.00E+00	0.00E+00	0.00E+00
71	564558.1	4153127	9901	DieselExhP	0.00105	NonCancer	0.00E+00	0.00E+00	0.00E+00
72	564568.1	4153127	9901	DieselExhP	0.00113	NonCancer	0.00E+00	0.00E+00	0.00E+00
73	564578.1	4153127	9901	DieselExhP	0.00122	NonCancer	0.00E+00	0.00E+00	0.00E+00
74	564698.1	4153127	9901	DieselExhP	0.00437	NonCancer	0.00E+00	0.00E+00	0.00E+00
75	564708.1	4153127	9901	DieselExhP	0.00501	NonCancer	0.00E+00	0.00E+00	0.00E+00
76	564718.1	4153127	9901	DieselExhP	0.00576	NonCancer	0.00E+00	0.00E+00	0.00E+00
77	564728.1	4153127	9901	DieselExhP	0.00664	NonCancer	0.00E+00	0.00E+00	0.00E+00
78	564738.1	4153127	9901	DieselExhP	0.00765	NonCancer	0.00E+00	0.00E+00	0.00E+00
79	564748.1	4153127	9901	DieselExhP	0.0088	NonCancer	0.00E+00	0.00E+00	0.00E+00
80	564758.1	4153127	9901	DieselExhP	0.01009	NonCancer	0.00E+00	0.00E+00	0.00E+00
81	564768.1	4153127	9901	DieselExhP	0.01147	NonCancer	0.00E+00	0.00E+00	0.00E+00
82	564778.1	4153127	9901	DieselExhP	0.01293	NonCancer	0.00E+00	0.00E+00	0.00E+00
83	564518.1	4153137	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
84	564528.1	4153137	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
85	564538.1	4153137	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
86	564548.1	4153137	9901	DieselExhP	0.00098	NonCancer	0.00E+00	0.00E+00	0.00E+00
87	564558.1	4153137	9901	DieselExhP	0.00106	NonCancer	0.00E+00	0.00E+00	0.00E+00
88	564568.1	4153137	9901	DieselExhP	0.00114	NonCancer	0.00E+00	0.00E+00	0.00E+00
89	564578.1	4153137	9901	DieselExhP	0.00123	NonCancer	0.00E+00	0.00E+00	0.00E+00
90	564588.1	4153137	9901	DieselExhP	0.00133	NonCancer	0.00E+00	0.00E+00	0.00E+00
91	564688.1	4153137	9901	DieselExhP	0.00386	NonCancer	0.00E+00	0.00E+00	0.00E+00
92	564698.1	4153137	9901	DieselExhP	0.00443	NonCancer	0.00E+00	0.00E+00	0.00E+00

93	564708.1	4153137	9901	DieselExhP	0.0051	NonCancer	0.00E+00	0.00E+00	0.00E+00
94	564718.1	4153137	9901	DieselExhP	0.0059	NonCancer	0.00E+00	0.00E+00	0.00E+00
95	564728.1	4153137	9901	DieselExhP	0.00684	NonCancer	0.00E+00	0.00E+00	0.00E+00
96	564738.1	4153137	9901	DieselExhP	0.00793	NonCancer	0.00E+00	0.00E+00	0.00E+00
97	564748.1	4153137	9901	DieselExhP	0.00919	NonCancer	0.00E+00	0.00E+00	0.00E+00
98	564758.1	4153137	9901	DieselExhP	0.01061	NonCancer	0.00E+00	0.00E+00	0.00E+00
99	564768.1	4153137	9901	DieselExhP	0.01214	NonCancer	0.00E+00	0.00E+00	0.00E+00
100	564508.1	4153147	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
101	564518.1	4153147	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
102	564528.1	4153147	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
103	564538.1	4153147	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
104	564548.1	4153147	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
105	564558.1	4153147	9901	DieselExhP	0.00106	NonCancer	0.00E+00	0.00E+00	0.00E+00
106	564568.1	4153147	9901	DieselExhP	0.00114	NonCancer	0.00E+00	0.00E+00	0.00E+00
107	564578.1	4153147	9901	DieselExhP	0.00123	NonCancer	0.00E+00	0.00E+00	0.00E+00
108	564588.1	4153147	9901	DieselExhP	0.00134	NonCancer	0.00E+00	0.00E+00	0.00E+00
109	564598.1	4153147	9901	DieselExhP	0.00145	NonCancer	0.00E+00	0.00E+00	0.00E+00
110	564678.1	4153147	9901	DieselExhP	0.0034	NonCancer	0.00E+00	0.00E+00	0.00E+00
111	564688.1	4153147	9901	DieselExhP	0.0039	NonCancer	0.00E+00	0.00E+00	0.00E+00
112	564698.1	4153147	9901	DieselExhP	0.00448	NonCancer	0.00E+00	0.00E+00	0.00E+00
113	564708.1	4153147	9901	DieselExhP	0.00518	NonCancer	0.00E+00	0.00E+00	0.00E+00
114	564718.1	4153147	9901	DieselExhP	0.00602	NonCancer	0.00E+00	0.00E+00	0.00E+00
115	564728.1	4153147	9901	DieselExhP	0.00703	NonCancer	0.00E+00	0.00E+00	0.00E+00
116	564738.1	4153147	9901	DieselExhP	0.00821	NonCancer	0.00E+00	0.00E+00	0.00E+00
117	564748.1	4153147	9901	DieselExhP	0.00956	NonCancer	0.00E+00	0.00E+00	0.00E+00
118	564758.1	4153147	9901	DieselExhP	0.0111	NonCancer	0.00E+00	0.00E+00	0.00E+00
119	564498.1	4153157	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
120	564508.1	4153157	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
121	564518.1	4153157	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
122	564528.1	4153157	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
123	564538.1	4153157	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
124	564548.1	4153157	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
125	564558.1	4153157	9901	DieselExhP	0.00106	NonCancer	0.00E+00	0.00E+00	0.00E+00
126	564568.1	4153157	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
127	564578.1	4153157	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
128	564588.1	4153157	9901	DieselExhP	0.00134	NonCancer	0.00E+00	0.00E+00	0.00E+00
129	564598.1	4153157	9901	DieselExhP	0.00146	NonCancer	0.00E+00	0.00E+00	0.00E+00
130	564608.1	4153157	9901	DieselExhP	0.00159	NonCancer	0.00E+00	0.00E+00	0.00E+00
131	564668.1	4153157	9901	DieselExhP	0.003	NonCancer	0.00E+00	0.00E+00	0.00E+00
132	564678.1	4153157	9901	DieselExhP	0.00342	NonCancer	0.00E+00	0.00E+00	0.00E+00
133	564688.1	4153157	9901	DieselExhP	0.00392	NonCancer	0.00E+00	0.00E+00	0.00E+00
134	564698.1	4153157	9901	DieselExhP	0.00452	NonCancer	0.00E+00	0.00E+00	0.00E+00
135	564708.1	4153157	9901	DieselExhP	0.00525	NonCancer	0.00E+00	0.00E+00	0.00E+00
136	564718.1	4153157	9901	DieselExhP	0.00613	NonCancer	0.00E+00	0.00E+00	0.00E+00
137	564728.1	4153157	9901	DieselExhP	0.00721	NonCancer	0.00E+00	0.00E+00	0.00E+00
138	564738.1	4153157	9901	DieselExhP	0.00849	NonCancer	0.00E+00	0.00E+00	0.00E+00
139	564748.1	4153157	9901	DieselExhP	0.00994	NonCancer	0.00E+00	0.00E+00	0.00E+00

140	564488.1	4153167	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
141	564498.1	4153167	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
142	564508.1	4153167	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
143	564518.1	4153167	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
144	564528.1	4153167	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
145	564538.1	4153167	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00
146	564548.1	4153167	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
147	564558.1	4153167	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
148	564568.1	4153167	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
149	564578.1	4153167	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
150	564588.1	4153167	9901	DieselExhP	0.00134	NonCancer	0.00E+00	0.00E+00	0.00E+00
151	564598.1	4153167	9901	DieselExhP	0.00146	NonCancer	0.00E+00	0.00E+00	0.00E+00
152	564608.1	4153167	9901	DieselExhP	0.0016	NonCancer	0.00E+00	0.00E+00	0.00E+00
153	564618.1	4153167	9901	DieselExhP	0.00175	NonCancer	0.00E+00	0.00E+00	0.00E+00
154	564658.1	4153167	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
155	564668.1	4153167	9901	DieselExhP	0.00301	NonCancer	0.00E+00	0.00E+00	0.00E+00
156	564678.1	4153167	9901	DieselExhP	0.00343	NonCancer	0.00E+00	0.00E+00	0.00E+00
157	564688.1	4153167	9901	DieselExhP	0.00394	NonCancer	0.00E+00	0.00E+00	0.00E+00
158	564698.1	4153167	9901	DieselExhP	0.00456	NonCancer	0.00E+00	0.00E+00	0.00E+00
159	564708.1	4153167	9901	DieselExhP	0.00531	NonCancer	0.00E+00	0.00E+00	0.00E+00
160	564718.1	4153167	9901	DieselExhP	0.00623	NonCancer	0.00E+00	0.00E+00	0.00E+00
161	564728.1	4153167	9901	DieselExhP	0.00737	NonCancer	0.00E+00	0.00E+00	0.00E+00
162	564738.1	4153167	9901	DieselExhP	0.00876	NonCancer	0.00E+00	0.00E+00	0.00E+00
163	564478.1	4153177	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
164	564488.1	4153177	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
165	564498.1	4153177	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
166	564508.1	4153177	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
167	564518.1	4153177	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
168	564528.1	4153177	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
169	564538.1	4153177	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00
170	564548.1	4153177	9901	DieselExhP	0.001	NonCancer	0.00E+00	0.00E+00	0.00E+00
171	564558.1	4153177	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
172	564568.1	4153177	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
173	564578.1	4153177	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
174	564588.1	4153177	9901	DieselExhP	0.00135	NonCancer	0.00E+00	0.00E+00	0.00E+00
175	564598.1	4153177	9901	DieselExhP	0.00146	NonCancer	0.00E+00	0.00E+00	0.00E+00
176	564608.1	4153177	9901	DieselExhP	0.0016	NonCancer	0.00E+00	0.00E+00	0.00E+00
177	564618.1	4153177	9901	DieselExhP	0.00175	NonCancer	0.00E+00	0.00E+00	0.00E+00
178	564648.1	4153177	9901	DieselExhP	0.00237	NonCancer	0.00E+00	0.00E+00	0.00E+00
179	564658.1	4153177	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
180	564668.1	4153177	9901	DieselExhP	0.00301	NonCancer	0.00E+00	0.00E+00	0.00E+00
181	564678.1	4153177	9901	DieselExhP	0.00343	NonCancer	0.00E+00	0.00E+00	0.00E+00
182	564688.1	4153177	9901	DieselExhP	0.00395	NonCancer	0.00E+00	0.00E+00	0.00E+00
183	564698.1	4153177	9901	DieselExhP	0.00458	NonCancer	0.00E+00	0.00E+00	0.00E+00
184	564708.1	4153177	9901	DieselExhP	0.00535	NonCancer	0.00E+00	0.00E+00	0.00E+00
185	564718.1	4153177	9901	DieselExhP	0.00631	NonCancer	0.00E+00	0.00E+00	0.00E+00
186	564728.1	4153177	9901	DieselExhP	0.00748	NonCancer	0.00E+00	0.00E+00	0.00E+00

187	564738.1	4153177	9901	DieselExhP	0.00892	NonCancer	0.00E+00	0.00E+00	0.00E+00
188	564468.1	4153187	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
189	564478.1	4153187	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
190	564488.1	4153187	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
191	564498.1	4153187	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
192	564508.1	4153187	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
193	564518.1	4153187	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
194	564528.1	4153187	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
195	564538.1	4153187	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00
196	564548.1	4153187	9901	DieselExhP	0.001	NonCancer	0.00E+00	0.00E+00	0.00E+00
197	564558.1	4153187	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
198	564568.1	4153187	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
199	564578.1	4153187	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
200	564588.1	4153187	9901	DieselExhP	0.00135	NonCancer	0.00E+00	0.00E+00	0.00E+00
201	564598.1	4153187	9901	DieselExhP	0.00147	NonCancer	0.00E+00	0.00E+00	0.00E+00
202	564608.1	4153187	9901	DieselExhP	0.0016	NonCancer	0.00E+00	0.00E+00	0.00E+00
203	564618.1	4153187	9901	DieselExhP	0.00176	NonCancer	0.00E+00	0.00E+00	0.00E+00
204	564648.1	4153187	9901	DieselExhP	0.00238	NonCancer	0.00E+00	0.00E+00	0.00E+00
205	564658.1	4153187	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
206	564668.1	4153187	9901	DieselExhP	0.00301	NonCancer	0.00E+00	0.00E+00	0.00E+00
207	564678.1	4153187	9901	DieselExhP	0.00343	NonCancer	0.00E+00	0.00E+00	0.00E+00
208	564688.1	4153187	9901	DieselExhP	0.00395	NonCancer	0.00E+00	0.00E+00	0.00E+00
209	564698.1	4153187	9901	DieselExhP	0.00458	NonCancer	0.00E+00	0.00E+00	0.00E+00
210	564708.1	4153187	9901	DieselExhP	0.00538	NonCancer	0.00E+00	0.00E+00	0.00E+00
211	564718.1	4153187	9901	DieselExhP	0.00636	NonCancer	0.00E+00	0.00E+00	0.00E+00
212	564728.1	4153187	9901	DieselExhP	0.00756	NonCancer	0.00E+00	0.00E+00	0.00E+00
213	564458.1	4153197	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
214	564468.1	4153197	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
215	564478.1	4153197	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
216	564488.1	4153197	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
217	564498.1	4153197	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
218	564508.1	4153197	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
219	564518.1	4153197	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
220	564528.1	4153197	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
221	564538.1	4153197	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00
222	564548.1	4153197	9901	DieselExhP	0.001	NonCancer	0.00E+00	0.00E+00	0.00E+00
223	564558.1	4153197	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
224	564568.1	4153197	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
225	564578.1	4153197	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
226	564588.1	4153197	9901	DieselExhP	0.00135	NonCancer	0.00E+00	0.00E+00	0.00E+00
227	564598.1	4153197	9901	DieselExhP	0.00147	NonCancer	0.00E+00	0.00E+00	0.00E+00
228	564608.1	4153197	9901	DieselExhP	0.0016	NonCancer	0.00E+00	0.00E+00	0.00E+00
229	564658.1	4153197	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
230	564668.1	4153197	9901	DieselExhP	0.003	NonCancer	0.00E+00	0.00E+00	0.00E+00
231	564678.1	4153197	9901	DieselExhP	0.00342	NonCancer	0.00E+00	0.00E+00	0.00E+00
232	564688.1	4153197	9901	DieselExhP	0.00394	NonCancer	0.00E+00	0.00E+00	0.00E+00
233	564698.1	4153197	9901	DieselExhP	0.00458	NonCancer	0.00E+00	0.00E+00	0.00E+00

234	564708.1	4153197	9901	DieselExhP	0.00539	NonCancer	0.00E+00	0.00E+00	0.00E+00
235	564718.1	4153197	9901	DieselExhP	0.00638	NonCancer	0.00E+00	0.00E+00	0.00E+00
236	564458.1	4153207	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
237	564468.1	4153207	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
238	564478.1	4153207	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
239	564488.1	4153207	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
240	564498.1	4153207	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
241	564508.1	4153207	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
242	564518.1	4153207	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
243	564528.1	4153207	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
244	564538.1	4153207	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00
245	564548.1	4153207	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
246	564558.1	4153207	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
247	564568.1	4153207	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
248	564578.1	4153207	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
249	564588.1	4153207	9901	DieselExhP	0.00135	NonCancer	0.00E+00	0.00E+00	0.00E+00
250	564598.1	4153207	9901	DieselExhP	0.00146	NonCancer	0.00E+00	0.00E+00	0.00E+00
251	564668.1	4153207	9901	DieselExhP	0.00299	NonCancer	0.00E+00	0.00E+00	0.00E+00
252	564678.1	4153207	9901	DieselExhP	0.00341	NonCancer	0.00E+00	0.00E+00	0.00E+00
253	564688.1	4153207	9901	DieselExhP	0.00393	NonCancer	0.00E+00	0.00E+00	0.00E+00
254	564698.1	4153207	9901	DieselExhP	0.00455	NonCancer	0.00E+00	0.00E+00	0.00E+00
255	564708.1	4153207	9901	DieselExhP	0.00533	NonCancer	0.00E+00	0.00E+00	0.00E+00
256	564458.1	4153217	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
257	564468.1	4153217	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
258	564478.1	4153217	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
259	564488.1	4153217	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
260	564498.1	4153217	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
261	564508.1	4153217	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
262	564518.1	4153217	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
263	564528.1	4153217	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
264	564538.1	4153217	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
265	564548.1	4153217	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
266	564558.1	4153217	9901	DieselExhP	0.00107	NonCancer	0.00E+00	0.00E+00	0.00E+00
267	564568.1	4153217	9901	DieselExhP	0.00115	NonCancer	0.00E+00	0.00E+00	0.00E+00
268	564578.1	4153217	9901	DieselExhP	0.00124	NonCancer	0.00E+00	0.00E+00	0.00E+00
269	564588.1	4153217	9901	DieselExhP	0.00134	NonCancer	0.00E+00	0.00E+00	0.00E+00
270	564678.1	4153217	9901	DieselExhP	0.00339	NonCancer	0.00E+00	0.00E+00	0.00E+00
271	564688.1	4153217	9901	DieselExhP	0.00391	NonCancer	0.00E+00	0.00E+00	0.00E+00
272	564698.1	4153217	9901	DieselExhP	0.00451	NonCancer	0.00E+00	0.00E+00	0.00E+00
273	564458.1	4153227	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
274	564468.1	4153227	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
275	564478.1	4153227	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
276	564488.1	4153227	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
277	564498.1	4153227	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
278	564508.1	4153227	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
279	564518.1	4153227	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
280	564528.1	4153227	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00

281	564538.1	4153227	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
282	564548.1	4153227	9901	DieselExhP	0.00099	NonCancer	0.00E+00	0.00E+00	0.00E+00
283	564558.1	4153227	9901	DieselExhP	0.00106	NonCancer	0.00E+00	0.00E+00	0.00E+00
284	564568.1	4153227	9901	DieselExhP	0.00114	NonCancer	0.00E+00	0.00E+00	0.00E+00
285	564578.1	4153227	9901	DieselExhP	0.00123	NonCancer	0.00E+00	0.00E+00	0.00E+00
286	564688.1	4153227	9901	DieselExhP	0.00388	NonCancer	0.00E+00	0.00E+00	0.00E+00
287	564458.1	4153237	9901	DieselExhP	0.00056	NonCancer	0.00E+00	0.00E+00	0.00E+00
288	564468.1	4153237	9901	DieselExhP	0.00059	NonCancer	0.00E+00	0.00E+00	0.00E+00
289	564478.1	4153237	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
290	564488.1	4153237	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
291	564498.1	4153237	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
292	564508.1	4153237	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
293	564518.1	4153237	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
294	564528.1	4153237	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
295	564538.1	4153237	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
296	564548.1	4153237	9901	DieselExhP	0.00098	NonCancer	0.00E+00	0.00E+00	0.00E+00
297	564558.1	4153237	9901	DieselExhP	0.00105	NonCancer	0.00E+00	0.00E+00	0.00E+00
298	564568.1	4153237	9901	DieselExhP	0.00113	NonCancer	0.00E+00	0.00E+00	0.00E+00
299	564458.1	4153247	9901	DieselExhP	0.00056	NonCancer	0.00E+00	0.00E+00	0.00E+00
300	564468.1	4153247	9901	DieselExhP	0.00059	NonCancer	0.00E+00	0.00E+00	0.00E+00
301	564478.1	4153247	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
302	564488.1	4153247	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
303	564498.1	4153247	9901	DieselExhP	0.0007	NonCancer	0.00E+00	0.00E+00	0.00E+00
304	564508.1	4153247	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
305	564518.1	4153247	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
306	564528.1	4153247	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
307	564538.1	4153247	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
308	564548.1	4153247	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
309	564558.1	4153247	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
310	564458.1	4153257	9901	DieselExhP	0.00055	NonCancer	0.00E+00	0.00E+00	0.00E+00
311	564468.1	4153257	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
312	564478.1	4153257	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
313	564488.1	4153257	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
314	564498.1	4153257	9901	DieselExhP	0.0007	NonCancer	0.00E+00	0.00E+00	0.00E+00
315	564508.1	4153257	9901	DieselExhP	0.00074	NonCancer	0.00E+00	0.00E+00	0.00E+00
316	564518.1	4153257	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
317	564528.1	4153257	9901	DieselExhP	0.00084	NonCancer	0.00E+00	0.00E+00	0.00E+00
318	564538.1	4153257	9901	DieselExhP	0.0009	NonCancer	0.00E+00	0.00E+00	0.00E+00
319	564548.1	4153257	9901	DieselExhP	0.00096	NonCancer	0.00E+00	0.00E+00	0.00E+00
320	564458.1	4153267	9901	DieselExhP	0.00055	NonCancer	0.00E+00	0.00E+00	0.00E+00
321	564468.1	4153267	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
322	564478.1	4153267	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
323	564488.1	4153267	9901	DieselExhP	0.00065	NonCancer	0.00E+00	0.00E+00	0.00E+00
324	564498.1	4153267	9901	DieselExhP	0.00069	NonCancer	0.00E+00	0.00E+00	0.00E+00
325	564508.1	4153267	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
326	564518.1	4153267	9901	DieselExhP	0.00078	NonCancer	0.00E+00	0.00E+00	0.00E+00
327	564528.1	4153267	9901	DieselExhP	0.00083	NonCancer	0.00E+00	0.00E+00	0.00E+00

328	564538.1	4153267	9901	DieselExhP	0.00089	NonCancer	0.00E+00	0.00E+00	0.00E+00
329	564458.1	4153277	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
330	564468.1	4153277	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
331	564478.1	4153277	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
332	564488.1	4153277	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
333	564498.1	4153277	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
334	564508.1	4153277	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
335	564518.1	4153277	9901	DieselExhP	0.00077	NonCancer	0.00E+00	0.00E+00	0.00E+00
336	564528.1	4153277	9901	DieselExhP	0.00082	NonCancer	0.00E+00	0.00E+00	0.00E+00
337	564458.1	4153287	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
338	564468.1	4153287	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
339	564478.1	4153287	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
340	564488.1	4153287	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
341	564498.1	4153287	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
342	564508.1	4153287	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
343	564518.1	4153287	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
344	564458.1	4153297	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
345	564468.1	4153297	9901	DieselExhP	0.00056	NonCancer	0.00E+00	0.00E+00	0.00E+00
346	564478.1	4153297	9901	DieselExhP	0.00059	NonCancer	0.00E+00	0.00E+00	0.00E+00
347	564488.1	4153297	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
348	564498.1	4153297	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
349	564458.1	4153307	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
350	564468.1	4153307	9901	DieselExhP	0.00055	NonCancer	0.00E+00	0.00E+00	0.00E+00
351	564478.1	4153307	9901	DieselExhP	0.00059	NonCancer	0.00E+00	0.00E+00	0.00E+00
352	564488.1	4153307	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
353	564458.1	4153317	9901	DieselExhP	0.00052	NonCancer	0.00E+00	0.00E+00	0.00E+00
354	564468.1	4153317	9901	DieselExhP	0.00055	NonCancer	0.00E+00	0.00E+00	0.00E+00
355	564478.1	4153317	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
356	564458.1	4153327	9901	DieselExhP	0.00051	NonCancer	0.00E+00	0.00E+00	0.00E+00
357	564468.1	4153327	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
358	564458.1	4153337	9901	DieselExhP	0.00051	NonCancer	0.00E+00	0.00E+00	0.00E+00

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KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DC	WATER_DC	FISH_DOSE	CROP_DOS	BEEF_DOSE
0.00E+00	*	8.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.17E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.20E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.21E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	6.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.40E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.22E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.36E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	5.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.21E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	8.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	5.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	8.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DAIRY_DOS	PIG_DOSE	CHICKEN_D	EGG_DOSE	1ST_DRIVE	2ND_DRIVE	3RD_DRIVE	PASTURE_C	FISH_CONC	WATER_CC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

)NC

*HARP - HRACalc v21081 4/20/2022 4:42:47 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00938	1.54E-06	1YrCancer[	*	1.54E-06
2	564808.1	4153037	9901	DieselExhP	0.00988	1.62E-06	1YrCancer[	*	1.62E-06
3	564788.1	4153047	9901	DieselExhP	0.00946	1.55E-06	1YrCancer[	*	1.55E-06
4	564798.1	4153047	9901	DieselExhP	0.01008	1.66E-06	1YrCancer[	*	1.66E-06
5	564808.1	4153047	9901	DieselExhP	0.01066	1.75E-06	1YrCancer[	*	1.75E-06
6	564818.1	4153047	9901	DieselExhP	0.01114	1.83E-06	1YrCancer[	*	1.83E-06
7	564778.1	4153057	9901	DieselExhP	0.00936	1.54E-06	1YrCancer[	*	1.54E-06
8	564788.1	4153057	9901	DieselExhP	0.01011	1.66E-06	1YrCancer[	*	1.66E-06
9	564798.1	4153057	9901	DieselExhP	0.01083	1.78E-06	1YrCancer[	*	1.78E-06
10	564808.1	4153057	9901	DieselExhP	0.0115	1.89E-06	1YrCancer[	*	1.89E-06
11	564818.1	4153057	9901	DieselExhP	0.01207	1.98E-06	1YrCancer[	*	1.98E-06
12	564768.1	4153067	9901	DieselExhP	0.00911	1.50E-06	1YrCancer[	*	1.50E-06
13	564778.1	4153067	9901	DieselExhP	0.00996	1.64E-06	1YrCancer[	*	1.64E-06
14	564788.1	4153067	9901	DieselExhP	0.01082	1.78E-06	1YrCancer[	*	1.78E-06
15	564798.1	4153067	9901	DieselExhP	0.01165	1.91E-06	1YrCancer[	*	1.91E-06
16	564808.1	4153067	9901	DieselExhP	0.01244	2.04E-06	1YrCancer[	*	2.04E-06
17	564818.1	4153067	9901	DieselExhP	0.01312	2.15E-06	1YrCancer[	*	2.15E-06
18	564758.1	4153077	9901	DieselExhP	0.00874	1.44E-06	1YrCancer[	*	1.44E-06
19	564768.1	4153077	9901	DieselExhP	0.00965	1.59E-06	1YrCancer[	*	1.59E-06
20	564778.1	4153077	9901	DieselExhP	0.01061	1.74E-06	1YrCancer[	*	1.74E-06
21	564788.1	4153077	9901	DieselExhP	0.01159	1.90E-06	1YrCancer[	*	1.90E-06
22	564798.1	4153077	9901	DieselExhP	0.01255	2.06E-06	1YrCancer[	*	2.06E-06
23	564808.1	4153077	9901	DieselExhP	0.01348	2.21E-06	1YrCancer[	*	2.21E-06
24	564818.1	4153077	9901	DieselExhP	0.0143	2.35E-06	1YrCancer[	*	2.35E-06
25	564748.1	4153087	9901	DieselExhP	0.00825	1.36E-06	1YrCancer[	*	1.36E-06
26	564758.1	4153087	9901	DieselExhP	0.0092	1.51E-06	1YrCancer[	*	1.51E-06
27	564768.1	4153087	9901	DieselExhP	0.01023	1.68E-06	1YrCancer[	*	1.68E-06
28	564778.1	4153087	9901	DieselExhP	0.0113	1.86E-06	1YrCancer[	*	1.86E-06
29	564788.1	4153087	9901	DieselExhP	0.01242	2.04E-06	1YrCancer[	*	2.04E-06
30	564798.1	4153087	9901	DieselExhP	0.01352	2.22E-06	1YrCancer[	*	2.22E-06
31	564808.1	4153087	9901	DieselExhP	0.0146	2.40E-06	1YrCancer[	*	2.40E-06
32	564818.1	4153087	9901	DieselExhP	0.0156	2.56E-06	1YrCancer[	*	2.56E-06
33	564548.1	4153097	9901	DieselExhP	0.00108	1.77E-07	1YrCancer[	*	1.77E-07
34	564738.1	4153097	9901	DieselExhP	0.00766	1.26E-06	1YrCancer[	*	1.26E-06
35	564748.1	4153097	9901	DieselExhP	0.00864	1.42E-06	1YrCancer[	*	1.42E-06
36	564758.1	4153097	9901	DieselExhP	0.0097	1.59E-06	1YrCancer[	*	1.59E-06
37	564768.1	4153097	9901	DieselExhP	0.01084	1.78E-06	1YrCancer[	*	1.78E-06
38	564778.1	4153097	9901	DieselExhP	0.01205	1.98E-06	1YrCancer[	*	1.98E-06
39	564788.1	4153097	9901	DieselExhP	0.01333	2.19E-06	1YrCancer[	*	2.19E-06
40	564798.1	4153097	9901	DieselExhP	0.01458	2.39E-06	1YrCancer[	*	2.39E-06
41	564808.1	4153097	9901	DieselExhP	0.01584	2.60E-06	1YrCancer[	*	2.60E-06
42	564538.1	4153107	9901	DieselExhP	0.00101	1.66E-07	1YrCancer[	*	1.66E-07
43	564548.1	4153107	9901	DieselExhP	0.00108	1.77E-07	1YrCancer[	*	1.77E-07
44	564558.1	4153107	9901	DieselExhP	0.00117	1.92E-07	1YrCancer[	*	1.92E-07
45	564718.1	4153107	9901	DieselExhP	0.00614	1.01E-06	1YrCancer[	*	1.01E-06

46	564728.1	4153107	9901	DieselExhP	0.007	1.15E-06	1YrCancer[	*	1.15E-06
47	564738.1	4153107	9901	DieselExhP	0.00796	1.31E-06	1YrCancer[	*	1.31E-06
48	564748.1	4153107	9901	DieselExhP	0.00904	1.48E-06	1YrCancer[	*	1.48E-06
49	564758.1	4153107	9901	DieselExhP	0.01022	1.68E-06	1YrCancer[	*	1.68E-06
50	564768.1	4153107	9901	DieselExhP	0.0115	1.89E-06	1YrCancer[	*	1.89E-06
51	564778.1	4153107	9901	DieselExhP	0.01285	2.11E-06	1YrCancer[	*	2.11E-06
52	564788.1	4153107	9901	DieselExhP	0.01429	2.35E-06	1YrCancer[	*	2.35E-06
53	564798.1	4153107	9901	DieselExhP	0.01573	2.58E-06	1YrCancer[	*	2.58E-06
54	564528.1	4153117	9901	DieselExhP	0.00095	1.56E-07	1YrCancer[	*	1.56E-07
55	564538.1	4153117	9901	DieselExhP	0.00102	1.68E-07	1YrCancer[	*	1.68E-07
56	564548.1	4153117	9901	DieselExhP	0.00109	1.79E-07	1YrCancer[	*	1.79E-07
57	564558.1	4153117	9901	DieselExhP	0.00117	1.92E-07	1YrCancer[	*	1.92E-07
58	564568.1	4153117	9901	DieselExhP	0.00126	2.07E-07	1YrCancer[	*	2.07E-07
59	564708.1	4153117	9901	DieselExhP	0.00551	9.05E-07	1YrCancer[	*	9.05E-07
60	564718.1	4153117	9901	DieselExhP	0.00631	1.04E-06	1YrCancer[	*	1.04E-06
61	564728.1	4153117	9901	DieselExhP	0.00723	1.19E-06	1YrCancer[	*	1.19E-06
62	564738.1	4153117	9901	DieselExhP	0.00827	1.36E-06	1YrCancer[	*	1.36E-06
63	564748.1	4153117	9901	DieselExhP	0.00945	1.55E-06	1YrCancer[	*	1.55E-06
64	564758.1	4153117	9901	DieselExhP	0.01076	1.77E-06	1YrCancer[	*	1.77E-06
65	564768.1	4153117	9901	DieselExhP	0.01216	2.00E-06	1YrCancer[	*	2.00E-06
66	564778.1	4153117	9901	DieselExhP	0.01365	2.24E-06	1YrCancer[	*	2.24E-06
67	564788.1	4153117	9901	DieselExhP	0.01525	2.50E-06	1YrCancer[	*	2.50E-06
68	564528.1	4153127	9901	DieselExhP	0.00096	1.58E-07	1YrCancer[	*	1.58E-07
69	564538.1	4153127	9901	DieselExhP	0.00102	1.68E-07	1YrCancer[	*	1.68E-07
70	564548.1	4153127	9901	DieselExhP	0.0011	1.81E-07	1YrCancer[	*	1.81E-07
71	564558.1	4153127	9901	DieselExhP	0.00118	1.94E-07	1YrCancer[	*	1.94E-07
72	564568.1	4153127	9901	DieselExhP	0.00127	2.09E-07	1YrCancer[	*	2.09E-07
73	564578.1	4153127	9901	DieselExhP	0.00137	2.25E-07	1YrCancer[	*	2.25E-07
74	564698.1	4153127	9901	DieselExhP	0.0049	8.05E-07	1YrCancer[	*	8.05E-07
75	564708.1	4153127	9901	DieselExhP	0.00562	9.23E-07	1YrCancer[	*	9.23E-07
76	564718.1	4153127	9901	DieselExhP	0.00647	1.06E-06	1YrCancer[	*	1.06E-06
77	564728.1	4153127	9901	DieselExhP	0.00745	1.22E-06	1YrCancer[	*	1.22E-06
78	564738.1	4153127	9901	DieselExhP	0.00858	1.41E-06	1YrCancer[	*	1.41E-06
79	564748.1	4153127	9901	DieselExhP	0.00987	1.62E-06	1YrCancer[	*	1.62E-06
80	564758.1	4153127	9901	DieselExhP	0.01132	1.86E-06	1YrCancer[	*	1.86E-06
81	564768.1	4153127	9901	DieselExhP	0.01287	2.11E-06	1YrCancer[	*	2.11E-06
82	564778.1	4153127	9901	DieselExhP	0.01451	2.38E-06	1YrCancer[	*	2.38E-06
83	564518.1	4153137	9901	DieselExhP	0.0009	1.48E-07	1YrCancer[	*	1.48E-07
84	564528.1	4153137	9901	DieselExhP	0.00096	1.58E-07	1YrCancer[	*	1.58E-07
85	564538.1	4153137	9901	DieselExhP	0.00103	1.69E-07	1YrCancer[	*	1.69E-07
86	564548.1	4153137	9901	DieselExhP	0.0011	1.81E-07	1YrCancer[	*	1.81E-07
87	564558.1	4153137	9901	DieselExhP	0.00118	1.94E-07	1YrCancer[	*	1.94E-07
88	564568.1	4153137	9901	DieselExhP	0.00127	2.09E-07	1YrCancer[	*	2.09E-07
89	564578.1	4153137	9901	DieselExhP	0.00138	2.27E-07	1YrCancer[	*	2.27E-07
90	564588.1	4153137	9901	DieselExhP	0.00149	2.45E-07	1YrCancer[	*	2.45E-07
91	564688.1	4153137	9901	DieselExhP	0.00434	7.13E-07	1YrCancer[	*	7.13E-07
92	564698.1	4153137	9901	DieselExhP	0.00497	8.16E-07	1YrCancer[	*	8.16E-07

93	564708.1	4153137	9901	DieselExhP	0.00573	9.41E-07	1YrCancer[	*	9.41E-07
94	564718.1	4153137	9901	DieselExhP	0.00662	1.09E-06	1YrCancer[	*	1.09E-06
95	564728.1	4153137	9901	DieselExhP	0.00767	1.26E-06	1YrCancer[	*	1.26E-06
96	564738.1	4153137	9901	DieselExhP	0.0089	1.46E-06	1YrCancer[	*	1.46E-06
97	564748.1	4153137	9901	DieselExhP	0.01031	1.69E-06	1YrCancer[	*	1.69E-06
98	564758.1	4153137	9901	DieselExhP	0.01191	1.96E-06	1YrCancer[	*	1.96E-06
99	564768.1	4153137	9901	DieselExhP	0.01363	2.24E-06	1YrCancer[	*	2.24E-06
100	564508.1	4153147	9901	DieselExhP	0.00085	1.40E-07	1YrCancer[	*	1.40E-07
101	564518.1	4153147	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
102	564528.1	4153147	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
103	564538.1	4153147	9901	DieselExhP	0.00103	1.69E-07	1YrCancer[	*	1.69E-07
104	564548.1	4153147	9901	DieselExhP	0.00111	1.82E-07	1YrCancer[	*	1.82E-07
105	564558.1	4153147	9901	DieselExhP	0.00119	1.95E-07	1YrCancer[	*	1.95E-07
106	564568.1	4153147	9901	DieselExhP	0.00128	2.10E-07	1YrCancer[	*	2.10E-07
107	564578.1	4153147	9901	DieselExhP	0.00138	2.27E-07	1YrCancer[	*	2.27E-07
108	564588.1	4153147	9901	DieselExhP	0.0015	2.46E-07	1YrCancer[	*	2.46E-07
109	564598.1	4153147	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
110	564678.1	4153147	9901	DieselExhP	0.00382	6.27E-07	1YrCancer[	*	6.27E-07
111	564688.1	4153147	9901	DieselExhP	0.00438	7.19E-07	1YrCancer[	*	7.19E-07
112	564698.1	4153147	9901	DieselExhP	0.00503	8.26E-07	1YrCancer[	*	8.26E-07
113	564708.1	4153147	9901	DieselExhP	0.00582	9.56E-07	1YrCancer[	*	9.56E-07
114	564718.1	4153147	9901	DieselExhP	0.00676	1.11E-06	1YrCancer[	*	1.11E-06
115	564728.1	4153147	9901	DieselExhP	0.00789	1.30E-06	1YrCancer[	*	1.30E-06
116	564738.1	4153147	9901	DieselExhP	0.00922	1.51E-06	1YrCancer[	*	1.51E-06
117	564748.1	4153147	9901	DieselExhP	0.01073	1.76E-06	1YrCancer[	*	1.76E-06
118	564758.1	4153147	9901	DieselExhP	0.01246	2.05E-06	1YrCancer[	*	2.05E-06
119	564498.1	4153157	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
120	564508.1	4153157	9901	DieselExhP	0.00085	1.40E-07	1YrCancer[	*	1.40E-07
121	564518.1	4153157	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
122	564528.1	4153157	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
123	564538.1	4153157	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
124	564548.1	4153157	9901	DieselExhP	0.00111	1.82E-07	1YrCancer[	*	1.82E-07
125	564558.1	4153157	9901	DieselExhP	0.00119	1.95E-07	1YrCancer[	*	1.95E-07
126	564568.1	4153157	9901	DieselExhP	0.00128	2.10E-07	1YrCancer[	*	2.10E-07
127	564578.1	4153157	9901	DieselExhP	0.00139	2.28E-07	1YrCancer[	*	2.28E-07
128	564588.1	4153157	9901	DieselExhP	0.0015	2.46E-07	1YrCancer[	*	2.46E-07
129	564598.1	4153157	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
130	564608.1	4153157	9901	DieselExhP	0.00179	2.94E-07	1YrCancer[	*	2.94E-07
131	564668.1	4153157	9901	DieselExhP	0.00337	5.54E-07	1YrCancer[	*	5.54E-07
132	564678.1	4153157	9901	DieselExhP	0.00384	6.31E-07	1YrCancer[	*	6.31E-07
133	564688.1	4153157	9901	DieselExhP	0.00441	7.24E-07	1YrCancer[	*	7.24E-07
134	564698.1	4153157	9901	DieselExhP	0.00508	8.34E-07	1YrCancer[	*	8.34E-07
135	564708.1	4153157	9901	DieselExhP	0.0059	9.69E-07	1YrCancer[	*	9.69E-07
136	564718.1	4153157	9901	DieselExhP	0.00689	1.13E-06	1YrCancer[	*	1.13E-06
137	564728.1	4153157	9901	DieselExhP	0.00809	1.33E-06	1YrCancer[	*	1.33E-06
138	564738.1	4153157	9901	DieselExhP	0.00953	1.57E-06	1YrCancer[	*	1.57E-06
139	564748.1	4153157	9901	DieselExhP	0.01116	1.83E-06	1YrCancer[	*	1.83E-06

140	564488.1	4153167	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
141	564498.1	4153167	9901	DieselExhP	0.00081	1.33E-07	1YrCancer[	*	1.33E-07
142	564508.1	4153167	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
143	564518.1	4153167	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
144	564528.1	4153167	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
145	564538.1	4153167	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
146	564548.1	4153167	9901	DieselExhP	0.00111	1.82E-07	1YrCancer[	*	1.82E-07
147	564558.1	4153167	9901	DieselExhP	0.0012	1.97E-07	1YrCancer[	*	1.97E-07
148	564568.1	4153167	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
149	564578.1	4153167	9901	DieselExhP	0.00139	2.28E-07	1YrCancer[	*	2.28E-07
150	564588.1	4153167	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
151	564598.1	4153167	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
152	564608.1	4153167	9901	DieselExhP	0.00179	2.94E-07	1YrCancer[	*	2.94E-07
153	564618.1	4153167	9901	DieselExhP	0.00197	3.24E-07	1YrCancer[	*	3.24E-07
154	564658.1	4153167	9901	DieselExhP	0.00299	4.91E-07	1YrCancer[	*	4.91E-07
155	564668.1	4153167	9901	DieselExhP	0.00338	5.55E-07	1YrCancer[	*	5.55E-07
156	564678.1	4153167	9901	DieselExhP	0.00385	6.32E-07	1YrCancer[	*	6.32E-07
157	564688.1	4153167	9901	DieselExhP	0.00443	7.28E-07	1YrCancer[	*	7.28E-07
158	564698.1	4153167	9901	DieselExhP	0.00512	8.41E-07	1YrCancer[	*	8.41E-07
159	564708.1	4153167	9901	DieselExhP	0.00596	9.79E-07	1YrCancer[	*	9.79E-07
160	564718.1	4153167	9901	DieselExhP	0.007	1.15E-06	1YrCancer[	*	1.15E-06
161	564728.1	4153167	9901	DieselExhP	0.00828	1.36E-06	1YrCancer[	*	1.36E-06
162	564738.1	4153167	9901	DieselExhP	0.00983	1.61E-06	1YrCancer[	*	1.61E-06
163	564478.1	4153177	9901	DieselExhP	0.00072	1.18E-07	1YrCancer[	*	1.18E-07
164	564488.1	4153177	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
165	564498.1	4153177	9901	DieselExhP	0.00081	1.33E-07	1YrCancer[	*	1.33E-07
166	564508.1	4153177	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
167	564518.1	4153177	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
168	564528.1	4153177	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
169	564538.1	4153177	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
170	564548.1	4153177	9901	DieselExhP	0.00112	1.84E-07	1YrCancer[	*	1.84E-07
171	564558.1	4153177	9901	DieselExhP	0.0012	1.97E-07	1YrCancer[	*	1.97E-07
172	564568.1	4153177	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
173	564578.1	4153177	9901	DieselExhP	0.00139	2.28E-07	1YrCancer[	*	2.28E-07
174	564588.1	4153177	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
175	564598.1	4153177	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
176	564608.1	4153177	9901	DieselExhP	0.0018	2.96E-07	1YrCancer[	*	2.96E-07
177	564618.1	4153177	9901	DieselExhP	0.00197	3.24E-07	1YrCancer[	*	3.24E-07
178	564648.1	4153177	9901	DieselExhP	0.00266	4.37E-07	1YrCancer[	*	4.37E-07
179	564658.1	4153177	9901	DieselExhP	0.00299	4.91E-07	1YrCancer[	*	4.91E-07
180	564668.1	4153177	9901	DieselExhP	0.00338	5.55E-07	1YrCancer[	*	5.55E-07
181	564678.1	4153177	9901	DieselExhP	0.00386	6.34E-07	1YrCancer[	*	6.34E-07
182	564688.1	4153177	9901	DieselExhP	0.00444	7.29E-07	1YrCancer[	*	7.29E-07
183	564698.1	4153177	9901	DieselExhP	0.00514	8.44E-07	1YrCancer[	*	8.44E-07
184	564708.1	4153177	9901	DieselExhP	0.00601	9.87E-07	1YrCancer[	*	9.87E-07
185	564718.1	4153177	9901	DieselExhP	0.00708	1.16E-06	1YrCancer[	*	1.16E-06
186	564728.1	4153177	9901	DieselExhP	0.0084	1.38E-06	1YrCancer[	*	1.38E-06

187	564738.1	4153177	9901	DieselExhP	0.01002	1.65E-06	1YrCancer[	*	1.65E-06
188	564468.1	4153187	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
189	564478.1	4153187	9901	DieselExhP	0.00072	1.18E-07	1YrCancer[	*	1.18E-07
190	564488.1	4153187	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
191	564498.1	4153187	9901	DieselExhP	0.00081	1.33E-07	1YrCancer[	*	1.33E-07
192	564508.1	4153187	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
193	564518.1	4153187	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
194	564528.1	4153187	9901	DieselExhP	0.00098	1.61E-07	1YrCancer[	*	1.61E-07
195	564538.1	4153187	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
196	564548.1	4153187	9901	DieselExhP	0.00112	1.84E-07	1YrCancer[	*	1.84E-07
197	564558.1	4153187	9901	DieselExhP	0.0012	1.97E-07	1YrCancer[	*	1.97E-07
198	564568.1	4153187	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
199	564578.1	4153187	9901	DieselExhP	0.0014	2.30E-07	1YrCancer[	*	2.30E-07
200	564588.1	4153187	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
201	564598.1	4153187	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
202	564608.1	4153187	9901	DieselExhP	0.0018	2.96E-07	1YrCancer[	*	2.96E-07
203	564618.1	4153187	9901	DieselExhP	0.00197	3.24E-07	1YrCancer[	*	3.24E-07
204	564648.1	4153187	9901	DieselExhP	0.00267	4.39E-07	1YrCancer[	*	4.39E-07
205	564658.1	4153187	9901	DieselExhP	0.00299	4.91E-07	1YrCancer[	*	4.91E-07
206	564668.1	4153187	9901	DieselExhP	0.00338	5.55E-07	1YrCancer[	*	5.55E-07
207	564678.1	4153187	9901	DieselExhP	0.00385	6.32E-07	1YrCancer[	*	6.32E-07
208	564688.1	4153187	9901	DieselExhP	0.00443	7.28E-07	1YrCancer[	*	7.28E-07
209	564698.1	4153187	9901	DieselExhP	0.00515	8.46E-07	1YrCancer[	*	8.46E-07
210	564708.1	4153187	9901	DieselExhP	0.00604	9.92E-07	1YrCancer[	*	9.92E-07
211	564718.1	4153187	9901	DieselExhP	0.00714	1.17E-06	1YrCancer[	*	1.17E-06
212	564728.1	4153187	9901	DieselExhP	0.00849	1.39E-06	1YrCancer[	*	1.39E-06
213	564458.1	4153197	9901	DieselExhP	0.00064	1.05E-07	1YrCancer[	*	1.05E-07
214	564468.1	4153197	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
215	564478.1	4153197	9901	DieselExhP	0.00072	1.18E-07	1YrCancer[	*	1.18E-07
216	564488.1	4153197	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
217	564498.1	4153197	9901	DieselExhP	0.00081	1.33E-07	1YrCancer[	*	1.33E-07
218	564508.1	4153197	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
219	564518.1	4153197	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
220	564528.1	4153197	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
221	564538.1	4153197	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
222	564548.1	4153197	9901	DieselExhP	0.00112	1.84E-07	1YrCancer[	*	1.84E-07
223	564558.1	4153197	9901	DieselExhP	0.0012	1.97E-07	1YrCancer[	*	1.97E-07
224	564568.1	4153197	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
225	564578.1	4153197	9901	DieselExhP	0.0014	2.30E-07	1YrCancer[	*	2.30E-07
226	564588.1	4153197	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
227	564598.1	4153197	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
228	564608.1	4153197	9901	DieselExhP	0.0018	2.96E-07	1YrCancer[	*	2.96E-07
229	564658.1	4153197	9901	DieselExhP	0.00298	4.89E-07	1YrCancer[	*	4.89E-07
230	564668.1	4153197	9901	DieselExhP	0.00337	5.54E-07	1YrCancer[	*	5.54E-07
231	564678.1	4153197	9901	DieselExhP	0.00384	6.31E-07	1YrCancer[	*	6.31E-07
232	564688.1	4153197	9901	DieselExhP	0.00442	7.26E-07	1YrCancer[	*	7.26E-07
233	564698.1	4153197	9901	DieselExhP	0.00514	8.44E-07	1YrCancer[	*	8.44E-07

234	564708.1	4153197	9901	DieselExhP	0.00605	9.94E-07	1YrCancer[	*	9.94E-07
235	564718.1	4153197	9901	DieselExhP	0.00717	1.18E-06	1YrCancer[	*	1.18E-06
236	564458.1	4153207	9901	DieselExhP	0.00064	1.05E-07	1YrCancer[	*	1.05E-07
237	564468.1	4153207	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
238	564478.1	4153207	9901	DieselExhP	0.00071	1.17E-07	1YrCancer[	*	1.17E-07
239	564488.1	4153207	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
240	564498.1	4153207	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
241	564508.1	4153207	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
242	564518.1	4153207	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
243	564528.1	4153207	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
244	564538.1	4153207	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
245	564548.1	4153207	9901	DieselExhP	0.00112	1.84E-07	1YrCancer[	*	1.84E-07
246	564558.1	4153207	9901	DieselExhP	0.0012	1.97E-07	1YrCancer[	*	1.97E-07
247	564568.1	4153207	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
248	564578.1	4153207	9901	DieselExhP	0.00139	2.28E-07	1YrCancer[	*	2.28E-07
249	564588.1	4153207	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
250	564598.1	4153207	9901	DieselExhP	0.00164	2.69E-07	1YrCancer[	*	2.69E-07
251	564668.1	4153207	9901	DieselExhP	0.00336	5.52E-07	1YrCancer[	*	5.52E-07
252	564678.1	4153207	9901	DieselExhP	0.00383	6.29E-07	1YrCancer[	*	6.29E-07
253	564688.1	4153207	9901	DieselExhP	0.00441	7.24E-07	1YrCancer[	*	7.24E-07
254	564698.1	4153207	9901	DieselExhP	0.00511	8.39E-07	1YrCancer[	*	8.39E-07
255	564708.1	4153207	9901	DieselExhP	0.00599	9.84E-07	1YrCancer[	*	9.84E-07
256	564458.1	4153217	9901	DieselExhP	0.00064	1.05E-07	1YrCancer[	*	1.05E-07
257	564468.1	4153217	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
258	564478.1	4153217	9901	DieselExhP	0.00071	1.17E-07	1YrCancer[	*	1.17E-07
259	564488.1	4153217	9901	DieselExhP	0.00075	1.23E-07	1YrCancer[	*	1.23E-07
260	564498.1	4153217	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
261	564508.1	4153217	9901	DieselExhP	0.00085	1.40E-07	1YrCancer[	*	1.40E-07
262	564518.1	4153217	9901	DieselExhP	0.00091	1.49E-07	1YrCancer[	*	1.49E-07
263	564528.1	4153217	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07
264	564538.1	4153217	9901	DieselExhP	0.00104	1.71E-07	1YrCancer[	*	1.71E-07
265	564548.1	4153217	9901	DieselExhP	0.00111	1.82E-07	1YrCancer[	*	1.82E-07
266	564558.1	4153217	9901	DieselExhP	0.00119	1.95E-07	1YrCancer[	*	1.95E-07
267	564568.1	4153217	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
268	564578.1	4153217	9901	DieselExhP	0.00139	2.28E-07	1YrCancer[	*	2.28E-07
269	564588.1	4153217	9901	DieselExhP	0.00151	2.48E-07	1YrCancer[	*	2.48E-07
270	564678.1	4153217	9901	DieselExhP	0.00381	6.26E-07	1YrCancer[	*	6.26E-07
271	564688.1	4153217	9901	DieselExhP	0.00439	7.21E-07	1YrCancer[	*	7.21E-07
272	564698.1	4153217	9901	DieselExhP	0.00506	8.31E-07	1YrCancer[	*	8.31E-07
273	564458.1	4153227	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
274	564468.1	4153227	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
275	564478.1	4153227	9901	DieselExhP	0.00071	1.17E-07	1YrCancer[	*	1.17E-07
276	564488.1	4153227	9901	DieselExhP	0.00075	1.23E-07	1YrCancer[	*	1.23E-07
277	564498.1	4153227	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
278	564508.1	4153227	9901	DieselExhP	0.00085	1.40E-07	1YrCancer[	*	1.40E-07
279	564518.1	4153227	9901	DieselExhP	0.0009	1.48E-07	1YrCancer[	*	1.48E-07
280	564528.1	4153227	9901	DieselExhP	0.00097	1.59E-07	1YrCancer[	*	1.59E-07

281	564538.1	4153227	9901	DieselExhP	0.00103	1.69E-07	1YrCancer[	*	1.69E-07
282	564548.1	4153227	9901	DieselExhP	0.00111	1.82E-07	1YrCancer[	*	1.82E-07
283	564558.1	4153227	9901	DieselExhP	0.00119	1.95E-07	1YrCancer[	*	1.95E-07
284	564568.1	4153227	9901	DieselExhP	0.00128	2.10E-07	1YrCancer[	*	2.10E-07
285	564578.1	4153227	9901	DieselExhP	0.00138	2.27E-07	1YrCancer[	*	2.27E-07
286	564688.1	4153227	9901	DieselExhP	0.00436	7.16E-07	1YrCancer[	*	7.16E-07
287	564458.1	4153237	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
288	564468.1	4153237	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
289	564478.1	4153237	9901	DieselExhP	0.0007	1.15E-07	1YrCancer[	*	1.15E-07
290	564488.1	4153237	9901	DieselExhP	0.00075	1.23E-07	1YrCancer[	*	1.23E-07
291	564498.1	4153237	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
292	564508.1	4153237	9901	DieselExhP	0.00084	1.38E-07	1YrCancer[	*	1.38E-07
293	564518.1	4153237	9901	DieselExhP	0.0009	1.48E-07	1YrCancer[	*	1.48E-07
294	564528.1	4153237	9901	DieselExhP	0.00096	1.58E-07	1YrCancer[	*	1.58E-07
295	564538.1	4153237	9901	DieselExhP	0.00103	1.69E-07	1YrCancer[	*	1.69E-07
296	564548.1	4153237	9901	DieselExhP	0.0011	1.81E-07	1YrCancer[	*	1.81E-07
297	564558.1	4153237	9901	DieselExhP	0.00118	1.94E-07	1YrCancer[	*	1.94E-07
298	564568.1	4153237	9901	DieselExhP	0.00127	2.09E-07	1YrCancer[	*	2.09E-07
299	564458.1	4153247	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
300	564468.1	4153247	9901	DieselExhP	0.00066	1.08E-07	1YrCancer[	*	1.08E-07
301	564478.1	4153247	9901	DieselExhP	0.0007	1.15E-07	1YrCancer[	*	1.15E-07
302	564488.1	4153247	9901	DieselExhP	0.00074	1.22E-07	1YrCancer[	*	1.22E-07
303	564498.1	4153247	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
304	564508.1	4153247	9901	DieselExhP	0.00084	1.38E-07	1YrCancer[	*	1.38E-07
305	564518.1	4153247	9901	DieselExhP	0.00089	1.46E-07	1YrCancer[	*	1.46E-07
306	564528.1	4153247	9901	DieselExhP	0.00095	1.56E-07	1YrCancer[	*	1.56E-07
307	564538.1	4153247	9901	DieselExhP	0.00102	1.68E-07	1YrCancer[	*	1.68E-07
308	564548.1	4153247	9901	DieselExhP	0.00109	1.79E-07	1YrCancer[	*	1.79E-07
309	564558.1	4153247	9901	DieselExhP	0.00117	1.92E-07	1YrCancer[	*	1.92E-07
310	564458.1	4153257	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
311	564468.1	4153257	9901	DieselExhP	0.00066	1.08E-07	1YrCancer[	*	1.08E-07
312	564478.1	4153257	9901	DieselExhP	0.00069	1.13E-07	1YrCancer[	*	1.13E-07
313	564488.1	4153257	9901	DieselExhP	0.00074	1.22E-07	1YrCancer[	*	1.22E-07
314	564498.1	4153257	9901	DieselExhP	0.00078	1.28E-07	1YrCancer[	*	1.28E-07
315	564508.1	4153257	9901	DieselExhP	0.00083	1.36E-07	1YrCancer[	*	1.36E-07
316	564518.1	4153257	9901	DieselExhP	0.00088	1.45E-07	1YrCancer[	*	1.45E-07
317	564528.1	4153257	9901	DieselExhP	0.00094	1.54E-07	1YrCancer[	*	1.54E-07
318	564538.1	4153257	9901	DieselExhP	0.00101	1.66E-07	1YrCancer[	*	1.66E-07
319	564548.1	4153257	9901	DieselExhP	0.00108	1.77E-07	1YrCancer[	*	1.77E-07
320	564458.1	4153267	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
321	564468.1	4153267	9901	DieselExhP	0.00065	1.07E-07	1YrCancer[	*	1.07E-07
322	564478.1	4153267	9901	DieselExhP	0.00069	1.13E-07	1YrCancer[	*	1.13E-07
323	564488.1	4153267	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
324	564498.1	4153267	9901	DieselExhP	0.00077	1.26E-07	1YrCancer[	*	1.26E-07
325	564508.1	4153267	9901	DieselExhP	0.00082	1.35E-07	1YrCancer[	*	1.35E-07
326	564518.1	4153267	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
327	564528.1	4153267	9901	DieselExhP	0.00093	1.53E-07	1YrCancer[	*	1.53E-07

328	564538.1	4153267	9901	DieselExhP	0.001	1.64E-07	1YrCancer[	*	1.64E-07
329	564458.1	4153277	9901	DieselExhP	0.00061	1.00E-07	1YrCancer[	*	1.00E-07
330	564468.1	4153277	9901	DieselExhP	0.00064	1.05E-07	1YrCancer[	*	1.05E-07
331	564478.1	4153277	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
332	564488.1	4153277	9901	DieselExhP	0.00072	1.18E-07	1YrCancer[	*	1.18E-07
333	564498.1	4153277	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
334	564508.1	4153277	9901	DieselExhP	0.00081	1.33E-07	1YrCancer[	*	1.33E-07
335	564518.1	4153277	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
336	564528.1	4153277	9901	DieselExhP	0.00092	1.51E-07	1YrCancer[	*	1.51E-07
337	564458.1	4153287	9901	DieselExhP	0.0006	9.85E-08	1YrCancer[	*	9.85E-08
338	564468.1	4153287	9901	DieselExhP	0.00064	1.05E-07	1YrCancer[	*	1.05E-07
339	564478.1	4153287	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
340	564488.1	4153287	9901	DieselExhP	0.00071	1.17E-07	1YrCancer[	*	1.17E-07
341	564498.1	4153287	9901	DieselExhP	0.00076	1.25E-07	1YrCancer[	*	1.25E-07
342	564508.1	4153287	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
343	564518.1	4153287	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
344	564458.1	4153297	9901	DieselExhP	0.0006	9.85E-08	1YrCancer[	*	9.85E-08
345	564468.1	4153297	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
346	564478.1	4153297	9901	DieselExhP	0.00066	1.08E-07	1YrCancer[	*	1.08E-07
347	564488.1	4153297	9901	DieselExhP	0.0007	1.15E-07	1YrCancer[	*	1.15E-07
348	564498.1	4153297	9901	DieselExhP	0.00075	1.23E-07	1YrCancer[	*	1.23E-07
349	564458.1	4153307	9901	DieselExhP	0.00059	9.69E-08	1YrCancer[	*	9.69E-08
350	564468.1	4153307	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
351	564478.1	4153307	9901	DieselExhP	0.00066	1.08E-07	1YrCancer[	*	1.08E-07
352	564488.1	4153307	9901	DieselExhP	0.00069	1.13E-07	1YrCancer[	*	1.13E-07
353	564458.1	4153317	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
354	564468.1	4153317	9901	DieselExhP	0.00061	1.00E-07	1YrCancer[	*	1.00E-07
355	564478.1	4153317	9901	DieselExhP	0.00065	1.07E-07	1YrCancer[	*	1.07E-07
356	564458.1	4153327	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
357	564468.1	4153327	9901	DieselExhP	0.00061	1.00E-07	1YrCancer[	*	1.00E-07
358	564458.1	4153337	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/20/2022 4:46:33 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00938	1.67E-06	1YrCancer[	*	1.67E-06
2	564808.1	4153037	9901	DieselExhP	0.00988	1.76E-06	1YrCancer[	*	1.76E-06
3	564788.1	4153047	9901	DieselExhP	0.00946	1.68E-06	1YrCancer[	*	1.68E-06
4	564798.1	4153047	9901	DieselExhP	0.01008	1.79E-06	1YrCancer[	*	1.79E-06
5	564808.1	4153047	9901	DieselExhP	0.01066	1.90E-06	1YrCancer[	*	1.90E-06
6	564818.1	4153047	9901	DieselExhP	0.01114	1.98E-06	1YrCancer[	*	1.98E-06
7	564778.1	4153057	9901	DieselExhP	0.00936	1.66E-06	1YrCancer[	*	1.66E-06
8	564788.1	4153057	9901	DieselExhP	0.01011	1.80E-06	1YrCancer[	*	1.80E-06
9	564798.1	4153057	9901	DieselExhP	0.01083	1.93E-06	1YrCancer[	*	1.93E-06
10	564808.1	4153057	9901	DieselExhP	0.0115	2.05E-06	1YrCancer[	*	2.05E-06
11	564818.1	4153057	9901	DieselExhP	0.01207	2.15E-06	1YrCancer[	*	2.15E-06
12	564768.1	4153067	9901	DieselExhP	0.00911	1.62E-06	1YrCancer[	*	1.62E-06
13	564778.1	4153067	9901	DieselExhP	0.00996	1.77E-06	1YrCancer[	*	1.77E-06
14	564788.1	4153067	9901	DieselExhP	0.01082	1.92E-06	1YrCancer[	*	1.92E-06
15	564798.1	4153067	9901	DieselExhP	0.01165	2.07E-06	1YrCancer[	*	2.07E-06
16	564808.1	4153067	9901	DieselExhP	0.01244	2.21E-06	1YrCancer[	*	2.21E-06
17	564818.1	4153067	9901	DieselExhP	0.01312	2.33E-06	1YrCancer[	*	2.33E-06
18	564758.1	4153077	9901	DieselExhP	0.00874	1.55E-06	1YrCancer[	*	1.55E-06
19	564768.1	4153077	9901	DieselExhP	0.00965	1.72E-06	1YrCancer[	*	1.72E-06
20	564778.1	4153077	9901	DieselExhP	0.01061	1.89E-06	1YrCancer[	*	1.89E-06
21	564788.1	4153077	9901	DieselExhP	0.01159	2.06E-06	1YrCancer[	*	2.06E-06
22	564798.1	4153077	9901	DieselExhP	0.01255	2.23E-06	1YrCancer[	*	2.23E-06
23	564808.1	4153077	9901	DieselExhP	0.01348	2.40E-06	1YrCancer[	*	2.40E-06
24	564818.1	4153077	9901	DieselExhP	0.0143	2.54E-06	1YrCancer[	*	2.54E-06
25	564748.1	4153087	9901	DieselExhP	0.00825	1.47E-06	1YrCancer[	*	1.47E-06
26	564758.1	4153087	9901	DieselExhP	0.0092	1.64E-06	1YrCancer[	*	1.64E-06
27	564768.1	4153087	9901	DieselExhP	0.01023	1.82E-06	1YrCancer[	*	1.82E-06
28	564778.1	4153087	9901	DieselExhP	0.0113	2.01E-06	1YrCancer[	*	2.01E-06
29	564788.1	4153087	9901	DieselExhP	0.01242	2.21E-06	1YrCancer[	*	2.21E-06
30	564798.1	4153087	9901	DieselExhP	0.01352	2.40E-06	1YrCancer[	*	2.40E-06
31	564808.1	4153087	9901	DieselExhP	0.0146	2.60E-06	1YrCancer[	*	2.60E-06
32	564818.1	4153087	9901	DieselExhP	0.0156	2.77E-06	1YrCancer[	*	2.77E-06
33	564548.1	4153097	9901	DieselExhP	0.00108	1.92E-07	1YrCancer[	*	1.92E-07
34	564738.1	4153097	9901	DieselExhP	0.00766	1.36E-06	1YrCancer[	*	1.36E-06
35	564748.1	4153097	9901	DieselExhP	0.00864	1.54E-06	1YrCancer[	*	1.54E-06
36	564758.1	4153097	9901	DieselExhP	0.0097	1.73E-06	1YrCancer[	*	1.73E-06
37	564768.1	4153097	9901	DieselExhP	0.01084	1.93E-06	1YrCancer[	*	1.93E-06
38	564778.1	4153097	9901	DieselExhP	0.01205	2.14E-06	1YrCancer[	*	2.14E-06
39	564788.1	4153097	9901	DieselExhP	0.01333	2.37E-06	1YrCancer[	*	2.37E-06
40	564798.1	4153097	9901	DieselExhP	0.01458	2.59E-06	1YrCancer[	*	2.59E-06
41	564808.1	4153097	9901	DieselExhP	0.01584	2.82E-06	1YrCancer[	*	2.82E-06
42	564538.1	4153107	9901	DieselExhP	0.00101	1.80E-07	1YrCancer[	*	1.80E-07
43	564548.1	4153107	9901	DieselExhP	0.00108	1.92E-07	1YrCancer[	*	1.92E-07
44	564558.1	4153107	9901	DieselExhP	0.00117	2.08E-07	1YrCancer[	*	2.08E-07
45	564718.1	4153107	9901	DieselExhP	0.00614	1.09E-06	1YrCancer[	*	1.09E-06

46	564728.1	4153107	9901	DieselExhP	0.007	1.24E-06	1YrCancer[	*	1.24E-06
47	564738.1	4153107	9901	DieselExhP	0.00796	1.42E-06	1YrCancer[	*	1.42E-06
48	564748.1	4153107	9901	DieselExhP	0.00904	1.61E-06	1YrCancer[	*	1.61E-06
49	564758.1	4153107	9901	DieselExhP	0.01022	1.82E-06	1YrCancer[	*	1.82E-06
50	564768.1	4153107	9901	DieselExhP	0.0115	2.05E-06	1YrCancer[	*	2.05E-06
51	564778.1	4153107	9901	DieselExhP	0.01285	2.29E-06	1YrCancer[	*	2.29E-06
52	564788.1	4153107	9901	DieselExhP	0.01429	2.54E-06	1YrCancer[	*	2.54E-06
53	564798.1	4153107	9901	DieselExhP	0.01573	2.80E-06	1YrCancer[	*	2.80E-06
54	564528.1	4153117	9901	DieselExhP	0.00095	1.69E-07	1YrCancer[	*	1.69E-07
55	564538.1	4153117	9901	DieselExhP	0.00102	1.81E-07	1YrCancer[	*	1.81E-07
56	564548.1	4153117	9901	DieselExhP	0.00109	1.94E-07	1YrCancer[	*	1.94E-07
57	564558.1	4153117	9901	DieselExhP	0.00117	2.08E-07	1YrCancer[	*	2.08E-07
58	564568.1	4153117	9901	DieselExhP	0.00126	2.24E-07	1YrCancer[	*	2.24E-07
59	564708.1	4153117	9901	DieselExhP	0.00551	9.80E-07	1YrCancer[	*	9.80E-07
60	564718.1	4153117	9901	DieselExhP	0.00631	1.12E-06	1YrCancer[	*	1.12E-06
61	564728.1	4153117	9901	DieselExhP	0.00723	1.29E-06	1YrCancer[	*	1.29E-06
62	564738.1	4153117	9901	DieselExhP	0.00827	1.47E-06	1YrCancer[	*	1.47E-06
63	564748.1	4153117	9901	DieselExhP	0.00945	1.68E-06	1YrCancer[	*	1.68E-06
64	564758.1	4153117	9901	DieselExhP	0.01076	1.91E-06	1YrCancer[	*	1.91E-06
65	564768.1	4153117	9901	DieselExhP	0.01216	2.16E-06	1YrCancer[	*	2.16E-06
66	564778.1	4153117	9901	DieselExhP	0.01365	2.43E-06	1YrCancer[	*	2.43E-06
67	564788.1	4153117	9901	DieselExhP	0.01525	2.71E-06	1YrCancer[	*	2.71E-06
68	564528.1	4153127	9901	DieselExhP	0.00096	1.71E-07	1YrCancer[	*	1.71E-07
69	564538.1	4153127	9901	DieselExhP	0.00102	1.81E-07	1YrCancer[	*	1.81E-07
70	564548.1	4153127	9901	DieselExhP	0.0011	1.96E-07	1YrCancer[	*	1.96E-07
71	564558.1	4153127	9901	DieselExhP	0.00118	2.10E-07	1YrCancer[	*	2.10E-07
72	564568.1	4153127	9901	DieselExhP	0.00127	2.26E-07	1YrCancer[	*	2.26E-07
73	564578.1	4153127	9901	DieselExhP	0.00137	2.44E-07	1YrCancer[	*	2.44E-07
74	564698.1	4153127	9901	DieselExhP	0.0049	8.71E-07	1YrCancer[	*	8.71E-07
75	564708.1	4153127	9901	DieselExhP	0.00562	9.99E-07	1YrCancer[	*	9.99E-07
76	564718.1	4153127	9901	DieselExhP	0.00647	1.15E-06	1YrCancer[	*	1.15E-06
77	564728.1	4153127	9901	DieselExhP	0.00745	1.33E-06	1YrCancer[	*	1.33E-06
78	564738.1	4153127	9901	DieselExhP	0.00858	1.53E-06	1YrCancer[	*	1.53E-06
79	564748.1	4153127	9901	DieselExhP	0.00987	1.76E-06	1YrCancer[	*	1.76E-06
80	564758.1	4153127	9901	DieselExhP	0.01132	2.01E-06	1YrCancer[	*	2.01E-06
81	564768.1	4153127	9901	DieselExhP	0.01287	2.29E-06	1YrCancer[	*	2.29E-06
82	564778.1	4153127	9901	DieselExhP	0.01451	2.58E-06	1YrCancer[	*	2.58E-06
83	564518.1	4153137	9901	DieselExhP	0.0009	1.60E-07	1YrCancer[	*	1.60E-07
84	564528.1	4153137	9901	DieselExhP	0.00096	1.71E-07	1YrCancer[	*	1.71E-07
85	564538.1	4153137	9901	DieselExhP	0.00103	1.83E-07	1YrCancer[	*	1.83E-07
86	564548.1	4153137	9901	DieselExhP	0.0011	1.96E-07	1YrCancer[	*	1.96E-07
87	564558.1	4153137	9901	DieselExhP	0.00118	2.10E-07	1YrCancer[	*	2.10E-07
88	564568.1	4153137	9901	DieselExhP	0.00127	2.26E-07	1YrCancer[	*	2.26E-07
89	564578.1	4153137	9901	DieselExhP	0.00138	2.45E-07	1YrCancer[	*	2.45E-07
90	564588.1	4153137	9901	DieselExhP	0.00149	2.65E-07	1YrCancer[	*	2.65E-07
91	564688.1	4153137	9901	DieselExhP	0.00434	7.72E-07	1YrCancer[	*	7.72E-07
92	564698.1	4153137	9901	DieselExhP	0.00497	8.84E-07	1YrCancer[	*	8.84E-07

93	564708.1	4153137	9901	DieselExhP	0.00573	1.02E-06	1YrCancer[	*	1.02E-06
94	564718.1	4153137	9901	DieselExhP	0.00662	1.18E-06	1YrCancer[	*	1.18E-06
95	564728.1	4153137	9901	DieselExhP	0.00767	1.36E-06	1YrCancer[	*	1.36E-06
96	564738.1	4153137	9901	DieselExhP	0.0089	1.58E-06	1YrCancer[	*	1.58E-06
97	564748.1	4153137	9901	DieselExhP	0.01031	1.83E-06	1YrCancer[	*	1.83E-06
98	564758.1	4153137	9901	DieselExhP	0.01191	2.12E-06	1YrCancer[	*	2.12E-06
99	564768.1	4153137	9901	DieselExhP	0.01363	2.42E-06	1YrCancer[	*	2.42E-06
100	564508.1	4153147	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
101	564518.1	4153147	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
102	564528.1	4153147	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
103	564538.1	4153147	9901	DieselExhP	0.00103	1.83E-07	1YrCancer[	*	1.83E-07
104	564548.1	4153147	9901	DieselExhP	0.00111	1.97E-07	1YrCancer[	*	1.97E-07
105	564558.1	4153147	9901	DieselExhP	0.00119	2.12E-07	1YrCancer[	*	2.12E-07
106	564568.1	4153147	9901	DieselExhP	0.00128	2.28E-07	1YrCancer[	*	2.28E-07
107	564578.1	4153147	9901	DieselExhP	0.00138	2.45E-07	1YrCancer[	*	2.45E-07
108	564588.1	4153147	9901	DieselExhP	0.0015	2.67E-07	1YrCancer[	*	2.67E-07
109	564598.1	4153147	9901	DieselExhP	0.00163	2.90E-07	1YrCancer[	*	2.90E-07
110	564678.1	4153147	9901	DieselExhP	0.00382	6.79E-07	1YrCancer[	*	6.79E-07
111	564688.1	4153147	9901	DieselExhP	0.00438	7.79E-07	1YrCancer[	*	7.79E-07
112	564698.1	4153147	9901	DieselExhP	0.00503	8.95E-07	1YrCancer[	*	8.95E-07
113	564708.1	4153147	9901	DieselExhP	0.00582	1.04E-06	1YrCancer[	*	1.04E-06
114	564718.1	4153147	9901	DieselExhP	0.00676	1.20E-06	1YrCancer[	*	1.20E-06
115	564728.1	4153147	9901	DieselExhP	0.00789	1.40E-06	1YrCancer[	*	1.40E-06
116	564738.1	4153147	9901	DieselExhP	0.00922	1.64E-06	1YrCancer[	*	1.64E-06
117	564748.1	4153147	9901	DieselExhP	0.01073	1.91E-06	1YrCancer[	*	1.91E-06
118	564758.1	4153147	9901	DieselExhP	0.01246	2.22E-06	1YrCancer[	*	2.22E-06
119	564498.1	4153157	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
120	564508.1	4153157	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
121	564518.1	4153157	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
122	564528.1	4153157	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
123	564538.1	4153157	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
124	564548.1	4153157	9901	DieselExhP	0.00111	1.97E-07	1YrCancer[	*	1.97E-07
125	564558.1	4153157	9901	DieselExhP	0.00119	2.12E-07	1YrCancer[	*	2.12E-07
126	564568.1	4153157	9901	DieselExhP	0.00128	2.28E-07	1YrCancer[	*	2.28E-07
127	564578.1	4153157	9901	DieselExhP	0.00139	2.47E-07	1YrCancer[	*	2.47E-07
128	564588.1	4153157	9901	DieselExhP	0.0015	2.67E-07	1YrCancer[	*	2.67E-07
129	564598.1	4153157	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
130	564608.1	4153157	9901	DieselExhP	0.00179	3.18E-07	1YrCancer[	*	3.18E-07
131	564668.1	4153157	9901	DieselExhP	0.00337	5.99E-07	1YrCancer[	*	5.99E-07
132	564678.1	4153157	9901	DieselExhP	0.00384	6.83E-07	1YrCancer[	*	6.83E-07
133	564688.1	4153157	9901	DieselExhP	0.00441	7.84E-07	1YrCancer[	*	7.84E-07
134	564698.1	4153157	9901	DieselExhP	0.00508	9.03E-07	1YrCancer[	*	9.03E-07
135	564708.1	4153157	9901	DieselExhP	0.0059	1.05E-06	1YrCancer[	*	1.05E-06
136	564718.1	4153157	9901	DieselExhP	0.00689	1.23E-06	1YrCancer[	*	1.23E-06
137	564728.1	4153157	9901	DieselExhP	0.00809	1.44E-06	1YrCancer[	*	1.44E-06
138	564738.1	4153157	9901	DieselExhP	0.00953	1.69E-06	1YrCancer[	*	1.69E-06
139	564748.1	4153157	9901	DieselExhP	0.01116	1.98E-06	1YrCancer[	*	1.98E-06

140	564488.1	4153167	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
141	564498.1	4153167	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
142	564508.1	4153167	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
143	564518.1	4153167	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
144	564528.1	4153167	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
145	564538.1	4153167	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
146	564548.1	4153167	9901	DieselExhP	0.00111	1.97E-07	1YrCancer[	*	1.97E-07
147	564558.1	4153167	9901	DieselExhP	0.0012	2.13E-07	1YrCancer[	*	2.13E-07
148	564568.1	4153167	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
149	564578.1	4153167	9901	DieselExhP	0.00139	2.47E-07	1YrCancer[	*	2.47E-07
150	564588.1	4153167	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
151	564598.1	4153167	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
152	564608.1	4153167	9901	DieselExhP	0.00179	3.18E-07	1YrCancer[	*	3.18E-07
153	564618.1	4153167	9901	DieselExhP	0.00197	3.50E-07	1YrCancer[	*	3.50E-07
154	564658.1	4153167	9901	DieselExhP	0.00299	5.32E-07	1YrCancer[	*	5.32E-07
155	564668.1	4153167	9901	DieselExhP	0.00338	6.01E-07	1YrCancer[	*	6.01E-07
156	564678.1	4153167	9901	DieselExhP	0.00385	6.85E-07	1YrCancer[	*	6.85E-07
157	564688.1	4153167	9901	DieselExhP	0.00443	7.88E-07	1YrCancer[	*	7.88E-07
158	564698.1	4153167	9901	DieselExhP	0.00512	9.11E-07	1YrCancer[	*	9.11E-07
159	564708.1	4153167	9901	DieselExhP	0.00596	1.06E-06	1YrCancer[	*	1.06E-06
160	564718.1	4153167	9901	DieselExhP	0.007	1.24E-06	1YrCancer[	*	1.24E-06
161	564728.1	4153167	9901	DieselExhP	0.00828	1.47E-06	1YrCancer[	*	1.47E-06
162	564738.1	4153167	9901	DieselExhP	0.00983	1.75E-06	1YrCancer[	*	1.75E-06
163	564478.1	4153177	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
164	564488.1	4153177	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
165	564498.1	4153177	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
166	564508.1	4153177	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
167	564518.1	4153177	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
168	564528.1	4153177	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
169	564538.1	4153177	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
170	564548.1	4153177	9901	DieselExhP	0.00112	1.99E-07	1YrCancer[	*	1.99E-07
171	564558.1	4153177	9901	DieselExhP	0.0012	2.13E-07	1YrCancer[	*	2.13E-07
172	564568.1	4153177	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
173	564578.1	4153177	9901	DieselExhP	0.00139	2.47E-07	1YrCancer[	*	2.47E-07
174	564588.1	4153177	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
175	564598.1	4153177	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
176	564608.1	4153177	9901	DieselExhP	0.0018	3.20E-07	1YrCancer[	*	3.20E-07
177	564618.1	4153177	9901	DieselExhP	0.00197	3.50E-07	1YrCancer[	*	3.50E-07
178	564648.1	4153177	9901	DieselExhP	0.00266	4.73E-07	1YrCancer[	*	4.73E-07
179	564658.1	4153177	9901	DieselExhP	0.00299	5.32E-07	1YrCancer[	*	5.32E-07
180	564668.1	4153177	9901	DieselExhP	0.00338	6.01E-07	1YrCancer[	*	6.01E-07
181	564678.1	4153177	9901	DieselExhP	0.00386	6.86E-07	1YrCancer[	*	6.86E-07
182	564688.1	4153177	9901	DieselExhP	0.00444	7.90E-07	1YrCancer[	*	7.90E-07
183	564698.1	4153177	9901	DieselExhP	0.00514	9.14E-07	1YrCancer[	*	9.14E-07
184	564708.1	4153177	9901	DieselExhP	0.00601	1.07E-06	1YrCancer[	*	1.07E-06
185	564718.1	4153177	9901	DieselExhP	0.00708	1.26E-06	1YrCancer[	*	1.26E-06
186	564728.1	4153177	9901	DieselExhP	0.0084	1.49E-06	1YrCancer[	*	1.49E-06

187	564738.1	4153177	9901	DieselExhP	0.01002	1.78E-06	1YrCancer[	*	1.78E-06
188	564468.1	4153187	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
189	564478.1	4153187	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
190	564488.1	4153187	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
191	564498.1	4153187	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
192	564508.1	4153187	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
193	564518.1	4153187	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
194	564528.1	4153187	9901	DieselExhP	0.00098	1.74E-07	1YrCancer[	*	1.74E-07
195	564538.1	4153187	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
196	564548.1	4153187	9901	DieselExhP	0.00112	1.99E-07	1YrCancer[	*	1.99E-07
197	564558.1	4153187	9901	DieselExhP	0.0012	2.13E-07	1YrCancer[	*	2.13E-07
198	564568.1	4153187	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
199	564578.1	4153187	9901	DieselExhP	0.0014	2.49E-07	1YrCancer[	*	2.49E-07
200	564588.1	4153187	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
201	564598.1	4153187	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
202	564608.1	4153187	9901	DieselExhP	0.0018	3.20E-07	1YrCancer[	*	3.20E-07
203	564618.1	4153187	9901	DieselExhP	0.00197	3.50E-07	1YrCancer[	*	3.50E-07
204	564648.1	4153187	9901	DieselExhP	0.00267	4.75E-07	1YrCancer[	*	4.75E-07
205	564658.1	4153187	9901	DieselExhP	0.00299	5.32E-07	1YrCancer[	*	5.32E-07
206	564668.1	4153187	9901	DieselExhP	0.00338	6.01E-07	1YrCancer[	*	6.01E-07
207	564678.1	4153187	9901	DieselExhP	0.00385	6.85E-07	1YrCancer[	*	6.85E-07
208	564688.1	4153187	9901	DieselExhP	0.00443	7.88E-07	1YrCancer[	*	7.88E-07
209	564698.1	4153187	9901	DieselExhP	0.00515	9.16E-07	1YrCancer[	*	9.16E-07
210	564708.1	4153187	9901	DieselExhP	0.00604	1.07E-06	1YrCancer[	*	1.07E-06
211	564718.1	4153187	9901	DieselExhP	0.00714	1.27E-06	1YrCancer[	*	1.27E-06
212	564728.1	4153187	9901	DieselExhP	0.00849	1.51E-06	1YrCancer[	*	1.51E-06
213	564458.1	4153197	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
214	564468.1	4153197	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
215	564478.1	4153197	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
216	564488.1	4153197	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
217	564498.1	4153197	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
218	564508.1	4153197	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
219	564518.1	4153197	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
220	564528.1	4153197	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
221	564538.1	4153197	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
222	564548.1	4153197	9901	DieselExhP	0.00112	1.99E-07	1YrCancer[	*	1.99E-07
223	564558.1	4153197	9901	DieselExhP	0.0012	2.13E-07	1YrCancer[	*	2.13E-07
224	564568.1	4153197	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
225	564578.1	4153197	9901	DieselExhP	0.0014	2.49E-07	1YrCancer[	*	2.49E-07
226	564588.1	4153197	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
227	564598.1	4153197	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
228	564608.1	4153197	9901	DieselExhP	0.0018	3.20E-07	1YrCancer[	*	3.20E-07
229	564658.1	4153197	9901	DieselExhP	0.00298	5.30E-07	1YrCancer[	*	5.30E-07
230	564668.1	4153197	9901	DieselExhP	0.00337	5.99E-07	1YrCancer[	*	5.99E-07
231	564678.1	4153197	9901	DieselExhP	0.00384	6.83E-07	1YrCancer[	*	6.83E-07
232	564688.1	4153197	9901	DieselExhP	0.00442	7.86E-07	1YrCancer[	*	7.86E-07
233	564698.1	4153197	9901	DieselExhP	0.00514	9.14E-07	1YrCancer[	*	9.14E-07

234	564708.1	4153197	9901	DieselExhP	0.00605	1.08E-06	1YrCancer[	*	1.08E-06
235	564718.1	4153197	9901	DieselExhP	0.00717	1.28E-06	1YrCancer[	*	1.28E-06
236	564458.1	4153207	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
237	564468.1	4153207	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
238	564478.1	4153207	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
239	564488.1	4153207	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
240	564498.1	4153207	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
241	564508.1	4153207	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
242	564518.1	4153207	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
243	564528.1	4153207	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
244	564538.1	4153207	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
245	564548.1	4153207	9901	DieselExhP	0.00112	1.99E-07	1YrCancer[	*	1.99E-07
246	564558.1	4153207	9901	DieselExhP	0.0012	2.13E-07	1YrCancer[	*	2.13E-07
247	564568.1	4153207	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
248	564578.1	4153207	9901	DieselExhP	0.00139	2.47E-07	1YrCancer[	*	2.47E-07
249	564588.1	4153207	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
250	564598.1	4153207	9901	DieselExhP	0.00164	2.92E-07	1YrCancer[	*	2.92E-07
251	564668.1	4153207	9901	DieselExhP	0.00336	5.98E-07	1YrCancer[	*	5.98E-07
252	564678.1	4153207	9901	DieselExhP	0.00383	6.81E-07	1YrCancer[	*	6.81E-07
253	564688.1	4153207	9901	DieselExhP	0.00441	7.84E-07	1YrCancer[	*	7.84E-07
254	564698.1	4153207	9901	DieselExhP	0.00511	9.09E-07	1YrCancer[	*	9.09E-07
255	564708.1	4153207	9901	DieselExhP	0.00599	1.07E-06	1YrCancer[	*	1.07E-06
256	564458.1	4153217	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
257	564468.1	4153217	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
258	564478.1	4153217	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
259	564488.1	4153217	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
260	564498.1	4153217	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
261	564508.1	4153217	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
262	564518.1	4153217	9901	DieselExhP	0.00091	1.62E-07	1YrCancer[	*	1.62E-07
263	564528.1	4153217	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07
264	564538.1	4153217	9901	DieselExhP	0.00104	1.85E-07	1YrCancer[	*	1.85E-07
265	564548.1	4153217	9901	DieselExhP	0.00111	1.97E-07	1YrCancer[	*	1.97E-07
266	564558.1	4153217	9901	DieselExhP	0.00119	2.12E-07	1YrCancer[	*	2.12E-07
267	564568.1	4153217	9901	DieselExhP	0.00129	2.29E-07	1YrCancer[	*	2.29E-07
268	564578.1	4153217	9901	DieselExhP	0.00139	2.47E-07	1YrCancer[	*	2.47E-07
269	564588.1	4153217	9901	DieselExhP	0.00151	2.69E-07	1YrCancer[	*	2.69E-07
270	564678.1	4153217	9901	DieselExhP	0.00381	6.78E-07	1YrCancer[	*	6.78E-07
271	564688.1	4153217	9901	DieselExhP	0.00439	7.81E-07	1YrCancer[	*	7.81E-07
272	564698.1	4153217	9901	DieselExhP	0.00506	9.00E-07	1YrCancer[	*	9.00E-07
273	564458.1	4153227	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
274	564468.1	4153227	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
275	564478.1	4153227	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
276	564488.1	4153227	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
277	564498.1	4153227	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
278	564508.1	4153227	9901	DieselExhP	0.00085	1.51E-07	1YrCancer[	*	1.51E-07
279	564518.1	4153227	9901	DieselExhP	0.0009	1.60E-07	1YrCancer[	*	1.60E-07
280	564528.1	4153227	9901	DieselExhP	0.00097	1.73E-07	1YrCancer[	*	1.73E-07

281	564538.1	4153227	9901	DieselExhP	0.00103	1.83E-07	1YrCancer[	*	1.83E-07
282	564548.1	4153227	9901	DieselExhP	0.00111	1.97E-07	1YrCancer[	*	1.97E-07
283	564558.1	4153227	9901	DieselExhP	0.00119	2.12E-07	1YrCancer[	*	2.12E-07
284	564568.1	4153227	9901	DieselExhP	0.00128	2.28E-07	1YrCancer[	*	2.28E-07
285	564578.1	4153227	9901	DieselExhP	0.00138	2.45E-07	1YrCancer[	*	2.45E-07
286	564688.1	4153227	9901	DieselExhP	0.00436	7.75E-07	1YrCancer[	*	7.75E-07
287	564458.1	4153237	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
288	564468.1	4153237	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
289	564478.1	4153237	9901	DieselExhP	0.0007	1.24E-07	1YrCancer[	*	1.24E-07
290	564488.1	4153237	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
291	564498.1	4153237	9901	DieselExhP	0.00079	1.41E-07	1YrCancer[	*	1.41E-07
292	564508.1	4153237	9901	DieselExhP	0.00084	1.49E-07	1YrCancer[	*	1.49E-07
293	564518.1	4153237	9901	DieselExhP	0.0009	1.60E-07	1YrCancer[	*	1.60E-07
294	564528.1	4153237	9901	DieselExhP	0.00096	1.71E-07	1YrCancer[	*	1.71E-07
295	564538.1	4153237	9901	DieselExhP	0.00103	1.83E-07	1YrCancer[	*	1.83E-07
296	564548.1	4153237	9901	DieselExhP	0.0011	1.96E-07	1YrCancer[	*	1.96E-07
297	564558.1	4153237	9901	DieselExhP	0.00118	2.10E-07	1YrCancer[	*	2.10E-07
298	564568.1	4153237	9901	DieselExhP	0.00127	2.26E-07	1YrCancer[	*	2.26E-07
299	564458.1	4153247	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
300	564468.1	4153247	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
301	564478.1	4153247	9901	DieselExhP	0.0007	1.24E-07	1YrCancer[	*	1.24E-07
302	564488.1	4153247	9901	DieselExhP	0.00074	1.32E-07	1YrCancer[	*	1.32E-07
303	564498.1	4153247	9901	DieselExhP	0.00079	1.41E-07	1YrCancer[	*	1.41E-07
304	564508.1	4153247	9901	DieselExhP	0.00084	1.49E-07	1YrCancer[	*	1.49E-07
305	564518.1	4153247	9901	DieselExhP	0.00089	1.58E-07	1YrCancer[	*	1.58E-07
306	564528.1	4153247	9901	DieselExhP	0.00095	1.69E-07	1YrCancer[	*	1.69E-07
307	564538.1	4153247	9901	DieselExhP	0.00102	1.81E-07	1YrCancer[	*	1.81E-07
308	564548.1	4153247	9901	DieselExhP	0.00109	1.94E-07	1YrCancer[	*	1.94E-07
309	564558.1	4153247	9901	DieselExhP	0.00117	2.08E-07	1YrCancer[	*	2.08E-07
310	564458.1	4153257	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
311	564468.1	4153257	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
312	564478.1	4153257	9901	DieselExhP	0.00069	1.23E-07	1YrCancer[	*	1.23E-07
313	564488.1	4153257	9901	DieselExhP	0.00074	1.32E-07	1YrCancer[	*	1.32E-07
314	564498.1	4153257	9901	DieselExhP	0.00078	1.39E-07	1YrCancer[	*	1.39E-07
315	564508.1	4153257	9901	DieselExhP	0.00083	1.48E-07	1YrCancer[	*	1.48E-07
316	564518.1	4153257	9901	DieselExhP	0.00088	1.57E-07	1YrCancer[	*	1.57E-07
317	564528.1	4153257	9901	DieselExhP	0.00094	1.67E-07	1YrCancer[	*	1.67E-07
318	564538.1	4153257	9901	DieselExhP	0.00101	1.80E-07	1YrCancer[	*	1.80E-07
319	564548.1	4153257	9901	DieselExhP	0.00108	1.92E-07	1YrCancer[	*	1.92E-07
320	564458.1	4153267	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
321	564468.1	4153267	9901	DieselExhP	0.00065	1.16E-07	1YrCancer[	*	1.16E-07
322	564478.1	4153267	9901	DieselExhP	0.00069	1.23E-07	1YrCancer[	*	1.23E-07
323	564488.1	4153267	9901	DieselExhP	0.00073	1.30E-07	1YrCancer[	*	1.30E-07
324	564498.1	4153267	9901	DieselExhP	0.00077	1.37E-07	1YrCancer[	*	1.37E-07
325	564508.1	4153267	9901	DieselExhP	0.00082	1.46E-07	1YrCancer[	*	1.46E-07
326	564518.1	4153267	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
327	564528.1	4153267	9901	DieselExhP	0.00093	1.65E-07	1YrCancer[	*	1.65E-07

328	564538.1	4153267	9901	DieselExhP	0.001	1.78E-07	1YrCancer[	*	1.78E-07
329	564458.1	4153277	9901	DieselExhP	0.00061	1.08E-07	1YrCancer[	*	1.08E-07
330	564468.1	4153277	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
331	564478.1	4153277	9901	DieselExhP	0.00068	1.21E-07	1YrCancer[	*	1.21E-07
332	564488.1	4153277	9901	DieselExhP	0.00072	1.28E-07	1YrCancer[	*	1.28E-07
333	564498.1	4153277	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
334	564508.1	4153277	9901	DieselExhP	0.00081	1.44E-07	1YrCancer[	*	1.44E-07
335	564518.1	4153277	9901	DieselExhP	0.00087	1.55E-07	1YrCancer[	*	1.55E-07
336	564528.1	4153277	9901	DieselExhP	0.00092	1.64E-07	1YrCancer[	*	1.64E-07
337	564458.1	4153287	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
338	564468.1	4153287	9901	DieselExhP	0.00064	1.14E-07	1YrCancer[	*	1.14E-07
339	564478.1	4153287	9901	DieselExhP	0.00067	1.19E-07	1YrCancer[	*	1.19E-07
340	564488.1	4153287	9901	DieselExhP	0.00071	1.26E-07	1YrCancer[	*	1.26E-07
341	564498.1	4153287	9901	DieselExhP	0.00076	1.35E-07	1YrCancer[	*	1.35E-07
342	564508.1	4153287	9901	DieselExhP	0.0008	1.42E-07	1YrCancer[	*	1.42E-07
343	564518.1	4153287	9901	DieselExhP	0.00086	1.53E-07	1YrCancer[	*	1.53E-07
344	564458.1	4153297	9901	DieselExhP	0.0006	1.07E-07	1YrCancer[	*	1.07E-07
345	564468.1	4153297	9901	DieselExhP	0.00063	1.12E-07	1YrCancer[	*	1.12E-07
346	564478.1	4153297	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
347	564488.1	4153297	9901	DieselExhP	0.0007	1.24E-07	1YrCancer[	*	1.24E-07
348	564498.1	4153297	9901	DieselExhP	0.00075	1.33E-07	1YrCancer[	*	1.33E-07
349	564458.1	4153307	9901	DieselExhP	0.00059	1.05E-07	1YrCancer[	*	1.05E-07
350	564468.1	4153307	9901	DieselExhP	0.00062	1.10E-07	1YrCancer[	*	1.10E-07
351	564478.1	4153307	9901	DieselExhP	0.00066	1.17E-07	1YrCancer[	*	1.17E-07
352	564488.1	4153307	9901	DieselExhP	0.00069	1.23E-07	1YrCancer[	*	1.23E-07
353	564458.1	4153317	9901	DieselExhP	0.00058	1.03E-07	1YrCancer[	*	1.03E-07
354	564468.1	4153317	9901	DieselExhP	0.00061	1.08E-07	1YrCancer[	*	1.08E-07
355	564478.1	4153317	9901	DieselExhP	0.00065	1.16E-07	1YrCancer[	*	1.16E-07
356	564458.1	4153327	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07
357	564468.1	4153327	9901	DieselExhP	0.00061	1.08E-07	1YrCancer[	*	1.08E-07
358	564458.1	4153337	9901	DieselExhP	0.00057	1.01E-07	1YrCancer[	*	1.01E-07

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/20/2022 4:42:47 PM - Chronic Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	564798.1	4153037	9901	DieselExhP	0.00938	NonCancer	0.00E+00	0.00E+00	0.00E+00
2	564808.1	4153037	9901	DieselExhP	0.00988	NonCancer	0.00E+00	0.00E+00	0.00E+00
3	564788.1	4153047	9901	DieselExhP	0.00946	NonCancer	0.00E+00	0.00E+00	0.00E+00
4	564798.1	4153047	9901	DieselExhP	0.01008	NonCancer	0.00E+00	0.00E+00	0.00E+00
5	564808.1	4153047	9901	DieselExhP	0.01066	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	564818.1	4153047	9901	DieselExhP	0.01114	NonCancer	0.00E+00	0.00E+00	0.00E+00
7	564778.1	4153057	9901	DieselExhP	0.00936	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	564788.1	4153057	9901	DieselExhP	0.01011	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	564798.1	4153057	9901	DieselExhP	0.01083	NonCancer	0.00E+00	0.00E+00	0.00E+00
10	564808.1	4153057	9901	DieselExhP	0.0115	NonCancer	0.00E+00	0.00E+00	0.00E+00
11	564818.1	4153057	9901	DieselExhP	0.01207	NonCancer	0.00E+00	0.00E+00	0.00E+00
12	564768.1	4153067	9901	DieselExhP	0.00911	NonCancer	0.00E+00	0.00E+00	0.00E+00
13	564778.1	4153067	9901	DieselExhP	0.00996	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	564788.1	4153067	9901	DieselExhP	0.01082	NonCancer	0.00E+00	0.00E+00	0.00E+00
15	564798.1	4153067	9901	DieselExhP	0.01165	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	564808.1	4153067	9901	DieselExhP	0.01244	NonCancer	0.00E+00	0.00E+00	0.00E+00
17	564818.1	4153067	9901	DieselExhP	0.01312	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	564758.1	4153077	9901	DieselExhP	0.00874	NonCancer	0.00E+00	0.00E+00	0.00E+00
19	564768.1	4153077	9901	DieselExhP	0.00965	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	564778.1	4153077	9901	DieselExhP	0.01061	NonCancer	0.00E+00	0.00E+00	0.00E+00
21	564788.1	4153077	9901	DieselExhP	0.01159	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	564798.1	4153077	9901	DieselExhP	0.01255	NonCancer	0.00E+00	0.00E+00	0.00E+00
23	564808.1	4153077	9901	DieselExhP	0.01348	NonCancer	0.00E+00	0.00E+00	0.00E+00
24	564818.1	4153077	9901	DieselExhP	0.0143	NonCancer	0.00E+00	0.00E+00	0.00E+00
25	564748.1	4153087	9901	DieselExhP	0.00825	NonCancer	0.00E+00	0.00E+00	0.00E+00
26	564758.1	4153087	9901	DieselExhP	0.0092	NonCancer	0.00E+00	0.00E+00	0.00E+00
27	564768.1	4153087	9901	DieselExhP	0.01023	NonCancer	0.00E+00	0.00E+00	0.00E+00
28	564778.1	4153087	9901	DieselExhP	0.0113	NonCancer	0.00E+00	0.00E+00	0.00E+00
29	564788.1	4153087	9901	DieselExhP	0.01242	NonCancer	0.00E+00	0.00E+00	0.00E+00
30	564798.1	4153087	9901	DieselExhP	0.01352	NonCancer	0.00E+00	0.00E+00	0.00E+00
31	564808.1	4153087	9901	DieselExhP	0.0146	NonCancer	0.00E+00	0.00E+00	0.00E+00
32	564818.1	4153087	9901	DieselExhP	0.0156	NonCancer	0.00E+00	0.00E+00	0.00E+00
33	564548.1	4153097	9901	DieselExhP	0.00108	NonCancer	0.00E+00	0.00E+00	0.00E+00
34	564738.1	4153097	9901	DieselExhP	0.00766	NonCancer	0.00E+00	0.00E+00	0.00E+00
35	564748.1	4153097	9901	DieselExhP	0.00864	NonCancer	0.00E+00	0.00E+00	0.00E+00
36	564758.1	4153097	9901	DieselExhP	0.0097	NonCancer	0.00E+00	0.00E+00	0.00E+00
37	564768.1	4153097	9901	DieselExhP	0.01084	NonCancer	0.00E+00	0.00E+00	0.00E+00
38	564778.1	4153097	9901	DieselExhP	0.01205	NonCancer	0.00E+00	0.00E+00	0.00E+00
39	564788.1	4153097	9901	DieselExhP	0.01333	NonCancer	0.00E+00	0.00E+00	0.00E+00
40	564798.1	4153097	9901	DieselExhP	0.01458	NonCancer	0.00E+00	0.00E+00	0.00E+00
41	564808.1	4153097	9901	DieselExhP	0.01584	NonCancer	0.00E+00	0.00E+00	0.00E+00
42	564538.1	4153107	9901	DieselExhP	0.00101	NonCancer	0.00E+00	0.00E+00	0.00E+00
43	564548.1	4153107	9901	DieselExhP	0.00108	NonCancer	0.00E+00	0.00E+00	0.00E+00
44	564558.1	4153107	9901	DieselExhP	0.00117	NonCancer	0.00E+00	0.00E+00	0.00E+00
45	564718.1	4153107	9901	DieselExhP	0.00614	NonCancer	0.00E+00	0.00E+00	0.00E+00

46	564728.1	4153107	9901	DieselExhP	0.007	NonCancer	0.00E+00	0.00E+00	0.00E+00
47	564738.1	4153107	9901	DieselExhP	0.00796	NonCancer	0.00E+00	0.00E+00	0.00E+00
48	564748.1	4153107	9901	DieselExhP	0.00904	NonCancer	0.00E+00	0.00E+00	0.00E+00
49	564758.1	4153107	9901	DieselExhP	0.01022	NonCancer	0.00E+00	0.00E+00	0.00E+00
50	564768.1	4153107	9901	DieselExhP	0.0115	NonCancer	0.00E+00	0.00E+00	0.00E+00
51	564778.1	4153107	9901	DieselExhP	0.01285	NonCancer	0.00E+00	0.00E+00	0.00E+00
52	564788.1	4153107	9901	DieselExhP	0.01429	NonCancer	0.00E+00	0.00E+00	0.00E+00
53	564798.1	4153107	9901	DieselExhP	0.01573	NonCancer	0.00E+00	0.00E+00	0.00E+00
54	564528.1	4153117	9901	DieselExhP	0.00095	NonCancer	0.00E+00	0.00E+00	0.00E+00
55	564538.1	4153117	9901	DieselExhP	0.00102	NonCancer	0.00E+00	0.00E+00	0.00E+00
56	564548.1	4153117	9901	DieselExhP	0.00109	NonCancer	0.00E+00	0.00E+00	0.00E+00
57	564558.1	4153117	9901	DieselExhP	0.00117	NonCancer	0.00E+00	0.00E+00	0.00E+00
58	564568.1	4153117	9901	DieselExhP	0.00126	NonCancer	0.00E+00	0.00E+00	0.00E+00
59	564708.1	4153117	9901	DieselExhP	0.00551	NonCancer	0.00E+00	0.00E+00	0.00E+00
60	564718.1	4153117	9901	DieselExhP	0.00631	NonCancer	0.00E+00	0.00E+00	0.00E+00
61	564728.1	4153117	9901	DieselExhP	0.00723	NonCancer	0.00E+00	0.00E+00	0.00E+00
62	564738.1	4153117	9901	DieselExhP	0.00827	NonCancer	0.00E+00	0.00E+00	0.00E+00
63	564748.1	4153117	9901	DieselExhP	0.00945	NonCancer	0.00E+00	0.00E+00	0.00E+00
64	564758.1	4153117	9901	DieselExhP	0.01076	NonCancer	0.00E+00	0.00E+00	0.00E+00
65	564768.1	4153117	9901	DieselExhP	0.01216	NonCancer	0.00E+00	0.00E+00	0.00E+00
66	564778.1	4153117	9901	DieselExhP	0.01365	NonCancer	0.00E+00	0.00E+00	0.00E+00
67	564788.1	4153117	9901	DieselExhP	0.01525	NonCancer	0.00E+00	0.00E+00	0.00E+00
68	564528.1	4153127	9901	DieselExhP	0.00096	NonCancer	0.00E+00	0.00E+00	0.00E+00
69	564538.1	4153127	9901	DieselExhP	0.00102	NonCancer	0.00E+00	0.00E+00	0.00E+00
70	564548.1	4153127	9901	DieselExhP	0.0011	NonCancer	0.00E+00	0.00E+00	0.00E+00
71	564558.1	4153127	9901	DieselExhP	0.00118	NonCancer	0.00E+00	0.00E+00	0.00E+00
72	564568.1	4153127	9901	DieselExhP	0.00127	NonCancer	0.00E+00	0.00E+00	0.00E+00
73	564578.1	4153127	9901	DieselExhP	0.00137	NonCancer	0.00E+00	0.00E+00	0.00E+00
74	564698.1	4153127	9901	DieselExhP	0.0049	NonCancer	0.00E+00	0.00E+00	0.00E+00
75	564708.1	4153127	9901	DieselExhP	0.00562	NonCancer	0.00E+00	0.00E+00	0.00E+00
76	564718.1	4153127	9901	DieselExhP	0.00647	NonCancer	0.00E+00	0.00E+00	0.00E+00
77	564728.1	4153127	9901	DieselExhP	0.00745	NonCancer	0.00E+00	0.00E+00	0.00E+00
78	564738.1	4153127	9901	DieselExhP	0.00858	NonCancer	0.00E+00	0.00E+00	0.00E+00
79	564748.1	4153127	9901	DieselExhP	0.00987	NonCancer	0.00E+00	0.00E+00	0.00E+00
80	564758.1	4153127	9901	DieselExhP	0.01132	NonCancer	0.00E+00	0.00E+00	0.00E+00
81	564768.1	4153127	9901	DieselExhP	0.01287	NonCancer	0.00E+00	0.00E+00	0.00E+00
82	564778.1	4153127	9901	DieselExhP	0.01451	NonCancer	0.00E+00	0.00E+00	0.00E+00
83	564518.1	4153137	9901	DieselExhP	0.0009	NonCancer	0.00E+00	0.00E+00	0.00E+00
84	564528.1	4153137	9901	DieselExhP	0.00096	NonCancer	0.00E+00	0.00E+00	0.00E+00
85	564538.1	4153137	9901	DieselExhP	0.00103	NonCancer	0.00E+00	0.00E+00	0.00E+00
86	564548.1	4153137	9901	DieselExhP	0.0011	NonCancer	0.00E+00	0.00E+00	0.00E+00
87	564558.1	4153137	9901	DieselExhP	0.00118	NonCancer	0.00E+00	0.00E+00	0.00E+00
88	564568.1	4153137	9901	DieselExhP	0.00127	NonCancer	0.00E+00	0.00E+00	0.00E+00
89	564578.1	4153137	9901	DieselExhP	0.00138	NonCancer	0.00E+00	0.00E+00	0.00E+00
90	564588.1	4153137	9901	DieselExhP	0.00149	NonCancer	0.00E+00	0.00E+00	0.00E+00
91	564688.1	4153137	9901	DieselExhP	0.00434	NonCancer	0.00E+00	0.00E+00	0.00E+00
92	564698.1	4153137	9901	DieselExhP	0.00497	NonCancer	0.00E+00	0.00E+00	0.00E+00

93	564708.1	4153137	9901	DieselExhP	0.00573	NonCancer	0.00E+00	0.00E+00	0.00E+00
94	564718.1	4153137	9901	DieselExhP	0.00662	NonCancer	0.00E+00	0.00E+00	0.00E+00
95	564728.1	4153137	9901	DieselExhP	0.00767	NonCancer	0.00E+00	0.00E+00	0.00E+00
96	564738.1	4153137	9901	DieselExhP	0.0089	NonCancer	0.00E+00	0.00E+00	0.00E+00
97	564748.1	4153137	9901	DieselExhP	0.01031	NonCancer	0.00E+00	0.00E+00	0.00E+00
98	564758.1	4153137	9901	DieselExhP	0.01191	NonCancer	0.00E+00	0.00E+00	0.00E+00
99	564768.1	4153137	9901	DieselExhP	0.01363	NonCancer	0.00E+00	0.00E+00	0.00E+00
100	564508.1	4153147	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
101	564518.1	4153147	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
102	564528.1	4153147	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
103	564538.1	4153147	9901	DieselExhP	0.00103	NonCancer	0.00E+00	0.00E+00	0.00E+00
104	564548.1	4153147	9901	DieselExhP	0.00111	NonCancer	0.00E+00	0.00E+00	0.00E+00
105	564558.1	4153147	9901	DieselExhP	0.00119	NonCancer	0.00E+00	0.00E+00	0.00E+00
106	564568.1	4153147	9901	DieselExhP	0.00128	NonCancer	0.00E+00	0.00E+00	0.00E+00
107	564578.1	4153147	9901	DieselExhP	0.00138	NonCancer	0.00E+00	0.00E+00	0.00E+00
108	564588.1	4153147	9901	DieselExhP	0.0015	NonCancer	0.00E+00	0.00E+00	0.00E+00
109	564598.1	4153147	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
110	564678.1	4153147	9901	DieselExhP	0.00382	NonCancer	0.00E+00	0.00E+00	0.00E+00
111	564688.1	4153147	9901	DieselExhP	0.00438	NonCancer	0.00E+00	0.00E+00	0.00E+00
112	564698.1	4153147	9901	DieselExhP	0.00503	NonCancer	0.00E+00	0.00E+00	0.00E+00
113	564708.1	4153147	9901	DieselExhP	0.00582	NonCancer	0.00E+00	0.00E+00	0.00E+00
114	564718.1	4153147	9901	DieselExhP	0.00676	NonCancer	0.00E+00	0.00E+00	0.00E+00
115	564728.1	4153147	9901	DieselExhP	0.00789	NonCancer	0.00E+00	0.00E+00	0.00E+00
116	564738.1	4153147	9901	DieselExhP	0.00922	NonCancer	0.00E+00	0.00E+00	0.00E+00
117	564748.1	4153147	9901	DieselExhP	0.01073	NonCancer	0.00E+00	0.00E+00	0.00E+00
118	564758.1	4153147	9901	DieselExhP	0.01246	NonCancer	0.00E+00	0.00E+00	0.00E+00
119	564498.1	4153157	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
120	564508.1	4153157	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
121	564518.1	4153157	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
122	564528.1	4153157	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
123	564538.1	4153157	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
124	564548.1	4153157	9901	DieselExhP	0.00111	NonCancer	0.00E+00	0.00E+00	0.00E+00
125	564558.1	4153157	9901	DieselExhP	0.00119	NonCancer	0.00E+00	0.00E+00	0.00E+00
126	564568.1	4153157	9901	DieselExhP	0.00128	NonCancer	0.00E+00	0.00E+00	0.00E+00
127	564578.1	4153157	9901	DieselExhP	0.00139	NonCancer	0.00E+00	0.00E+00	0.00E+00
128	564588.1	4153157	9901	DieselExhP	0.0015	NonCancer	0.00E+00	0.00E+00	0.00E+00
129	564598.1	4153157	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
130	564608.1	4153157	9901	DieselExhP	0.00179	NonCancer	0.00E+00	0.00E+00	0.00E+00
131	564668.1	4153157	9901	DieselExhP	0.00337	NonCancer	0.00E+00	0.00E+00	0.00E+00
132	564678.1	4153157	9901	DieselExhP	0.00384	NonCancer	0.00E+00	0.00E+00	0.00E+00
133	564688.1	4153157	9901	DieselExhP	0.00441	NonCancer	0.00E+00	0.00E+00	0.00E+00
134	564698.1	4153157	9901	DieselExhP	0.00508	NonCancer	0.00E+00	0.00E+00	0.00E+00
135	564708.1	4153157	9901	DieselExhP	0.0059	NonCancer	0.00E+00	0.00E+00	0.00E+00
136	564718.1	4153157	9901	DieselExhP	0.00689	NonCancer	0.00E+00	0.00E+00	0.00E+00
137	564728.1	4153157	9901	DieselExhP	0.00809	NonCancer	0.00E+00	0.00E+00	0.00E+00
138	564738.1	4153157	9901	DieselExhP	0.00953	NonCancer	0.00E+00	0.00E+00	0.00E+00
139	564748.1	4153157	9901	DieselExhP	0.01116	NonCancer	0.00E+00	0.00E+00	0.00E+00

140	564488.1	4153167	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
141	564498.1	4153167	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
142	564508.1	4153167	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
143	564518.1	4153167	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
144	564528.1	4153167	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
145	564538.1	4153167	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
146	564548.1	4153167	9901	DieselExhP	0.00111	NonCancer	0.00E+00	0.00E+00	0.00E+00
147	564558.1	4153167	9901	DieselExhP	0.0012	NonCancer	0.00E+00	0.00E+00	0.00E+00
148	564568.1	4153167	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
149	564578.1	4153167	9901	DieselExhP	0.00139	NonCancer	0.00E+00	0.00E+00	0.00E+00
150	564588.1	4153167	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
151	564598.1	4153167	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
152	564608.1	4153167	9901	DieselExhP	0.00179	NonCancer	0.00E+00	0.00E+00	0.00E+00
153	564618.1	4153167	9901	DieselExhP	0.00197	NonCancer	0.00E+00	0.00E+00	0.00E+00
154	564658.1	4153167	9901	DieselExhP	0.00299	NonCancer	0.00E+00	0.00E+00	0.00E+00
155	564668.1	4153167	9901	DieselExhP	0.00338	NonCancer	0.00E+00	0.00E+00	0.00E+00
156	564678.1	4153167	9901	DieselExhP	0.00385	NonCancer	0.00E+00	0.00E+00	0.00E+00
157	564688.1	4153167	9901	DieselExhP	0.00443	NonCancer	0.00E+00	0.00E+00	0.00E+00
158	564698.1	4153167	9901	DieselExhP	0.00512	NonCancer	0.00E+00	0.00E+00	0.00E+00
159	564708.1	4153167	9901	DieselExhP	0.00596	NonCancer	0.00E+00	0.00E+00	0.00E+00
160	564718.1	4153167	9901	DieselExhP	0.007	NonCancer	0.00E+00	0.00E+00	0.00E+00
161	564728.1	4153167	9901	DieselExhP	0.00828	NonCancer	0.00E+00	0.00E+00	0.00E+00
162	564738.1	4153167	9901	DieselExhP	0.00983	NonCancer	0.00E+00	0.00E+00	0.00E+00
163	564478.1	4153177	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
164	564488.1	4153177	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
165	564498.1	4153177	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
166	564508.1	4153177	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
167	564518.1	4153177	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
168	564528.1	4153177	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
169	564538.1	4153177	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
170	564548.1	4153177	9901	DieselExhP	0.00112	NonCancer	0.00E+00	0.00E+00	0.00E+00
171	564558.1	4153177	9901	DieselExhP	0.0012	NonCancer	0.00E+00	0.00E+00	0.00E+00
172	564568.1	4153177	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
173	564578.1	4153177	9901	DieselExhP	0.00139	NonCancer	0.00E+00	0.00E+00	0.00E+00
174	564588.1	4153177	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
175	564598.1	4153177	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
176	564608.1	4153177	9901	DieselExhP	0.0018	NonCancer	0.00E+00	0.00E+00	0.00E+00
177	564618.1	4153177	9901	DieselExhP	0.00197	NonCancer	0.00E+00	0.00E+00	0.00E+00
178	564648.1	4153177	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
179	564658.1	4153177	9901	DieselExhP	0.00299	NonCancer	0.00E+00	0.00E+00	0.00E+00
180	564668.1	4153177	9901	DieselExhP	0.00338	NonCancer	0.00E+00	0.00E+00	0.00E+00
181	564678.1	4153177	9901	DieselExhP	0.00386	NonCancer	0.00E+00	0.00E+00	0.00E+00
182	564688.1	4153177	9901	DieselExhP	0.00444	NonCancer	0.00E+00	0.00E+00	0.00E+00
183	564698.1	4153177	9901	DieselExhP	0.00514	NonCancer	0.00E+00	0.00E+00	0.00E+00
184	564708.1	4153177	9901	DieselExhP	0.00601	NonCancer	0.00E+00	0.00E+00	0.00E+00
185	564718.1	4153177	9901	DieselExhP	0.00708	NonCancer	0.00E+00	0.00E+00	0.00E+00
186	564728.1	4153177	9901	DieselExhP	0.0084	NonCancer	0.00E+00	0.00E+00	0.00E+00

187	564738.1	4153177	9901	DieselExhP	0.01002	NonCancer	0.00E+00	0.00E+00	0.00E+00
188	564468.1	4153187	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
189	564478.1	4153187	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
190	564488.1	4153187	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
191	564498.1	4153187	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
192	564508.1	4153187	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
193	564518.1	4153187	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
194	564528.1	4153187	9901	DieselExhP	0.00098	NonCancer	0.00E+00	0.00E+00	0.00E+00
195	564538.1	4153187	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
196	564548.1	4153187	9901	DieselExhP	0.00112	NonCancer	0.00E+00	0.00E+00	0.00E+00
197	564558.1	4153187	9901	DieselExhP	0.0012	NonCancer	0.00E+00	0.00E+00	0.00E+00
198	564568.1	4153187	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
199	564578.1	4153187	9901	DieselExhP	0.0014	NonCancer	0.00E+00	0.00E+00	0.00E+00
200	564588.1	4153187	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
201	564598.1	4153187	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
202	564608.1	4153187	9901	DieselExhP	0.0018	NonCancer	0.00E+00	0.00E+00	0.00E+00
203	564618.1	4153187	9901	DieselExhP	0.00197	NonCancer	0.00E+00	0.00E+00	0.00E+00
204	564648.1	4153187	9901	DieselExhP	0.00267	NonCancer	0.00E+00	0.00E+00	0.00E+00
205	564658.1	4153187	9901	DieselExhP	0.00299	NonCancer	0.00E+00	0.00E+00	0.00E+00
206	564668.1	4153187	9901	DieselExhP	0.00338	NonCancer	0.00E+00	0.00E+00	0.00E+00
207	564678.1	4153187	9901	DieselExhP	0.00385	NonCancer	0.00E+00	0.00E+00	0.00E+00
208	564688.1	4153187	9901	DieselExhP	0.00443	NonCancer	0.00E+00	0.00E+00	0.00E+00
209	564698.1	4153187	9901	DieselExhP	0.00515	NonCancer	0.00E+00	0.00E+00	0.00E+00
210	564708.1	4153187	9901	DieselExhP	0.00604	NonCancer	0.00E+00	0.00E+00	0.00E+00
211	564718.1	4153187	9901	DieselExhP	0.00714	NonCancer	0.00E+00	0.00E+00	0.00E+00
212	564728.1	4153187	9901	DieselExhP	0.00849	NonCancer	0.00E+00	0.00E+00	0.00E+00
213	564458.1	4153197	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
214	564468.1	4153197	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
215	564478.1	4153197	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
216	564488.1	4153197	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
217	564498.1	4153197	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
218	564508.1	4153197	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
219	564518.1	4153197	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
220	564528.1	4153197	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
221	564538.1	4153197	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
222	564548.1	4153197	9901	DieselExhP	0.00112	NonCancer	0.00E+00	0.00E+00	0.00E+00
223	564558.1	4153197	9901	DieselExhP	0.0012	NonCancer	0.00E+00	0.00E+00	0.00E+00
224	564568.1	4153197	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
225	564578.1	4153197	9901	DieselExhP	0.0014	NonCancer	0.00E+00	0.00E+00	0.00E+00
226	564588.1	4153197	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
227	564598.1	4153197	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
228	564608.1	4153197	9901	DieselExhP	0.0018	NonCancer	0.00E+00	0.00E+00	0.00E+00
229	564658.1	4153197	9901	DieselExhP	0.00298	NonCancer	0.00E+00	0.00E+00	0.00E+00
230	564668.1	4153197	9901	DieselExhP	0.00337	NonCancer	0.00E+00	0.00E+00	0.00E+00
231	564678.1	4153197	9901	DieselExhP	0.00384	NonCancer	0.00E+00	0.00E+00	0.00E+00
232	564688.1	4153197	9901	DieselExhP	0.00442	NonCancer	0.00E+00	0.00E+00	0.00E+00
233	564698.1	4153197	9901	DieselExhP	0.00514	NonCancer	0.00E+00	0.00E+00	0.00E+00

234	564708.1	4153197	9901	DieselExhP	0.00605	NonCancer	0.00E+00	0.00E+00	0.00E+00
235	564718.1	4153197	9901	DieselExhP	0.00717	NonCancer	0.00E+00	0.00E+00	0.00E+00
236	564458.1	4153207	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
237	564468.1	4153207	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
238	564478.1	4153207	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
239	564488.1	4153207	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
240	564498.1	4153207	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
241	564508.1	4153207	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
242	564518.1	4153207	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
243	564528.1	4153207	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
244	564538.1	4153207	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
245	564548.1	4153207	9901	DieselExhP	0.00112	NonCancer	0.00E+00	0.00E+00	0.00E+00
246	564558.1	4153207	9901	DieselExhP	0.0012	NonCancer	0.00E+00	0.00E+00	0.00E+00
247	564568.1	4153207	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
248	564578.1	4153207	9901	DieselExhP	0.00139	NonCancer	0.00E+00	0.00E+00	0.00E+00
249	564588.1	4153207	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
250	564598.1	4153207	9901	DieselExhP	0.00164	NonCancer	0.00E+00	0.00E+00	0.00E+00
251	564668.1	4153207	9901	DieselExhP	0.00336	NonCancer	0.00E+00	0.00E+00	0.00E+00
252	564678.1	4153207	9901	DieselExhP	0.00383	NonCancer	0.00E+00	0.00E+00	0.00E+00
253	564688.1	4153207	9901	DieselExhP	0.00441	NonCancer	0.00E+00	0.00E+00	0.00E+00
254	564698.1	4153207	9901	DieselExhP	0.00511	NonCancer	0.00E+00	0.00E+00	0.00E+00
255	564708.1	4153207	9901	DieselExhP	0.00599	NonCancer	0.00E+00	0.00E+00	0.00E+00
256	564458.1	4153217	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
257	564468.1	4153217	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
258	564478.1	4153217	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
259	564488.1	4153217	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
260	564498.1	4153217	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
261	564508.1	4153217	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
262	564518.1	4153217	9901	DieselExhP	0.00091	NonCancer	0.00E+00	0.00E+00	0.00E+00
263	564528.1	4153217	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00
264	564538.1	4153217	9901	DieselExhP	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
265	564548.1	4153217	9901	DieselExhP	0.00111	NonCancer	0.00E+00	0.00E+00	0.00E+00
266	564558.1	4153217	9901	DieselExhP	0.00119	NonCancer	0.00E+00	0.00E+00	0.00E+00
267	564568.1	4153217	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
268	564578.1	4153217	9901	DieselExhP	0.00139	NonCancer	0.00E+00	0.00E+00	0.00E+00
269	564588.1	4153217	9901	DieselExhP	0.00151	NonCancer	0.00E+00	0.00E+00	0.00E+00
270	564678.1	4153217	9901	DieselExhP	0.00381	NonCancer	0.00E+00	0.00E+00	0.00E+00
271	564688.1	4153217	9901	DieselExhP	0.00439	NonCancer	0.00E+00	0.00E+00	0.00E+00
272	564698.1	4153217	9901	DieselExhP	0.00506	NonCancer	0.00E+00	0.00E+00	0.00E+00
273	564458.1	4153227	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
274	564468.1	4153227	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
275	564478.1	4153227	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
276	564488.1	4153227	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
277	564498.1	4153227	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
278	564508.1	4153227	9901	DieselExhP	0.00085	NonCancer	0.00E+00	0.00E+00	0.00E+00
279	564518.1	4153227	9901	DieselExhP	0.0009	NonCancer	0.00E+00	0.00E+00	0.00E+00
280	564528.1	4153227	9901	DieselExhP	0.00097	NonCancer	0.00E+00	0.00E+00	0.00E+00

281	564538.1	4153227	9901	DieselExhP	0.00103	NonCancer	0.00E+00	0.00E+00	0.00E+00
282	564548.1	4153227	9901	DieselExhP	0.00111	NonCancer	0.00E+00	0.00E+00	0.00E+00
283	564558.1	4153227	9901	DieselExhP	0.00119	NonCancer	0.00E+00	0.00E+00	0.00E+00
284	564568.1	4153227	9901	DieselExhP	0.00128	NonCancer	0.00E+00	0.00E+00	0.00E+00
285	564578.1	4153227	9901	DieselExhP	0.00138	NonCancer	0.00E+00	0.00E+00	0.00E+00
286	564688.1	4153227	9901	DieselExhP	0.00436	NonCancer	0.00E+00	0.00E+00	0.00E+00
287	564458.1	4153237	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
288	564468.1	4153237	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
289	564478.1	4153237	9901	DieselExhP	0.0007	NonCancer	0.00E+00	0.00E+00	0.00E+00
290	564488.1	4153237	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
291	564498.1	4153237	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
292	564508.1	4153237	9901	DieselExhP	0.00084	NonCancer	0.00E+00	0.00E+00	0.00E+00
293	564518.1	4153237	9901	DieselExhP	0.0009	NonCancer	0.00E+00	0.00E+00	0.00E+00
294	564528.1	4153237	9901	DieselExhP	0.00096	NonCancer	0.00E+00	0.00E+00	0.00E+00
295	564538.1	4153237	9901	DieselExhP	0.00103	NonCancer	0.00E+00	0.00E+00	0.00E+00
296	564548.1	4153237	9901	DieselExhP	0.0011	NonCancer	0.00E+00	0.00E+00	0.00E+00
297	564558.1	4153237	9901	DieselExhP	0.00118	NonCancer	0.00E+00	0.00E+00	0.00E+00
298	564568.1	4153237	9901	DieselExhP	0.00127	NonCancer	0.00E+00	0.00E+00	0.00E+00
299	564458.1	4153247	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
300	564468.1	4153247	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
301	564478.1	4153247	9901	DieselExhP	0.0007	NonCancer	0.00E+00	0.00E+00	0.00E+00
302	564488.1	4153247	9901	DieselExhP	0.00074	NonCancer	0.00E+00	0.00E+00	0.00E+00
303	564498.1	4153247	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
304	564508.1	4153247	9901	DieselExhP	0.00084	NonCancer	0.00E+00	0.00E+00	0.00E+00
305	564518.1	4153247	9901	DieselExhP	0.00089	NonCancer	0.00E+00	0.00E+00	0.00E+00
306	564528.1	4153247	9901	DieselExhP	0.00095	NonCancer	0.00E+00	0.00E+00	0.00E+00
307	564538.1	4153247	9901	DieselExhP	0.00102	NonCancer	0.00E+00	0.00E+00	0.00E+00
308	564548.1	4153247	9901	DieselExhP	0.00109	NonCancer	0.00E+00	0.00E+00	0.00E+00
309	564558.1	4153247	9901	DieselExhP	0.00117	NonCancer	0.00E+00	0.00E+00	0.00E+00
310	564458.1	4153257	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
311	564468.1	4153257	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
312	564478.1	4153257	9901	DieselExhP	0.00069	NonCancer	0.00E+00	0.00E+00	0.00E+00
313	564488.1	4153257	9901	DieselExhP	0.00074	NonCancer	0.00E+00	0.00E+00	0.00E+00
314	564498.1	4153257	9901	DieselExhP	0.00078	NonCancer	0.00E+00	0.00E+00	0.00E+00
315	564508.1	4153257	9901	DieselExhP	0.00083	NonCancer	0.00E+00	0.00E+00	0.00E+00
316	564518.1	4153257	9901	DieselExhP	0.00088	NonCancer	0.00E+00	0.00E+00	0.00E+00
317	564528.1	4153257	9901	DieselExhP	0.00094	NonCancer	0.00E+00	0.00E+00	0.00E+00
318	564538.1	4153257	9901	DieselExhP	0.00101	NonCancer	0.00E+00	0.00E+00	0.00E+00
319	564548.1	4153257	9901	DieselExhP	0.00108	NonCancer	0.00E+00	0.00E+00	0.00E+00
320	564458.1	4153267	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
321	564468.1	4153267	9901	DieselExhP	0.00065	NonCancer	0.00E+00	0.00E+00	0.00E+00
322	564478.1	4153267	9901	DieselExhP	0.00069	NonCancer	0.00E+00	0.00E+00	0.00E+00
323	564488.1	4153267	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
324	564498.1	4153267	9901	DieselExhP	0.00077	NonCancer	0.00E+00	0.00E+00	0.00E+00
325	564508.1	4153267	9901	DieselExhP	0.00082	NonCancer	0.00E+00	0.00E+00	0.00E+00
326	564518.1	4153267	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
327	564528.1	4153267	9901	DieselExhP	0.00093	NonCancer	0.00E+00	0.00E+00	0.00E+00

328	564538.1	4153267	9901	DieselExhP	0.001	NonCancer	0.00E+00	0.00E+00	0.00E+00
329	564458.1	4153277	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
330	564468.1	4153277	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
331	564478.1	4153277	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
332	564488.1	4153277	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
333	564498.1	4153277	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
334	564508.1	4153277	9901	DieselExhP	0.00081	NonCancer	0.00E+00	0.00E+00	0.00E+00
335	564518.1	4153277	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
336	564528.1	4153277	9901	DieselExhP	0.00092	NonCancer	0.00E+00	0.00E+00	0.00E+00
337	564458.1	4153287	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
338	564468.1	4153287	9901	DieselExhP	0.00064	NonCancer	0.00E+00	0.00E+00	0.00E+00
339	564478.1	4153287	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
340	564488.1	4153287	9901	DieselExhP	0.00071	NonCancer	0.00E+00	0.00E+00	0.00E+00
341	564498.1	4153287	9901	DieselExhP	0.00076	NonCancer	0.00E+00	0.00E+00	0.00E+00
342	564508.1	4153287	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
343	564518.1	4153287	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
344	564458.1	4153297	9901	DieselExhP	0.0006	NonCancer	0.00E+00	0.00E+00	0.00E+00
345	564468.1	4153297	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
346	564478.1	4153297	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
347	564488.1	4153297	9901	DieselExhP	0.0007	NonCancer	0.00E+00	0.00E+00	0.00E+00
348	564498.1	4153297	9901	DieselExhP	0.00075	NonCancer	0.00E+00	0.00E+00	0.00E+00
349	564458.1	4153307	9901	DieselExhP	0.00059	NonCancer	0.00E+00	0.00E+00	0.00E+00
350	564468.1	4153307	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
351	564478.1	4153307	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
352	564488.1	4153307	9901	DieselExhP	0.00069	NonCancer	0.00E+00	0.00E+00	0.00E+00
353	564458.1	4153317	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
354	564468.1	4153317	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
355	564478.1	4153317	9901	DieselExhP	0.00065	NonCancer	0.00E+00	0.00E+00	0.00E+00
356	564458.1	4153327	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
357	564468.1	4153327	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
358	564458.1	4153337	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00

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KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	0.00E+00	1.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DC	WATER_DC	FISH_DOSE	CROP_DOS	BEEF_DOSE
0.00E+00	*	9.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.21E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.17E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.24E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.31E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.16E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.13E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.24E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.56E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.21E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	7.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.22E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.13E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	5.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.36E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.25E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	1.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	6.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DAIRY_DOS	PIG_DOSE	CHICKEN_D	EGG_DOSE	1ST_DRIVE	2ND_DRIVE	3RD_DRIVE	PASTURE_C	FISH_CONC	WATER_CC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

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*HARP - HRACalc v21081 4/20/2022 4:43:39 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00454	1.77E-07	1YrCancer[	*	1.77E-07
2	564808.1	4153037	9901	DieselExhP	0.00478	1.86E-07	1YrCancer[	*	1.86E-07
3	564788.1	4153047	9901	DieselExhP	0.00457	1.78E-07	1YrCancer[	*	1.78E-07
4	564798.1	4153047	9901	DieselExhP	0.00487	1.90E-07	1YrCancer[	*	1.90E-07
5	564808.1	4153047	9901	DieselExhP	0.00515	2.00E-07	1YrCancer[	*	2.00E-07
6	564818.1	4153047	9901	DieselExhP	0.00539	2.10E-07	1YrCancer[	*	2.10E-07
7	564778.1	4153057	9901	DieselExhP	0.00453	1.76E-07	1YrCancer[	*	1.76E-07
8	564788.1	4153057	9901	DieselExhP	0.00489	1.90E-07	1YrCancer[	*	1.90E-07
9	564798.1	4153057	9901	DieselExhP	0.00524	2.04E-07	1YrCancer[	*	2.04E-07
10	564808.1	4153057	9901	DieselExhP	0.00556	2.16E-07	1YrCancer[	*	2.16E-07
11	564818.1	4153057	9901	DieselExhP	0.00584	2.27E-07	1YrCancer[	*	2.27E-07
12	564768.1	4153067	9901	DieselExhP	0.00441	1.72E-07	1YrCancer[	*	1.72E-07
13	564778.1	4153067	9901	DieselExhP	0.00482	1.88E-07	1YrCancer[	*	1.88E-07
14	564788.1	4153067	9901	DieselExhP	0.00523	2.04E-07	1YrCancer[	*	2.04E-07
15	564798.1	4153067	9901	DieselExhP	0.00563	2.19E-07	1YrCancer[	*	2.19E-07
16	564808.1	4153067	9901	DieselExhP	0.00602	2.34E-07	1YrCancer[	*	2.34E-07
17	564818.1	4153067	9901	DieselExhP	0.00635	2.47E-07	1YrCancer[	*	2.47E-07
18	564758.1	4153077	9901	DieselExhP	0.00423	1.65E-07	1YrCancer[	*	1.65E-07
19	564768.1	4153077	9901	DieselExhP	0.00467	1.82E-07	1YrCancer[	*	1.82E-07
20	564778.1	4153077	9901	DieselExhP	0.00513	2.00E-07	1YrCancer[	*	2.00E-07
21	564788.1	4153077	9901	DieselExhP	0.00561	2.18E-07	1YrCancer[	*	2.18E-07
22	564798.1	4153077	9901	DieselExhP	0.00607	2.36E-07	1YrCancer[	*	2.36E-07
23	564808.1	4153077	9901	DieselExhP	0.00652	2.54E-07	1YrCancer[	*	2.54E-07
24	564818.1	4153077	9901	DieselExhP	0.00692	2.69E-07	1YrCancer[	*	2.69E-07
25	564748.1	4153087	9901	DieselExhP	0.00399	1.55E-07	1YrCancer[	*	1.55E-07
26	564758.1	4153087	9901	DieselExhP	0.00445	1.73E-07	1YrCancer[	*	1.73E-07
27	564768.1	4153087	9901	DieselExhP	0.00495	1.93E-07	1YrCancer[	*	1.93E-07
28	564778.1	4153087	9901	DieselExhP	0.00547	2.13E-07	1YrCancer[	*	2.13E-07
29	564788.1	4153087	9901	DieselExhP	0.00601	2.34E-07	1YrCancer[	*	2.34E-07
30	564798.1	4153087	9901	DieselExhP	0.00654	2.55E-07	1YrCancer[	*	2.55E-07
31	564808.1	4153087	9901	DieselExhP	0.00706	2.75E-07	1YrCancer[	*	2.75E-07
32	564818.1	4153087	9901	DieselExhP	0.00754	2.93E-07	1YrCancer[	*	2.93E-07
33	564548.1	4153097	9901	DieselExhP	0.00052	2.02E-08	1YrCancer[	*	2.02E-08
34	564738.1	4153097	9901	DieselExhP	0.0037	1.44E-07	1YrCancer[	*	1.44E-07
35	564748.1	4153097	9901	DieselExhP	0.00418	1.63E-07	1YrCancer[	*	1.63E-07
36	564758.1	4153097	9901	DieselExhP	0.00469	1.83E-07	1YrCancer[	*	1.83E-07
37	564768.1	4153097	9901	DieselExhP	0.00524	2.04E-07	1YrCancer[	*	2.04E-07
38	564778.1	4153097	9901	DieselExhP	0.00583	2.27E-07	1YrCancer[	*	2.27E-07
39	564788.1	4153097	9901	DieselExhP	0.00645	2.51E-07	1YrCancer[	*	2.51E-07
40	564798.1	4153097	9901	DieselExhP	0.00705	2.74E-07	1YrCancer[	*	2.74E-07
41	564808.1	4153097	9901	DieselExhP	0.00766	2.98E-07	1YrCancer[	*	2.98E-07
42	564538.1	4153107	9901	DieselExhP	0.00049	1.91E-08	1YrCancer[	*	1.91E-08
43	564548.1	4153107	9901	DieselExhP	0.00052	2.02E-08	1YrCancer[	*	2.02E-08
44	564558.1	4153107	9901	DieselExhP	0.00056	2.18E-08	1YrCancer[	*	2.18E-08
45	564718.1	4153107	9901	DieselExhP	0.00297	1.16E-07	1YrCancer[	*	1.16E-07

46	564728.1	4153107	9901	DieselExhP	0.00339	1.32E-07	1YrCancer[	*	1.32E-07
47	564738.1	4153107	9901	DieselExhP	0.00385	1.50E-07	1YrCancer[	*	1.50E-07
48	564748.1	4153107	9901	DieselExhP	0.00437	1.70E-07	1YrCancer[	*	1.70E-07
49	564758.1	4153107	9901	DieselExhP	0.00494	1.92E-07	1YrCancer[	*	1.92E-07
50	564768.1	4153107	9901	DieselExhP	0.00556	2.16E-07	1YrCancer[	*	2.16E-07
51	564778.1	4153107	9901	DieselExhP	0.00621	2.42E-07	1YrCancer[	*	2.42E-07
52	564788.1	4153107	9901	DieselExhP	0.00691	2.69E-07	1YrCancer[	*	2.69E-07
53	564798.1	4153107	9901	DieselExhP	0.00761	2.96E-07	1YrCancer[	*	2.96E-07
54	564528.1	4153117	9901	DieselExhP	0.00046	1.79E-08	1YrCancer[	*	1.79E-08
55	564538.1	4153117	9901	DieselExhP	0.00049	1.91E-08	1YrCancer[	*	1.91E-08
56	564548.1	4153117	9901	DieselExhP	0.00053	2.06E-08	1YrCancer[	*	2.06E-08
57	564558.1	4153117	9901	DieselExhP	0.00057	2.22E-08	1YrCancer[	*	2.22E-08
58	564568.1	4153117	9901	DieselExhP	0.00061	2.37E-08	1YrCancer[	*	2.37E-08
59	564708.1	4153117	9901	DieselExhP	0.00266	1.04E-07	1YrCancer[	*	1.04E-07
60	564718.1	4153117	9901	DieselExhP	0.00305	1.19E-07	1YrCancer[	*	1.19E-07
61	564728.1	4153117	9901	DieselExhP	0.00349	1.36E-07	1YrCancer[	*	1.36E-07
62	564738.1	4153117	9901	DieselExhP	0.004	1.56E-07	1YrCancer[	*	1.56E-07
63	564748.1	4153117	9901	DieselExhP	0.00457	1.78E-07	1YrCancer[	*	1.78E-07
64	564758.1	4153117	9901	DieselExhP	0.0052	2.02E-07	1YrCancer[	*	2.02E-07
65	564768.1	4153117	9901	DieselExhP	0.00588	2.29E-07	1YrCancer[	*	2.29E-07
66	564778.1	4153117	9901	DieselExhP	0.0066	2.57E-07	1YrCancer[	*	2.57E-07
67	564788.1	4153117	9901	DieselExhP	0.00738	2.87E-07	1YrCancer[	*	2.87E-07
68	564528.1	4153127	9901	DieselExhP	0.00046	1.79E-08	1YrCancer[	*	1.79E-08
69	564538.1	4153127	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
70	564548.1	4153127	9901	DieselExhP	0.00053	2.06E-08	1YrCancer[	*	2.06E-08
71	564558.1	4153127	9901	DieselExhP	0.00057	2.22E-08	1YrCancer[	*	2.22E-08
72	564568.1	4153127	9901	DieselExhP	0.00061	2.37E-08	1YrCancer[	*	2.37E-08
73	564578.1	4153127	9901	DieselExhP	0.00066	2.57E-08	1YrCancer[	*	2.57E-08
74	564698.1	4153127	9901	DieselExhP	0.00237	9.22E-08	1YrCancer[	*	9.22E-08
75	564708.1	4153127	9901	DieselExhP	0.00272	1.06E-07	1YrCancer[	*	1.06E-07
76	564718.1	4153127	9901	DieselExhP	0.00313	1.22E-07	1YrCancer[	*	1.22E-07
77	564728.1	4153127	9901	DieselExhP	0.0036	1.40E-07	1YrCancer[	*	1.40E-07
78	564738.1	4153127	9901	DieselExhP	0.00415	1.62E-07	1YrCancer[	*	1.62E-07
79	564748.1	4153127	9901	DieselExhP	0.00477	1.86E-07	1YrCancer[	*	1.86E-07
80	564758.1	4153127	9901	DieselExhP	0.00547	2.13E-07	1YrCancer[	*	2.13E-07
81	564768.1	4153127	9901	DieselExhP	0.00623	2.42E-07	1YrCancer[	*	2.42E-07
82	564778.1	4153127	9901	DieselExhP	0.00702	2.73E-07	1YrCancer[	*	2.73E-07
83	564518.1	4153137	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
84	564528.1	4153137	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
85	564538.1	4153137	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
86	564548.1	4153137	9901	DieselExhP	0.00053	2.06E-08	1YrCancer[	*	2.06E-08
87	564558.1	4153137	9901	DieselExhP	0.00057	2.22E-08	1YrCancer[	*	2.22E-08
88	564568.1	4153137	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
89	564578.1	4153137	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
90	564588.1	4153137	9901	DieselExhP	0.00072	2.80E-08	1YrCancer[	*	2.80E-08
91	564688.1	4153137	9901	DieselExhP	0.0021	8.17E-08	1YrCancer[	*	8.17E-08
92	564698.1	4153137	9901	DieselExhP	0.0024	9.34E-08	1YrCancer[	*	9.34E-08

93	564708.1	4153137	9901	DieselExhP	0.00277	1.08E-07	1YrCancer[	*	1.08E-07
94	564718.1	4153137	9901	DieselExhP	0.0032	1.25E-07	1YrCancer[	*	1.25E-07
95	564728.1	4153137	9901	DieselExhP	0.00371	1.44E-07	1YrCancer[	*	1.44E-07
96	564738.1	4153137	9901	DieselExhP	0.0043	1.67E-07	1YrCancer[	*	1.67E-07
97	564748.1	4153137	9901	DieselExhP	0.00499	1.94E-07	1YrCancer[	*	1.94E-07
98	564758.1	4153137	9901	DieselExhP	0.00576	2.24E-07	1YrCancer[	*	2.24E-07
99	564768.1	4153137	9901	DieselExhP	0.00659	2.57E-07	1YrCancer[	*	2.57E-07
100	564508.1	4153147	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
101	564518.1	4153147	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
102	564528.1	4153147	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
103	564538.1	4153147	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
104	564548.1	4153147	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
105	564558.1	4153147	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
106	564568.1	4153147	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
107	564578.1	4153147	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
108	564588.1	4153147	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
109	564598.1	4153147	9901	DieselExhP	0.00079	3.07E-08	1YrCancer[	*	3.07E-08
110	564678.1	4153147	9901	DieselExhP	0.00185	7.20E-08	1YrCancer[	*	7.20E-08
111	564688.1	4153147	9901	DieselExhP	0.00212	8.25E-08	1YrCancer[	*	8.25E-08
112	564698.1	4153147	9901	DieselExhP	0.00243	9.46E-08	1YrCancer[	*	9.46E-08
113	564708.1	4153147	9901	DieselExhP	0.00281	1.09E-07	1YrCancer[	*	1.09E-07
114	564718.1	4153147	9901	DieselExhP	0.00327	1.27E-07	1YrCancer[	*	1.27E-07
115	564728.1	4153147	9901	DieselExhP	0.00381	1.48E-07	1YrCancer[	*	1.48E-07
116	564738.1	4153147	9901	DieselExhP	0.00446	1.74E-07	1YrCancer[	*	1.74E-07
117	564748.1	4153147	9901	DieselExhP	0.00519	2.02E-07	1YrCancer[	*	2.02E-07
118	564758.1	4153147	9901	DieselExhP	0.00603	2.35E-07	1YrCancer[	*	2.35E-07
119	564498.1	4153157	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
120	564508.1	4153157	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
121	564518.1	4153157	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
122	564528.1	4153157	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
123	564538.1	4153157	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
124	564548.1	4153157	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
125	564558.1	4153157	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
126	564568.1	4153157	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
127	564578.1	4153157	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
128	564588.1	4153157	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
129	564598.1	4153157	9901	DieselExhP	0.00079	3.07E-08	1YrCancer[	*	3.07E-08
130	564608.1	4153157	9901	DieselExhP	0.00086	3.35E-08	1YrCancer[	*	3.35E-08
131	564668.1	4153157	9901	DieselExhP	0.00163	6.34E-08	1YrCancer[	*	6.34E-08
132	564678.1	4153157	9901	DieselExhP	0.00186	7.24E-08	1YrCancer[	*	7.24E-08
133	564688.1	4153157	9901	DieselExhP	0.00213	8.29E-08	1YrCancer[	*	8.29E-08
134	564698.1	4153157	9901	DieselExhP	0.00246	9.57E-08	1YrCancer[	*	9.57E-08
135	564708.1	4153157	9901	DieselExhP	0.00285	1.11E-07	1YrCancer[	*	1.11E-07
136	564718.1	4153157	9901	DieselExhP	0.00333	1.30E-07	1YrCancer[	*	1.30E-07
137	564728.1	4153157	9901	DieselExhP	0.00391	1.52E-07	1YrCancer[	*	1.52E-07
138	564738.1	4153157	9901	DieselExhP	0.00461	1.79E-07	1YrCancer[	*	1.79E-07
139	564748.1	4153157	9901	DieselExhP	0.0054	2.10E-07	1YrCancer[	*	2.10E-07

140	564488.1	4153167	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
141	564498.1	4153167	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
142	564508.1	4153167	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
143	564518.1	4153167	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
144	564528.1	4153167	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
145	564538.1	4153167	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
146	564548.1	4153167	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
147	564558.1	4153167	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
148	564568.1	4153167	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
149	564578.1	4153167	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
150	564588.1	4153167	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
151	564598.1	4153167	9901	DieselExhP	0.00079	3.07E-08	1YrCancer[	*	3.07E-08
152	564608.1	4153167	9901	DieselExhP	0.00087	3.39E-08	1YrCancer[	*	3.39E-08
153	564618.1	4153167	9901	DieselExhP	0.00095	3.70E-08	1YrCancer[	*	3.70E-08
154	564658.1	4153167	9901	DieselExhP	0.00144	5.60E-08	1YrCancer[	*	5.60E-08
155	564668.1	4153167	9901	DieselExhP	0.00163	6.34E-08	1YrCancer[	*	6.34E-08
156	564678.1	4153167	9901	DieselExhP	0.00186	7.24E-08	1YrCancer[	*	7.24E-08
157	564688.1	4153167	9901	DieselExhP	0.00214	8.33E-08	1YrCancer[	*	8.33E-08
158	564698.1	4153167	9901	DieselExhP	0.00247	9.61E-08	1YrCancer[	*	9.61E-08
159	564708.1	4153167	9901	DieselExhP	0.00288	1.12E-07	1YrCancer[	*	1.12E-07
160	564718.1	4153167	9901	DieselExhP	0.00338	1.32E-07	1YrCancer[	*	1.32E-07
161	564728.1	4153167	9901	DieselExhP	0.004	1.56E-07	1YrCancer[	*	1.56E-07
162	564738.1	4153167	9901	DieselExhP	0.00475	1.85E-07	1YrCancer[	*	1.85E-07
163	564478.1	4153177	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
164	564488.1	4153177	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
165	564498.1	4153177	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
166	564508.1	4153177	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
167	564518.1	4153177	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
168	564528.1	4153177	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
169	564538.1	4153177	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
170	564548.1	4153177	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
171	564558.1	4153177	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
172	564568.1	4153177	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
173	564578.1	4153177	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
174	564588.1	4153177	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
175	564598.1	4153177	9901	DieselExhP	0.00079	3.07E-08	1YrCancer[	*	3.07E-08
176	564608.1	4153177	9901	DieselExhP	0.00087	3.39E-08	1YrCancer[	*	3.39E-08
177	564618.1	4153177	9901	DieselExhP	0.00095	3.70E-08	1YrCancer[	*	3.70E-08
178	564648.1	4153177	9901	DieselExhP	0.00129	5.02E-08	1YrCancer[	*	5.02E-08
179	564658.1	4153177	9901	DieselExhP	0.00145	5.64E-08	1YrCancer[	*	5.64E-08
180	564668.1	4153177	9901	DieselExhP	0.00163	6.34E-08	1YrCancer[	*	6.34E-08
181	564678.1	4153177	9901	DieselExhP	0.00186	7.24E-08	1YrCancer[	*	7.24E-08
182	564688.1	4153177	9901	DieselExhP	0.00214	8.33E-08	1YrCancer[	*	8.33E-08
183	564698.1	4153177	9901	DieselExhP	0.00248	9.65E-08	1YrCancer[	*	9.65E-08
184	564708.1	4153177	9901	DieselExhP	0.00291	1.13E-07	1YrCancer[	*	1.13E-07
185	564718.1	4153177	9901	DieselExhP	0.00342	1.33E-07	1YrCancer[	*	1.33E-07
186	564728.1	4153177	9901	DieselExhP	0.00406	1.58E-07	1YrCancer[	*	1.58E-07

187	564738.1	4153177	9901	DieselExhP	0.00484	1.88E-07	1YrCancer[	*	1.88E-07
188	564468.1	4153187	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
189	564478.1	4153187	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
190	564488.1	4153187	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
191	564498.1	4153187	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
192	564508.1	4153187	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
193	564518.1	4153187	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
194	564528.1	4153187	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
195	564538.1	4153187	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
196	564548.1	4153187	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
197	564558.1	4153187	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
198	564568.1	4153187	9901	DieselExhP	0.00063	2.45E-08	1YrCancer[	*	2.45E-08
199	564578.1	4153187	9901	DieselExhP	0.00068	2.65E-08	1YrCancer[	*	2.65E-08
200	564588.1	4153187	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
201	564598.1	4153187	9901	DieselExhP	0.0008	3.11E-08	1YrCancer[	*	3.11E-08
202	564608.1	4153187	9901	DieselExhP	0.00087	3.39E-08	1YrCancer[	*	3.39E-08
203	564618.1	4153187	9901	DieselExhP	0.00095	3.70E-08	1YrCancer[	*	3.70E-08
204	564648.1	4153187	9901	DieselExhP	0.00129	5.02E-08	1YrCancer[	*	5.02E-08
205	564658.1	4153187	9901	DieselExhP	0.00145	5.64E-08	1YrCancer[	*	5.64E-08
206	564668.1	4153187	9901	DieselExhP	0.00163	6.34E-08	1YrCancer[	*	6.34E-08
207	564678.1	4153187	9901	DieselExhP	0.00186	7.24E-08	1YrCancer[	*	7.24E-08
208	564688.1	4153187	9901	DieselExhP	0.00214	8.33E-08	1YrCancer[	*	8.33E-08
209	564698.1	4153187	9901	DieselExhP	0.00249	9.69E-08	1YrCancer[	*	9.69E-08
210	564708.1	4153187	9901	DieselExhP	0.00292	1.14E-07	1YrCancer[	*	1.14E-07
211	564718.1	4153187	9901	DieselExhP	0.00345	1.34E-07	1YrCancer[	*	1.34E-07
212	564728.1	4153187	9901	DieselExhP	0.0041	1.60E-07	1YrCancer[	*	1.60E-07
213	564458.1	4153197	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
214	564468.1	4153197	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
215	564478.1	4153197	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
216	564488.1	4153197	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
217	564498.1	4153197	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
218	564508.1	4153197	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
219	564518.1	4153197	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
220	564528.1	4153197	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
221	564538.1	4153197	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
222	564548.1	4153197	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
223	564558.1	4153197	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
224	564568.1	4153197	9901	DieselExhP	0.00063	2.45E-08	1YrCancer[	*	2.45E-08
225	564578.1	4153197	9901	DieselExhP	0.00068	2.65E-08	1YrCancer[	*	2.65E-08
226	564588.1	4153197	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
227	564598.1	4153197	9901	DieselExhP	0.0008	3.11E-08	1YrCancer[	*	3.11E-08
228	564608.1	4153197	9901	DieselExhP	0.00087	3.39E-08	1YrCancer[	*	3.39E-08
229	564658.1	4153197	9901	DieselExhP	0.00144	5.60E-08	1YrCancer[	*	5.60E-08
230	564668.1	4153197	9901	DieselExhP	0.00163	6.34E-08	1YrCancer[	*	6.34E-08
231	564678.1	4153197	9901	DieselExhP	0.00186	7.24E-08	1YrCancer[	*	7.24E-08
232	564688.1	4153197	9901	DieselExhP	0.00214	8.33E-08	1YrCancer[	*	8.33E-08
233	564698.1	4153197	9901	DieselExhP	0.00249	9.69E-08	1YrCancer[	*	9.69E-08

234	564708.1	4153197	9901	DieselExhP	0.00293	1.14E-07	1YrCancer[	*	1.14E-07
235	564718.1	4153197	9901	DieselExhP	0.00346	1.35E-07	1YrCancer[	*	1.35E-07
236	564458.1	4153207	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
237	564468.1	4153207	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
238	564478.1	4153207	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
239	564488.1	4153207	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
240	564498.1	4153207	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
241	564508.1	4153207	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
242	564518.1	4153207	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
243	564528.1	4153207	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
244	564538.1	4153207	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
245	564548.1	4153207	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
246	564558.1	4153207	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
247	564568.1	4153207	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
248	564578.1	4153207	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
249	564588.1	4153207	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
250	564598.1	4153207	9901	DieselExhP	0.00079	3.07E-08	1YrCancer[	*	3.07E-08
251	564668.1	4153207	9901	DieselExhP	0.00162	6.31E-08	1YrCancer[	*	6.31E-08
252	564678.1	4153207	9901	DieselExhP	0.00185	7.20E-08	1YrCancer[	*	7.20E-08
253	564688.1	4153207	9901	DieselExhP	0.00213	8.29E-08	1YrCancer[	*	8.29E-08
254	564698.1	4153207	9901	DieselExhP	0.00247	9.61E-08	1YrCancer[	*	9.61E-08
255	564708.1	4153207	9901	DieselExhP	0.0029	1.13E-07	1YrCancer[	*	1.13E-07
256	564458.1	4153217	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
257	564468.1	4153217	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
258	564478.1	4153217	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
259	564488.1	4153217	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
260	564498.1	4153217	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
261	564508.1	4153217	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
262	564518.1	4153217	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
263	564528.1	4153217	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08
264	564538.1	4153217	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
265	564548.1	4153217	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
266	564558.1	4153217	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
267	564568.1	4153217	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
268	564578.1	4153217	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
269	564588.1	4153217	9901	DieselExhP	0.00073	2.84E-08	1YrCancer[	*	2.84E-08
270	564678.1	4153217	9901	DieselExhP	0.00184	7.16E-08	1YrCancer[	*	7.16E-08
271	564688.1	4153217	9901	DieselExhP	0.00212	8.25E-08	1YrCancer[	*	8.25E-08
272	564698.1	4153217	9901	DieselExhP	0.00245	9.54E-08	1YrCancer[	*	9.54E-08
273	564458.1	4153227	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
274	564468.1	4153227	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
275	564478.1	4153227	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
276	564488.1	4153227	9901	DieselExhP	0.00036	1.40E-08	1YrCancer[	*	1.40E-08
277	564498.1	4153227	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
278	564508.1	4153227	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
279	564518.1	4153227	9901	DieselExhP	0.00044	1.71E-08	1YrCancer[	*	1.71E-08
280	564528.1	4153227	9901	DieselExhP	0.00047	1.83E-08	1YrCancer[	*	1.83E-08

281	564538.1	4153227	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
282	564548.1	4153227	9901	DieselExhP	0.00054	2.10E-08	1YrCancer[	*	2.10E-08
283	564558.1	4153227	9901	DieselExhP	0.00058	2.26E-08	1YrCancer[	*	2.26E-08
284	564568.1	4153227	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
285	564578.1	4153227	9901	DieselExhP	0.00067	2.61E-08	1YrCancer[	*	2.61E-08
286	564688.1	4153227	9901	DieselExhP	0.00211	8.21E-08	1YrCancer[	*	8.21E-08
287	564458.1	4153237	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
288	564468.1	4153237	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
289	564478.1	4153237	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
290	564488.1	4153237	9901	DieselExhP	0.00036	1.40E-08	1YrCancer[	*	1.40E-08
291	564498.1	4153237	9901	DieselExhP	0.00038	1.48E-08	1YrCancer[	*	1.48E-08
292	564508.1	4153237	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
293	564518.1	4153237	9901	DieselExhP	0.00043	1.67E-08	1YrCancer[	*	1.67E-08
294	564528.1	4153237	9901	DieselExhP	0.00046	1.79E-08	1YrCancer[	*	1.79E-08
295	564538.1	4153237	9901	DieselExhP	0.0005	1.95E-08	1YrCancer[	*	1.95E-08
296	564548.1	4153237	9901	DieselExhP	0.00053	2.06E-08	1YrCancer[	*	2.06E-08
297	564558.1	4153237	9901	DieselExhP	0.00057	2.22E-08	1YrCancer[	*	2.22E-08
298	564568.1	4153237	9901	DieselExhP	0.00062	2.41E-08	1YrCancer[	*	2.41E-08
299	564458.1	4153247	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
300	564468.1	4153247	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
301	564478.1	4153247	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
302	564488.1	4153247	9901	DieselExhP	0.00036	1.40E-08	1YrCancer[	*	1.40E-08
303	564498.1	4153247	9901	DieselExhP	0.00038	1.48E-08	1YrCancer[	*	1.48E-08
304	564508.1	4153247	9901	DieselExhP	0.0004	1.56E-08	1YrCancer[	*	1.56E-08
305	564518.1	4153247	9901	DieselExhP	0.00043	1.67E-08	1YrCancer[	*	1.67E-08
306	564528.1	4153247	9901	DieselExhP	0.00046	1.79E-08	1YrCancer[	*	1.79E-08
307	564538.1	4153247	9901	DieselExhP	0.00049	1.91E-08	1YrCancer[	*	1.91E-08
308	564548.1	4153247	9901	DieselExhP	0.00053	2.06E-08	1YrCancer[	*	2.06E-08
309	564558.1	4153247	9901	DieselExhP	0.00057	2.22E-08	1YrCancer[	*	2.22E-08
310	564458.1	4153257	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
311	564468.1	4153257	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
312	564478.1	4153257	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
313	564488.1	4153257	9901	DieselExhP	0.00036	1.40E-08	1YrCancer[	*	1.40E-08
314	564498.1	4153257	9901	DieselExhP	0.00038	1.48E-08	1YrCancer[	*	1.48E-08
315	564508.1	4153257	9901	DieselExhP	0.0004	1.56E-08	1YrCancer[	*	1.56E-08
316	564518.1	4153257	9901	DieselExhP	0.00043	1.67E-08	1YrCancer[	*	1.67E-08
317	564528.1	4153257	9901	DieselExhP	0.00046	1.79E-08	1YrCancer[	*	1.79E-08
318	564538.1	4153257	9901	DieselExhP	0.00049	1.91E-08	1YrCancer[	*	1.91E-08
319	564548.1	4153257	9901	DieselExhP	0.00052	2.02E-08	1YrCancer[	*	2.02E-08
320	564458.1	4153267	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
321	564468.1	4153267	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
322	564478.1	4153267	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
323	564488.1	4153267	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
324	564498.1	4153267	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
325	564508.1	4153267	9901	DieselExhP	0.0004	1.56E-08	1YrCancer[	*	1.56E-08
326	564518.1	4153267	9901	DieselExhP	0.00042	1.63E-08	1YrCancer[	*	1.63E-08
327	564528.1	4153267	9901	DieselExhP	0.00045	1.75E-08	1YrCancer[	*	1.75E-08

328	564538.1	4153267	9901	DieselExhP	0.00048	1.87E-08	1YrCancer[	*	1.87E-08
329	564458.1	4153277	9901	DieselExhP	0.00029	1.13E-08	1YrCancer[	*	1.13E-08
330	564468.1	4153277	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
331	564478.1	4153277	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
332	564488.1	4153277	9901	DieselExhP	0.00035	1.36E-08	1YrCancer[	*	1.36E-08
333	564498.1	4153277	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
334	564508.1	4153277	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
335	564518.1	4153277	9901	DieselExhP	0.00042	1.63E-08	1YrCancer[	*	1.63E-08
336	564528.1	4153277	9901	DieselExhP	0.00045	1.75E-08	1YrCancer[	*	1.75E-08
337	564458.1	4153287	9901	DieselExhP	0.00029	1.13E-08	1YrCancer[	*	1.13E-08
338	564468.1	4153287	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
339	564478.1	4153287	9901	DieselExhP	0.00033	1.28E-08	1YrCancer[	*	1.28E-08
340	564488.1	4153287	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
341	564498.1	4153287	9901	DieselExhP	0.00037	1.44E-08	1YrCancer[	*	1.44E-08
342	564508.1	4153287	9901	DieselExhP	0.00039	1.52E-08	1YrCancer[	*	1.52E-08
343	564518.1	4153287	9901	DieselExhP	0.00041	1.60E-08	1YrCancer[	*	1.60E-08
344	564458.1	4153297	9901	DieselExhP	0.00029	1.13E-08	1YrCancer[	*	1.13E-08
345	564468.1	4153297	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
346	564478.1	4153297	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
347	564488.1	4153297	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
348	564498.1	4153297	9901	DieselExhP	0.00036	1.40E-08	1YrCancer[	*	1.40E-08
349	564458.1	4153307	9901	DieselExhP	0.00029	1.13E-08	1YrCancer[	*	1.13E-08
350	564468.1	4153307	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
351	564478.1	4153307	9901	DieselExhP	0.00032	1.25E-08	1YrCancer[	*	1.25E-08
352	564488.1	4153307	9901	DieselExhP	0.00034	1.32E-08	1YrCancer[	*	1.32E-08
353	564458.1	4153317	9901	DieselExhP	0.00028	1.09E-08	1YrCancer[	*	1.09E-08
354	564468.1	4153317	9901	DieselExhP	0.0003	1.17E-08	1YrCancer[	*	1.17E-08
355	564478.1	4153317	9901	DieselExhP	0.00031	1.21E-08	1YrCancer[	*	1.21E-08
356	564458.1	4153327	9901	DieselExhP	0.00028	1.09E-08	1YrCancer[	*	1.09E-08
357	564468.1	4153327	9901	DieselExhP	0.00029	1.13E-08	1YrCancer[	*	1.13E-08
358	564458.1	4153337	9901	DieselExhP	0.00027	1.05E-08	1YrCancer[	*	1.05E-08

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/20/2022 4:47:30 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00454	7.46E-07	1YrCancer	*	7.46E-07
2	564808.1	4153037	9901	DieselExhP	0.00478	7.85E-07	1YrCancer	*	7.85E-07
3	564788.1	4153047	9901	DieselExhP	0.00457	7.51E-07	1YrCancer	*	7.51E-07
4	564798.1	4153047	9901	DieselExhP	0.00487	8.00E-07	1YrCancer	*	8.00E-07
5	564808.1	4153047	9901	DieselExhP	0.00515	8.46E-07	1YrCancer	*	8.46E-07
6	564818.1	4153047	9901	DieselExhP	0.00539	8.85E-07	1YrCancer	*	8.85E-07
7	564778.1	4153057	9901	DieselExhP	0.00453	7.44E-07	1YrCancer	*	7.44E-07
8	564788.1	4153057	9901	DieselExhP	0.00489	8.03E-07	1YrCancer	*	8.03E-07
9	564798.1	4153057	9901	DieselExhP	0.00524	8.61E-07	1YrCancer	*	8.61E-07
10	564808.1	4153057	9901	DieselExhP	0.00556	9.13E-07	1YrCancer	*	9.13E-07
11	564818.1	4153057	9901	DieselExhP	0.00584	9.59E-07	1YrCancer	*	9.59E-07
12	564768.1	4153067	9901	DieselExhP	0.00441	7.24E-07	1YrCancer	*	7.24E-07
13	564778.1	4153067	9901	DieselExhP	0.00482	7.92E-07	1YrCancer	*	7.92E-07
14	564788.1	4153067	9901	DieselExhP	0.00523	8.59E-07	1YrCancer	*	8.59E-07
15	564798.1	4153067	9901	DieselExhP	0.00563	9.25E-07	1YrCancer	*	9.25E-07
16	564808.1	4153067	9901	DieselExhP	0.00602	9.89E-07	1YrCancer	*	9.89E-07
17	564818.1	4153067	9901	DieselExhP	0.00635	1.04E-06	1YrCancer	*	1.04E-06
18	564758.1	4153077	9901	DieselExhP	0.00423	6.95E-07	1YrCancer	*	6.95E-07
19	564768.1	4153077	9901	DieselExhP	0.00467	7.67E-07	1YrCancer	*	7.67E-07
20	564778.1	4153077	9901	DieselExhP	0.00513	8.43E-07	1YrCancer	*	8.43E-07
21	564788.1	4153077	9901	DieselExhP	0.00561	9.21E-07	1YrCancer	*	9.21E-07
22	564798.1	4153077	9901	DieselExhP	0.00607	9.97E-07	1YrCancer	*	9.97E-07
23	564808.1	4153077	9901	DieselExhP	0.00652	1.07E-06	1YrCancer	*	1.07E-06
24	564818.1	4153077	9901	DieselExhP	0.00692	1.14E-06	1YrCancer	*	1.14E-06
25	564748.1	4153087	9901	DieselExhP	0.00399	6.55E-07	1YrCancer	*	6.55E-07
26	564758.1	4153087	9901	DieselExhP	0.00445	7.31E-07	1YrCancer	*	7.31E-07
27	564768.1	4153087	9901	DieselExhP	0.00495	8.13E-07	1YrCancer	*	8.13E-07
28	564778.1	4153087	9901	DieselExhP	0.00547	8.98E-07	1YrCancer	*	8.98E-07
29	564788.1	4153087	9901	DieselExhP	0.00601	9.87E-07	1YrCancer	*	9.87E-07
30	564798.1	4153087	9901	DieselExhP	0.00654	1.07E-06	1YrCancer	*	1.07E-06
31	564808.1	4153087	9901	DieselExhP	0.00706	1.16E-06	1YrCancer	*	1.16E-06
32	564818.1	4153087	9901	DieselExhP	0.00754	1.24E-06	1YrCancer	*	1.24E-06
33	564548.1	4153097	9901	DieselExhP	0.00052	8.54E-08	1YrCancer	*	8.54E-08
34	564738.1	4153097	9901	DieselExhP	0.0037	6.08E-07	1YrCancer	*	6.08E-07
35	564748.1	4153097	9901	DieselExhP	0.00418	6.87E-07	1YrCancer	*	6.87E-07
36	564758.1	4153097	9901	DieselExhP	0.00469	7.70E-07	1YrCancer	*	7.70E-07
37	564768.1	4153097	9901	DieselExhP	0.00524	8.61E-07	1YrCancer	*	8.61E-07
38	564778.1	4153097	9901	DieselExhP	0.00583	9.58E-07	1YrCancer	*	9.58E-07
39	564788.1	4153097	9901	DieselExhP	0.00645	1.06E-06	1YrCancer	*	1.06E-06
40	564798.1	4153097	9901	DieselExhP	0.00705	1.16E-06	1YrCancer	*	1.16E-06
41	564808.1	4153097	9901	DieselExhP	0.00766	1.26E-06	1YrCancer	*	1.26E-06
42	564538.1	4153107	9901	DieselExhP	0.00049	8.05E-08	1YrCancer	*	8.05E-08
43	564548.1	4153107	9901	DieselExhP	0.00052	8.54E-08	1YrCancer	*	8.54E-08
44	564558.1	4153107	9901	DieselExhP	0.00056	9.20E-08	1YrCancer	*	9.20E-08
45	564718.1	4153107	9901	DieselExhP	0.00297	4.88E-07	1YrCancer	*	4.88E-07

46	564728.1	4153107	9901	DieselExhP	0.00339	5.57E-07	1YrCancer[	*	5.57E-07
47	564738.1	4153107	9901	DieselExhP	0.00385	6.32E-07	1YrCancer[	*	6.32E-07
48	564748.1	4153107	9901	DieselExhP	0.00437	7.18E-07	1YrCancer[	*	7.18E-07
49	564758.1	4153107	9901	DieselExhP	0.00494	8.11E-07	1YrCancer[	*	8.11E-07
50	564768.1	4153107	9901	DieselExhP	0.00556	9.13E-07	1YrCancer[	*	9.13E-07
51	564778.1	4153107	9901	DieselExhP	0.00621	1.02E-06	1YrCancer[	*	1.02E-06
52	564788.1	4153107	9901	DieselExhP	0.00691	1.13E-06	1YrCancer[	*	1.13E-06
53	564798.1	4153107	9901	DieselExhP	0.00761	1.25E-06	1YrCancer[	*	1.25E-06
54	564528.1	4153117	9901	DieselExhP	0.00046	7.56E-08	1YrCancer[	*	7.56E-08
55	564538.1	4153117	9901	DieselExhP	0.00049	8.05E-08	1YrCancer[	*	8.05E-08
56	564548.1	4153117	9901	DieselExhP	0.00053	8.71E-08	1YrCancer[	*	8.71E-08
57	564558.1	4153117	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
58	564568.1	4153117	9901	DieselExhP	0.00061	1.00E-07	1YrCancer[	*	1.00E-07
59	564708.1	4153117	9901	DieselExhP	0.00266	4.37E-07	1YrCancer[	*	4.37E-07
60	564718.1	4153117	9901	DieselExhP	0.00305	5.01E-07	1YrCancer[	*	5.01E-07
61	564728.1	4153117	9901	DieselExhP	0.00349	5.73E-07	1YrCancer[	*	5.73E-07
62	564738.1	4153117	9901	DieselExhP	0.004	6.57E-07	1YrCancer[	*	6.57E-07
63	564748.1	4153117	9901	DieselExhP	0.00457	7.51E-07	1YrCancer[	*	7.51E-07
64	564758.1	4153117	9901	DieselExhP	0.0052	8.54E-07	1YrCancer[	*	8.54E-07
65	564768.1	4153117	9901	DieselExhP	0.00588	9.66E-07	1YrCancer[	*	9.66E-07
66	564778.1	4153117	9901	DieselExhP	0.0066	1.08E-06	1YrCancer[	*	1.08E-06
67	564788.1	4153117	9901	DieselExhP	0.00738	1.21E-06	1YrCancer[	*	1.21E-06
68	564528.1	4153127	9901	DieselExhP	0.00046	7.56E-08	1YrCancer[	*	7.56E-08
69	564538.1	4153127	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
70	564548.1	4153127	9901	DieselExhP	0.00053	8.71E-08	1YrCancer[	*	8.71E-08
71	564558.1	4153127	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
72	564568.1	4153127	9901	DieselExhP	0.00061	1.00E-07	1YrCancer[	*	1.00E-07
73	564578.1	4153127	9901	DieselExhP	0.00066	1.08E-07	1YrCancer[	*	1.08E-07
74	564698.1	4153127	9901	DieselExhP	0.00237	3.89E-07	1YrCancer[	*	3.89E-07
75	564708.1	4153127	9901	DieselExhP	0.00272	4.47E-07	1YrCancer[	*	4.47E-07
76	564718.1	4153127	9901	DieselExhP	0.00313	5.14E-07	1YrCancer[	*	5.14E-07
77	564728.1	4153127	9901	DieselExhP	0.0036	5.91E-07	1YrCancer[	*	5.91E-07
78	564738.1	4153127	9901	DieselExhP	0.00415	6.82E-07	1YrCancer[	*	6.82E-07
79	564748.1	4153127	9901	DieselExhP	0.00477	7.83E-07	1YrCancer[	*	7.83E-07
80	564758.1	4153127	9901	DieselExhP	0.00547	8.98E-07	1YrCancer[	*	8.98E-07
81	564768.1	4153127	9901	DieselExhP	0.00623	1.02E-06	1YrCancer[	*	1.02E-06
82	564778.1	4153127	9901	DieselExhP	0.00702	1.15E-06	1YrCancer[	*	1.15E-06
83	564518.1	4153137	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
84	564528.1	4153137	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
85	564538.1	4153137	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
86	564548.1	4153137	9901	DieselExhP	0.00053	8.71E-08	1YrCancer[	*	8.71E-08
87	564558.1	4153137	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
88	564568.1	4153137	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
89	564578.1	4153137	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
90	564588.1	4153137	9901	DieselExhP	0.00072	1.18E-07	1YrCancer[	*	1.18E-07
91	564688.1	4153137	9901	DieselExhP	0.0021	3.45E-07	1YrCancer[	*	3.45E-07
92	564698.1	4153137	9901	DieselExhP	0.0024	3.94E-07	1YrCancer[	*	3.94E-07

93	564708.1	4153137	9901	DieselExhP	0.00277	4.55E-07	1YrCancer[	*	4.55E-07
94	564718.1	4153137	9901	DieselExhP	0.0032	5.26E-07	1YrCancer[	*	5.26E-07
95	564728.1	4153137	9901	DieselExhP	0.00371	6.09E-07	1YrCancer[	*	6.09E-07
96	564738.1	4153137	9901	DieselExhP	0.0043	7.06E-07	1YrCancer[	*	7.06E-07
97	564748.1	4153137	9901	DieselExhP	0.00499	8.20E-07	1YrCancer[	*	8.20E-07
98	564758.1	4153137	9901	DieselExhP	0.00576	9.46E-07	1YrCancer[	*	9.46E-07
99	564768.1	4153137	9901	DieselExhP	0.00659	1.08E-06	1YrCancer[	*	1.08E-06
100	564508.1	4153147	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
101	564518.1	4153147	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
102	564528.1	4153147	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
103	564538.1	4153147	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
104	564548.1	4153147	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
105	564558.1	4153147	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
106	564568.1	4153147	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
107	564578.1	4153147	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
108	564588.1	4153147	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
109	564598.1	4153147	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
110	564678.1	4153147	9901	DieselExhP	0.00185	3.04E-07	1YrCancer[	*	3.04E-07
111	564688.1	4153147	9901	DieselExhP	0.00212	3.48E-07	1YrCancer[	*	3.48E-07
112	564698.1	4153147	9901	DieselExhP	0.00243	3.99E-07	1YrCancer[	*	3.99E-07
113	564708.1	4153147	9901	DieselExhP	0.00281	4.62E-07	1YrCancer[	*	4.62E-07
114	564718.1	4153147	9901	DieselExhP	0.00327	5.37E-07	1YrCancer[	*	5.37E-07
115	564728.1	4153147	9901	DieselExhP	0.00381	6.26E-07	1YrCancer[	*	6.26E-07
116	564738.1	4153147	9901	DieselExhP	0.00446	7.33E-07	1YrCancer[	*	7.33E-07
117	564748.1	4153147	9901	DieselExhP	0.00519	8.52E-07	1YrCancer[	*	8.52E-07
118	564758.1	4153147	9901	DieselExhP	0.00603	9.90E-07	1YrCancer[	*	9.90E-07
119	564498.1	4153157	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
120	564508.1	4153157	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
121	564518.1	4153157	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
122	564528.1	4153157	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
123	564538.1	4153157	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
124	564548.1	4153157	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
125	564558.1	4153157	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
126	564568.1	4153157	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
127	564578.1	4153157	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
128	564588.1	4153157	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
129	564598.1	4153157	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
130	564608.1	4153157	9901	DieselExhP	0.00086	1.41E-07	1YrCancer[	*	1.41E-07
131	564668.1	4153157	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
132	564678.1	4153157	9901	DieselExhP	0.00186	3.06E-07	1YrCancer[	*	3.06E-07
133	564688.1	4153157	9901	DieselExhP	0.00213	3.50E-07	1YrCancer[	*	3.50E-07
134	564698.1	4153157	9901	DieselExhP	0.00246	4.04E-07	1YrCancer[	*	4.04E-07
135	564708.1	4153157	9901	DieselExhP	0.00285	4.68E-07	1YrCancer[	*	4.68E-07
136	564718.1	4153157	9901	DieselExhP	0.00333	5.47E-07	1YrCancer[	*	5.47E-07
137	564728.1	4153157	9901	DieselExhP	0.00391	6.42E-07	1YrCancer[	*	6.42E-07
138	564738.1	4153157	9901	DieselExhP	0.00461	7.57E-07	1YrCancer[	*	7.57E-07
139	564748.1	4153157	9901	DieselExhP	0.0054	8.87E-07	1YrCancer[	*	8.87E-07

140	564488.1	4153167	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
141	564498.1	4153167	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
142	564508.1	4153167	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
143	564518.1	4153167	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
144	564528.1	4153167	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
145	564538.1	4153167	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
146	564548.1	4153167	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
147	564558.1	4153167	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
148	564568.1	4153167	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
149	564578.1	4153167	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
150	564588.1	4153167	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
151	564598.1	4153167	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
152	564608.1	4153167	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
153	564618.1	4153167	9901	DieselExhP	0.00095	1.56E-07	1YrCancer[	*	1.56E-07
154	564658.1	4153167	9901	DieselExhP	0.00144	2.37E-07	1YrCancer[	*	2.37E-07
155	564668.1	4153167	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
156	564678.1	4153167	9901	DieselExhP	0.00186	3.06E-07	1YrCancer[	*	3.06E-07
157	564688.1	4153167	9901	DieselExhP	0.00214	3.51E-07	1YrCancer[	*	3.51E-07
158	564698.1	4153167	9901	DieselExhP	0.00247	4.06E-07	1YrCancer[	*	4.06E-07
159	564708.1	4153167	9901	DieselExhP	0.00288	4.73E-07	1YrCancer[	*	4.73E-07
160	564718.1	4153167	9901	DieselExhP	0.00338	5.55E-07	1YrCancer[	*	5.55E-07
161	564728.1	4153167	9901	DieselExhP	0.004	6.57E-07	1YrCancer[	*	6.57E-07
162	564738.1	4153167	9901	DieselExhP	0.00475	7.80E-07	1YrCancer[	*	7.80E-07
163	564478.1	4153177	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
164	564488.1	4153177	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
165	564498.1	4153177	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
166	564508.1	4153177	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
167	564518.1	4153177	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
168	564528.1	4153177	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
169	564538.1	4153177	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
170	564548.1	4153177	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
171	564558.1	4153177	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
172	564568.1	4153177	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
173	564578.1	4153177	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
174	564588.1	4153177	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
175	564598.1	4153177	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
176	564608.1	4153177	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
177	564618.1	4153177	9901	DieselExhP	0.00095	1.56E-07	1YrCancer[	*	1.56E-07
178	564648.1	4153177	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
179	564658.1	4153177	9901	DieselExhP	0.00145	2.38E-07	1YrCancer[	*	2.38E-07
180	564668.1	4153177	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
181	564678.1	4153177	9901	DieselExhP	0.00186	3.06E-07	1YrCancer[	*	3.06E-07
182	564688.1	4153177	9901	DieselExhP	0.00214	3.51E-07	1YrCancer[	*	3.51E-07
183	564698.1	4153177	9901	DieselExhP	0.00248	4.07E-07	1YrCancer[	*	4.07E-07
184	564708.1	4153177	9901	DieselExhP	0.00291	4.78E-07	1YrCancer[	*	4.78E-07
185	564718.1	4153177	9901	DieselExhP	0.00342	5.62E-07	1YrCancer[	*	5.62E-07
186	564728.1	4153177	9901	DieselExhP	0.00406	6.67E-07	1YrCancer[	*	6.67E-07

187	564738.1	4153177	9901	DieselExhP	0.00484	7.95E-07	1YrCancer[	*	7.95E-07
188	564468.1	4153187	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
189	564478.1	4153187	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
190	564488.1	4153187	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
191	564498.1	4153187	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
192	564508.1	4153187	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
193	564518.1	4153187	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
194	564528.1	4153187	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
195	564538.1	4153187	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
196	564548.1	4153187	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
197	564558.1	4153187	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
198	564568.1	4153187	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
199	564578.1	4153187	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
200	564588.1	4153187	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
201	564598.1	4153187	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
202	564608.1	4153187	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
203	564618.1	4153187	9901	DieselExhP	0.00095	1.56E-07	1YrCancer[	*	1.56E-07
204	564648.1	4153187	9901	DieselExhP	0.00129	2.12E-07	1YrCancer[	*	2.12E-07
205	564658.1	4153187	9901	DieselExhP	0.00145	2.38E-07	1YrCancer[	*	2.38E-07
206	564668.1	4153187	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
207	564678.1	4153187	9901	DieselExhP	0.00186	3.06E-07	1YrCancer[	*	3.06E-07
208	564688.1	4153187	9901	DieselExhP	0.00214	3.51E-07	1YrCancer[	*	3.51E-07
209	564698.1	4153187	9901	DieselExhP	0.00249	4.09E-07	1YrCancer[	*	4.09E-07
210	564708.1	4153187	9901	DieselExhP	0.00292	4.80E-07	1YrCancer[	*	4.80E-07
211	564718.1	4153187	9901	DieselExhP	0.00345	5.67E-07	1YrCancer[	*	5.67E-07
212	564728.1	4153187	9901	DieselExhP	0.0041	6.73E-07	1YrCancer[	*	6.73E-07
213	564458.1	4153197	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
214	564468.1	4153197	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
215	564478.1	4153197	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
216	564488.1	4153197	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
217	564498.1	4153197	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
218	564508.1	4153197	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
219	564518.1	4153197	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
220	564528.1	4153197	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
221	564538.1	4153197	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
222	564548.1	4153197	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
223	564558.1	4153197	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
224	564568.1	4153197	9901	DieselExhP	0.00063	1.03E-07	1YrCancer[	*	1.03E-07
225	564578.1	4153197	9901	DieselExhP	0.00068	1.12E-07	1YrCancer[	*	1.12E-07
226	564588.1	4153197	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
227	564598.1	4153197	9901	DieselExhP	0.0008	1.31E-07	1YrCancer[	*	1.31E-07
228	564608.1	4153197	9901	DieselExhP	0.00087	1.43E-07	1YrCancer[	*	1.43E-07
229	564658.1	4153197	9901	DieselExhP	0.00144	2.37E-07	1YrCancer[	*	2.37E-07
230	564668.1	4153197	9901	DieselExhP	0.00163	2.68E-07	1YrCancer[	*	2.68E-07
231	564678.1	4153197	9901	DieselExhP	0.00186	3.06E-07	1YrCancer[	*	3.06E-07
232	564688.1	4153197	9901	DieselExhP	0.00214	3.51E-07	1YrCancer[	*	3.51E-07
233	564698.1	4153197	9901	DieselExhP	0.00249	4.09E-07	1YrCancer[	*	4.09E-07

234	564708.1	4153197	9901	DieselExhP	0.00293	4.81E-07	1YrCancer[	*	4.81E-07
235	564718.1	4153197	9901	DieselExhP	0.00346	5.68E-07	1YrCancer[	*	5.68E-07
236	564458.1	4153207	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
237	564468.1	4153207	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
238	564478.1	4153207	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
239	564488.1	4153207	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
240	564498.1	4153207	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
241	564508.1	4153207	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
242	564518.1	4153207	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
243	564528.1	4153207	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
244	564538.1	4153207	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
245	564548.1	4153207	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
246	564558.1	4153207	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
247	564568.1	4153207	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
248	564578.1	4153207	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
249	564588.1	4153207	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
250	564598.1	4153207	9901	DieselExhP	0.00079	1.30E-07	1YrCancer[	*	1.30E-07
251	564668.1	4153207	9901	DieselExhP	0.00162	2.66E-07	1YrCancer[	*	2.66E-07
252	564678.1	4153207	9901	DieselExhP	0.00185	3.04E-07	1YrCancer[	*	3.04E-07
253	564688.1	4153207	9901	DieselExhP	0.00213	3.50E-07	1YrCancer[	*	3.50E-07
254	564698.1	4153207	9901	DieselExhP	0.00247	4.06E-07	1YrCancer[	*	4.06E-07
255	564708.1	4153207	9901	DieselExhP	0.0029	4.76E-07	1YrCancer[	*	4.76E-07
256	564458.1	4153217	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
257	564468.1	4153217	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
258	564478.1	4153217	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
259	564488.1	4153217	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
260	564498.1	4153217	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
261	564508.1	4153217	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
262	564518.1	4153217	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
263	564528.1	4153217	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08
264	564538.1	4153217	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
265	564548.1	4153217	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
266	564558.1	4153217	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
267	564568.1	4153217	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
268	564578.1	4153217	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
269	564588.1	4153217	9901	DieselExhP	0.00073	1.20E-07	1YrCancer[	*	1.20E-07
270	564678.1	4153217	9901	DieselExhP	0.00184	3.02E-07	1YrCancer[	*	3.02E-07
271	564688.1	4153217	9901	DieselExhP	0.00212	3.48E-07	1YrCancer[	*	3.48E-07
272	564698.1	4153217	9901	DieselExhP	0.00245	4.02E-07	1YrCancer[	*	4.02E-07
273	564458.1	4153227	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
274	564468.1	4153227	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
275	564478.1	4153227	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
276	564488.1	4153227	9901	DieselExhP	0.00036	5.91E-08	1YrCancer[	*	5.91E-08
277	564498.1	4153227	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
278	564508.1	4153227	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
279	564518.1	4153227	9901	DieselExhP	0.00044	7.23E-08	1YrCancer[	*	7.23E-08
280	564528.1	4153227	9901	DieselExhP	0.00047	7.72E-08	1YrCancer[	*	7.72E-08

281	564538.1	4153227	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
282	564548.1	4153227	9901	DieselExhP	0.00054	8.87E-08	1YrCancer[	*	8.87E-08
283	564558.1	4153227	9901	DieselExhP	0.00058	9.53E-08	1YrCancer[	*	9.53E-08
284	564568.1	4153227	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
285	564578.1	4153227	9901	DieselExhP	0.00067	1.10E-07	1YrCancer[	*	1.10E-07
286	564688.1	4153227	9901	DieselExhP	0.00211	3.47E-07	1YrCancer[	*	3.47E-07
287	564458.1	4153237	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
288	564468.1	4153237	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
289	564478.1	4153237	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
290	564488.1	4153237	9901	DieselExhP	0.00036	5.91E-08	1YrCancer[	*	5.91E-08
291	564498.1	4153237	9901	DieselExhP	0.00038	6.24E-08	1YrCancer[	*	6.24E-08
292	564508.1	4153237	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
293	564518.1	4153237	9901	DieselExhP	0.00043	7.06E-08	1YrCancer[	*	7.06E-08
294	564528.1	4153237	9901	DieselExhP	0.00046	7.56E-08	1YrCancer[	*	7.56E-08
295	564538.1	4153237	9901	DieselExhP	0.0005	8.21E-08	1YrCancer[	*	8.21E-08
296	564548.1	4153237	9901	DieselExhP	0.00053	8.71E-08	1YrCancer[	*	8.71E-08
297	564558.1	4153237	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
298	564568.1	4153237	9901	DieselExhP	0.00062	1.02E-07	1YrCancer[	*	1.02E-07
299	564458.1	4153247	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
300	564468.1	4153247	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
301	564478.1	4153247	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
302	564488.1	4153247	9901	DieselExhP	0.00036	5.91E-08	1YrCancer[	*	5.91E-08
303	564498.1	4153247	9901	DieselExhP	0.00038	6.24E-08	1YrCancer[	*	6.24E-08
304	564508.1	4153247	9901	DieselExhP	0.0004	6.57E-08	1YrCancer[	*	6.57E-08
305	564518.1	4153247	9901	DieselExhP	0.00043	7.06E-08	1YrCancer[	*	7.06E-08
306	564528.1	4153247	9901	DieselExhP	0.00046	7.56E-08	1YrCancer[	*	7.56E-08
307	564538.1	4153247	9901	DieselExhP	0.00049	8.05E-08	1YrCancer[	*	8.05E-08
308	564548.1	4153247	9901	DieselExhP	0.00053	8.71E-08	1YrCancer[	*	8.71E-08
309	564558.1	4153247	9901	DieselExhP	0.00057	9.36E-08	1YrCancer[	*	9.36E-08
310	564458.1	4153257	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
311	564468.1	4153257	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
312	564478.1	4153257	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
313	564488.1	4153257	9901	DieselExhP	0.00036	5.91E-08	1YrCancer[	*	5.91E-08
314	564498.1	4153257	9901	DieselExhP	0.00038	6.24E-08	1YrCancer[	*	6.24E-08
315	564508.1	4153257	9901	DieselExhP	0.0004	6.57E-08	1YrCancer[	*	6.57E-08
316	564518.1	4153257	9901	DieselExhP	0.00043	7.06E-08	1YrCancer[	*	7.06E-08
317	564528.1	4153257	9901	DieselExhP	0.00046	7.56E-08	1YrCancer[	*	7.56E-08
318	564538.1	4153257	9901	DieselExhP	0.00049	8.05E-08	1YrCancer[	*	8.05E-08
319	564548.1	4153257	9901	DieselExhP	0.00052	8.54E-08	1YrCancer[	*	8.54E-08
320	564458.1	4153267	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
321	564468.1	4153267	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
322	564478.1	4153267	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
323	564488.1	4153267	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
324	564498.1	4153267	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
325	564508.1	4153267	9901	DieselExhP	0.0004	6.57E-08	1YrCancer[	*	6.57E-08
326	564518.1	4153267	9901	DieselExhP	0.00042	6.90E-08	1YrCancer[	*	6.90E-08
327	564528.1	4153267	9901	DieselExhP	0.00045	7.39E-08	1YrCancer[	*	7.39E-08

328	564538.1	4153267	9901	DieselExhP	0.00048	7.88E-08	1YrCancer[	*	7.88E-08
329	564458.1	4153277	9901	DieselExhP	0.00029	4.76E-08	1YrCancer[	*	4.76E-08
330	564468.1	4153277	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
331	564478.1	4153277	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
332	564488.1	4153277	9901	DieselExhP	0.00035	5.75E-08	1YrCancer[	*	5.75E-08
333	564498.1	4153277	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
334	564508.1	4153277	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
335	564518.1	4153277	9901	DieselExhP	0.00042	6.90E-08	1YrCancer[	*	6.90E-08
336	564528.1	4153277	9901	DieselExhP	0.00045	7.39E-08	1YrCancer[	*	7.39E-08
337	564458.1	4153287	9901	DieselExhP	0.00029	4.76E-08	1YrCancer[	*	4.76E-08
338	564468.1	4153287	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
339	564478.1	4153287	9901	DieselExhP	0.00033	5.42E-08	1YrCancer[	*	5.42E-08
340	564488.1	4153287	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
341	564498.1	4153287	9901	DieselExhP	0.00037	6.08E-08	1YrCancer[	*	6.08E-08
342	564508.1	4153287	9901	DieselExhP	0.00039	6.41E-08	1YrCancer[	*	6.41E-08
343	564518.1	4153287	9901	DieselExhP	0.00041	6.73E-08	1YrCancer[	*	6.73E-08
344	564458.1	4153297	9901	DieselExhP	0.00029	4.76E-08	1YrCancer[	*	4.76E-08
345	564468.1	4153297	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
346	564478.1	4153297	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
347	564488.1	4153297	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
348	564498.1	4153297	9901	DieselExhP	0.00036	5.91E-08	1YrCancer[	*	5.91E-08
349	564458.1	4153307	9901	DieselExhP	0.00029	4.76E-08	1YrCancer[	*	4.76E-08
350	564468.1	4153307	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
351	564478.1	4153307	9901	DieselExhP	0.00032	5.26E-08	1YrCancer[	*	5.26E-08
352	564488.1	4153307	9901	DieselExhP	0.00034	5.58E-08	1YrCancer[	*	5.58E-08
353	564458.1	4153317	9901	DieselExhP	0.00028	4.60E-08	1YrCancer[	*	4.60E-08
354	564468.1	4153317	9901	DieselExhP	0.0003	4.93E-08	1YrCancer[	*	4.93E-08
355	564478.1	4153317	9901	DieselExhP	0.00031	5.09E-08	1YrCancer[	*	5.09E-08
356	564458.1	4153327	9901	DieselExhP	0.00028	4.60E-08	1YrCancer[	*	4.60E-08
357	564468.1	4153327	9901	DieselExhP	0.00029	4.76E-08	1YrCancer[	*	4.76E-08
358	564458.1	4153337	9901	DieselExhP	0.00027	4.43E-08	1YrCancer[	*	4.43E-08

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/20/2022 4:43:39 PM - Chronic Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	564798.1	4153037	9901	DieselExhP	0.00454	NonCancer	0.00E+00	0.00E+00	0.00E+00
2	564808.1	4153037	9901	DieselExhP	0.00478	NonCancer	0.00E+00	0.00E+00	0.00E+00
3	564788.1	4153047	9901	DieselExhP	0.00457	NonCancer	0.00E+00	0.00E+00	0.00E+00
4	564798.1	4153047	9901	DieselExhP	0.00487	NonCancer	0.00E+00	0.00E+00	0.00E+00
5	564808.1	4153047	9901	DieselExhP	0.00515	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	564818.1	4153047	9901	DieselExhP	0.00539	NonCancer	0.00E+00	0.00E+00	0.00E+00
7	564778.1	4153057	9901	DieselExhP	0.00453	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	564788.1	4153057	9901	DieselExhP	0.00489	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	564798.1	4153057	9901	DieselExhP	0.00524	NonCancer	0.00E+00	0.00E+00	0.00E+00
10	564808.1	4153057	9901	DieselExhP	0.00556	NonCancer	0.00E+00	0.00E+00	0.00E+00
11	564818.1	4153057	9901	DieselExhP	0.00584	NonCancer	0.00E+00	0.00E+00	0.00E+00
12	564768.1	4153067	9901	DieselExhP	0.00441	NonCancer	0.00E+00	0.00E+00	0.00E+00
13	564778.1	4153067	9901	DieselExhP	0.00482	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	564788.1	4153067	9901	DieselExhP	0.00523	NonCancer	0.00E+00	0.00E+00	0.00E+00
15	564798.1	4153067	9901	DieselExhP	0.00563	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	564808.1	4153067	9901	DieselExhP	0.00602	NonCancer	0.00E+00	0.00E+00	0.00E+00
17	564818.1	4153067	9901	DieselExhP	0.00635	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	564758.1	4153077	9901	DieselExhP	0.00423	NonCancer	0.00E+00	0.00E+00	0.00E+00
19	564768.1	4153077	9901	DieselExhP	0.00467	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	564778.1	4153077	9901	DieselExhP	0.00513	NonCancer	0.00E+00	0.00E+00	0.00E+00
21	564788.1	4153077	9901	DieselExhP	0.00561	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	564798.1	4153077	9901	DieselExhP	0.00607	NonCancer	0.00E+00	0.00E+00	0.00E+00
23	564808.1	4153077	9901	DieselExhP	0.00652	NonCancer	0.00E+00	0.00E+00	0.00E+00
24	564818.1	4153077	9901	DieselExhP	0.00692	NonCancer	0.00E+00	0.00E+00	0.00E+00
25	564748.1	4153087	9901	DieselExhP	0.00399	NonCancer	0.00E+00	0.00E+00	0.00E+00
26	564758.1	4153087	9901	DieselExhP	0.00445	NonCancer	0.00E+00	0.00E+00	0.00E+00
27	564768.1	4153087	9901	DieselExhP	0.00495	NonCancer	0.00E+00	0.00E+00	0.00E+00
28	564778.1	4153087	9901	DieselExhP	0.00547	NonCancer	0.00E+00	0.00E+00	0.00E+00
29	564788.1	4153087	9901	DieselExhP	0.00601	NonCancer	0.00E+00	0.00E+00	0.00E+00
30	564798.1	4153087	9901	DieselExhP	0.00654	NonCancer	0.00E+00	0.00E+00	0.00E+00
31	564808.1	4153087	9901	DieselExhP	0.00706	NonCancer	0.00E+00	0.00E+00	0.00E+00
32	564818.1	4153087	9901	DieselExhP	0.00754	NonCancer	0.00E+00	0.00E+00	0.00E+00
33	564548.1	4153097	9901	DieselExhP	0.00052	NonCancer	0.00E+00	0.00E+00	0.00E+00
34	564738.1	4153097	9901	DieselExhP	0.0037	NonCancer	0.00E+00	0.00E+00	0.00E+00
35	564748.1	4153097	9901	DieselExhP	0.00418	NonCancer	0.00E+00	0.00E+00	0.00E+00
36	564758.1	4153097	9901	DieselExhP	0.00469	NonCancer	0.00E+00	0.00E+00	0.00E+00
37	564768.1	4153097	9901	DieselExhP	0.00524	NonCancer	0.00E+00	0.00E+00	0.00E+00
38	564778.1	4153097	9901	DieselExhP	0.00583	NonCancer	0.00E+00	0.00E+00	0.00E+00
39	564788.1	4153097	9901	DieselExhP	0.00645	NonCancer	0.00E+00	0.00E+00	0.00E+00
40	564798.1	4153097	9901	DieselExhP	0.00705	NonCancer	0.00E+00	0.00E+00	0.00E+00
41	564808.1	4153097	9901	DieselExhP	0.00766	NonCancer	0.00E+00	0.00E+00	0.00E+00
42	564538.1	4153107	9901	DieselExhP	0.00049	NonCancer	0.00E+00	0.00E+00	0.00E+00
43	564548.1	4153107	9901	DieselExhP	0.00052	NonCancer	0.00E+00	0.00E+00	0.00E+00
44	564558.1	4153107	9901	DieselExhP	0.00056	NonCancer	0.00E+00	0.00E+00	0.00E+00
45	564718.1	4153107	9901	DieselExhP	0.00297	NonCancer	0.00E+00	0.00E+00	0.00E+00

46	564728.1	4153107	9901	DieselExhP	0.00339	NonCancer	0.00E+00	0.00E+00	0.00E+00
47	564738.1	4153107	9901	DieselExhP	0.00385	NonCancer	0.00E+00	0.00E+00	0.00E+00
48	564748.1	4153107	9901	DieselExhP	0.00437	NonCancer	0.00E+00	0.00E+00	0.00E+00
49	564758.1	4153107	9901	DieselExhP	0.00494	NonCancer	0.00E+00	0.00E+00	0.00E+00
50	564768.1	4153107	9901	DieselExhP	0.00556	NonCancer	0.00E+00	0.00E+00	0.00E+00
51	564778.1	4153107	9901	DieselExhP	0.00621	NonCancer	0.00E+00	0.00E+00	0.00E+00
52	564788.1	4153107	9901	DieselExhP	0.00691	NonCancer	0.00E+00	0.00E+00	0.00E+00
53	564798.1	4153107	9901	DieselExhP	0.00761	NonCancer	0.00E+00	0.00E+00	0.00E+00
54	564528.1	4153117	9901	DieselExhP	0.00046	NonCancer	0.00E+00	0.00E+00	0.00E+00
55	564538.1	4153117	9901	DieselExhP	0.00049	NonCancer	0.00E+00	0.00E+00	0.00E+00
56	564548.1	4153117	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
57	564558.1	4153117	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
58	564568.1	4153117	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
59	564708.1	4153117	9901	DieselExhP	0.00266	NonCancer	0.00E+00	0.00E+00	0.00E+00
60	564718.1	4153117	9901	DieselExhP	0.00305	NonCancer	0.00E+00	0.00E+00	0.00E+00
61	564728.1	4153117	9901	DieselExhP	0.00349	NonCancer	0.00E+00	0.00E+00	0.00E+00
62	564738.1	4153117	9901	DieselExhP	0.004	NonCancer	0.00E+00	0.00E+00	0.00E+00
63	564748.1	4153117	9901	DieselExhP	0.00457	NonCancer	0.00E+00	0.00E+00	0.00E+00
64	564758.1	4153117	9901	DieselExhP	0.0052	NonCancer	0.00E+00	0.00E+00	0.00E+00
65	564768.1	4153117	9901	DieselExhP	0.00588	NonCancer	0.00E+00	0.00E+00	0.00E+00
66	564778.1	4153117	9901	DieselExhP	0.0066	NonCancer	0.00E+00	0.00E+00	0.00E+00
67	564788.1	4153117	9901	DieselExhP	0.00738	NonCancer	0.00E+00	0.00E+00	0.00E+00
68	564528.1	4153127	9901	DieselExhP	0.00046	NonCancer	0.00E+00	0.00E+00	0.00E+00
69	564538.1	4153127	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
70	564548.1	4153127	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
71	564558.1	4153127	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
72	564568.1	4153127	9901	DieselExhP	0.00061	NonCancer	0.00E+00	0.00E+00	0.00E+00
73	564578.1	4153127	9901	DieselExhP	0.00066	NonCancer	0.00E+00	0.00E+00	0.00E+00
74	564698.1	4153127	9901	DieselExhP	0.00237	NonCancer	0.00E+00	0.00E+00	0.00E+00
75	564708.1	4153127	9901	DieselExhP	0.00272	NonCancer	0.00E+00	0.00E+00	0.00E+00
76	564718.1	4153127	9901	DieselExhP	0.00313	NonCancer	0.00E+00	0.00E+00	0.00E+00
77	564728.1	4153127	9901	DieselExhP	0.0036	NonCancer	0.00E+00	0.00E+00	0.00E+00
78	564738.1	4153127	9901	DieselExhP	0.00415	NonCancer	0.00E+00	0.00E+00	0.00E+00
79	564748.1	4153127	9901	DieselExhP	0.00477	NonCancer	0.00E+00	0.00E+00	0.00E+00
80	564758.1	4153127	9901	DieselExhP	0.00547	NonCancer	0.00E+00	0.00E+00	0.00E+00
81	564768.1	4153127	9901	DieselExhP	0.00623	NonCancer	0.00E+00	0.00E+00	0.00E+00
82	564778.1	4153127	9901	DieselExhP	0.00702	NonCancer	0.00E+00	0.00E+00	0.00E+00
83	564518.1	4153137	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
84	564528.1	4153137	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
85	564538.1	4153137	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
86	564548.1	4153137	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
87	564558.1	4153137	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
88	564568.1	4153137	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
89	564578.1	4153137	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
90	564588.1	4153137	9901	DieselExhP	0.00072	NonCancer	0.00E+00	0.00E+00	0.00E+00
91	564688.1	4153137	9901	DieselExhP	0.0021	NonCancer	0.00E+00	0.00E+00	0.00E+00
92	564698.1	4153137	9901	DieselExhP	0.0024	NonCancer	0.00E+00	0.00E+00	0.00E+00

93	564708.1	4153137	9901	DieselExhP	0.00277	NonCancer	0.00E+00	0.00E+00	0.00E+00
94	564718.1	4153137	9901	DieselExhP	0.0032	NonCancer	0.00E+00	0.00E+00	0.00E+00
95	564728.1	4153137	9901	DieselExhP	0.00371	NonCancer	0.00E+00	0.00E+00	0.00E+00
96	564738.1	4153137	9901	DieselExhP	0.0043	NonCancer	0.00E+00	0.00E+00	0.00E+00
97	564748.1	4153137	9901	DieselExhP	0.00499	NonCancer	0.00E+00	0.00E+00	0.00E+00
98	564758.1	4153137	9901	DieselExhP	0.00576	NonCancer	0.00E+00	0.00E+00	0.00E+00
99	564768.1	4153137	9901	DieselExhP	0.00659	NonCancer	0.00E+00	0.00E+00	0.00E+00
100	564508.1	4153147	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
101	564518.1	4153147	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
102	564528.1	4153147	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
103	564538.1	4153147	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
104	564548.1	4153147	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
105	564558.1	4153147	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
106	564568.1	4153147	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
107	564578.1	4153147	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
108	564588.1	4153147	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
109	564598.1	4153147	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
110	564678.1	4153147	9901	DieselExhP	0.00185	NonCancer	0.00E+00	0.00E+00	0.00E+00
111	564688.1	4153147	9901	DieselExhP	0.00212	NonCancer	0.00E+00	0.00E+00	0.00E+00
112	564698.1	4153147	9901	DieselExhP	0.00243	NonCancer	0.00E+00	0.00E+00	0.00E+00
113	564708.1	4153147	9901	DieselExhP	0.00281	NonCancer	0.00E+00	0.00E+00	0.00E+00
114	564718.1	4153147	9901	DieselExhP	0.00327	NonCancer	0.00E+00	0.00E+00	0.00E+00
115	564728.1	4153147	9901	DieselExhP	0.00381	NonCancer	0.00E+00	0.00E+00	0.00E+00
116	564738.1	4153147	9901	DieselExhP	0.00446	NonCancer	0.00E+00	0.00E+00	0.00E+00
117	564748.1	4153147	9901	DieselExhP	0.00519	NonCancer	0.00E+00	0.00E+00	0.00E+00
118	564758.1	4153147	9901	DieselExhP	0.00603	NonCancer	0.00E+00	0.00E+00	0.00E+00
119	564498.1	4153157	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
120	564508.1	4153157	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
121	564518.1	4153157	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
122	564528.1	4153157	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
123	564538.1	4153157	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
124	564548.1	4153157	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
125	564558.1	4153157	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
126	564568.1	4153157	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
127	564578.1	4153157	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
128	564588.1	4153157	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
129	564598.1	4153157	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
130	564608.1	4153157	9901	DieselExhP	0.00086	NonCancer	0.00E+00	0.00E+00	0.00E+00
131	564668.1	4153157	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
132	564678.1	4153157	9901	DieselExhP	0.00186	NonCancer	0.00E+00	0.00E+00	0.00E+00
133	564688.1	4153157	9901	DieselExhP	0.00213	NonCancer	0.00E+00	0.00E+00	0.00E+00
134	564698.1	4153157	9901	DieselExhP	0.00246	NonCancer	0.00E+00	0.00E+00	0.00E+00
135	564708.1	4153157	9901	DieselExhP	0.00285	NonCancer	0.00E+00	0.00E+00	0.00E+00
136	564718.1	4153157	9901	DieselExhP	0.00333	NonCancer	0.00E+00	0.00E+00	0.00E+00
137	564728.1	4153157	9901	DieselExhP	0.00391	NonCancer	0.00E+00	0.00E+00	0.00E+00
138	564738.1	4153157	9901	DieselExhP	0.00461	NonCancer	0.00E+00	0.00E+00	0.00E+00
139	564748.1	4153157	9901	DieselExhP	0.0054	NonCancer	0.00E+00	0.00E+00	0.00E+00

140	564488.1	4153167	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
141	564498.1	4153167	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
142	564508.1	4153167	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
143	564518.1	4153167	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
144	564528.1	4153167	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
145	564538.1	4153167	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
146	564548.1	4153167	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
147	564558.1	4153167	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
148	564568.1	4153167	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
149	564578.1	4153167	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
150	564588.1	4153167	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
151	564598.1	4153167	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
152	564608.1	4153167	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
153	564618.1	4153167	9901	DieselExhP	0.00095	NonCancer	0.00E+00	0.00E+00	0.00E+00
154	564658.1	4153167	9901	DieselExhP	0.00144	NonCancer	0.00E+00	0.00E+00	0.00E+00
155	564668.1	4153167	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
156	564678.1	4153167	9901	DieselExhP	0.00186	NonCancer	0.00E+00	0.00E+00	0.00E+00
157	564688.1	4153167	9901	DieselExhP	0.00214	NonCancer	0.00E+00	0.00E+00	0.00E+00
158	564698.1	4153167	9901	DieselExhP	0.00247	NonCancer	0.00E+00	0.00E+00	0.00E+00
159	564708.1	4153167	9901	DieselExhP	0.00288	NonCancer	0.00E+00	0.00E+00	0.00E+00
160	564718.1	4153167	9901	DieselExhP	0.00338	NonCancer	0.00E+00	0.00E+00	0.00E+00
161	564728.1	4153167	9901	DieselExhP	0.004	NonCancer	0.00E+00	0.00E+00	0.00E+00
162	564738.1	4153167	9901	DieselExhP	0.00475	NonCancer	0.00E+00	0.00E+00	0.00E+00
163	564478.1	4153177	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
164	564488.1	4153177	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
165	564498.1	4153177	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
166	564508.1	4153177	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
167	564518.1	4153177	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
168	564528.1	4153177	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
169	564538.1	4153177	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
170	564548.1	4153177	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
171	564558.1	4153177	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
172	564568.1	4153177	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
173	564578.1	4153177	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
174	564588.1	4153177	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
175	564598.1	4153177	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
176	564608.1	4153177	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
177	564618.1	4153177	9901	DieselExhP	0.00095	NonCancer	0.00E+00	0.00E+00	0.00E+00
178	564648.1	4153177	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
179	564658.1	4153177	9901	DieselExhP	0.00145	NonCancer	0.00E+00	0.00E+00	0.00E+00
180	564668.1	4153177	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
181	564678.1	4153177	9901	DieselExhP	0.00186	NonCancer	0.00E+00	0.00E+00	0.00E+00
182	564688.1	4153177	9901	DieselExhP	0.00214	NonCancer	0.00E+00	0.00E+00	0.00E+00
183	564698.1	4153177	9901	DieselExhP	0.00248	NonCancer	0.00E+00	0.00E+00	0.00E+00
184	564708.1	4153177	9901	DieselExhP	0.00291	NonCancer	0.00E+00	0.00E+00	0.00E+00
185	564718.1	4153177	9901	DieselExhP	0.00342	NonCancer	0.00E+00	0.00E+00	0.00E+00
186	564728.1	4153177	9901	DieselExhP	0.00406	NonCancer	0.00E+00	0.00E+00	0.00E+00

187	564738.1	4153177	9901	DieselExhP	0.00484	NonCancer	0.00E+00	0.00E+00	0.00E+00
188	564468.1	4153187	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
189	564478.1	4153187	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
190	564488.1	4153187	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
191	564498.1	4153187	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
192	564508.1	4153187	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
193	564518.1	4153187	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
194	564528.1	4153187	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
195	564538.1	4153187	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
196	564548.1	4153187	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
197	564558.1	4153187	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
198	564568.1	4153187	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
199	564578.1	4153187	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
200	564588.1	4153187	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
201	564598.1	4153187	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
202	564608.1	4153187	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
203	564618.1	4153187	9901	DieselExhP	0.00095	NonCancer	0.00E+00	0.00E+00	0.00E+00
204	564648.1	4153187	9901	DieselExhP	0.00129	NonCancer	0.00E+00	0.00E+00	0.00E+00
205	564658.1	4153187	9901	DieselExhP	0.00145	NonCancer	0.00E+00	0.00E+00	0.00E+00
206	564668.1	4153187	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
207	564678.1	4153187	9901	DieselExhP	0.00186	NonCancer	0.00E+00	0.00E+00	0.00E+00
208	564688.1	4153187	9901	DieselExhP	0.00214	NonCancer	0.00E+00	0.00E+00	0.00E+00
209	564698.1	4153187	9901	DieselExhP	0.00249	NonCancer	0.00E+00	0.00E+00	0.00E+00
210	564708.1	4153187	9901	DieselExhP	0.00292	NonCancer	0.00E+00	0.00E+00	0.00E+00
211	564718.1	4153187	9901	DieselExhP	0.00345	NonCancer	0.00E+00	0.00E+00	0.00E+00
212	564728.1	4153187	9901	DieselExhP	0.0041	NonCancer	0.00E+00	0.00E+00	0.00E+00
213	564458.1	4153197	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
214	564468.1	4153197	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
215	564478.1	4153197	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
216	564488.1	4153197	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
217	564498.1	4153197	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
218	564508.1	4153197	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
219	564518.1	4153197	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
220	564528.1	4153197	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
221	564538.1	4153197	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
222	564548.1	4153197	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
223	564558.1	4153197	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
224	564568.1	4153197	9901	DieselExhP	0.00063	NonCancer	0.00E+00	0.00E+00	0.00E+00
225	564578.1	4153197	9901	DieselExhP	0.00068	NonCancer	0.00E+00	0.00E+00	0.00E+00
226	564588.1	4153197	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
227	564598.1	4153197	9901	DieselExhP	0.0008	NonCancer	0.00E+00	0.00E+00	0.00E+00
228	564608.1	4153197	9901	DieselExhP	0.00087	NonCancer	0.00E+00	0.00E+00	0.00E+00
229	564658.1	4153197	9901	DieselExhP	0.00144	NonCancer	0.00E+00	0.00E+00	0.00E+00
230	564668.1	4153197	9901	DieselExhP	0.00163	NonCancer	0.00E+00	0.00E+00	0.00E+00
231	564678.1	4153197	9901	DieselExhP	0.00186	NonCancer	0.00E+00	0.00E+00	0.00E+00
232	564688.1	4153197	9901	DieselExhP	0.00214	NonCancer	0.00E+00	0.00E+00	0.00E+00
233	564698.1	4153197	9901	DieselExhP	0.00249	NonCancer	0.00E+00	0.00E+00	0.00E+00

234	564708.1	4153197	9901	DieselExhP	0.00293	NonCancer	0.00E+00	0.00E+00	0.00E+00
235	564718.1	4153197	9901	DieselExhP	0.00346	NonCancer	0.00E+00	0.00E+00	0.00E+00
236	564458.1	4153207	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
237	564468.1	4153207	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
238	564478.1	4153207	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
239	564488.1	4153207	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
240	564498.1	4153207	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
241	564508.1	4153207	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
242	564518.1	4153207	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
243	564528.1	4153207	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
244	564538.1	4153207	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
245	564548.1	4153207	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
246	564558.1	4153207	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
247	564568.1	4153207	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
248	564578.1	4153207	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
249	564588.1	4153207	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
250	564598.1	4153207	9901	DieselExhP	0.00079	NonCancer	0.00E+00	0.00E+00	0.00E+00
251	564668.1	4153207	9901	DieselExhP	0.00162	NonCancer	0.00E+00	0.00E+00	0.00E+00
252	564678.1	4153207	9901	DieselExhP	0.00185	NonCancer	0.00E+00	0.00E+00	0.00E+00
253	564688.1	4153207	9901	DieselExhP	0.00213	NonCancer	0.00E+00	0.00E+00	0.00E+00
254	564698.1	4153207	9901	DieselExhP	0.00247	NonCancer	0.00E+00	0.00E+00	0.00E+00
255	564708.1	4153207	9901	DieselExhP	0.0029	NonCancer	0.00E+00	0.00E+00	0.00E+00
256	564458.1	4153217	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
257	564468.1	4153217	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
258	564478.1	4153217	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
259	564488.1	4153217	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
260	564498.1	4153217	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
261	564508.1	4153217	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
262	564518.1	4153217	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
263	564528.1	4153217	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00
264	564538.1	4153217	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
265	564548.1	4153217	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
266	564558.1	4153217	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
267	564568.1	4153217	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
268	564578.1	4153217	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
269	564588.1	4153217	9901	DieselExhP	0.00073	NonCancer	0.00E+00	0.00E+00	0.00E+00
270	564678.1	4153217	9901	DieselExhP	0.00184	NonCancer	0.00E+00	0.00E+00	0.00E+00
271	564688.1	4153217	9901	DieselExhP	0.00212	NonCancer	0.00E+00	0.00E+00	0.00E+00
272	564698.1	4153217	9901	DieselExhP	0.00245	NonCancer	0.00E+00	0.00E+00	0.00E+00
273	564458.1	4153227	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
274	564468.1	4153227	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
275	564478.1	4153227	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
276	564488.1	4153227	9901	DieselExhP	0.00036	NonCancer	0.00E+00	0.00E+00	0.00E+00
277	564498.1	4153227	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
278	564508.1	4153227	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
279	564518.1	4153227	9901	DieselExhP	0.00044	NonCancer	0.00E+00	0.00E+00	0.00E+00
280	564528.1	4153227	9901	DieselExhP	0.00047	NonCancer	0.00E+00	0.00E+00	0.00E+00

281	564538.1	4153227	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
282	564548.1	4153227	9901	DieselExhP	0.00054	NonCancer	0.00E+00	0.00E+00	0.00E+00
283	564558.1	4153227	9901	DieselExhP	0.00058	NonCancer	0.00E+00	0.00E+00	0.00E+00
284	564568.1	4153227	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
285	564578.1	4153227	9901	DieselExhP	0.00067	NonCancer	0.00E+00	0.00E+00	0.00E+00
286	564688.1	4153227	9901	DieselExhP	0.00211	NonCancer	0.00E+00	0.00E+00	0.00E+00
287	564458.1	4153237	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
288	564468.1	4153237	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
289	564478.1	4153237	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
290	564488.1	4153237	9901	DieselExhP	0.00036	NonCancer	0.00E+00	0.00E+00	0.00E+00
291	564498.1	4153237	9901	DieselExhP	0.00038	NonCancer	0.00E+00	0.00E+00	0.00E+00
292	564508.1	4153237	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
293	564518.1	4153237	9901	DieselExhP	0.00043	NonCancer	0.00E+00	0.00E+00	0.00E+00
294	564528.1	4153237	9901	DieselExhP	0.00046	NonCancer	0.00E+00	0.00E+00	0.00E+00
295	564538.1	4153237	9901	DieselExhP	0.0005	NonCancer	0.00E+00	0.00E+00	0.00E+00
296	564548.1	4153237	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
297	564558.1	4153237	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
298	564568.1	4153237	9901	DieselExhP	0.00062	NonCancer	0.00E+00	0.00E+00	0.00E+00
299	564458.1	4153247	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
300	564468.1	4153247	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
301	564478.1	4153247	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
302	564488.1	4153247	9901	DieselExhP	0.00036	NonCancer	0.00E+00	0.00E+00	0.00E+00
303	564498.1	4153247	9901	DieselExhP	0.00038	NonCancer	0.00E+00	0.00E+00	0.00E+00
304	564508.1	4153247	9901	DieselExhP	0.0004	NonCancer	0.00E+00	0.00E+00	0.00E+00
305	564518.1	4153247	9901	DieselExhP	0.00043	NonCancer	0.00E+00	0.00E+00	0.00E+00
306	564528.1	4153247	9901	DieselExhP	0.00046	NonCancer	0.00E+00	0.00E+00	0.00E+00
307	564538.1	4153247	9901	DieselExhP	0.00049	NonCancer	0.00E+00	0.00E+00	0.00E+00
308	564548.1	4153247	9901	DieselExhP	0.00053	NonCancer	0.00E+00	0.00E+00	0.00E+00
309	564558.1	4153247	9901	DieselExhP	0.00057	NonCancer	0.00E+00	0.00E+00	0.00E+00
310	564458.1	4153257	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
311	564468.1	4153257	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
312	564478.1	4153257	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
313	564488.1	4153257	9901	DieselExhP	0.00036	NonCancer	0.00E+00	0.00E+00	0.00E+00
314	564498.1	4153257	9901	DieselExhP	0.00038	NonCancer	0.00E+00	0.00E+00	0.00E+00
315	564508.1	4153257	9901	DieselExhP	0.0004	NonCancer	0.00E+00	0.00E+00	0.00E+00
316	564518.1	4153257	9901	DieselExhP	0.00043	NonCancer	0.00E+00	0.00E+00	0.00E+00
317	564528.1	4153257	9901	DieselExhP	0.00046	NonCancer	0.00E+00	0.00E+00	0.00E+00
318	564538.1	4153257	9901	DieselExhP	0.00049	NonCancer	0.00E+00	0.00E+00	0.00E+00
319	564548.1	4153257	9901	DieselExhP	0.00052	NonCancer	0.00E+00	0.00E+00	0.00E+00
320	564458.1	4153267	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
321	564468.1	4153267	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
322	564478.1	4153267	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
323	564488.1	4153267	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
324	564498.1	4153267	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
325	564508.1	4153267	9901	DieselExhP	0.0004	NonCancer	0.00E+00	0.00E+00	0.00E+00
326	564518.1	4153267	9901	DieselExhP	0.00042	NonCancer	0.00E+00	0.00E+00	0.00E+00
327	564528.1	4153267	9901	DieselExhP	0.00045	NonCancer	0.00E+00	0.00E+00	0.00E+00

328	564538.1	4153267	9901	DieselExhP	0.00048	NonCancer	0.00E+00	0.00E+00	0.00E+00
329	564458.1	4153277	9901	DieselExhP	0.00029	NonCancer	0.00E+00	0.00E+00	0.00E+00
330	564468.1	4153277	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
331	564478.1	4153277	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
332	564488.1	4153277	9901	DieselExhP	0.00035	NonCancer	0.00E+00	0.00E+00	0.00E+00
333	564498.1	4153277	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
334	564508.1	4153277	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
335	564518.1	4153277	9901	DieselExhP	0.00042	NonCancer	0.00E+00	0.00E+00	0.00E+00
336	564528.1	4153277	9901	DieselExhP	0.00045	NonCancer	0.00E+00	0.00E+00	0.00E+00
337	564458.1	4153287	9901	DieselExhP	0.00029	NonCancer	0.00E+00	0.00E+00	0.00E+00
338	564468.1	4153287	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
339	564478.1	4153287	9901	DieselExhP	0.00033	NonCancer	0.00E+00	0.00E+00	0.00E+00
340	564488.1	4153287	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
341	564498.1	4153287	9901	DieselExhP	0.00037	NonCancer	0.00E+00	0.00E+00	0.00E+00
342	564508.1	4153287	9901	DieselExhP	0.00039	NonCancer	0.00E+00	0.00E+00	0.00E+00
343	564518.1	4153287	9901	DieselExhP	0.00041	NonCancer	0.00E+00	0.00E+00	0.00E+00
344	564458.1	4153297	9901	DieselExhP	0.00029	NonCancer	0.00E+00	0.00E+00	0.00E+00
345	564468.1	4153297	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
346	564478.1	4153297	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
347	564488.1	4153297	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
348	564498.1	4153297	9901	DieselExhP	0.00036	NonCancer	0.00E+00	0.00E+00	0.00E+00
349	564458.1	4153307	9901	DieselExhP	0.00029	NonCancer	0.00E+00	0.00E+00	0.00E+00
350	564468.1	4153307	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
351	564478.1	4153307	9901	DieselExhP	0.00032	NonCancer	0.00E+00	0.00E+00	0.00E+00
352	564488.1	4153307	9901	DieselExhP	0.00034	NonCancer	0.00E+00	0.00E+00	0.00E+00
353	564458.1	4153317	9901	DieselExhP	0.00028	NonCancer	0.00E+00	0.00E+00	0.00E+00
354	564468.1	4153317	9901	DieselExhP	0.0003	NonCancer	0.00E+00	0.00E+00	0.00E+00
355	564478.1	4153317	9901	DieselExhP	0.00031	NonCancer	0.00E+00	0.00E+00	0.00E+00
356	564458.1	4153327	9901	DieselExhP	0.00028	NonCancer	0.00E+00	0.00E+00	0.00E+00
357	564468.1	4153327	9901	DieselExhP	0.00029	NonCancer	0.00E+00	0.00E+00	0.00E+00
358	564458.1	4153337	9901	DieselExhP	0.00027	NonCancer	0.00E+00	0.00E+00	0.00E+00

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KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	0.00E+00	9.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	6.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	5.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	9.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	5.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	9.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DC	WATER_DC	FISH_DOSE	CROP_DOS	BEEF_DOSE
0.00E+00	*	4.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	7.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	3.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	2.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	4.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	2.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	4.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DAIRY_DOS	PIG_DOSE	CHICKEN_D	EGG_DOSE	1ST_DRIVE	2ND_DRIVE	3RD_DRIVE	PASTURE_C	FISH_CONC	WATER_CC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

)NC

Mitigated			Max Cancer Res	5.41	Max Chronic HI Res	0.00	Max PM2.5 Concentration	0.118
INDEX	X	Y	RISK_SUM	CANCER IN ONE MILLION		RESP	PM2.5	
RESIDENT	564798.1	4153036.82	3.20E-06	3.20		1.88E-03		7.03E-02
RESIDENT	564808.1	4153036.82	3.37E-06	3.37		1.98E-03		7.41E-02
RESIDENT	564788.1	4153046.82	3.23E-06	3.23		1.89E-03		7.04E-02
RESIDENT	564798.1	4153046.82	3.44E-06	3.44		2.02E-03		7.53E-02
RESIDENT	564808.1	4153046.82	3.64E-06	3.64		2.13E-03		7.99E-02
RESIDENT	564818.1	4153046.82	3.81E-06	3.81		2.23E-03		8.35E-02
RESIDENT	564778.1	4153056.82	3.20E-06	3.20		1.87E-03		6.91E-02
RESIDENT	564788.1	4153056.82	3.45E-06	3.45		2.02E-03		7.50E-02
RESIDENT	564798.1	4153056.82	3.70E-06	3.70		2.17E-03		8.07E-02
RESIDENT	564808.1	4153056.82	3.93E-06	3.93		2.30E-03		8.61E-02
RESIDENT	564818.1	4153056.82	4.12E-06	4.12		2.41E-03		9.05E-02
RESIDENT	564768.1	4153066.82	3.11E-06	3.11		1.82E-03		6.69E-02
RESIDENT	564778.1	4153066.82	3.40E-06	3.40		1.99E-03		7.34E-02
RESIDENT	564788.1	4153066.82	3.70E-06	3.70		2.16E-03		8.01E-02
RESIDENT	564798.1	4153066.82	3.98E-06	3.98		2.33E-03		8.67E-02
RESIDENT	564808.1	4153066.82	4.25E-06	4.25		2.49E-03		9.30E-02
RESIDENT	564818.1	4153066.82	4.48E-06	4.48		2.62E-03		9.83E-02
RESIDENT	564758.1	4153076.82	2.99E-06	2.99		1.75E-03		6.35E-02
RESIDENT	564768.1	4153076.82	3.30E-06	3.30		1.93E-03		7.06E-02
RESIDENT	564778.1	4153076.82	3.62E-06	3.62		2.12E-03		7.80E-02
RESIDENT	564788.1	4153076.82	3.96E-06	3.96		2.32E-03		8.56E-02
RESIDENT	564798.1	4153076.82	4.29E-06	4.29		2.51E-03		9.31E-02
RESIDENT	564808.1	4153076.82	4.60E-06	4.60		2.70E-03		1.01E-01
RESIDENT	564818.1	4153076.82	4.88E-06	4.88		2.86E-03		1.07E-01
RESIDENT	564748.1	4153086.82	2.82E-06	2.82		1.65E-03		5.92E-02
RESIDENT	564758.1	4153086.82	3.14E-06	3.14		1.84E-03		6.67E-02
RESIDENT	564768.1	4153086.82	3.49E-06	3.49		2.05E-03		7.46E-02
RESIDENT	564778.1	4153086.82	3.86E-06	3.86		2.26E-03		8.29E-02
RESIDENT	564788.1	4153086.82	4.24E-06	4.24		2.48E-03		9.16E-02
RESIDENT	564798.1	4153086.82	4.62E-06	4.62		2.70E-03		1.00E-01
RESIDENT	564808.1	4153086.82	4.99E-06	4.99		2.92E-03		1.09E-01
RESIDENT	564818.1	4153086.82	5.33E-06	5.33		3.12E-03		1.17E-01
RESIDENT	564548.1	4153096.82	3.68E-07	0.37		2.16E-04		7.24E-03
RESIDENT	564738.1	4153096.82	2.62E-06	2.62		1.53E-03		5.41E-02
RESIDENT	564748.1	4153096.82	2.95E-06	2.95		1.73E-03		6.18E-02
RESIDENT	564758.1	4153096.82	3.31E-06	3.31		1.94E-03		7.00E-02
RESIDENT	564768.1	4153096.82	3.70E-06	3.70		2.17E-03		7.89E-02
RESIDENT	564778.1	4153096.82	4.12E-06	4.12		2.41E-03		8.82E-02
RESIDENT	564788.1	4153096.82	4.55E-06	4.55		2.67E-03		9.81E-02
RESIDENT	564798.1	4153096.82	4.98E-06	4.98		2.92E-03		1.08E-01
RESIDENT	564808.1	4153096.82	5.41E-06	5.41		3.17E-03		1.18E-01
RESIDENT	564538.1	4153106.82	3.45E-07	0.35		2.02E-04		6.84E-03
RESIDENT	564548.1	4153106.82	3.70E-07	0.37		2.16E-04		7.31E-03
RESIDENT	564558.1	4153106.82	3.99E-07	0.40		2.34E-04		7.84E-03
RESIDENT	564718.1	4153106.82	2.10E-06	2.10		1.23E-03		4.23E-02

RESIDENT	564728.1	4153106.82	2.39E-06	2.39	1.40E-03	4.87E-02
RESIDENT	564738.1	4153106.82	2.72E-06	2.72	1.59E-03	5.61E-02
RESIDENT	564748.1	4153106.82	3.09E-06	3.09	1.81E-03	6.44E-02
RESIDENT	564758.1	4153106.82	3.49E-06	3.49	2.04E-03	7.36E-02
RESIDENT	564768.1	4153106.82	3.93E-06	3.93	2.30E-03	8.34E-02
RESIDENT	564778.1	4153106.82	4.39E-06	4.39	2.57E-03	9.39E-02
RESIDENT	564788.1	4153106.82	4.88E-06	4.88	2.86E-03	1.05E-01
RESIDENT	564798.1	4153106.82	5.37E-06	5.37	3.15E-03	1.16E-01
RESIDENT	564528.1	4153116.82	3.25E-07	0.33	1.90E-04	6.51E-03
RESIDENT	564538.1	4153116.82	3.48E-07	0.35	2.04E-04	6.93E-03
RESIDENT	564548.1	4153116.82	3.72E-07	0.37	2.18E-04	7.39E-03
RESIDENT	564558.1	4153116.82	4.01E-07	0.40	2.34E-04	7.91E-03
RESIDENT	564568.1	4153116.82	4.32E-07	0.43	2.52E-04	8.50E-03
RESIDENT	564708.1	4153116.82	1.88E-06	1.88	1.10E-03	3.74E-02
RESIDENT	564718.1	4153116.82	2.15E-06	2.15	1.26E-03	4.32E-02
RESIDENT	564728.1	4153116.82	2.47E-06	2.47	1.45E-03	5.01E-02
RESIDENT	564738.1	4153116.82	2.82E-06	2.82	1.65E-03	5.80E-02
RESIDENT	564748.1	4153116.82	3.23E-06	3.23	1.89E-03	6.71E-02
RESIDENT	564758.1	4153116.82	3.68E-06	3.68	2.15E-03	7.72E-02
RESIDENT	564768.1	4153116.82	4.15E-06	4.15	2.43E-03	8.80E-02
RESIDENT	564778.1	4153116.82	4.66E-06	4.66	2.73E-03	9.95E-02
RESIDENT	564788.1	4153116.82	5.21E-06	5.21	3.05E-03	1.12E-01
RESIDENT	564528.1	4153126.82	3.27E-07	0.33	1.92E-04	6.61E-03
RESIDENT	564538.1	4153126.82	3.49E-07	0.35	2.04E-04	7.03E-03
RESIDENT	564548.1	4153126.82	3.76E-07	0.38	2.20E-04	7.49E-03
RESIDENT	564558.1	4153126.82	4.03E-07	0.40	2.36E-04	8.01E-03
RESIDENT	564568.1	4153126.82	4.33E-07	0.43	2.54E-04	8.59E-03
RESIDENT	564578.1	4153126.82	4.68E-07	0.47	2.74E-04	9.25E-03
RESIDENT	564698.1	4153126.82	1.67E-06	1.67	9.80E-04	3.30E-02
RESIDENT	564708.1	4153126.82	1.92E-06	1.92	1.12E-03	3.81E-02
RESIDENT	564718.1	4153126.82	2.21E-06	2.21	1.29E-03	4.42E-02
RESIDENT	564728.1	4153126.82	2.54E-06	2.54	1.49E-03	5.15E-02
RESIDENT	564738.1	4153126.82	2.93E-06	2.93	1.72E-03	6.01E-02
RESIDENT	564748.1	4153126.82	3.37E-06	3.37	1.97E-03	6.99E-02
RESIDENT	564758.1	4153126.82	3.87E-06	3.87	2.26E-03	8.10E-02
RESIDENT	564768.1	4153126.82	4.40E-06	4.40	2.57E-03	9.30E-02
RESIDENT	564778.1	4153126.82	4.96E-06	4.96	2.90E-03	1.06E-01
RESIDENT	564518.1	4153136.82	3.09E-07	0.31	1.80E-04	6.32E-03
RESIDENT	564528.1	4153136.82	3.29E-07	0.33	1.92E-04	6.71E-03
RESIDENT	564538.1	4153136.82	3.52E-07	0.35	2.06E-04	7.13E-03
RESIDENT	564548.1	4153136.82	3.76E-07	0.38	2.20E-04	7.60E-03
RESIDENT	564558.1	4153136.82	4.05E-07	0.40	2.36E-04	8.12E-03
RESIDENT	564568.1	4153136.82	4.35E-07	0.44	2.54E-04	8.70E-03
RESIDENT	564578.1	4153136.82	4.71E-07	0.47	2.76E-04	9.36E-03
RESIDENT	564588.1	4153136.82	5.09E-07	0.51	2.98E-04	1.01E-02
RESIDENT	564688.1	4153136.82	1.48E-06	1.48	8.68E-04	2.91E-02
RESIDENT	564698.1	4153136.82	1.70E-06	1.70	9.94E-04	3.35E-02

RESIDENT	564708.1	4153136.82	1.96E-06	1.96	1.15E-03	3.88E-02
RESIDENT	564718.1	4153136.82	2.26E-06	2.26	1.32E-03	4.52E-02
RESIDENT	564728.1	4153136.82	2.62E-06	2.62	1.53E-03	5.29E-02
RESIDENT	564738.1	4153136.82	3.04E-06	3.04	1.78E-03	6.21E-02
RESIDENT	564748.1	4153136.82	3.52E-06	3.52	2.06E-03	7.29E-02
RESIDENT	564758.1	4153136.82	4.07E-06	4.07	2.38E-03	8.52E-02
RESIDENT	564768.1	4153136.82	4.65E-06	4.65	2.73E-03	9.84E-02
RESIDENT	564508.1	4153146.82	2.91E-07	0.29	1.70E-04	6.01E-03
RESIDENT	564518.1	4153146.82	3.11E-07	0.31	1.82E-04	6.39E-03
RESIDENT	564528.1	4153146.82	3.31E-07	0.33	1.94E-04	6.79E-03
RESIDENT	564538.1	4153146.82	3.52E-07	0.35	2.06E-04	7.23E-03
RESIDENT	564548.1	4153146.82	3.79E-07	0.38	2.22E-04	7.71E-03
RESIDENT	564558.1	4153146.82	4.07E-07	0.41	2.38E-04	8.23E-03
RESIDENT	564568.1	4153146.82	4.37E-07	0.44	2.56E-04	8.82E-03
RESIDENT	564578.1	4153146.82	4.71E-07	0.47	2.76E-04	9.48E-03
RESIDENT	564588.1	4153146.82	5.13E-07	0.51	3.00E-04	1.02E-02
RESIDENT	564598.1	4153146.82	5.56E-07	0.56	3.26E-04	1.11E-02
RESIDENT	564678.1	4153146.82	1.30E-06	1.30	7.64E-04	2.56E-02
RESIDENT	564688.1	4153146.82	1.50E-06	1.50	8.76E-04	2.94E-02
RESIDENT	564698.1	4153146.82	1.72E-06	1.72	1.01E-03	3.39E-02
RESIDENT	564708.1	4153146.82	1.99E-06	1.99	1.16E-03	3.94E-02
RESIDENT	564718.1	4153146.82	2.31E-06	2.31	1.35E-03	4.60E-02
RESIDENT	564728.1	4153146.82	2.69E-06	2.69	1.58E-03	5.43E-02
RESIDENT	564738.1	4153146.82	3.15E-06	3.15	1.84E-03	6.42E-02
RESIDENT	564748.1	4153146.82	3.66E-06	3.66	2.15E-03	7.58E-02
RESIDENT	564758.1	4153146.82	4.26E-06	4.26	2.49E-03	8.91E-02
RESIDENT	564498.1	4153156.82	2.75E-07	0.27	1.60E-04	5.71E-03
RESIDENT	564508.1	4153156.82	2.91E-07	0.29	1.70E-04	6.06E-03
RESIDENT	564518.1	4153156.82	3.11E-07	0.31	1.82E-04	6.44E-03
RESIDENT	564528.1	4153156.82	3.32E-07	0.33	1.94E-04	6.85E-03
RESIDENT	564538.1	4153156.82	3.54E-07	0.35	2.08E-04	7.31E-03
RESIDENT	564548.1	4153156.82	3.79E-07	0.38	2.22E-04	7.80E-03
RESIDENT	564558.1	4153156.82	4.07E-07	0.41	2.38E-04	8.35E-03
RESIDENT	564568.1	4153156.82	4.39E-07	0.44	2.56E-04	8.94E-03
RESIDENT	564578.1	4153156.82	4.75E-07	0.47	2.78E-04	9.61E-03
RESIDENT	564588.1	4153156.82	5.13E-07	0.51	3.00E-04	1.04E-02
RESIDENT	564598.1	4153156.82	5.60E-07	0.56	3.28E-04	1.12E-02
RESIDENT	564608.1	4153156.82	6.10E-07	0.61	3.58E-04	1.22E-02
RESIDENT	564668.1	4153156.82	1.15E-06	1.15	6.74E-04	2.26E-02
RESIDENT	564678.1	4153156.82	1.31E-06	1.31	7.68E-04	2.58E-02
RESIDENT	564688.1	4153156.82	1.50E-06	1.50	8.82E-04	2.96E-02
RESIDENT	564698.1	4153156.82	1.73E-06	1.73	1.02E-03	3.42E-02
RESIDENT	564708.1	4153156.82	2.01E-06	2.01	1.18E-03	3.99E-02
RESIDENT	564718.1	4153156.82	2.35E-06	2.35	1.38E-03	4.69E-02
RESIDENT	564728.1	4153156.82	2.76E-06	2.76	1.62E-03	5.56E-02
RESIDENT	564738.1	4153156.82	3.25E-06	3.25	1.91E-03	6.63E-02
RESIDENT	564748.1	4153156.82	3.81E-06	3.81	2.23E-03	7.87E-02

RESIDENT	564488.1	4153166.82	2.60E-07	0.26	1.52E-04	5.41E-03
RESIDENT	564498.1	4153166.82	2.76E-07	0.28	1.62E-04	5.74E-03
RESIDENT	564508.1	4153166.82	2.92E-07	0.29	1.72E-04	6.09E-03
RESIDENT	564518.1	4153166.82	3.11E-07	0.31	1.82E-04	6.47E-03
RESIDENT	564528.1	4153166.82	3.32E-07	0.33	1.94E-04	6.90E-03
RESIDENT	564538.1	4153166.82	3.56E-07	0.36	2.08E-04	7.37E-03
RESIDENT	564548.1	4153166.82	3.79E-07	0.38	2.22E-04	7.88E-03
RESIDENT	564558.1	4153166.82	4.10E-07	0.41	2.40E-04	8.44E-03
RESIDENT	564568.1	4153166.82	4.41E-07	0.44	2.58E-04	9.05E-03
RESIDENT	564578.1	4153166.82	4.75E-07	0.47	2.78E-04	9.73E-03
RESIDENT	564588.1	4153166.82	5.15E-07	0.51	3.02E-04	1.05E-02
RESIDENT	564598.1	4153166.82	5.60E-07	0.56	3.28E-04	1.13E-02
RESIDENT	564608.1	4153166.82	6.12E-07	0.61	3.58E-04	1.23E-02
RESIDENT	564618.1	4153166.82	6.72E-07	0.67	3.94E-04	1.34E-02
RESIDENT	564658.1	4153166.82	1.02E-06	1.02	5.98E-04	2.01E-02
RESIDENT	564668.1	4153166.82	1.15E-06	1.15	6.76E-04	2.27E-02
RESIDENT	564678.1	4153166.82	1.31E-06	1.31	7.70E-04	2.59E-02
RESIDENT	564688.1	4153166.82	1.51E-06	1.51	8.86E-04	2.98E-02
RESIDENT	564698.1	4153166.82	1.75E-06	1.75	1.02E-03	3.45E-02
RESIDENT	564708.1	4153166.82	2.04E-06	2.04	1.19E-03	4.04E-02
RESIDENT	564718.1	4153166.82	2.39E-06	2.39	1.40E-03	4.76E-02
RESIDENT	564728.1	4153166.82	2.83E-06	2.83	1.66E-03	5.68E-02
RESIDENT	564738.1	4153166.82	3.36E-06	3.36	1.97E-03	6.83E-02
RESIDENT	564478.1	4153176.82	2.46E-07	0.25	1.44E-04	5.11E-03
RESIDENT	564488.1	4153176.82	2.60E-07	0.26	1.52E-04	5.42E-03
RESIDENT	564498.1	4153176.82	2.76E-07	0.28	1.62E-04	5.75E-03
RESIDENT	564508.1	4153176.82	2.92E-07	0.29	1.72E-04	6.11E-03
RESIDENT	564518.1	4153176.82	3.11E-07	0.31	1.82E-04	6.50E-03
RESIDENT	564528.1	4153176.82	3.32E-07	0.33	1.94E-04	6.93E-03
RESIDENT	564538.1	4153176.82	3.56E-07	0.36	2.08E-04	7.41E-03
RESIDENT	564548.1	4153176.82	3.83E-07	0.38	2.24E-04	7.93E-03
RESIDENT	564558.1	4153176.82	4.10E-07	0.41	2.40E-04	8.50E-03
RESIDENT	564568.1	4153176.82	4.41E-07	0.44	2.58E-04	9.13E-03
RESIDENT	564578.1	4153176.82	4.75E-07	0.47	2.78E-04	9.83E-03
RESIDENT	564588.1	4153176.82	5.17E-07	0.52	3.02E-04	1.06E-02
RESIDENT	564598.1	4153176.82	5.60E-07	0.56	3.28E-04	1.15E-02
RESIDENT	564608.1	4153176.82	6.14E-07	0.61	3.60E-04	1.25E-02
RESIDENT	564618.1	4153176.82	6.72E-07	0.67	3.94E-04	1.36E-02
RESIDENT	564648.1	4153176.82	9.09E-07	0.91	5.32E-04	1.81E-02
RESIDENT	564658.1	4153176.82	1.02E-06	1.02	5.98E-04	2.03E-02
RESIDENT	564668.1	4153176.82	1.15E-06	1.15	6.76E-04	2.28E-02
RESIDENT	564678.1	4153176.82	1.32E-06	1.32	7.72E-04	2.60E-02
RESIDENT	564688.1	4153176.82	1.52E-06	1.52	8.88E-04	2.99E-02
RESIDENT	564698.1	4153176.82	1.76E-06	1.76	1.03E-03	3.48E-02
RESIDENT	564708.1	4153176.82	2.05E-06	2.05	1.20E-03	4.08E-02
RESIDENT	564718.1	4153176.82	2.42E-06	2.42	1.42E-03	4.83E-02
RESIDENT	564728.1	4153176.82	2.87E-06	2.87	1.68E-03	5.77E-02

RESIDENT	564738.1	4153176.82	3.42E-06	3.42	2.00E-03	6.97E-02
RESIDENT	564468.1	4153186.82	2.31E-07	0.23	1.36E-04	4.84E-03
RESIDENT	564478.1	4153186.82	2.46E-07	0.25	1.44E-04	5.12E-03
RESIDENT	564488.1	4153186.82	2.60E-07	0.26	1.52E-04	5.42E-03
RESIDENT	564498.1	4153186.82	2.76E-07	0.28	1.62E-04	5.75E-03
RESIDENT	564508.1	4153186.82	2.92E-07	0.29	1.72E-04	6.11E-03
RESIDENT	564518.1	4153186.82	3.11E-07	0.31	1.82E-04	6.51E-03
RESIDENT	564528.1	4153186.82	3.34E-07	0.33	1.96E-04	6.95E-03
RESIDENT	564538.1	4153186.82	3.56E-07	0.36	2.08E-04	7.42E-03
RESIDENT	564548.1	4153186.82	3.83E-07	0.38	2.24E-04	7.95E-03
RESIDENT	564558.1	4153186.82	4.10E-07	0.41	2.40E-04	8.54E-03
RESIDENT	564568.1	4153186.82	4.41E-07	0.44	2.58E-04	9.18E-03
RESIDENT	564578.1	4153186.82	4.77E-07	0.48	2.80E-04	9.89E-03
RESIDENT	564588.1	4153186.82	5.17E-07	0.52	3.02E-04	1.07E-02
RESIDENT	564598.1	4153186.82	5.62E-07	0.56	3.28E-04	1.16E-02
RESIDENT	564608.1	4153186.82	6.14E-07	0.61	3.60E-04	1.26E-02
RESIDENT	564618.1	4153186.82	6.74E-07	0.67	3.94E-04	1.37E-02
RESIDENT	564648.1	4153186.82	9.12E-07	0.91	5.34E-04	1.83E-02
RESIDENT	564658.1	4153186.82	1.02E-06	1.02	5.98E-04	2.04E-02
RESIDENT	564668.1	4153186.82	1.15E-06	1.15	6.76E-04	2.29E-02
RESIDENT	564678.1	4153186.82	1.31E-06	1.31	7.70E-04	2.61E-02
RESIDENT	564688.1	4153186.82	1.51E-06	1.51	8.86E-04	3.00E-02
RESIDENT	564698.1	4153186.82	1.76E-06	1.76	1.03E-03	3.49E-02
RESIDENT	564708.1	4153186.82	2.06E-06	2.06	1.21E-03	4.11E-02
RESIDENT	564718.1	4153186.82	2.44E-06	2.44	1.43E-03	4.87E-02
RESIDENT	564728.1	4153186.82	2.90E-06	2.90	1.70E-03	5.84E-02
RESIDENT	564458.1	4153196.82	2.19E-07	0.22	1.28E-04	4.59E-03
RESIDENT	564468.1	4153196.82	2.31E-07	0.23	1.36E-04	4.85E-03
RESIDENT	564478.1	4153196.82	2.46E-07	0.25	1.44E-04	5.12E-03
RESIDENT	564488.1	4153196.82	2.60E-07	0.26	1.52E-04	5.42E-03
RESIDENT	564498.1	4153196.82	2.76E-07	0.28	1.62E-04	5.75E-03
RESIDENT	564508.1	4153196.82	2.92E-07	0.29	1.72E-04	6.11E-03
RESIDENT	564518.1	4153196.82	3.11E-07	0.31	1.82E-04	6.51E-03
RESIDENT	564528.1	4153196.82	3.32E-07	0.33	1.94E-04	6.95E-03
RESIDENT	564538.1	4153196.82	3.56E-07	0.36	2.08E-04	7.42E-03
RESIDENT	564548.1	4153196.82	3.83E-07	0.38	2.24E-04	7.95E-03
RESIDENT	564558.1	4153196.82	4.10E-07	0.41	2.40E-04	8.54E-03
RESIDENT	564568.1	4153196.82	4.41E-07	0.44	2.58E-04	9.19E-03
RESIDENT	564578.1	4153196.82	4.77E-07	0.48	2.80E-04	9.91E-03
RESIDENT	564588.1	4153196.82	5.17E-07	0.52	3.02E-04	1.07E-02
RESIDENT	564598.1	4153196.82	5.62E-07	0.56	3.28E-04	1.16E-02
RESIDENT	564608.1	4153196.82	6.14E-07	0.61	3.60E-04	1.27E-02
RESIDENT	564658.1	4153196.82	1.02E-06	1.02	5.96E-04	2.05E-02
RESIDENT	564668.1	4153196.82	1.15E-06	1.15	6.74E-04	2.30E-02
RESIDENT	564678.1	4153196.82	1.31E-06	1.31	7.68E-04	2.62E-02
RESIDENT	564688.1	4153196.82	1.51E-06	1.51	8.84E-04	3.01E-02
RESIDENT	564698.1	4153196.82	1.76E-06	1.76	1.03E-03	3.50E-02

RESIDENT	564708.1	4153196.82	2.07E-06	2.07	1.21E-03	4.12E-02
RESIDENT	564718.1	4153196.82	2.45E-06	2.45	1.43E-03	4.90E-02
RESIDENT	564458.1	4153206.82	2.19E-07	0.22	1.28E-04	4.59E-03
RESIDENT	564468.1	4153206.82	2.31E-07	0.23	1.36E-04	4.84E-03
RESIDENT	564478.1	4153206.82	2.44E-07	0.24	1.42E-04	5.12E-03
RESIDENT	564488.1	4153206.82	2.60E-07	0.26	1.52E-04	5.42E-03
RESIDENT	564498.1	4153206.82	2.75E-07	0.27	1.60E-04	5.75E-03
RESIDENT	564508.1	4153206.82	2.92E-07	0.29	1.72E-04	6.11E-03
RESIDENT	564518.1	4153206.82	3.11E-07	0.31	1.82E-04	6.51E-03
RESIDENT	564528.1	4153206.82	3.32E-07	0.33	1.94E-04	6.94E-03
RESIDENT	564538.1	4153206.82	3.56E-07	0.36	2.08E-04	7.41E-03
RESIDENT	564548.1	4153206.82	3.81E-07	0.38	2.24E-04	7.94E-03
RESIDENT	564558.1	4153206.82	4.10E-07	0.41	2.40E-04	8.53E-03
RESIDENT	564568.1	4153206.82	4.41E-07	0.44	2.58E-04	9.19E-03
RESIDENT	564578.1	4153206.82	4.75E-07	0.47	2.78E-04	9.91E-03
RESIDENT	564588.1	4153206.82	5.17E-07	0.52	3.02E-04	1.07E-02
RESIDENT	564598.1	4153206.82	5.60E-07	0.56	3.28E-04	1.16E-02
RESIDENT	564668.1	4153206.82	1.15E-06	1.15	6.72E-04	2.31E-02
RESIDENT	564678.1	4153206.82	1.31E-06	1.31	7.66E-04	2.62E-02
RESIDENT	564688.1	4153206.82	1.51E-06	1.51	8.82E-04	3.01E-02
RESIDENT	564698.1	4153206.82	1.74E-06	1.74	1.02E-03	3.49E-02
RESIDENT	564708.1	4153206.82	2.04E-06	2.04	1.20E-03	4.10E-02
RESIDENT	564458.1	4153216.82	2.19E-07	0.22	1.28E-04	4.58E-03
RESIDENT	564468.1	4153216.82	2.30E-07	0.23	1.34E-04	4.83E-03
RESIDENT	564478.1	4153216.82	2.44E-07	0.24	1.42E-04	5.11E-03
RESIDENT	564488.1	4153216.82	2.57E-07	0.26	1.50E-04	5.41E-03
RESIDENT	564498.1	4153216.82	2.73E-07	0.27	1.60E-04	5.73E-03
RESIDENT	564508.1	4153216.82	2.91E-07	0.29	1.70E-04	6.10E-03
RESIDENT	564518.1	4153216.82	3.11E-07	0.31	1.82E-04	6.49E-03
RESIDENT	564528.1	4153216.82	3.31E-07	0.33	1.94E-04	6.92E-03
RESIDENT	564538.1	4153216.82	3.54E-07	0.35	2.08E-04	7.40E-03
RESIDENT	564548.1	4153216.82	3.79E-07	0.38	2.22E-04	7.93E-03
RESIDENT	564558.1	4153216.82	4.08E-07	0.41	2.38E-04	8.52E-03
RESIDENT	564568.1	4153216.82	4.41E-07	0.44	2.58E-04	9.17E-03
RESIDENT	564578.1	4153216.82	4.75E-07	0.47	2.78E-04	9.90E-03
RESIDENT	564588.1	4153216.82	5.15E-07	0.51	3.02E-04	1.07E-02
RESIDENT	564678.1	4153216.82	1.30E-06	1.30	7.62E-04	2.63E-02
RESIDENT	564688.1	4153216.82	1.50E-06	1.50	8.78E-04	3.02E-02
RESIDENT	564698.1	4153216.82	1.73E-06	1.73	1.01E-03	3.48E-02
RESIDENT	564458.1	4153226.82	2.17E-07	0.22	1.26E-04	4.56E-03
RESIDENT	564468.1	4153226.82	2.29E-07	0.23	1.34E-04	4.82E-03
RESIDENT	564478.1	4153226.82	2.42E-07	0.24	1.42E-04	5.09E-03
RESIDENT	564488.1	4153226.82	2.56E-07	0.26	1.50E-04	5.39E-03
RESIDENT	564498.1	4153226.82	2.73E-07	0.27	1.60E-04	5.72E-03
RESIDENT	564508.1	4153226.82	2.91E-07	0.29	1.70E-04	6.08E-03
RESIDENT	564518.1	4153226.82	3.09E-07	0.31	1.80E-04	6.48E-03
RESIDENT	564528.1	4153226.82	3.31E-07	0.33	1.94E-04	6.90E-03

RESIDENT	564538.1	4153226.82	3.52E-07	0.35	2.06E-04	7.38E-03
RESIDENT	564548.1	4153226.82	3.79E-07	0.38	2.22E-04	7.91E-03
RESIDENT	564558.1	4153226.82	4.07E-07	0.41	2.38E-04	8.50E-03
RESIDENT	564568.1	4153226.82	4.37E-07	0.44	2.56E-04	9.15E-03
RESIDENT	564578.1	4153226.82	4.71E-07	0.47	2.76E-04	9.89E-03
RESIDENT	564688.1	4153226.82	1.49E-06	1.49	8.72E-04	3.02E-02
RESIDENT	564458.1	4153236.82	2.15E-07	0.22	1.26E-04	4.53E-03
RESIDENT	564468.1	4153236.82	2.27E-07	0.23	1.34E-04	4.78E-03
RESIDENT	564478.1	4153236.82	2.40E-07	0.24	1.40E-04	5.06E-03
RESIDENT	564488.1	4153236.82	2.56E-07	0.26	1.50E-04	5.36E-03
RESIDENT	564498.1	4153236.82	2.71E-07	0.27	1.58E-04	5.69E-03
RESIDENT	564508.1	4153236.82	2.87E-07	0.29	1.68E-04	6.05E-03
RESIDENT	564518.1	4153236.82	3.07E-07	0.31	1.80E-04	6.45E-03
RESIDENT	564528.1	4153236.82	3.29E-07	0.33	1.92E-04	6.88E-03
RESIDENT	564538.1	4153236.82	3.50E-07	0.35	2.06E-04	7.35E-03
RESIDENT	564548.1	4153236.82	3.76E-07	0.38	2.20E-04	7.88E-03
RESIDENT	564558.1	4153236.82	4.03E-07	0.40	2.36E-04	8.47E-03
RESIDENT	564568.1	4153236.82	4.34E-07	0.43	2.54E-04	9.12E-03
RESIDENT	564458.1	4153246.82	2.15E-07	0.21	1.26E-04	4.49E-03
RESIDENT	564468.1	4153246.82	2.26E-07	0.23	1.32E-04	4.74E-03
RESIDENT	564478.1	4153246.82	2.38E-07	0.24	1.40E-04	5.02E-03
RESIDENT	564488.1	4153246.82	2.53E-07	0.25	1.48E-04	5.32E-03
RESIDENT	564498.1	4153246.82	2.69E-07	0.27	1.58E-04	5.65E-03
RESIDENT	564508.1	4153246.82	2.87E-07	0.29	1.68E-04	6.01E-03
RESIDENT	564518.1	4153246.82	3.03E-07	0.30	1.78E-04	6.40E-03
RESIDENT	564528.1	4153246.82	3.25E-07	0.33	1.90E-04	6.83E-03
RESIDENT	564538.1	4153246.82	3.48E-07	0.35	2.04E-04	7.31E-03
RESIDENT	564548.1	4153246.82	3.72E-07	0.37	2.18E-04	7.84E-03
RESIDENT	564558.1	4153246.82	3.99E-07	0.40	2.34E-04	8.42E-03
RESIDENT	564458.1	4153256.82	2.11E-07	0.21	1.24E-04	4.44E-03
RESIDENT	564468.1	4153256.82	2.24E-07	0.22	1.32E-04	4.69E-03
RESIDENT	564478.1	4153256.82	2.37E-07	0.24	1.38E-04	4.97E-03
RESIDENT	564488.1	4153256.82	2.53E-07	0.25	1.48E-04	5.27E-03
RESIDENT	564498.1	4153256.82	2.67E-07	0.27	1.56E-04	5.60E-03
RESIDENT	564508.1	4153256.82	2.83E-07	0.28	1.66E-04	5.95E-03
RESIDENT	564518.1	4153256.82	3.02E-07	0.30	1.76E-04	6.34E-03
RESIDENT	564528.1	4153256.82	3.22E-07	0.32	1.88E-04	6.77E-03
RESIDENT	564538.1	4153256.82	3.45E-07	0.35	2.02E-04	7.24E-03
RESIDENT	564548.1	4153256.82	3.68E-07	0.37	2.16E-04	7.77E-03
RESIDENT	564458.1	4153266.82	2.11E-07	0.21	1.24E-04	4.39E-03
RESIDENT	564468.1	4153266.82	2.22E-07	0.22	1.30E-04	4.64E-03
RESIDENT	564478.1	4153266.82	2.35E-07	0.23	1.38E-04	4.91E-03
RESIDENT	564488.1	4153266.82	2.49E-07	0.25	1.46E-04	5.21E-03
RESIDENT	564498.1	4153266.82	2.64E-07	0.26	1.54E-04	5.53E-03
RESIDENT	564508.1	4153266.82	2.80E-07	0.28	1.64E-04	5.89E-03
RESIDENT	564518.1	4153266.82	2.98E-07	0.30	1.74E-04	6.27E-03
RESIDENT	564528.1	4153266.82	3.18E-07	0.32	1.86E-04	6.69E-03

RESIDENT	564538.1	4153266.82	3.41E-07	0.34	2.00E-04	7.15E-03
RESIDENT	564458.1	4153276.82	2.08E-07	0.21	1.22E-04	4.33E-03
RESIDENT	564468.1	4153276.82	2.19E-07	0.22	1.28E-04	4.58E-03
RESIDENT	564478.1	4153276.82	2.33E-07	0.23	1.36E-04	4.85E-03
RESIDENT	564488.1	4153276.82	2.46E-07	0.25	1.44E-04	5.14E-03
RESIDENT	564498.1	4153276.82	2.60E-07	0.26	1.52E-04	5.46E-03
RESIDENT	564508.1	4153276.82	2.76E-07	0.28	1.62E-04	5.81E-03
RESIDENT	564518.1	4153276.82	2.96E-07	0.30	1.74E-04	6.19E-03
RESIDENT	564528.1	4153276.82	3.14E-07	0.31	1.84E-04	6.60E-03
RESIDENT	564458.1	4153286.82	2.06E-07	0.21	1.20E-04	4.28E-03
RESIDENT	564468.1	4153286.82	2.19E-07	0.22	1.28E-04	4.53E-03
RESIDENT	564478.1	4153286.82	2.30E-07	0.23	1.34E-04	4.79E-03
RESIDENT	564488.1	4153286.82	2.42E-07	0.24	1.42E-04	5.07E-03
RESIDENT	564498.1	4153286.82	2.58E-07	0.26	1.52E-04	5.38E-03
RESIDENT	564508.1	4153286.82	2.75E-07	0.27	1.60E-04	5.73E-03
RESIDENT	564518.1	4153286.82	2.92E-07	0.29	1.72E-04	6.10E-03
RESIDENT	564458.1	4153296.82	2.04E-07	0.20	1.20E-04	4.24E-03
RESIDENT	564468.1	4153296.82	2.15E-07	0.21	1.26E-04	4.48E-03
RESIDENT	564478.1	4153296.82	2.26E-07	0.23	1.32E-04	4.73E-03
RESIDENT	564488.1	4153296.82	2.40E-07	0.24	1.40E-04	5.01E-03
RESIDENT	564498.1	4153296.82	2.55E-07	0.25	1.50E-04	5.31E-03
RESIDENT	564458.1	4153306.82	2.02E-07	0.20	1.18E-04	4.19E-03
RESIDENT	564468.1	4153306.82	2.11E-07	0.21	1.24E-04	4.43E-03
RESIDENT	564478.1	4153306.82	2.26E-07	0.23	1.32E-04	4.68E-03
RESIDENT	564488.1	4153306.82	2.37E-07	0.24	1.38E-04	4.95E-03
RESIDENT	564458.1	4153316.82	1.99E-07	0.20	1.16E-04	4.14E-03
RESIDENT	564468.1	4153316.82	2.10E-07	0.21	1.22E-04	4.37E-03
RESIDENT	564478.1	4153316.82	2.22E-07	0.22	1.30E-04	4.62E-03
RESIDENT	564458.1	4153326.82	1.95E-07	0.20	1.14E-04	4.09E-03
RESIDENT	564468.1	4153326.82	2.08E-07	0.21	1.22E-04	4.31E-03
RESIDENT	564458.1	4153336.82	1.95E-07	0.19	1.14E-04	4.04E-03

Operational HRA Analysis

Delivery Conversions	
12	months per year
52	weeks per year
7	days per week
24	hours per day
60	minutes per hour
60	seconds per minute
31449600	seconds per year

Generator Conversions	
365	days per year
24	hours per day
60	minutes per hour
60	seconds per minute
907185	grams per ton

Lab Conversions	
260	days per year
12	hours per day
60	minutes per hour
60	seconds per minute
0.002205	lbs per gram
907185	grams per ton

Generator PM2.5 Emissions (for a 2,000 kw generator)

5.58E-05 grams per second

Generator PM2.5 Emissions (for a 500 kw generator)

1.41E-05 grams per second

2 2,000 kw generators

Stack parameters:	3.9 meters	release height
	893 Kelvin	exit temp
	7,798 cubic ft per min	exhaust flow rate

Labs

New lab square footage	272,500			
		120000	44.04% Building 1	assumed 50% Bldg 1 sf would be lab uses
		152500	55.96% Building 2	assumed 50% Bldg 2 sf would be lab uses

Pollutant	Type I/II Hourly EF (grams/sf/sec)*	Tons ROG per Year	Pounds ROG per day	* used highest EF from either Type I or Type II labs
Benzene	4.68E-10	1.58E-03	1.21E-02	
CCl4	3.14E-09	1.06E-02	8.15E-02	
Chloroform	4.10E-08	1.38E-01	1.06E+00	
1,4-Dioxane	8.97E-10	3.03E-03	2.33E-02	
Formaldehyde	2.83E-08	9.55E-02	7.34E-01	
Hexane	4.18E-09	1.41E-02	1.08E-01	
HCl	4.42E-08	1.49E-01	1.15E+00	
IsopropylAlcoh	1.22E-07	4.12E-01	3.17E+00	
Methanol	3.71E-07	1.25E+00	9.63E+00	
MethyleneChlor	4.77E-09	1.61E-02	1.24E-01	
Toluene	3.82E-09	1.29E-02	9.91E-02	
Xylenes	7.35E-09	2.48E-02	1.91E-01	
DMF	1.41E-09	4.76E-03	3.66E-02	
TCE	2.02E-09	6.82E-03	5.24E-02	
Hydrazine	3.22E-11	1.09E-04	8.36E-04	
Perc	2.54E-10	8.57E-04	6.59E-03	
Glutaraldhyd	1.14E-09	3.85E-03	2.96E-02	
Triethylamine	5.30E-10	1.79E-03	1.38E-02	
HF	9.27E-09	3.13E-02	2.41E-01	
MethylBromide	3.24E-07	1.09E+00	8.41E+00	
Acrylamide	3.20E-10	1.08E-03	8.30E-03	
EDC	1.31E-08	4.42E-02	3.40E-01	
Total		3.317E+00	25.52	

1.461E+00	tons ROG/year	Building 1
1.856E+00	tons ROG/year	Building 2
1.180E-01	grams ROG/second	Building 1
1.499E-01	grams ROG/second	Building 2
2.950E-02	**grams ROG/second**	**per Bldg 1 point source**
4.998E-02	**grams ROG/second**	**per Bldg 2 point source**

Source: UC Davis 2018, Appendix D, page 85

Modeled as four lab point sources for Building 1; 3 lab point sources for Building 2

Release Height (feet)	112
Diameter (m)	0.914
Exit Velocity (m/s)	15.24
Exit Temperature (K)	293.15

Mobile Worker

total length and area of AERMOD onroad line area sources

Worker_ MarinePk wy	849.4	meters
	4247	square meters
Worker_H ollySt	1238	meters
	6190	square meters

total length of vehicle route

Worker_ MarinePk wy	23.6	miles	1 mile	=	1609.34	meters
	37980.42	meters				
Worker_H ollySt	23.6	miles	1 mile	=	1609.34	meters
	37980.42	meters				

Onroad Fugitive PM2.5

fraction of AERMOD line area source lengths to trip route length

total tons PM25 fugitive worker

		tons/yr	grams/sec	grams/sec/m^2			
40%	Worker_ MarinePk wy	2026	1.35E-02	3.87E-04	9.12E-08	Worker MarinePk wy 0.022364	2026 1.5052
60%	Worker_H ollySt	2026	2.94E-02	8.47E-04	1.37E-07	Worker_H ollySt 0.032596	

total tons PM25 exhaust worker

1 ton = 907185 grams

assume 24hr operation of worker vehicles Mon-Sun

31536000 operational seconds/year

2026 0.0291

Onroad Exhaust PM2.5

		tons/yr	grams/sec	grams/sec/m^2
40%	Worker_ MarinePk wy	2026	2.60E-04	7.49E-06	1.76E-09
60%	Worker_H ollySt	2026	5.69E-04	1.64E-05	2.64E-09

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Hourly Laboratory Emission Factors												
Compound	**Type of Lab**	**Pollutant**	Benzene	Carbon Tetrachloride	Chloroform	1,4-Dioxane	Formaldehyde	n-Hexane	Hydrochloric Acid	Isopropanol	Methanol	Methylene Chloride
		HARP Pollutant name	Benzene	CCl4	Chloroform	1,4-Dioxane	Formaldehyde	Hexane	HCl	Isopropyl Alcoh	Methanol	Methylene Chlor
		CAS	71432	56235	67663	123911	50000	110543	7647010	67630	67561	75092
Lab Type I (g/s per ft^2)	Chemistry and Chemical Engineering		1.17E-08	1.04E-09	1.41E-07	1.35E-08	4.84E-10	9.07E-10	4.90E-09	1.91E-08	5.98E-07	5.56E-07
Lab Type II (g/s per ft^2)	General Biological Sciences		4.68E-10	3.14E-09	4.10E-08	8.97E-10	2.83E-08	1.59E-09	4.35E-08	1.22E-07	3.71E-07	4.77E-09
Lab Type III (g/s per ft^2)	Physical Sciences/Other (Engineering, Geology, Physics, etc.)		3.79E-10	2.49E-09	5.07E-09	1.18E-10	5.09E-09	4.18E-09	4.42E-08	9.07E-08	2.27E-07	1.47E-09

Laboratory Type 1 Hourly Emissions (lb/hr)												
HARP ID	**Lab Name**	**Wet lab sq footage**	**Lab type**	**Benzene**	**Carbon Tetrachloride**	**Chloroform**	**1,4-Dioxane**	**Formaldehyde**	**n-Hexane**	**Hydrochloric Acid**	**Isopropanol**	**Methanol**	**Methylene Chloride**
ENGIN2_1	Engineering II	11,903	I	1.10E-03	9.81E-05	1.34E-02	1.28E-03	4.57E-05	8.57E-05	4.63E-04	1.80E-03	5.65E-02	5.26E-02
CHEM1	Chemistry	48,469	I	4.48E-03	4.00E-04	5.44E-02	5.21E-03	1.86E-04	3.49E-04	1.88E-03	7.33E-03	2.30E-01	2.14E-01
CHEMANX1	Chemistry Annex	33013	I	3.05E-03	2.72E-04	3.71E-02	3.55E-03	1.27E-04	2.38E-04	1.28E-03	4.99E-03	1.57E-01	1.46E-01
BAINER1	Bainer Hall	23,060	I	2.13E-03	1.90E-04	2.59E-02	2.48E-03	8.86E-05	1.66E-04	8.96E-04	3.49E-03	1.09E-01	1.02E-01
NEWCHLAB	New chemistry discovery complex lab	29,392	I	2.72E-03	2.42E-04	3.30E-02	3.16E-03	1.13E-04	2.12E-04	1.14E-03	4.45E-03	1.40E-01	1.30E-01
NEWSTLAB	New Storer lab	22,188	I	2.05E-03	1.83E-04	2.49E-02	2.38E-03	8.53E-05	1.60E-04	8.62E-04	3.36E-03	1.05E-01	9.80E-02

Laboratory Type 2 Hourly Emissions (lb/hr)												
HARP ID	**Lab Name**	**Wet lab sq footage**	**Lab type**	**Benzene**	**Carbon Tetrachloride**	**Chloroform**	**1,4-Dioxane**	**Formaldehyde**	**n-Hexane**	**Hydrochloric Acid**	**Isopropanol**	**Methanol**	**Methylene Chloride**
TB187	Temporary Building 187	906	II	3.37E-06	2.26E-05	2.95E-04	6.45E-06	2.04E-04	1.14E-05	3.13E-04	8.76E-04	2.67E-03	3.43E-05
TB188	Temporary Building 188	735	II	2.73E-06	1.83E-05	2.39E-04	5.24E-06	1.65E-04	9.28E-06	2.54E-04	7.10E-04	2.16E-03	2.78E-05
ENOL_1	Enology	1052	II	3.91E-06	2.62E-05	3.42E-04	7.49E-06	2.37E-04	1.33E-05	3.63E-04	1.02E-03	3.10E-03	3.98E-05
WICK_1	Wickson Hall	24,463	II	9.10E-05	6.09E-04	7.96E-03	1.74E-04	5.50E-03	3.09E-04	8.45E-03	2.36E-02	7.20E-02	9.26E-04
HOLG_1	Hoagland	12998	II	4.83E-05	3.24E-04	4.23E-03	9.26E-05	2.92E-03	1.64E-04	4.49E-03	1.26E-02	3.83E-02	4.92E-04
MANN_1	Mann Hall	3486	II	1.30E-05	8.68E-05	1.13E-03	2.48E-05	7.84E-04	4.40E-05	1.20E-03	3.37E-03	1.03E-02	1.32E-04
STORER_1	Storer Hall	1337	II	4.97E-06	3.33E-05	4.35E-04	9.52E-06	3.01E-04	1.69E-05	4.62E-04	1.29E-03	3.94E-03	5.06E-05
HUTCH_1	Hutchison Hall/Biological Sci Unit 2	23294	II	8.66E-05	5.80E-04	7.58E-03	1.66E-04	5.24E-03	2.94E-04	8.04E-03	2.25E-02	6.86E-02	8.82E-04
ASMUND_1	Asmundson Hall	7256	II	2.70E-05	1.81E-04	2.36E-03	5.17E-05	1.63E-03	9.16E-05	2.51E-03	7.01E-03	2.14E-02	2.75E-04
ROBBINS1	Robbins Hall	10384	II	3.86E-05	2.59E-04	3.38E-03	7.40E-05	2.34E-03	1.31E-04	3.59E-03	1.00E-02	3.06E-02	3.93E-04
BRIGGS1	Briggs Hall and Life Sciences	69705	II	2.59E-04	1.74E-03	2.27E-02	4.96E-04	1.57E-02	8.80E-04	2.41E-02	6.74E-02	2.05E-01	2.64E-03
AC_SURG1	Academic Surge	5180	II	1.93E-05	1.29E-04	1.68E-03	3.69E-05	1.17E-03	6.54E-05	1.79E-03	5.01E-03	1.53E-02	1.96E-04

MEYER1	Meyer Hall	46480	II	1.73E-04	1.16E-03	1.51E-02	3.31E-04	1.05E-02	5.87E-04	1.60E-02	4.49E-02	1.37E-01	1.76E-03
THURMAN1	Thurman Hall	4148	II	1.54E-05	1.03E-04	1.35E-03	2.95E-05	9.33E-04	5.24E-05	1.43E-03	4.01E-03	1.22E-02	1.57E-04
MADDY1	Maddy Hall	7940	II	2.95E-05	1.98E-04	2.58E-03	5.66E-05	1.79E-03	1.00E-04	2.74E-03	7.67E-03	2.34E-02	3.01E-04
TUPPER	Tupper Hall	45609	II	1.70E-04	1.14E-03	1.48E-02	3.25E-04	1.03E-02	5.76E-04	1.57E-02	4.41E-02	1.34E-01	1.73E-03
VETMED2	VET MED 2	3682	II	1.37E-05	9.17E-05	1.20E-03	2.62E-05	8.28E-04	4.65E-05	1.27E-03	3.56E-03	1.08E-02	1.39E-04
ASMNDANX	Asmundson Annex	486	II	1.81E-06	1.21E-05	1.58E-04	3.46E-06	1.09E-04	6.14E-06	1.68E-04	4.70E-04	1.43E-03	1.84E-05
YOUNG	Young Hall	2820	II	1.05E-05	7.03E-05	9.17E-04	2.01E-05	6.34E-04	3.56E-05	9.74E-04	2.73E-03	8.30E-03	1.07E-04
TB9	Temporary Building 9	721	II	2.68E-06	1.80E-05	2.35E-04	5.14E-06	1.62E-04	9.10E-06	2.49E-04	6.97E-04	2.12E-03	2.73E-05
SEROLOGY	Serology	1198	II	4.45E-06	2.98E-05	3.90E-04	8.53E-06	2.69E-04	1.51E-05	4.14E-04	1.16E-03	3.53E-03	4.54E-05
ARSR1	ARS R-1	64	II	2.38E-07	1.59E-06	2.08E-05	4.56E-07	1.44E-05	8.08E-07	2.21E-05	6.19E-05	1.88E-04	2.42E-06
ARSR2	ARS R-2	879	II	3.27E-06	2.19E-05	2.86E-04	6.26E-06	1.98E-04	1.11E-05	3.03E-04	8.50E-04	2.59E-03	3.33E-05
COMP_MED	Center For Comparative Medicine	11199	II	4.16E-05	2.79E-04	3.64E-03	7.98E-05	2.52E-03	1.41E-04	3.87E-03	1.08E-02	3.30E-02	4.24E-04
PRIMCNTR	Primate Center	5895	II	2.19E-05	1.47E-04	1.92E-03	4.20E-05	1.33E-03	7.44E-05	2.04E-03	5.70E-03	1.74E-02	2.23E-04
TB184	Temporary Building 184	1866	II	6.94E-06	4.65E-05	6.07E-04	1.33E-05	4.20E-04	2.36E-05	6.44E-04	1.80E-03	5.49E-03	7.07E-05
TB160	Temporary Building 160	393	II	1.46E-06	9.79E-06	1.28E-04	2.80E-06	8.84E-05	4.96E-06	1.36E-04	3.80E-04	1.16E-03	1.49E-05
APCARU2	APCARU	528	II	1.96E-06	1.32E-05	1.72E-04	3.76E-06	1.19E-04	6.67E-06	1.82E-04	5.10E-04	1.55E-03	2.00E-05
ECOL_LAB	Ecology Lab (Aquadic Bio in bldg DB)	899	II	3.34E-06	2.24E-05	2.92E-04	6.40E-06	2.02E-04	1.14E-05	3.10E-04	8.69E-04	2.65E-03	3.40E-05
TB1	Temporary Building 1	277	II	1.03E-06	6.90E-06	9.01E-05	1.97E-06	6.23E-05	3.50E-06	9.56E-05	2.68E-04	8.16E-04	1.05E-05
CELL_BIO	ITEH Cellular Biology	1046	II	3.89E-06	2.61E-05	3.40E-04	7.45E-06	2.35E-04	1.32E-05	3.61E-04	1.01E-03	3.08E-03	3.96E-05
ITEHPATH	ITEH Pathology Clinic	923	II	3.43E-06	2.30E-05	3.00E-04	6.57E-06	2.08E-04	1.17E-05	3.19E-04	8.92E-04	2.72E-03	3.49E-05
ARS_DL1	ARS DL-10; Bovine Shed (Leukemia Lab)	386	II	1.44E-06	9.62E-06	1.26E-04	2.75E-06	8.68E-05	4.87E-06	1.33E-04	3.73E-04	1.14E-03	1.46E-05
COLEA	Cole Fac A	651	II	2.42E-06	1.62E-05	2.12E-04	4.64E-06	1.46E-04	8.22E-06	2.25E-04	6.29E-04	1.92E-03	2.46E-05
COLEB	Cole Fac B	589	II	2.19E-06	1.47E-05	1.92E-04	4.20E-06	1.32E-04	7.44E-06	2.03E-04	5.69E-04	1.73E-03	2.23E-05
COLEC	Cole Fac C	877	II	3.26E-06	2.18E-05	2.85E-04	6.25E-06	1.97E-04	1.11E-05	3.03E-04	8.48E-04	2.58E-03	3.32E-05
VMTH	Vet Med Teaching Hospital (VMTH)	2278	II	8.47E-06	5.68E-05	7.41E-04	1.62E-05	5.12E-04	2.88E-05	7.87E-04	2.20E-03	6.71E-03	8.62E-05
ARSJ_BRN	ARS Iso Barn J bldg	48	II	1.78E-07	1.20E-06	1.56E-05	3.42E-07	1.08E-05	6.06E-07	1.66E-05	4.64E-05	1.41E-04	1.82E-06

Toluene	Xylenes	Dimethylformamide	Trichloroethylene	Hydrazine	Tetrachloroethylene	Glutaraldehyde	Triethylamine	Hydrogen Fluoride	Methyl Bromide	Acrylamide	Ethylene Dichloride
Toluene	Xylenes	DMF	TCE	Hydrazine	Perc	Glutaraldhyd	Triethylamine	HF	Methyl Bromide	Acrylamide	EDC
108883	1330207	68122	79016	302012	127184	111308	121448	7664393	74839	79061	107062
4.01E-08	1.40E-09	2.85E-09	0	6.14E-11	5.09E-10	2.07E-10	3.39E-09	1.66E-11	1.51E-09	7.85E-11	3.15E-10
3.82E-09	7.35E-09	1.41E-09	3.24E-10	3.22E-11	2.97E-11	1.14E-09	5.30E-10	4.59E-11	3.24E-07	3.20E-10	1.43E-09
2.13E-09	4.36E-09	1.72E-11	2.02E-09	3.04E-12	2.54E-10	4.87E-10	0	9.27E-09	0	0.00E+00	1.31E-08

Toluene	**Xylenes**	**Dimethylformamide**	**Trichloroethylene**	**Hydrazine**	**Tetrachloroethylene**	**Glutaraldehyde**	**Triethylamine**	**Hydrogen Fluoride**	**Methyl Bromide**	**Acrylamide**	**Ethylene Dichloride**
3.78E-03	1.32E-04	2.69E-04	0.00E+00	5.80E-06	4.81E-05	1.96E-05	3.20E-04	1.56E-06	1.42E-04	7.42E-06	2.97E-05
1.54E-02	5.37E-04	1.10E-03	0.00E+00	2.36E-05	1.96E-04	7.97E-05	1.30E-03	6.37E-06	5.80E-04	3.02E-05	1.21E-04
1.05E-02	3.66E-04	7.46E-04	0.00E+00	1.61E-05	1.33E-04	5.43E-05	8.87E-04	4.34E-06	3.95E-04	2.06E-05	8.25E-05
7.33E-03	2.56E-04	5.21E-04	0.00E+00	1.12E-05	9.32E-05	3.79E-05	6.20E-04	3.03E-06	2.76E-04	1.44E-05	5.76E-05
9.35E-03	3.26E-04	6.64E-04	0.00E+00	1.43E-05	1.19E-04	4.83E-05	7.90E-04	3.86E-06	3.52E-04	1.83E-05	7.34E-05
7.06E-03	2.46E-04	5.01E-04	0.00E+00	1.08E-05	8.97E-05	3.65E-05	5.96E-04	2.91E-06	2.66E-04	1.38E-05	5.54E-05

Toluene	**Xylenes**	**Dimethylformamide**	**Trichloroethylene**	**Hydrazine**	**Tetrachloroethylene**	**Glutaraldehyde**	**Triethylamine**	**Hydrogen Fluoride**	**Methyl Bromide**	**Acrylamide**	**Ethylene Dichloride**
2.75E-05	5.29E-05	1.02E-05	2.33E-06	2.32E-07	2.14E-07	8.18E-06	3.81E-06	3.30E-07	2.33E-03	2.30E-06	1.03E-05
2.23E-05	4.29E-05	8.24E-06	1.89E-06	1.88E-07	1.73E-07	6.63E-06	3.09E-06	2.68E-07	1.89E-03	1.86E-06	8.35E-06
3.19E-05	6.14E-05	1.18E-05	2.70E-06	2.69E-07	2.48E-07	9.49E-06	4.42E-06	3.83E-07	2.71E-03	2.67E-06	1.19E-05
7.42E-04	1.43E-03	2.74E-04	6.28E-05	6.26E-06	5.77E-06	2.21E-04	1.03E-04	8.91E-06	6.30E-02	6.21E-05	2.78E-04
3.94E-04	7.58E-04	1.46E-04	3.34E-05	3.33E-06	3.07E-06	1.17E-04	5.47E-05	4.73E-06	3.35E-02	3.30E-05	1.48E-04
1.06E-04	2.03E-04	3.91E-05	8.96E-06	8.92E-07	8.23E-07	3.15E-05	1.47E-05	1.27E-06	8.97E-03	8.84E-06	3.96E-05
4.05E-05	7.80E-05	1.50E-05	3.43E-06	3.42E-07	3.16E-07	1.21E-05	5.62E-06	4.87E-07	3.44E-03	3.39E-06	1.52E-05
7.06E-04	1.36E-03	2.61E-04	5.98E-05	5.96E-06	5.50E-06	2.10E-04	9.80E-05	8.48E-06	6.00E-02	5.91E-05	2.65E-04
2.20E-04	4.23E-04	8.14E-05	1.86E-05	1.86E-06	1.71E-06	6.55E-05	3.05E-05	2.64E-06	1.87E-02	1.84E-05	8.24E-05
3.15E-04	6.06E-04	1.16E-04	2.67E-05	2.66E-06	2.45E-06	9.37E-05	4.37E-05	3.78E-06	2.67E-02	2.63E-05	1.18E-04
2.11E-03	4.07E-03	7.82E-04	1.79E-04	1.78E-05	1.65E-05	6.29E-04	2.93E-04	2.54E-05	1.79E-01	1.77E-04	7.92E-04
1.57E-04	3.02E-04	5.81E-05	1.33E-05	1.33E-06	1.22E-06	4.67E-05	2.18E-05	1.89E-06	1.33E-02	1.31E-05	5.88E-05

1.41E-03	2.71E-03	5.21E-04	1.19E-04	1.19E-05	1.10E-05	4.19E-04	1.95E-04	1.69E-05	1.20E-01	1.18E-04	5.28E-04
1.26E-04	2.42E-04	4.65E-05	1.07E-05	1.06E-06	9.79E-07	3.74E-05	1.74E-05	1.51E-06	1.07E-02	1.05E-05	4.71E-05
2.41E-04	4.63E-04	8.90E-05	2.04E-05	2.03E-06	1.87E-06	7.17E-05	3.34E-05	2.89E-06	2.04E-02	2.01E-05	9.02E-05
1.38E-03	2.66E-03	5.11E-04	1.17E-04	1.17E-05	1.08E-05	4.12E-04	1.92E-04	1.66E-05	1.17E-01	1.16E-04	5.18E-04
1.12E-04	2.15E-04	4.13E-05	9.46E-06	9.42E-07	8.69E-07	3.32E-05	1.55E-05	1.34E-06	9.48E-03	9.34E-06	4.18E-05
1.47E-05	2.84E-05	5.45E-06	1.25E-06	1.24E-07	1.15E-07	4.39E-06	2.04E-06	1.77E-07	1.25E-03	1.23E-06	5.52E-06
8.55E-05	1.65E-04	3.16E-05	7.24E-06	7.21E-07	6.66E-07	2.54E-05	1.19E-05	1.03E-06	7.26E-03	7.15E-06	3.20E-05
2.19E-05	4.21E-05	8.08E-06	1.85E-06	1.84E-07	1.70E-07	6.51E-06	3.03E-06	2.62E-07	1.86E-03	1.83E-06	8.19E-06
3.63E-05	6.99E-05	1.34E-05	3.08E-06	3.06E-07	2.83E-07	1.08E-05	5.04E-06	4.36E-07	3.08E-03	3.04E-06	1.36E-05
1.94E-06	3.73E-06	7.18E-07	1.64E-07	1.64E-08	1.51E-08	5.78E-07	2.69E-07	2.33E-08	1.65E-04	1.62E-07	7.27E-07
2.66E-05	5.13E-05	9.86E-06	2.26E-06	2.25E-07	2.07E-07	7.93E-06	3.70E-06	3.20E-07	2.26E-03	2.23E-06	9.98E-06
3.39E-04	6.53E-04	1.26E-04	2.88E-05	2.87E-06	2.64E-06	1.01E-04	4.71E-05	4.08E-06	2.88E-02	2.84E-05	1.27E-04
1.79E-04	3.44E-04	6.61E-05	1.51E-05	1.51E-06	1.39E-06	5.32E-05	2.48E-05	2.15E-06	1.52E-02	1.50E-05	6.70E-05
5.66E-05	1.09E-04	2.09E-05	4.79E-06	4.77E-07	4.40E-07	1.68E-05	7.85E-06	6.79E-07	4.80E-03	4.73E-06	2.12E-05
1.19E-05	2.29E-05	4.41E-06	1.01E-06	1.01E-07	9.28E-08	3.55E-06	1.65E-06	1.43E-07	1.01E-03	9.97E-07	4.46E-06
1.60E-05	3.08E-05	5.92E-06	1.36E-06	1.35E-07	1.25E-07	4.76E-06	2.22E-06	1.92E-07	1.36E-03	1.34E-06	6.00E-06
2.73E-05	5.24E-05	1.01E-05	2.31E-06	2.30E-07	2.12E-07	8.11E-06	3.78E-06	3.27E-07	2.31E-03	2.28E-06	1.02E-05
8.40E-06	1.62E-05	3.11E-06	7.12E-07	7.09E-08	6.54E-08	2.50E-06	1.16E-06	1.01E-07	7.13E-04	7.03E-07	3.15E-06
3.17E-05	6.10E-05	1.17E-05	2.69E-06	2.68E-07	2.47E-07	9.44E-06	4.40E-06	3.81E-07	2.69E-03	2.65E-06	1.19E-05
2.80E-05	5.38E-05	1.03E-05	2.37E-06	2.36E-07	2.18E-07	8.33E-06	3.88E-06	3.36E-07	2.38E-03	2.34E-06	1.05E-05
1.17E-05	2.25E-05	4.33E-06	9.92E-07	9.87E-08	9.11E-08	3.48E-06	1.62E-06	1.41E-07	9.94E-04	9.79E-07	4.38E-06
1.97E-05	3.80E-05	7.30E-06	1.67E-06	1.67E-07	1.54E-07	5.87E-06	2.74E-06	2.37E-07	1.68E-03	1.65E-06	7.39E-06
1.79E-05	3.44E-05	6.60E-06	1.51E-06	1.51E-07	1.39E-07	5.32E-06	2.48E-06	2.14E-07	1.52E-03	1.49E-06	6.69E-06
2.66E-05	5.12E-05	9.83E-06	2.25E-06	2.24E-07	2.07E-07	7.91E-06	3.69E-06	3.19E-07	2.26E-03	2.23E-06	9.96E-06
6.91E-05	1.33E-04	2.55E-05	5.85E-06	5.83E-07	5.38E-07	2.06E-05	9.58E-06	8.29E-07	5.86E-03	5.78E-06	2.59E-05
1.46E-06	2.80E-06	5.38E-07	1.23E-07	1.23E-08	1.13E-08	4.33E-07	2.02E-07	1.75E-08	1.24E-04	1.22E-07	5.45E-07

AERMOD View - Building Parameters
MS Excel - Layout Format

Parameters	Units	Description
ID_Building =	-	Name up to 8 characters with no spaces or "-"
Description =	-	Optional (up to 250 characters)
Tier_Number =	integer	Integer
Base_Elevation =	[m]	Leave blank, base elevation will be auto-calculated from terrain database
Tier Height	(m)	Assume 14 ft per floor 4.268292683 meters per floor
Num_Coords =	integer	Number of coordinate pairs (X,Y) for the building corners to follow
X1 =	[m] (UTM 10N)	X coordinate for corner 1 or for center of tank/building
Y1 =	[m] (UTM 10N)	Y coordinate for corner 1 or for center of tank/building
X2 =	[m] (UTM 10N)	X coordinate for corner 2
Y2 =	[m] (UTM 10N)	Y coordinate for corner 2
X3 =	[m] (UTM 10N)	X coordinate for corner 3
Y3 =	[m] (UTM 10N)	Y coordinate for corner 3
X4 =	[m] (UTM 10N)	X coordinate for corner 4
Y4 =	[m] (UTM 10N)	Y coordinate for corner 4
…		

NOTE: You may keep adding additional coordinate pairs for an POLYGONAL building with more than 4 corners (e.g. X5, Y5, etc)

ID_Building	Description	Tier_Number	Base_Elevation	Number of Floors	Tier_Height	Num_Coords	X1	Y1	X2	Y2	X3	Y3	X4	Y4	X5	Y5	X6	Y6	X7	Y7	X8	Y8
					[m]		[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]
1	Building 1	1			34.1376	8	564786.7389	4153299.288	564813.1314	4153329.099	564843.2382	4153291.601	564845.1217	4153292.908	564866.1015	4153267.735	564831.5932	4153239.626	564810.9297	4153265.337	564813.0759	4153266.717
2	Building 2	1			34.1376	8	564838.1855	4153337.176	564872.097	4153375.257	564868.7089	4153378.276	564903.2832	4153416.309	564922.3073	4153392.539	564921.0223	4153391.116	564935.1766	4153373.831	564862.9076	4153315.543
3	Parking Structure	1			22.5552	5	564847.7612	4153221.775	564951.707	4153334.465	564959.4041	4153327.632	564969.3317	4153294.715	564877.4747	4153195.05						

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.00019	3.21	3.21	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153037	0.00021	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153047	0.00018	3.09	3.09	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153047	0.00019	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153047	0.00021	2.93	2.93	1.5	ANNUAL	DPM	5
RESIDENT	564818.1	4153047	0.00022	3.06	3.06	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153057	0.00016	3.1	3.1	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153057	0.00017	2.98	2.98	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153057	0.00019	2.93	2.93	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153057	0.00021	2.89	2.89	1.5	ANNUAL	DPM	5
RESIDENT	564818.1	4153057	0.00022	3.04	3.04	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153067	0.00014	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153067	0.00016	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153067	0.00017	2.87	2.87	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153067	0.00019	2.86	2.86	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153067	0.0002	2.84	2.84	1.5	ANNUAL	DPM	5
RESIDENT	564818.1	4153067	0.00022	3.03	3.03	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153077	0.00013	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153077	0.00014	3.04	3.04	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153077	0.00016	2.91	2.91	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153077	0.00017	2.78	2.78	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153077	0.00019	2.81	2.81	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153077	0.0002	2.83	2.83	1.5	ANNUAL	DPM	5
RESIDENT	564818.1	4153077	0.00022	3.04	3.04	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153087	0.00012	3.09	3.09	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153087	0.00013	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153087	0.00014	2.92	2.92	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153087	0.00015	2.83	2.83	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153087	0.00017	2.74	2.74	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153087	0.00018	2.86	2.86	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153087	0.0002	2.99	2.99	1.5	ANNUAL	DPM	5
RESIDENT	564818.1	4153087	0.00022	3.18	3.18	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153097	4.00E-05	3.79	3.79	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153097	0.00011	3.06	3.06	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153097	0.00012	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153097	0.00013	2.87	2.87	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153097	0.00014	2.8	2.8	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153097	0.00015	2.75	2.75	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153097	0.00016	2.69	2.69	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153097	0.00018	2.92	2.92	1.5	ANNUAL	DPM	5
RESIDENT	564808.1	4153097	0.0002	3.15	3.15	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153107	4.00E-05	3.87	3.87	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153107	4.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153107	5.00E-05	3.57	3.57	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153107	9.00E-05	3.12	3.12	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153107	0.0001	3.04	3.04	1.5	ANNUAL	DPM	5

RESIDENT	564738.1	4153107	0.00011	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153107	0.00012	2.86	2.86	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153107	0.00012	2.75	2.75	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153107	0.00014	2.7	2.7	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153107	0.00015	2.7	2.7	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153107	0.00016	2.7	2.7	1.5	ANNUAL	DPM	5
RESIDENT	564798.1	4153107	0.00018	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153117	4.00E-05	3.87	3.87	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153117	4.00E-05	3.79	3.79	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153117	4.00E-05	3.68	3.68	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153117	5.00E-05	3.55	3.55	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153117	5.00E-05	3.43	3.43	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153117	9.00E-05	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153117	9.00E-05	3.06	3.06	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153117	0.0001	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153117	0.00011	2.93	2.93	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153117	0.00011	2.83	2.83	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153117	0.00012	2.73	2.73	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153117	0.00013	2.74	2.74	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153117	0.00015	2.88	2.88	1.5	ANNUAL	DPM	5
RESIDENT	564788.1	4153117	0.00016	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153127	4.00E-05	3.76	3.76	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153127	4.00E-05	3.71	3.71	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153127	4.00E-05	3.63	3.63	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153127	5.00E-05	3.53	3.53	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153127	5.00E-05	3.44	3.44	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153127	5.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153127	8.00E-05	3.11	3.11	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153127	9.00E-05	3.06	3.06	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153127	9.00E-05	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153127	0.0001	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153127	0.0001	2.9	2.9	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153127	0.00011	2.8	2.8	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153127	0.00012	2.7	2.7	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153127	0.00013	2.78	2.78	1.5	ANNUAL	DPM	5
RESIDENT	564778.1	4153127	0.00014	3.05	3.05	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153137	4.00E-05	3.71	3.71	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153137	4.00E-05	3.68	3.68	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153137	4.00E-05	3.65	3.65	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153137	4.00E-05	3.6	3.6	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153137	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153137	5.00E-05	3.44	3.44	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153137	5.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153137	5.00E-05	3.25	3.25	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153137	8.00E-05	3.03	3.03	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153137	8.00E-05	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153137	9.00E-05	2.98	2.98	1.5	ANNUAL	DPM	5

RESIDENT	564718.1	4153137	9.00E-05	2.95	2.95	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153137	0.0001	2.91	2.91	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153137	0.0001	2.87	2.87	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153137	0.00011	2.79	2.79	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153137	0.00012	2.69	2.69	1.5	ANNUAL	DPM	5
RESIDENT	564768.1	4153137	0.00013	2.84	2.84	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153147	4.00E-05	3.86	3.86	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153147	4.00E-05	3.76	3.76	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153147	4.00E-05	3.71	3.71	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153147	4.00E-05	3.65	3.65	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153147	4.00E-05	3.59	3.59	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153147	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153147	5.00E-05	3.44	3.44	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153147	5.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153147	5.00E-05	3.29	3.29	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153147	5.00E-05	3.26	3.26	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153147	7.00E-05	3.12	3.12	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153147	8.00E-05	2.99	2.99	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153147	8.00E-05	2.97	2.97	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153147	8.00E-05	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153147	9.00E-05	2.94	2.94	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153147	0.0001	2.88	2.88	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153147	0.0001	2.83	2.83	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153147	0.00011	2.89	2.89	1.5	ANNUAL	DPM	5
RESIDENT	564758.1	4153147	0.00012	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153157	4.00E-05	3.84	3.84	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153157	4.00E-05	3.83	3.83	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153157	4.00E-05	3.81	3.81	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153157	4.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153157	4.00E-05	3.65	3.65	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153157	4.00E-05	3.58	3.58	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153157	4.00E-05	3.51	3.51	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153157	5.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153157	5.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153157	5.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153157	5.00E-05	3.27	3.27	1.5	ANNUAL	DPM	5
RESIDENT	564608.1	4153157	5.00E-05	3.2	3.2	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153157	7.00E-05	3.18	3.18	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153157	7.00E-05	3.06	3.06	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153157	7.00E-05	2.94	2.94	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153157	8.00E-05	2.94	2.94	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153157	8.00E-05	2.95	2.95	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153157	9.00E-05	2.93	2.93	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153157	9.00E-05	2.85	2.85	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153157	0.0001	2.78	2.78	1.5	ANNUAL	DPM	5
RESIDENT	564748.1	4153157	0.00011	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153167	4.00E-05	3.86	3.86	1.5	ANNUAL	DPM	5

RESIDENT	564498.1	4153167	4.00E-05	3.75	3.75	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153167	4.00E-05	3.8	3.8	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153167	4.00E-05	3.84	3.84	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153167	4.00E-05	3.74	3.74	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153167	4.00E-05	3.64	3.64	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153167	4.00E-05	3.57	3.57	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153167	4.00E-05	3.51	3.51	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153167	5.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153167	5.00E-05	3.41	3.41	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153167	5.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153167	5.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564608.1	4153167	5.00E-05	3.17	3.17	1.5	ANNUAL	DPM	5
RESIDENT	564618.1	4153167	6.00E-05	3.12	3.12	1.5	ANNUAL	DPM	5
RESIDENT	564658.1	4153167	6.00E-05	3.2	3.2	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153167	7.00E-05	3.1	3.1	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153167	7.00E-05	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153167	7.00E-05	2.9	2.9	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153167	8.00E-05	2.91	2.91	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153167	8.00E-05	2.93	2.93	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153167	9.00E-05	2.91	2.91	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153167	9.00E-05	2.82	2.82	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153167	0.0001	2.74	2.74	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153177	3.00E-05	4.04	4.04	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153177	4.00E-05	3.84	3.84	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153177	4.00E-05	3.74	3.74	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153177	4.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153177	4.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153177	4.00E-05	3.65	3.65	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153177	4.00E-05	3.58	3.58	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153177	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153177	4.00E-05	3.46	3.46	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153177	5.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153177	5.00E-05	3.4	3.4	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153177	5.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153177	5.00E-05	3.3	3.3	1.5	ANNUAL	DPM	5
RESIDENT	564608.1	4153177	5.00E-05	3.2	3.2	1.5	ANNUAL	DPM	5
RESIDENT	564618.1	4153177	5.00E-05	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564648.1	4153177	6.00E-05	3.23	3.23	1.5	ANNUAL	DPM	5
RESIDENT	564658.1	4153177	6.00E-05	3.18	3.18	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153177	7.00E-05	3.11	3.11	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153177	7.00E-05	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153177	7.00E-05	2.9	2.9	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153177	8.00E-05	2.87	2.87	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153177	8.00E-05	2.86	2.86	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153177	8.00E-05	2.89	2.89	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153177	9.00E-05	2.99	2.99	1.5	ANNUAL	DPM	5
RESIDENT	564738.1	4153177	9.00E-05	3.08	3.08	1.5	ANNUAL	DPM	5

RESIDENT	564468.1	4153187	3.00E-05	4.09	4.09	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153187	4.00E-05	3.95	3.95	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153187	4.00E-05	3.82	3.82	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153187	4.00E-05	3.72	3.72	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153187	4.00E-05	3.67	3.67	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153187	4.00E-05	3.62	3.62	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153187	4.00E-05	3.56	3.56	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153187	4.00E-05	3.51	3.51	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153187	4.00E-05	3.47	3.47	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153187	4.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153187	5.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153187	5.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153187	5.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153187	5.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564608.1	4153187	5.00E-05	3.23	3.23	1.5	ANNUAL	DPM	5
RESIDENT	564618.1	4153187	5.00E-05	3.17	3.17	1.5	ANNUAL	DPM	5
RESIDENT	564648.1	4153187	6.00E-05	3.17	3.17	1.5	ANNUAL	DPM	5
RESIDENT	564658.1	4153187	6.00E-05	3.16	3.16	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153187	7.00E-05	3.11	3.11	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153187	7.00E-05	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153187	7.00E-05	2.89	2.89	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153187	8.00E-05	2.84	2.84	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153187	8.00E-05	2.79	2.79	1.5	ANNUAL	DPM	5
RESIDENT	564718.1	4153187	8.00E-05	2.88	2.88	1.5	ANNUAL	DPM	5
RESIDENT	564728.1	4153187	9.00E-05	3.15	3.15	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153197	3.00E-05	4.09	4.09	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153197	3.00E-05	3.95	3.95	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153197	4.00E-05	3.87	3.87	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153197	4.00E-05	3.79	3.79	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153197	4.00E-05	3.7	3.7	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153197	4.00E-05	3.6	3.6	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153197	4.00E-05	3.51	3.51	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153197	4.00E-05	3.48	3.48	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153197	4.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153197	4.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153197	4.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153197	5.00E-05	3.36	3.36	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153197	5.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153197	5.00E-05	3.4	3.4	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153197	5.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564608.1	4153197	5.00E-05	3.26	3.26	1.5	ANNUAL	DPM	5
RESIDENT	564658.1	4153197	6.00E-05	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153197	7.00E-05	3.12	3.12	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153197	7.00E-05	3	3	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153197	7.00E-05	2.89	2.89	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153197	8.00E-05	2.8	2.8	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153197	8.00E-05	2.72	2.72	1.5	ANNUAL	DPM	5

RESIDENT	564718.1	4153197	8.00E-05	2.87	2.87	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153207	3.00E-05	4.02	4.02	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153207	3.00E-05	3.88	3.88	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153207	4.00E-05	3.81	3.81	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153207	4.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153207	4.00E-05	3.64	3.64	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153207	4.00E-05	3.54	3.54	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153207	4.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153207	4.00E-05	3.43	3.43	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153207	4.00E-05	3.41	3.41	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153207	4.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153207	5.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153207	5.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153207	5.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153207	5.00E-05	3.34	3.34	1.5	ANNUAL	DPM	5
RESIDENT	564598.1	4153207	5.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564668.1	4153207	7.00E-05	3.13	3.13	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153207	7.00E-05	2.99	2.99	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153207	7.00E-05	2.84	2.84	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153207	8.00E-05	2.9	2.9	1.5	ANNUAL	DPM	5
RESIDENT	564708.1	4153207	8.00E-05	2.98	2.98	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153217	3.00E-05	3.94	3.94	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153217	3.00E-05	3.82	3.82	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153217	4.00E-05	3.75	3.75	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153217	4.00E-05	3.67	3.67	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153217	4.00E-05	3.58	3.58	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153217	4.00E-05	3.48	3.48	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153217	4.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153217	4.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153217	4.00E-05	3.38	3.38	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153217	4.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153217	5.00E-05	3.31	3.31	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153217	5.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153217	5.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564588.1	4153217	5.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564678.1	4153217	7.00E-05	2.97	2.97	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153217	7.00E-05	2.79	2.79	1.5	ANNUAL	DPM	5
RESIDENT	564698.1	4153217	8.00E-05	3.01	3.01	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153227	3.00E-05	3.86	3.86	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153227	3.00E-05	3.75	3.75	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153227	4.00E-05	3.68	3.68	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153227	4.00E-05	3.62	3.62	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153227	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153227	4.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153227	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153227	4.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153227	4.00E-05	3.34	3.34	1.5	ANNUAL	DPM	5

RESIDENT	564548.1	4153227	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153227	5.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153227	5.00E-05	3.24	3.24	1.5	ANNUAL	DPM	5
RESIDENT	564578.1	4153227	5.00E-05	3.23	3.23	1.5	ANNUAL	DPM	5
RESIDENT	564688.1	4153227	8.00E-05	2.74	2.74	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153237	3.00E-05	3.81	3.81	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153237	3.00E-05	3.73	3.73	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153237	4.00E-05	3.64	3.64	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153237	4.00E-05	3.55	3.55	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153237	4.00E-05	3.47	3.47	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153237	4.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153237	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153237	4.00E-05	3.31	3.31	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153237	4.00E-05	3.31	3.31	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153237	4.00E-05	3.29	3.29	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153237	5.00E-05	3.26	3.26	1.5	ANNUAL	DPM	5
RESIDENT	564568.1	4153237	5.00E-05	3.24	3.24	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153247	3.00E-05	3.76	3.76	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153247	3.00E-05	3.7	3.7	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153247	4.00E-05	3.59	3.59	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153247	4.00E-05	3.48	3.48	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153247	4.00E-05	3.41	3.41	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153247	4.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153247	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153247	4.00E-05	3.3	3.3	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153247	4.00E-05	3.27	3.27	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153247	4.00E-05	3.25	3.25	1.5	ANNUAL	DPM	5
RESIDENT	564558.1	4153247	5.00E-05	3.24	3.24	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153257	3.00E-05	3.71	3.71	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153257	4.00E-05	3.68	3.68	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153257	4.00E-05	3.55	3.55	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153257	4.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153257	4.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153257	4.00E-05	3.34	3.34	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153257	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153257	4.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153257	4.00E-05	3.24	3.24	1.5	ANNUAL	DPM	5
RESIDENT	564548.1	4153257	5.00E-05	3.22	3.22	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153267	3.00E-05	3.65	3.65	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153267	4.00E-05	3.6	3.6	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153267	4.00E-05	3.5	3.5	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153267	4.00E-05	3.4	3.4	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153267	4.00E-05	3.32	3.32	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153267	4.00E-05	3.26	3.26	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153267	4.00E-05	3.21	3.21	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153267	4.00E-05	3.21	3.21	1.5	ANNUAL	DPM	5
RESIDENT	564538.1	4153267	4.00E-05	3.22	3.22	1.5	ANNUAL	DPM	5

RESIDENT	564458.1	4153277	3.00E-05	3.58	3.58	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153277	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153277	4.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153277	4.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153277	4.00E-05	3.29	3.29	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153277	4.00E-05	3.17	3.17	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153277	4.00E-05	3.08	3.08	1.5	ANNUAL	DPM	5
RESIDENT	564528.1	4153277	4.00E-05	3.14	3.14	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153287	4.00E-05	3.52	3.52	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153287	4.00E-05	3.45	3.45	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153287	4.00E-05	3.41	3.41	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153287	4.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153287	4.00E-05	3.25	3.25	1.5	ANNUAL	DPM	5
RESIDENT	564508.1	4153287	4.00E-05	3.08	3.08	1.5	ANNUAL	DPM	5
RESIDENT	564518.1	4153287	4.00E-05	2.96	2.96	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153297	4.00E-05	3.47	3.47	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153297	4.00E-05	3.39	3.39	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153297	4.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153297	4.00E-05	3.35	3.35	1.5	ANNUAL	DPM	5
RESIDENT	564498.1	4153297	4.00E-05	3.28	3.28	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153307	4.00E-05	3.42	3.42	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153307	4.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153307	4.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564488.1	4153307	4.00E-05	3.33	3.33	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153317	4.00E-05	3.37	3.37	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153317	4.00E-05	3.27	3.27	1.5	ANNUAL	DPM	5
RESIDENT	564478.1	4153317	4.00E-05	3.29	3.29	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153327	4.00E-05	3.34	3.34	1.5	ANNUAL	DPM	5
RESIDENT	564468.1	4153327	4.00E-05	3.26	3.26	1.5	ANNUAL	DPM	5
RESIDENT	564458.1	4153337	4.00E-05	3.31	3.31	1.5	ANNUAL	DPM	5

Discrete Re	X	Y	Concentrat	Elevation (i	Hill Heights	Flagpole (Z	Averagin P	Source Gro	Num Years
RESIDENT	564798.1	4153037	0.01352	3.21	3.21	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153037	0.01449	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153047	0.01345	3.09	3.09	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153047	0.01444	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153047	0.01553	2.93	2.93	1.5	ANNUAL	PM25	5
RESIDENT	564818.1	4153047	0.01673	3.06	3.06	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153057	0.01335	3.1	3.1	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153057	0.01435	2.98	2.98	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153057	0.01544	2.93	2.93	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153057	0.01667	2.89	2.89	1.5	ANNUAL	PM25	5
RESIDENT	564818.1	4153057	0.01804	3.04	3.04	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153067	0.01321	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153067	0.01423	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153067	0.01535	2.87	2.87	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153067	0.01657	2.86	2.86	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153067	0.01796	2.84	2.84	1.5	ANNUAL	PM25	5
RESIDENT	564818.1	4153067	0.01953	3.03	3.03	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153077	0.01303	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153077	0.01407	3.04	3.04	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153077	0.01521	2.91	2.91	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153077	0.01646	2.78	2.78	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153077	0.01784	2.81	2.81	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153077	0.01942	2.83	2.83	1.5	ANNUAL	PM25	5
RESIDENT	564818.1	4153077	0.02123	3.04	3.04	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153087	0.01281	3.09	3.09	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153087	0.01389	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153087	0.01505	2.92	2.92	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153087	0.01631	2.83	2.83	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153087	0.01771	2.74	2.74	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153087	0.01925	2.86	2.86	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153087	0.02103	2.99	2.99	1.5	ANNUAL	PM25	5
RESIDENT	564818.1	4153087	0.02315	3.18	3.18	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153097	0.00249	3.79	3.79	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153097	0.0125	3.06	3.06	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153097	0.01365	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153097	0.01485	2.87	2.87	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153097	0.01615	2.8	2.8	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153097	0.01756	2.75	2.75	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153097	0.01914	2.69	2.69	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153097	0.02085	2.92	2.92	1.5	ANNUAL	PM25	5
RESIDENT	564808.1	4153097	0.02288	3.15	3.15	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153107	0.00234	3.87	3.87	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153107	0.00253	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153107	0.00274	3.57	3.57	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153107	0.011	3.12	3.12	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153107	0.0121	3.04	3.04	1.5	ANNUAL	PM25	5

RESIDENT	564738.1	4153107	0.0133	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153107	0.01458	2.86	2.86	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153107	0.01593	2.75	2.75	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153107	0.01738	2.7	2.7	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153107	0.01897	2.7	2.7	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153107	0.02076	2.7	2.7	1.5	ANNUAL	PM25	5
RESIDENT	564798.1	4153107	0.0227	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153117	0.00219	3.87	3.87	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153117	0.00237	3.79	3.79	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153117	0.00256	3.68	3.68	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153117	0.00278	3.55	3.55	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153117	0.00301	3.43	3.43	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153117	0.01053	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153117	0.01162	3.06	3.06	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153117	0.01284	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153117	0.01417	2.93	2.93	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153117	0.0156	2.83	2.83	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153117	0.01712	2.73	2.73	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153117	0.01875	2.74	2.74	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153117	0.02054	2.88	2.88	1.5	ANNUAL	PM25	5
RESIDENT	564788.1	4153117	0.02254	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153127	0.00221	3.76	3.76	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153127	0.00239	3.71	3.71	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153127	0.00259	3.63	3.63	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153127	0.00281	3.53	3.53	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153127	0.00306	3.44	3.44	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153127	0.00333	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153127	0.01002	3.11	3.11	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153127	0.0111	3.06	3.06	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153127	0.01231	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153127	0.01365	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153127	0.01514	2.9	2.9	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153127	0.01676	2.8	2.8	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153127	0.01849	2.7	2.7	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153127	0.02033	2.78	2.78	1.5	ANNUAL	PM25	5
RESIDENT	564778.1	4153127	0.02236	3.05	3.05	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153137	0.00207	3.71	3.71	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153137	0.00224	3.68	3.68	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153137	0.00242	3.65	3.65	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153137	0.00262	3.6	3.6	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153137	0.00285	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153137	0.00311	3.44	3.44	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153137	0.00339	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153137	0.0037	3.25	3.25	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153137	0.00949	3.03	3.03	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153137	0.01054	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153137	0.01172	2.98	2.98	1.5	ANNUAL	PM25	5

RESIDENT	564718.1	4153137	0.01306	2.95	2.95	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153137	0.01456	2.91	2.91	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153137	0.01623	2.87	2.87	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153137	0.01806	2.79	2.79	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153137	0.02004	2.69	2.69	1.5	ANNUAL	PM25	5
RESIDENT	564768.1	4153137	0.02214	2.84	2.84	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153147	0.00194	3.86	3.86	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153147	0.00209	3.76	3.76	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153147	0.00226	3.71	3.71	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153147	0.00245	3.65	3.65	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153147	0.00266	3.59	3.59	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153147	0.00289	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153147	0.00315	3.44	3.44	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153147	0.00344	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153147	0.00377	3.29	3.29	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153147	0.00413	3.26	3.26	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153147	0.00891	3.12	3.12	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153147	0.00993	2.99	2.99	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153147	0.01108	2.97	2.97	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153147	0.01239	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153147	0.01388	2.94	2.94	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153147	0.01556	2.88	2.88	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153147	0.01746	2.83	2.83	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153147	0.01951	2.89	2.89	1.5	ANNUAL	PM25	5
RESIDENT	564758.1	4153147	0.02173	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153157	0.00183	3.84	3.84	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153157	0.00197	3.83	3.83	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153157	0.00212	3.81	3.81	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153157	0.00229	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153157	0.00248	3.65	3.65	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153157	0.00269	3.58	3.58	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153157	0.00293	3.51	3.51	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153157	0.0032	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153157	0.0035	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153157	0.00384	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153157	0.00422	3.27	3.27	1.5	ANNUAL	PM25	5
RESIDENT	564608.1	4153157	0.00465	3.2	3.2	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153157	0.00835	3.18	3.18	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153157	0.0093	3.06	3.06	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153157	0.01041	2.94	2.94	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153157	0.01167	2.94	2.94	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153157	0.01312	2.95	2.95	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153157	0.01478	2.93	2.93	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153157	0.0167	2.85	2.85	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153157	0.01886	2.78	2.78	1.5	ANNUAL	PM25	5
RESIDENT	564748.1	4153157	0.02117	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153167	0.00172	3.86	3.86	1.5	ANNUAL	PM25	5

RESIDENT	564498.1	4153167	0.00185	3.75	3.75	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153167	0.00199	3.8	3.8	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153167	0.00214	3.84	3.84	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153167	0.00232	3.74	3.74	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153167	0.00251	3.64	3.64	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153167	0.00273	3.57	3.57	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153167	0.00298	3.51	3.51	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153167	0.00325	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153167	0.00356	3.41	3.41	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153167	0.00391	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153167	0.00431	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564608.1	4153167	0.00476	3.17	3.17	1.5	ANNUAL	PM25	5
RESIDENT	564618.1	4153167	0.00526	3.12	3.12	1.5	ANNUAL	PM25	5
RESIDENT	564658.1	4153167	0.00783	3.2	3.2	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153167	0.0087	3.1	3.1	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153167	0.00971	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153167	0.01091	2.9	2.9	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153167	0.0123	2.91	2.91	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153167	0.01392	2.93	2.93	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153167	0.01579	2.91	2.91	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153167	0.01797	2.82	2.82	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153167	0.02046	2.74	2.74	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153177	0.00162	4.04	4.04	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153177	0.00174	3.84	3.84	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153177	0.00187	3.74	3.74	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153177	0.00202	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153177	0.00217	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153177	0.00235	3.65	3.65	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153177	0.00255	3.58	3.58	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153177	0.00278	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153177	0.00303	3.46	3.46	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153177	0.00331	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153177	0.00363	3.4	3.4	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153177	0.00399	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153177	0.0044	3.3	3.3	1.5	ANNUAL	PM25	5
RESIDENT	564608.1	4153177	0.00488	3.2	3.2	1.5	ANNUAL	PM25	5
RESIDENT	564618.1	4153177	0.00541	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564648.1	4153177	0.00735	3.23	3.23	1.5	ANNUAL	PM25	5
RESIDENT	564658.1	4153177	0.00815	3.18	3.18	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153177	0.00906	3.11	3.11	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153177	0.01015	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153177	0.01145	2.9	2.9	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153177	0.01299	2.87	2.87	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153177	0.01481	2.86	2.86	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153177	0.01693	2.89	2.89	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153177	0.01937	2.99	2.99	1.5	ANNUAL	PM25	5
RESIDENT	564738.1	4153177	0.02218	3.08	3.08	1.5	ANNUAL	PM25	5

RESIDENT	564468.1	4153187	0.00153	4.09	4.09	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153187	0.00164	3.95	3.95	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153187	0.00176	3.82	3.82	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153187	0.00189	3.72	3.72	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153187	0.00204	3.67	3.67	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153187	0.00221	3.62	3.62	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153187	0.00239	3.56	3.56	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153187	0.0026	3.51	3.51	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153187	0.00283	3.47	3.47	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153187	0.00309	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153187	0.00338	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153187	0.00371	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153187	0.00408	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153187	0.00451	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564608.1	4153187	0.005	3.23	3.23	1.5	ANNUAL	PM25	5
RESIDENT	564618.1	4153187	0.00555	3.17	3.17	1.5	ANNUAL	PM25	5
RESIDENT	564648.1	4153187	0.00765	3.17	3.17	1.5	ANNUAL	PM25	5
RESIDENT	564658.1	4153187	0.0085	3.16	3.16	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153187	0.00947	3.11	3.11	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153187	0.01063	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153187	0.01204	2.89	2.89	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153187	0.01374	2.84	2.84	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153187	0.01579	2.79	2.79	1.5	ANNUAL	PM25	5
RESIDENT	564718.1	4153187	0.0182	2.88	2.88	1.5	ANNUAL	PM25	5
RESIDENT	564728.1	4153187	0.02098	3.15	3.15	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153197	0.00145	4.09	4.09	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153197	0.00155	3.95	3.95	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153197	0.00166	3.87	3.87	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153197	0.00178	3.79	3.79	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153197	0.00191	3.7	3.7	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153197	0.00207	3.6	3.6	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153197	0.00224	3.51	3.51	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153197	0.00243	3.48	3.48	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153197	0.00264	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153197	0.00288	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153197	0.00315	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153197	0.00345	3.36	3.36	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153197	0.00379	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153197	0.00417	3.4	3.4	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153197	0.00462	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564608.1	4153197	0.00513	3.26	3.26	1.5	ANNUAL	PM25	5
RESIDENT	564658.1	4153197	0.00888	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153197	0.00992	3.12	3.12	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153197	0.01116	3	3	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153197	0.01268	2.89	2.89	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153197	0.01456	2.8	2.8	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153197	0.01687	2.72	2.72	1.5	ANNUAL	PM25	5

RESIDENT	564718.1	4153197	0.01962	2.87	2.87	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153207	0.00146	4.02	4.02	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153207	0.00156	3.88	3.88	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153207	0.00167	3.81	3.81	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153207	0.0018	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153207	0.00194	3.64	3.64	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153207	0.00209	3.54	3.54	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153207	0.00227	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153207	0.00246	3.43	3.43	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153207	0.00268	3.41	3.41	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153207	0.00293	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153207	0.00321	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153207	0.00352	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153207	0.00388	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153207	0.00428	3.34	3.34	1.5	ANNUAL	PM25	5
RESIDENT	564598.1	4153207	0.00474	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564668.1	4153207	0.0104	3.13	3.13	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153207	0.01175	2.99	2.99	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153207	0.0134	2.84	2.84	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153207	0.01542	2.9	2.9	1.5	ANNUAL	PM25	5
RESIDENT	564708.1	4153207	0.01796	2.98	2.98	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153217	0.00148	3.94	3.94	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153217	0.00158	3.82	3.82	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153217	0.00169	3.75	3.75	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153217	0.00182	3.67	3.67	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153217	0.00196	3.58	3.58	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153217	0.00212	3.48	3.48	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153217	0.0023	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153217	0.0025	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153217	0.00272	3.38	3.38	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153217	0.00298	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153217	0.00327	3.31	3.31	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153217	0.0036	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153217	0.00397	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564588.1	4153217	0.0044	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564678.1	4153217	0.0124	2.97	2.97	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153217	0.01421	2.79	2.79	1.5	ANNUAL	PM25	5
RESIDENT	564698.1	4153217	0.01637	3.01	3.01	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153227	0.0015	3.86	3.86	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153227	0.0016	3.75	3.75	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153227	0.00172	3.68	3.68	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153227	0.00185	3.62	3.62	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153227	0.00199	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153227	0.00215	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153227	0.00233	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153227	0.00254	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153227	0.00277	3.34	3.34	1.5	ANNUAL	PM25	5

RESIDENT	564548.1	4153227	0.00303	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153227	0.00333	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153227	0.00368	3.24	3.24	1.5	ANNUAL	PM25	5
RESIDENT	564578.1	4153227	0.00407	3.23	3.23	1.5	ANNUAL	PM25	5
RESIDENT	564688.1	4153227	0.0151	2.74	2.74	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153237	0.00152	3.81	3.81	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153237	0.00163	3.73	3.73	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153237	0.00174	3.64	3.64	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153237	0.00188	3.55	3.55	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153237	0.00202	3.47	3.47	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153237	0.00219	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153237	0.00237	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153237	0.00258	3.31	3.31	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153237	0.00282	3.31	3.31	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153237	0.00309	3.29	3.29	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153237	0.0034	3.26	3.26	1.5	ANNUAL	PM25	5
RESIDENT	564568.1	4153237	0.00376	3.24	3.24	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153247	0.00155	3.76	3.76	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153247	0.00165	3.7	3.7	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153247	0.00177	3.59	3.59	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153247	0.00191	3.48	3.48	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153247	0.00206	3.41	3.41	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153247	0.00222	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153247	0.00241	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153247	0.00263	3.3	3.3	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153247	0.00288	3.27	3.27	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153247	0.00316	3.25	3.25	1.5	ANNUAL	PM25	5
RESIDENT	564558.1	4153247	0.00348	3.24	3.24	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153257	0.00157	3.71	3.71	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153257	0.00168	3.68	3.68	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153257	0.0018	3.55	3.55	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153257	0.00194	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153257	0.00209	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153257	0.00226	3.34	3.34	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153257	0.00246	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153257	0.00268	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153257	0.00294	3.24	3.24	1.5	ANNUAL	PM25	5
RESIDENT	564548.1	4153257	0.00323	3.22	3.22	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153267	0.00159	3.65	3.65	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153267	0.0017	3.6	3.6	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153267	0.00183	3.5	3.5	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153267	0.00197	3.4	3.4	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153267	0.00212	3.32	3.32	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153267	0.0023	3.26	3.26	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153267	0.0025	3.21	3.21	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153267	0.00273	3.21	3.21	1.5	ANNUAL	PM25	5
RESIDENT	564538.1	4153267	0.003	3.22	3.22	1.5	ANNUAL	PM25	5

RESIDENT	564458.1	4153277	0.00161	3.58	3.58	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153277	0.00173	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153277	0.00185	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153277	0.00199	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153277	0.00216	3.29	3.29	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153277	0.00234	3.17	3.17	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153277	0.00255	3.08	3.08	1.5	ANNUAL	PM25	5
RESIDENT	564528.1	4153277	0.00278	3.14	3.14	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153287	0.00163	3.52	3.52	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153287	0.00175	3.45	3.45	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153287	0.00188	3.41	3.41	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153287	0.00202	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153287	0.00219	3.25	3.25	1.5	ANNUAL	PM25	5
RESIDENT	564508.1	4153287	0.00238	3.08	3.08	1.5	ANNUAL	PM25	5
RESIDENT	564518.1	4153287	0.00259	2.96	2.96	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153297	0.00165	3.47	3.47	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153297	0.00177	3.39	3.39	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153297	0.0019	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153297	0.00205	3.35	3.35	1.5	ANNUAL	PM25	5
RESIDENT	564498.1	4153297	0.00222	3.28	3.28	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153307	0.00167	3.42	3.42	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153307	0.00179	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153307	0.00193	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564488.1	4153307	0.00208	3.33	3.33	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153317	0.0017	3.37	3.37	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153317	0.00182	3.27	3.27	1.5	ANNUAL	PM25	5
RESIDENT	564478.1	4153317	0.00195	3.29	3.29	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153327	0.00172	3.34	3.34	1.5	ANNUAL	PM25	5
RESIDENT	564468.1	4153327	0.00184	3.26	3.26	1.5	ANNUAL	PM25	5
RESIDENT	564458.1	4153337	0.00174	3.31	3.31	1.5	ANNUAL	PM25	5

564798.1	4153037	9901	DieselExhP	0.00019	0	0	0	0
564808.1	4153037	9901	DieselExhP	0.00021	0	0	0	0
564788.1	4153047	9901	DieselExhP	0.00018	0	0	0	0
564798.1	4153047	9901	DieselExhP	0.00019	0	0	0	0
564808.1	4153047	9901	DieselExhP	0.00021	0	0	0	0
564818.1	4153047	9901	DieselExhP	0.00022	0	0	0	0
564778.1	4153057	9901	DieselExhP	0.00016	0	0	0	0
564788.1	4153057	9901	DieselExhP	0.00017	0	0	0	0
564798.1	4153057	9901	DieselExhP	0.00019	0	0	0	0
564808.1	4153057	9901	DieselExhP	0.00021	0	0	0	0
564818.1	4153057	9901	DieselExhP	0.00022	0	0	0	0
564768.1	4153067	9901	DieselExhP	0.00014	0	0	0	0
564778.1	4153067	9901	DieselExhP	0.00016	0	0	0	0
564788.1	4153067	9901	DieselExhP	0.00017	0	0	0	0
564798.1	4153067	9901	DieselExhP	0.00019	0	0	0	0
564808.1	4153067	9901	DieselExhP	0.0002	0	0	0	0
564818.1	4153067	9901	DieselExhP	0.00022	0	0	0	0
564758.1	4153077	9901	DieselExhP	0.00013	0	0	0	0
564768.1	4153077	9901	DieselExhP	0.00014	0	0	0	0
564778.1	4153077	9901	DieselExhP	0.00016	0	0	0	0
564788.1	4153077	9901	DieselExhP	0.00017	0	0	0	0
564798.1	4153077	9901	DieselExhP	0.00019	0	0	0	0
564808.1	4153077	9901	DieselExhP	0.0002	0	0	0	0
564818.1	4153077	9901	DieselExhP	0.00022	0	0	0	0
564748.1	4153087	9901	DieselExhP	0.00012	0	0	0	0
564758.1	4153087	9901	DieselExhP	0.00013	0	0	0	0
564768.1	4153087	9901	DieselExhP	0.00014	0	0	0	0
564778.1	4153087	9901	DieselExhP	0.00015	0	0	0	0
564788.1	4153087	9901	DieselExhP	0.00017	0	0	0	0
564798.1	4153087	9901	DieselExhP	0.00018	0	0	0	0
564808.1	4153087	9901	DieselExhP	0.0002	0	0	0	0
564818.1	4153087	9901	DieselExhP	0.00022	0	0	0	0
564548.1	4153097	9901	DieselExhP	0.00004	0	0	0	0
564738.1	4153097	9901	DieselExhP	0.00011	0	0	0	0
564748.1	4153097	9901	DieselExhP	0.00012	0	0	0	0
564758.1	4153097	9901	DieselExhP	0.00013	0	0	0	0
564768.1	4153097	9901	DieselExhP	0.00014	0	0	0	0
564778.1	4153097	9901	DieselExhP	0.00015	0	0	0	0
564788.1	4153097	9901	DieselExhP	0.00016	0	0	0	0
564798.1	4153097	9901	DieselExhP	0.00018	0	0	0	0
564808.1	4153097	9901	DieselExhP	0.0002	0	0	0	0
564538.1	4153107	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153107	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153107	9901	DieselExhP	0.00005	0	0	0	0
564718.1	4153107	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153107	9901	DieselExhP	0.0001	0	0	0	0
564738.1	4153107	9901	DieselExhP	0.00011	0	0	0	0

564748.1	4153107	9901	DieselExhP	0.00012	0	0	0	0
564758.1	4153107	9901	DieselExhP	0.00012	0	0	0	0
564768.1	4153107	9901	DieselExhP	0.00014	0	0	0	0
564778.1	4153107	9901	DieselExhP	0.00015	0	0	0	0
564788.1	4153107	9901	DieselExhP	0.00016	0	0	0	0
564798.1	4153107	9901	DieselExhP	0.00018	0	0	0	0
564528.1	4153117	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153117	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153117	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153117	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153117	9901	DieselExhP	0.00005	0	0	0	0
564708.1	4153117	9901	DieselExhP	0.00009	0	0	0	0
564718.1	4153117	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153117	9901	DieselExhP	0.0001	0	0	0	0
564738.1	4153117	9901	DieselExhP	0.00011	0	0	0	0
564748.1	4153117	9901	DieselExhP	0.00011	0	0	0	0
564758.1	4153117	9901	DieselExhP	0.00012	0	0	0	0
564768.1	4153117	9901	DieselExhP	0.00013	0	0	0	0
564778.1	4153117	9901	DieselExhP	0.00015	0	0	0	0
564788.1	4153117	9901	DieselExhP	0.00016	0	0	0	0
564528.1	4153127	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153127	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153127	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153127	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153127	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153127	9901	DieselExhP	0.00005	0	0	0	0
564698.1	4153127	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153127	9901	DieselExhP	0.00009	0	0	0	0
564718.1	4153127	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153127	9901	DieselExhP	0.0001	0	0	0	0
564738.1	4153127	9901	DieselExhP	0.0001	0	0	0	0
564748.1	4153127	9901	DieselExhP	0.00011	0	0	0	0
564758.1	4153127	9901	DieselExhP	0.00012	0	0	0	0
564768.1	4153127	9901	DieselExhP	0.00013	0	0	0	0
564778.1	4153127	9901	DieselExhP	0.00014	0	0	0	0
564518.1	4153137	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153137	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153137	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153137	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153137	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153137	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153137	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153137	9901	DieselExhP	0.00005	0	0	0	0
564688.1	4153137	9901	DieselExhP	0.00008	0	0	0	0
564698.1	4153137	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153137	9901	DieselExhP	0.00009	0	0	0	0
564718.1	4153137	9901	DieselExhP	0.00009	0	0	0	0

564728.1	4153137	9901	DieselExhP	0.0001	0	0	0	0
564738.1	4153137	9901	DieselExhP	0.0001	0	0	0	0
564748.1	4153137	9901	DieselExhP	0.00011	0	0	0	0
564758.1	4153137	9901	DieselExhP	0.00012	0	0	0	0
564768.1	4153137	9901	DieselExhP	0.00013	0	0	0	0
564508.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153147	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153147	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153147	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153147	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153147	9901	DieselExhP	0.00005	0	0	0	0
564678.1	4153147	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153147	9901	DieselExhP	0.00008	0	0	0	0
564698.1	4153147	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153147	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153147	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153147	9901	DieselExhP	0.0001	0	0	0	0
564738.1	4153147	9901	DieselExhP	0.0001	0	0	0	0
564748.1	4153147	9901	DieselExhP	0.00011	0	0	0	0
564758.1	4153147	9901	DieselExhP	0.00012	0	0	0	0
564498.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153157	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153157	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153157	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153157	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153157	9901	DieselExhP	0.00005	0	0	0	0
564608.1	4153157	9901	DieselExhP	0.00005	0	0	0	0
564668.1	4153157	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153157	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153157	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153157	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153157	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153157	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153157	9901	DieselExhP	0.00009	0	0	0	0
564738.1	4153157	9901	DieselExhP	0.0001	0	0	0	0
564748.1	4153157	9901	DieselExhP	0.00011	0	0	0	0
564488.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153167	9901	DieselExhP	0.00004	0	0	0	0

564508.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153167	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153167	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153167	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153167	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153167	9901	DieselExhP	0.00005	0	0	0	0
564608.1	4153167	9901	DieselExhP	0.00005	0	0	0	0
564618.1	4153167	9901	DieselExhP	0.00006	0	0	0	0
564658.1	4153167	9901	DieselExhP	0.00006	0	0	0	0
564668.1	4153167	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153167	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153167	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153167	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153167	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153167	9901	DieselExhP	0.00009	0	0	0	0
564728.1	4153167	9901	DieselExhP	0.00009	0	0	0	0
564738.1	4153167	9901	DieselExhP	0.0001	0	0	0	0
564478.1	4153177	9901	DieselExhP	0.00003	0	0	0	0
564488.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153177	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564608.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564618.1	4153177	9901	DieselExhP	0.00005	0	0	0	0
564648.1	4153177	9901	DieselExhP	0.00006	0	0	0	0
564658.1	4153177	9901	DieselExhP	0.00006	0	0	0	0
564668.1	4153177	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153177	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153177	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153177	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153177	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153177	9901	DieselExhP	0.00008	0	0	0	0
564728.1	4153177	9901	DieselExhP	0.00009	0	0	0	0
564738.1	4153177	9901	DieselExhP	0.00009	0	0	0	0
564468.1	4153187	9901	DieselExhP	0.00003	0	0	0	0

564478.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153187	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564608.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564618.1	4153187	9901	DieselExhP	0.00005	0	0	0	0
564648.1	4153187	9901	DieselExhP	0.00006	0	0	0	0
564658.1	4153187	9901	DieselExhP	0.00006	0	0	0	0
564668.1	4153187	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153187	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153187	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153187	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153187	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153187	9901	DieselExhP	0.00008	0	0	0	0
564728.1	4153187	9901	DieselExhP	0.00009	0	0	0	0
564458.1	4153197	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153197	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153197	9901	DieselExhP	0.00004	0	0	0	0
564568.1	4153197	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153197	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153197	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153197	9901	DieselExhP	0.00005	0	0	0	0
564608.1	4153197	9901	DieselExhP	0.00005	0	0	0	0
564658.1	4153197	9901	DieselExhP	0.00006	0	0	0	0
564668.1	4153197	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153197	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153197	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153197	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153197	9901	DieselExhP	0.00008	0	0	0	0
564718.1	4153197	9901	DieselExhP	0.00008	0	0	0	0

564458.1	4153207	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153207	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153207	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153207	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153207	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153207	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153207	9901	DieselExhP	0.00005	0	0	0	0
564598.1	4153207	9901	DieselExhP	0.00005	0	0	0	0
564668.1	4153207	9901	DieselExhP	0.00007	0	0	0	0
564678.1	4153207	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153207	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153207	9901	DieselExhP	0.00008	0	0	0	0
564708.1	4153207	9901	DieselExhP	0.00008	0	0	0	0
564458.1	4153217	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153217	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153217	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153217	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153217	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153217	9901	DieselExhP	0.00005	0	0	0	0
564588.1	4153217	9901	DieselExhP	0.00005	0	0	0	0
564678.1	4153217	9901	DieselExhP	0.00007	0	0	0	0
564688.1	4153217	9901	DieselExhP	0.00007	0	0	0	0
564698.1	4153217	9901	DieselExhP	0.00008	0	0	0	0
564458.1	4153227	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153227	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153227	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153227	9901	DieselExhP	0.00004	0	0	0	0

564558.1	4153227	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153227	9901	DieselExhP	0.00005	0	0	0	0
564578.1	4153227	9901	DieselExhP	0.00005	0	0	0	0
564688.1	4153227	9901	DieselExhP	0.00008	0	0	0	0
564458.1	4153237	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153237	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153237	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153237	9901	DieselExhP	0.00005	0	0	0	0
564568.1	4153237	9901	DieselExhP	0.00005	0	0	0	0
564458.1	4153247	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153247	9901	DieselExhP	0.00003	0	0	0	0
564478.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153247	9901	DieselExhP	0.00004	0	0	0	0
564558.1	4153247	9901	DieselExhP	0.00005	0	0	0	0
564458.1	4153257	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153257	9901	DieselExhP	0.00004	0	0	0	0
564548.1	4153257	9901	DieselExhP	0.00005	0	0	0	0
564458.1	4153267	9901	DieselExhP	0.00003	0	0	0	0
564468.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564538.1	4153267	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153277	9901	DieselExhP	0.00003	0	0	0	0

564468.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564528.1	4153277	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564468.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564508.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564518.1	4153287	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153297	9901	DieselExhP	0.00004	0	0	0	0
564468.1	4153297	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153297	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153297	9901	DieselExhP	0.00004	0	0	0	0
564498.1	4153297	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153307	9901	DieselExhP	0.00004	0	0	0	0
564468.1	4153307	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153307	9901	DieselExhP	0.00004	0	0	0	0
564488.1	4153307	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153317	9901	DieselExhP	0.00004	0	0	0	0
564468.1	4153317	9901	DieselExhP	0.00004	0	0	0	0
564478.1	4153317	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153327	9901	DieselExhP	0.00004	0	0	0	0
564468.1	4153327	9901	DieselExhP	0.00004	0	0	0	0
564458.1	4153337	9901	DieselExhP	0.00004	0	0	0	0

Discrete Re	X	Y	Annual Cor	1-hr Conce	Elevation (i	Hill Height	Flagpole (Z	Source Grc	Num Years	Net ID
RESIDENT	564798.1	4153037	0.55705	11.3376	3.21	3.21	1.5	ALL	5	
RESIDENT	564808.1	4153037	0.56242	11.43809	3.14	3.14	1.5	ALL	5	
RESIDENT	564788.1	4153047	0.57083	11.24117	3.09	3.09	1.5	ALL	5	
RESIDENT	564798.1	4153047	0.57989	11.41663	3.01	3.01	1.5	ALL	5	
RESIDENT	564808.1	4153047	0.58707	11.53338	2.93	2.93	1.5	ALL	5	
RESIDENT	564818.1	4153047	0.5909	11.30541	3.06	3.06	1.5	ALL	5	
RESIDENT	564778.1	4153057	0.5728	11.00201	3.1	3.1	1.5	ALL	5	
RESIDENT	564788.1	4153057	0.59309	11.45581	2.98	2.98	1.5	ALL	5	
RESIDENT	564798.1	4153057	0.60551	11.54631	2.93	2.93	1.5	ALL	5	
RESIDENT	564808.1	4153057	0.61371	11.61606	2.89	2.89	1.5	ALL	5	
RESIDENT	564818.1	4153057	0.61654	11.45869	3.04	3.04	1.5	ALL	5	
RESIDENT	564768.1	4153067	0.56949	11.202	3.14	3.14	1.5	ALL	5	
RESIDENT	564778.1	4153067	0.59435	11.10974	3.01	3.01	1.5	ALL	5	
RESIDENT	564788.1	4153067	0.61584	11.63152	2.87	2.87	1.5	ALL	5	
RESIDENT	564798.1	4153067	0.63104	11.77389	2.86	2.86	1.5	ALL	5	
RESIDENT	564808.1	4153067	0.63733	11.66543	2.84	2.84	1.5	ALL	5	
RESIDENT	564818.1	4153067	0.64198	11.58032	3.03	3.03	1.5	ALL	5	
RESIDENT	564758.1	4153077	0.559	11.79086	3.14	3.14	1.5	ALL	5	
RESIDENT	564768.1	4153077	0.58691	11.42587	3.04	3.04	1.5	ALL	5	
RESIDENT	564778.1	4153077	0.61445	11.27799	2.91	2.91	1.5	ALL	5	
RESIDENT	564788.1	4153077	0.63834	11.76067	2.78	2.78	1.5	ALL	5	
RESIDENT	564798.1	4153077	0.6554	11.95919	2.81	2.81	1.5	ALL	5	
RESIDENT	564808.1	4153077	0.66463	11.73875	2.83	2.83	1.5	ALL	5	
RESIDENT	564818.1	4153077	0.66992	11.6668	3.04	3.04	1.5	ALL	5	
RESIDENT	564748.1	4153087	0.53785	11.71874	3.09	3.09	1.5	ALL	5	
RESIDENT	564758.1	4153087	0.57329	11.84654	3.01	3.01	1.5	ALL	5	
RESIDENT	564768.1	4153087	0.6041	11.59718	2.92	2.92	1.5	ALL	5	
RESIDENT	564778.1	4153087	0.63532	11.58439	2.83	2.83	1.5	ALL	5	
RESIDENT	564788.1	4153087	0.66016	11.8355	2.74	2.74	1.5	ALL	5	
RESIDENT	564798.1	4153087	0.67874	12.09368	2.86	2.86	1.5	ALL	5	
RESIDENT	564808.1	4153087	0.69261	11.91466	2.99	2.99	1.5	ALL	5	
RESIDENT	564818.1	4153087	0.69778	11.71457	3.18	3.18	1.5	ALL	5	
RESIDENT	564548.1	4153097	0.10578	9.91834	3.79	3.79	1.5	ALL	5	
RESIDENT	564738.1	4153097	0.50147	11.80436	3.06	3.06	1.5	ALL	5	
RESIDENT	564748.1	4153097	0.54572	11.66721	2.96	2.96	1.5	ALL	5	
RESIDENT	564758.1	4153097	0.58526	11.93485	2.87	2.87	1.5	ALL	5	
RESIDENT	564768.1	4153097	0.62	11.8884	2.8	2.8	1.5	ALL	5	
RESIDENT	564778.1	4153097	0.65451	11.91591	2.75	2.75	1.5	ALL	5	
RESIDENT	564788.1	4153097	0.68098	11.84944	2.69	2.69	1.5	ALL	5	
RESIDENT	564798.1	4153097	0.70415	12.16944	2.92	2.92	1.5	ALL	5	
RESIDENT	564808.1	4153097	0.71896	12.05905	3.15	3.15	1.5	ALL	5	
RESIDENT	564538.1	4153107	0.09865	9.64519	3.87	3.87	1.5	ALL	5	
RESIDENT	564548.1	4153107	0.10464	9.9192	3.73	3.73	1.5	ALL	5	
RESIDENT	564558.1	4153107	0.11099	10.21525	3.57	3.57	1.5	ALL	5	
RESIDENT	564718.1	4153107	0.42355	11.35237	3.12	3.12	1.5	ALL	5	
RESIDENT	564728.1	4153107	0.46378	11.44199	3.04	3.04	1.5	ALL	5	
RESIDENT	564738.1	4153107	0.50467	11.69164	2.96	2.96	1.5	ALL	5	
RESIDENT	564748.1	4153107	0.55202	11.64552	2.86	2.86	1.5	ALL	5	
RESIDENT	564758.1	4153107	0.59548	12.06984	2.75	2.75	1.5	ALL	5	
RESIDENT	564768.1	4153107	0.63359	12.13348	2.7	2.7	1.5	ALL	5	
RESIDENT	564778.1	4153107	0.6732	12.25057	2.7	2.7	1.5	ALL	5	

RESIDENT	564788.1	4153107	0.70338	12.19922	2.7	2.7	1.5	ALL	5
RESIDENT	564798.1	4153107	0.72615	12.18177	3	3	1.5	ALL	5
RESIDENT	564528.1	4153117	0.09271	9.96833	3.87	3.87	1.5	ALL	5
RESIDENT	564538.1	4153117	0.0978	9.90626	3.79	3.79	1.5	ALL	5
RESIDENT	564548.1	4153117	0.10328	9.75698	3.68	3.68	1.5	ALL	5
RESIDENT	564558.1	4153117	0.10984	10.15126	3.55	3.55	1.5	ALL	5
RESIDENT	564568.1	4153117	0.11654	10.47653	3.43	3.43	1.5	ALL	5
RESIDENT	564708.1	4153117	0.37608	11.44944	3.14	3.14	1.5	ALL	5
RESIDENT	564718.1	4153117	0.41888	11.34305	3.06	3.06	1.5	ALL	5
RESIDENT	564728.1	4153117	0.46156	11.38891	3	3	1.5	ALL	5
RESIDENT	564738.1	4153117	0.50674	11.56798	2.93	2.93	1.5	ALL	5
RESIDENT	564748.1	4153117	0.55692	11.8833	2.83	2.83	1.5	ALL	5
RESIDENT	564758.1	4153117	0.60232	12.09764	2.73	2.73	1.5	ALL	5
RESIDENT	564768.1	4153117	0.64427	12.27716	2.74	2.74	1.5	ALL	5
RESIDENT	564778.1	4153117	0.6873	12.50937	2.88	2.88	1.5	ALL	5
RESIDENT	564788.1	4153117	0.7229	12.54567	3.01	3.01	1.5	ALL	5
RESIDENT	564528.1	4153127	0.09253	9.88682	3.76	3.76	1.5	ALL	5
RESIDENT	564538.1	4153127	0.09711	9.95551	3.71	3.71	1.5	ALL	5
RESIDENT	564548.1	4153127	0.10244	9.93939	3.63	3.63	1.5	ALL	5
RESIDENT	564558.1	4153127	0.10815	9.89772	3.53	3.53	1.5	ALL	5
RESIDENT	564568.1	4153127	0.11506	10.337	3.44	3.44	1.5	ALL	5
RESIDENT	564578.1	4153127	0.12231	10.68884	3.38	3.38	1.5	ALL	5
RESIDENT	564698.1	4153127	0.33252	11.46339	3.11	3.11	1.5	ALL	5
RESIDENT	564708.1	4153127	0.368	11.4172	3.06	3.06	1.5	ALL	5
RESIDENT	564718.1	4153127	0.41237	11.41976	3.01	3.01	1.5	ALL	5
RESIDENT	564728.1	4153127	0.45914	11.44375	2.96	2.96	1.5	ALL	5
RESIDENT	564738.1	4153127	0.50405	11.63424	2.9	2.9	1.5	ALL	5
RESIDENT	564748.1	4153127	0.55977	12.13912	2.8	2.8	1.5	ALL	5
RESIDENT	564758.1	4153127	0.60578	12.25784	2.7	2.7	1.5	ALL	5
RESIDENT	564768.1	4153127	0.65273	12.30688	2.78	2.78	1.5	ALL	5
RESIDENT	564778.1	4153127	0.6998	12.67537	3.05	3.05	1.5	ALL	5
RESIDENT	564518.1	4153137	0.08776	9.45956	3.71	3.71	1.5	ALL	5
RESIDENT	564528.1	4153137	0.09221	9.58799	3.68	3.68	1.5	ALL	5
RESIDENT	564538.1	4153137	0.09693	9.78202	3.65	3.65	1.5	ALL	5
RESIDENT	564548.1	4153137	0.10188	9.89969	3.6	3.6	1.5	ALL	5
RESIDENT	564558.1	4153137	0.10737	9.93065	3.52	3.52	1.5	ALL	5
RESIDENT	564568.1	4153137	0.11332	9.99258	3.44	3.44	1.5	ALL	5
RESIDENT	564578.1	4153137	0.12053	10.46261	3.35	3.35	1.5	ALL	5
RESIDENT	564588.1	4153137	0.12813	10.83766	3.25	3.25	1.5	ALL	5
RESIDENT	564688.1	4153137	0.29171	11.34632	3.03	3.03	1.5	ALL	5
RESIDENT	564698.1	4153137	0.32416	11.5254	3	3	1.5	ALL	5
RESIDENT	564708.1	4153137	0.3589	11.3892	2.98	2.98	1.5	ALL	5
RESIDENT	564718.1	4153137	0.40516	11.49545	2.95	2.95	1.5	ALL	5
RESIDENT	564728.1	4153137	0.45095	11.38457	2.91	2.91	1.5	ALL	5
RESIDENT	564738.1	4153137	0.49888	11.60954	2.87	2.87	1.5	ALL	5
RESIDENT	564748.1	4153137	0.5556	12.26103	2.79	2.79	1.5	ALL	5
RESIDENT	564758.1	4153137	0.60816	12.52387	2.69	2.69	1.5	ALL	5
RESIDENT	564768.1	4153137	0.65822	12.33441	2.84	2.84	1.5	ALL	5
RESIDENT	564508.1	4153147	0.08349	9.51921	3.86	3.86	1.5	ALL	5
RESIDENT	564518.1	4153147	0.08736	9.62361	3.76	3.76	1.5	ALL	5
RESIDENT	564528.1	4153147	0.0915	9.66304	3.71	3.71	1.5	ALL	5
RESIDENT	564538.1	4153147	0.09631	9.6301	3.65	3.65	1.5	ALL	5

RESIDENT	564548.1	4153147	0.10113	9.63129	3.59	3.59	1.5	ALL	5
RESIDENT	564558.1	4153147	0.10648	9.80392	3.52	3.52	1.5	ALL	5
RESIDENT	564568.1	4153147	0.11227	9.90323	3.44	3.44	1.5	ALL	5
RESIDENT	564578.1	4153147	0.11867	10.01672	3.37	3.37	1.5	ALL	5
RESIDENT	564588.1	4153147	0.12637	10.51149	3.29	3.29	1.5	ALL	5
RESIDENT	564598.1	4153147	0.13439	10.90632	3.26	3.26	1.5	ALL	5
RESIDENT	564678.1	4153147	0.25193	11.32339	3.12	3.12	1.5	ALL	5
RESIDENT	564688.1	4153147	0.28147	11.37604	2.99	2.99	1.5	ALL	5
RESIDENT	564698.1	4153147	0.31302	11.36956	2.97	2.97	1.5	ALL	5
RESIDENT	564708.1	4153147	0.34738	11.42982	2.96	2.96	1.5	ALL	5
RESIDENT	564718.1	4153147	0.39059	11.76956	2.94	2.94	1.5	ALL	5
RESIDENT	564728.1	4153147	0.44219	11.78738	2.88	2.88	1.5	ALL	5
RESIDENT	564738.1	4153147	0.48983	11.53267	2.83	2.83	1.5	ALL	5
RESIDENT	564748.1	4153147	0.54397	12.22486	2.89	2.89	1.5	ALL	5
RESIDENT	564758.1	4153147	0.60513	12.63773	2.96	2.96	1.5	ALL	5
RESIDENT	564498.1	4153157	0.07954	9.1457	3.84	3.84	1.5	ALL	5
RESIDENT	564508.1	4153157	0.083	9.38912	3.83	3.83	1.5	ALL	5
RESIDENT	564518.1	4153157	0.08692	9.58423	3.81	3.81	1.5	ALL	5
RESIDENT	564528.1	4153157	0.09129	9.72184	3.73	3.73	1.5	ALL	5
RESIDENT	564538.1	4153157	0.09566	9.79296	3.65	3.65	1.5	ALL	5
RESIDENT	564548.1	4153157	0.10072	9.78824	3.58	3.58	1.5	ALL	5
RESIDENT	564558.1	4153157	0.10596	9.70078	3.51	3.51	1.5	ALL	5
RESIDENT	564568.1	4153157	0.11128	9.68237	3.45	3.45	1.5	ALL	5
RESIDENT	564578.1	4153157	0.11735	9.83994	3.39	3.39	1.5	ALL	5
RESIDENT	564588.1	4153157	0.12396	9.95583	3.33	3.33	1.5	ALL	5
RESIDENT	564598.1	4153157	0.13213	10.4684	3.27	3.27	1.5	ALL	5
RESIDENT	564608.1	4153157	0.14063	10.87556	3.2	3.2	1.5	ALL	5
RESIDENT	564668.1	4153157	0.22191	11.7333	3.18	3.18	1.5	ALL	5
RESIDENT	564678.1	4153157	0.24306	11.49786	3.06	3.06	1.5	ALL	5
RESIDENT	564688.1	4153157	0.26828	11.17867	2.94	2.94	1.5	ALL	5
RESIDENT	564698.1	4153157	0.30069	11.11499	2.94	2.94	1.5	ALL	5
RESIDENT	564708.1	4153157	0.33461	11.32964	2.95	2.95	1.5	ALL	5
RESIDENT	564718.1	4153157	0.37419	11.83764	2.93	2.93	1.5	ALL	5
RESIDENT	564728.1	4153157	0.42657	12.02851	2.85	2.85	1.5	ALL	5
RESIDENT	564738.1	4153157	0.47896	11.84192	2.78	2.78	1.5	ALL	5
RESIDENT	564748.1	4153157	0.5349	12.0185	3	3	1.5	ALL	5
RESIDENT	564488.1	4153167	0.07618	8.40783	3.86	3.86	1.5	ALL	5
RESIDENT	564498.1	4153167	0.07954	8.74845	3.75	3.75	1.5	ALL	5
RESIDENT	564508.1	4153167	0.08299	9.06067	3.8	3.8	1.5	ALL	5
RESIDENT	564518.1	4153167	0.0868	9.33541	3.84	3.84	1.5	ALL	5
RESIDENT	564528.1	4153167	0.09092	9.56304	3.74	3.74	1.5	ALL	5
RESIDENT	564538.1	4153167	0.09541	9.73312	3.64	3.64	1.5	ALL	5
RESIDENT	564548.1	4153167	0.10019	9.83525	3.57	3.57	1.5	ALL	5
RESIDENT	564558.1	4153167	0.1053	9.85971	3.51	3.51	1.5	ALL	5
RESIDENT	564568.1	4153167	0.11056	9.79671	3.45	3.45	1.5	ALL	5
RESIDENT	564578.1	4153167	0.11646	9.64045	3.41	3.41	1.5	ALL	5
RESIDENT	564588.1	4153167	0.12241	9.72987	3.37	3.37	1.5	ALL	5
RESIDENT	564598.1	4153167	0.12947	9.96469	3.28	3.28	1.5	ALL	5
RESIDENT	564608.1	4153167	0.13742	10.31693	3.17	3.17	1.5	ALL	5
RESIDENT	564618.1	4153167	0.14661	10.72593	3.12	3.12	1.5	ALL	5
RESIDENT	564658.1	4153167	0.19418	11.45284	3.2	3.2	1.5	ALL	5
RESIDENT	564668.1	4153167	0.21254	11.58918	3.1	3.1	1.5	ALL	5

RESIDENT	564678.1	4153167	0.23293	11.5352	3	3	1.5	ALL	5
RESIDENT	564688.1	4153167	0.25564	11.34109	2.9	2.9	1.5	ALL	5
RESIDENT	564698.1	4153167	0.28475	11.28363	2.91	2.91	1.5	ALL	5
RESIDENT	564708.1	4153167	0.31937	11.07348	2.93	2.93	1.5	ALL	5
RESIDENT	564718.1	4153167	0.35803	11.67353	2.91	2.91	1.5	ALL	5
RESIDENT	564728.1	4153167	0.40733	12.03351	2.82	2.82	1.5	ALL	5
RESIDENT	564738.1	4153167	0.4611	12.01948	2.74	2.74	1.5	ALL	5
RESIDENT	564478.1	4153177	0.07331	8.78073	4.04	4.04	1.5	ALL	5
RESIDENT	564488.1	4153177	0.07645	8.71229	3.84	3.84	1.5	ALL	5
RESIDENT	564498.1	4153177	0.07965	8.6132	3.74	3.74	1.5	ALL	5
RESIDENT	564508.1	4153177	0.08312	8.71188	3.73	3.73	1.5	ALL	5
RESIDENT	564518.1	4153177	0.08673	8.99336	3.73	3.73	1.5	ALL	5
RESIDENT	564528.1	4153177	0.09071	9.24613	3.65	3.65	1.5	ALL	5
RESIDENT	564538.1	4153177	0.09484	9.46163	3.58	3.58	1.5	ALL	5
RESIDENT	564548.1	4153177	0.09948	9.6456	3.52	3.52	1.5	ALL	5
RESIDENT	564558.1	4153177	0.10437	9.77725	3.46	3.46	1.5	ALL	5
RESIDENT	564568.1	4153177	0.10965	9.83039	3.42	3.42	1.5	ALL	5
RESIDENT	564578.1	4153177	0.11542	9.79279	3.4	3.4	1.5	ALL	5
RESIDENT	564588.1	4153177	0.12119	9.72406	3.38	3.38	1.5	ALL	5
RESIDENT	564598.1	4153177	0.12774	9.80246	3.3	3.3	1.5	ALL	5
RESIDENT	564608.1	4153177	0.135	10.10012	3.2	3.2	1.5	ALL	5
RESIDENT	564618.1	4153177	0.14241	10.44437	3.14	3.14	1.5	ALL	5
RESIDENT	564648.1	4153177	0.174	10.94445	3.23	3.23	1.5	ALL	5
RESIDENT	564658.1	4153177	0.18646	11.25554	3.18	3.18	1.5	ALL	5
RESIDENT	564668.1	4153177	0.20213	11.34156	3.11	3.11	1.5	ALL	5
RESIDENT	564678.1	4153177	0.22124	11.39262	3	3	1.5	ALL	5
RESIDENT	564688.1	4153177	0.24366	11.52938	2.9	2.9	1.5	ALL	5
RESIDENT	564698.1	4153177	0.26828	11.46167	2.87	2.87	1.5	ALL	5
RESIDENT	564708.1	4153177	0.30109	11.27164	2.86	2.86	1.5	ALL	5
RESIDENT	564718.1	4153177	0.33824	11.26195	2.89	2.89	1.5	ALL	5
RESIDENT	564728.1	4153177	0.38334	11.78401	2.99	2.99	1.5	ALL	5
RESIDENT	564738.1	4153177	0.44006	11.93971	3.08	3.08	1.5	ALL	5
RESIDENT	564468.1	4153187	0.07072	9.32156	4.09	4.09	1.5	ALL	5
RESIDENT	564478.1	4153187	0.07369	9.34083	3.95	3.95	1.5	ALL	5
RESIDENT	564488.1	4153187	0.07674	9.33199	3.82	3.82	1.5	ALL	5
RESIDENT	564498.1	4153187	0.08013	9.29249	3.72	3.72	1.5	ALL	5
RESIDENT	564508.1	4153187	0.08356	9.22038	3.67	3.67	1.5	ALL	5
RESIDENT	564518.1	4153187	0.0871	9.11383	3.62	3.62	1.5	ALL	5
RESIDENT	564528.1	4153187	0.09098	9.06874	3.56	3.56	1.5	ALL	5
RESIDENT	564538.1	4153187	0.09498	9.35283	3.51	3.51	1.5	ALL	5
RESIDENT	564548.1	4153187	0.09919	9.59953	3.47	3.47	1.5	ALL	5
RESIDENT	564558.1	4153187	0.10403	9.79986	3.42	3.42	1.5	ALL	5
RESIDENT	564568.1	4153187	0.10916	9.94236	3.39	3.39	1.5	ALL	5
RESIDENT	564578.1	4153187	0.11445	10.0172	3.39	3.39	1.5	ALL	5
RESIDENT	564588.1	4153187	0.12008	10.01265	3.39	3.39	1.5	ALL	5
RESIDENT	564598.1	4153187	0.12631	9.92067	3.33	3.33	1.5	ALL	5
RESIDENT	564608.1	4153187	0.13288	10.13589	3.23	3.23	1.5	ALL	5
RESIDENT	564618.1	4153187	0.14006	10.43069	3.17	3.17	1.5	ALL	5
RESIDENT	564648.1	4153187	0.16822	10.77384	3.17	3.17	1.5	ALL	5
RESIDENT	564658.1	4153187	0.17969	10.75211	3.16	3.16	1.5	ALL	5
RESIDENT	564668.1	4153187	0.19232	11.01447	3.11	3.11	1.5	ALL	5
RESIDENT	564678.1	4153187	0.21003	11.42745	3	3	1.5	ALL	5

RESIDENT	564688.1	4153187	0.22969	11.74056	2.89	2.89	1.5	ALL	5
RESIDENT	564698.1	4153187	0.2521	11.8069	2.84	2.84	1.5	ALL	5
RESIDENT	564708.1	4153187	0.28095	11.58387	2.79	2.79	1.5	ALL	5
RESIDENT	564718.1	4153187	0.31726	11.49146	2.88	2.88	1.5	ALL	5
RESIDENT	564728.1	4153187	0.35825	11.57455	3.15	3.15	1.5	ALL	5
RESIDENT	564458.1	4153197	0.06806	9.54852	4.09	4.09	1.5	ALL	5
RESIDENT	564468.1	4153197	0.07096	9.65128	3.95	3.95	1.5	ALL	5
RESIDENT	564478.1	4153197	0.07384	9.73096	3.87	3.87	1.5	ALL	5
RESIDENT	564488.1	4153197	0.077	9.78443	3.79	3.79	1.5	ALL	5
RESIDENT	564498.1	4153197	0.0803	9.80905	3.7	3.7	1.5	ALL	5
RESIDENT	564508.1	4153197	0.08356	9.80175	3.6	3.6	1.5	ALL	5
RESIDENT	564518.1	4153197	0.08723	9.75999	3.51	3.51	1.5	ALL	5
RESIDENT	564528.1	4153197	0.09094	9.68116	3.48	3.48	1.5	ALL	5
RESIDENT	564538.1	4153197	0.09503	9.56353	3.45	3.45	1.5	ALL	5
RESIDENT	564548.1	4153197	0.09921	9.46856	3.42	3.42	1.5	ALL	5
RESIDENT	564558.1	4153197	0.10372	9.63133	3.38	3.38	1.5	ALL	5
RESIDENT	564568.1	4153197	0.1085	9.85711	3.36	3.36	1.5	ALL	5
RESIDENT	564578.1	4153197	0.11379	10.02455	3.38	3.38	1.5	ALL	5
RESIDENT	564588.1	4153197	0.11933	10.11929	3.4	3.4	1.5	ALL	5
RESIDENT	564598.1	4153197	0.12517	10.13165	3.35	3.35	1.5	ALL	5
RESIDENT	564608.1	4153197	0.13173	10.04866	3.26	3.26	1.5	ALL	5
RESIDENT	564658.1	4153197	0.17322	10.88154	3.14	3.14	1.5	ALL	5
RESIDENT	564668.1	4153197	0.18417	10.9975	3.12	3.12	1.5	ALL	5
RESIDENT	564678.1	4153197	0.19657	11.158	3	3	1.5	ALL	5
RESIDENT	564688.1	4153197	0.2159	11.63495	2.89	2.89	1.5	ALL	5
RESIDENT	564698.1	4153197	0.23555	11.88009	2.8	2.8	1.5	ALL	5
RESIDENT	564708.1	4153197	0.25979	11.83552	2.72	2.72	1.5	ALL	5
RESIDENT	564718.1	4153197	0.2929	11.60603	2.87	2.87	1.5	ALL	5
RESIDENT	564458.1	4153207	0.06798	9.63043	4.02	4.02	1.5	ALL	5
RESIDENT	564468.1	4153207	0.07081	9.78672	3.88	3.88	1.5	ALL	5
RESIDENT	564478.1	4153207	0.07375	9.92374	3.81	3.81	1.5	ALL	5
RESIDENT	564488.1	4153207	0.07694	10.03794	3.73	3.73	1.5	ALL	5
RESIDENT	564498.1	4153207	0.0801	10.12643	3.64	3.64	1.5	ALL	5
RESIDENT	564508.1	4153207	0.0836	10.18554	3.54	3.54	1.5	ALL	5
RESIDENT	564518.1	4153207	0.08724	10.21211	3.45	3.45	1.5	ALL	5
RESIDENT	564528.1	4153207	0.0909	10.20275	3.43	3.43	1.5	ALL	5
RESIDENT	564538.1	4153207	0.09497	10.15446	3.41	3.41	1.5	ALL	5
RESIDENT	564548.1	4153207	0.0991	10.06473	3.38	3.38	1.5	ALL	5
RESIDENT	564558.1	4153207	0.10353	9.93086	3.35	3.35	1.5	ALL	5
RESIDENT	564568.1	4153207	0.1082	9.99216	3.32	3.32	1.5	ALL	5
RESIDENT	564578.1	4153207	0.1131	10.05018	3.33	3.33	1.5	ALL	5
RESIDENT	564588.1	4153207	0.11849	10.04304	3.34	3.34	1.5	ALL	5
RESIDENT	564598.1	4153207	0.124	10.08426	3.32	3.32	1.5	ALL	5
RESIDENT	564668.1	4153207	0.17734	11.35208	3.13	3.13	1.5	ALL	5
RESIDENT	564678.1	4153207	0.18832	11.19535	2.99	2.99	1.5	ALL	5
RESIDENT	564688.1	4153207	0.20174	11.23653	2.84	2.84	1.5	ALL	5
RESIDENT	564698.1	4153207	0.21899	11.60193	2.9	2.9	1.5	ALL	5
RESIDENT	564708.1	4153207	0.23944	11.73994	2.98	2.98	1.5	ALL	5
RESIDENT	564458.1	4153217	0.06831	9.51493	3.94	3.94	1.5	ALL	5
RESIDENT	564468.1	4153217	0.07101	9.71682	3.82	3.82	1.5	ALL	5
RESIDENT	564478.1	4153217	0.07392	9.90386	3.75	3.75	1.5	ALL	5
RESIDENT	564488.1	4153217	0.0769	10.07255	3.67	3.67	1.5	ALL	5

RESIDENT	564498.1	4153217	0.08029	10.21985	3.58	3.58	1.5 ALL	5
RESIDENT	564508.1	4153217	0.08365	10.34194	3.48	3.48	1.5 ALL	5
RESIDENT	564518.1	4153217	0.08722	10.43495	3.38	3.38	1.5 ALL	5
RESIDENT	564528.1	4153217	0.09105	10.49546	3.38	3.38	1.5 ALL	5
RESIDENT	564538.1	4153217	0.09499	10.51907	3.38	3.38	1.5 ALL	5
RESIDENT	564548.1	4153217	0.09896	10.50292	3.35	3.35	1.5 ALL	5
RESIDENT	564558.1	4153217	0.10334	10.44266	3.31	3.31	1.5 ALL	5
RESIDENT	564568.1	4153217	0.10776	10.33651	3.28	3.28	1.5 ALL	5
RESIDENT	564578.1	4153217	0.11248	10.30665	3.28	3.28	1.5 ALL	5
RESIDENT	564588.1	4153217	0.11745	10.38597	3.28	3.28	1.5 ALL	5
RESIDENT	564678.1	4153217	0.17903	11.70159	2.97	2.97	1.5 ALL	5
RESIDENT	564688.1	4153217	0.18891	11.45948	2.79	2.79	1.5 ALL	5
RESIDENT	564698.1	4153217	0.20187	11.28957	3.01	3.01	1.5 ALL	5
RESIDENT	564458.1	4153227	0.0682	9.20696	3.86	3.86	1.5 ALL	5
RESIDENT	564468.1	4153227	0.07102	9.44365	3.75	3.75	1.5 ALL	5
RESIDENT	564478.1	4153227	0.07385	9.67007	3.68	3.68	1.5 ALL	5
RESIDENT	564488.1	4153227	0.07696	9.88313	3.62	3.62	1.5 ALL	5
RESIDENT	564498.1	4153227	0.08013	10.07977	3.52	3.52	1.5 ALL	5
RESIDENT	564508.1	4153227	0.08345	10.25631	3.42	3.42	1.5 ALL	5
RESIDENT	564518.1	4153227	0.08715	10.40882	3.32	3.32	1.5 ALL	5
RESIDENT	564528.1	4153227	0.09067	10.5336	3.33	3.33	1.5 ALL	5
RESIDENT	564538.1	4153227	0.09461	10.6258	3.34	3.34	1.5 ALL	5
RESIDENT	564548.1	4153227	0.09875	10.68191	3.32	3.32	1.5 ALL	5
RESIDENT	564558.1	4153227	0.10298	10.69698	3.28	3.28	1.5 ALL	5
RESIDENT	564568.1	4153227	0.10719	10.66765	3.24	3.24	1.5 ALL	5
RESIDENT	564578.1	4153227	0.11182	10.58993	3.23	3.23	1.5 ALL	5
RESIDENT	564688.1	4153227	0.17803	11.74165	2.74	2.74	1.5 ALL	5
RESIDENT	564458.1	4153237	0.06807	8.72387	3.81	3.81	1.5 ALL	5
RESIDENT	564468.1	4153237	0.07091	8.98257	3.73	3.73	1.5 ALL	5
RESIDENT	564478.1	4153237	0.07369	9.23549	3.64	3.64	1.5 ALL	5
RESIDENT	564488.1	4153237	0.07681	9.48011	3.55	3.55	1.5 ALL	5
RESIDENT	564498.1	4153237	0.07986	9.71342	3.47	3.47	1.5 ALL	5
RESIDENT	564508.1	4153237	0.08329	9.93209	3.39	3.39	1.5 ALL	5
RESIDENT	564518.1	4153237	0.08666	10.13255	3.32	3.32	1.5 ALL	5
RESIDENT	564528.1	4153237	0.09028	10.31085	3.31	3.31	1.5 ALL	5
RESIDENT	564538.1	4153237	0.09399	10.46268	3.31	3.31	1.5 ALL	5
RESIDENT	564548.1	4153237	0.09808	10.5835	3.29	3.29	1.5 ALL	5
RESIDENT	564558.1	4153237	0.10227	10.66901	3.26	3.26	1.5 ALL	5
RESIDENT	564568.1	4153237	0.10667	10.7138	3.24	3.24	1.5 ALL	5
RESIDENT	564458.1	4153247	0.06781	8.0936	3.76	3.76	1.5 ALL	5
RESIDENT	564468.1	4153247	0.07052	8.36114	3.7	3.7	1.5 ALL	5
RESIDENT	564478.1	4153247	0.07347	8.6269	3.59	3.59	1.5 ALL	5
RESIDENT	564488.1	4153247	0.07645	8.88884	3.48	3.48	1.5 ALL	5
RESIDENT	564498.1	4153247	0.07969	9.14435	3.41	3.41	1.5 ALL	5
RESIDENT	564508.1	4153247	0.08285	9.39053	3.37	3.37	1.5 ALL	5
RESIDENT	564518.1	4153247	0.08636	9.62442	3.32	3.32	1.5 ALL	5
RESIDENT	564528.1	4153247	0.08982	9.84205	3.3	3.3	1.5 ALL	5
RESIDENT	564538.1	4153247	0.09363	10.04002	3.27	3.27	1.5 ALL	5
RESIDENT	564548.1	4153247	0.09739	10.21302	3.25	3.25	1.5 ALL	5
RESIDENT	564558.1	4153247	0.10134	10.35791	3.24	3.24	1.5 ALL	5
RESIDENT	564458.1	4153257	0.0674	8.02046	3.71	3.71	1.5 ALL	5
RESIDENT	564468.1	4153257	0.0701	8.20332	3.68	3.68	1.5 ALL	5

RESIDENT	564478.1	4153257	0.07285	8.38335	3.55	3.55	1.5	ALL	5
RESIDENT	564488.1	4153257	0.07617	8.55875	3.42	3.42	1.5	ALL	5
RESIDENT	564498.1	4153257	0.07933	8.72748	3.35	3.35	1.5	ALL	5
RESIDENT	564508.1	4153257	0.08262	8.88733	3.34	3.34	1.5	ALL	5
RESIDENT	564518.1	4153257	0.086	9.03582	3.32	3.32	1.5	ALL	5
RESIDENT	564528.1	4153257	0.08961	9.16994	3.28	3.28	1.5	ALL	5
RESIDENT	564538.1	4153257	0.09334	9.3889	3.24	3.24	1.5	ALL	5
RESIDENT	564548.1	4153257	0.09723	9.59874	3.22	3.22	1.5	ALL	5
RESIDENT	564458.1	4153267	0.06725	8.25069	3.65	3.65	1.5	ALL	5
RESIDENT	564468.1	4153267	0.06989	8.45581	3.6	3.6	1.5	ALL	5
RESIDENT	564478.1	4153267	0.07287	8.65969	3.5	3.5	1.5	ALL	5
RESIDENT	564488.1	4153267	0.07573	8.8607	3.4	3.4	1.5	ALL	5
RESIDENT	564498.1	4153267	0.07878	9.05686	3.32	3.32	1.5	ALL	5
RESIDENT	564508.1	4153267	0.0822	9.246	3.26	3.26	1.5	ALL	5
RESIDENT	564518.1	4153267	0.08543	9.42553	3.21	3.21	1.5	ALL	5
RESIDENT	564528.1	4153267	0.08887	9.59226	3.21	3.21	1.5	ALL	5
RESIDENT	564538.1	4153267	0.09258	9.74311	3.22	3.22	1.5	ALL	5
RESIDENT	564458.1	4153277	0.06673	8.31994	3.58	3.58	1.5	ALL	5
RESIDENT	564468.1	4153277	0.06926	8.53891	3.52	3.52	1.5	ALL	5
RESIDENT	564478.1	4153277	0.07216	8.75792	3.45	3.45	1.5	ALL	5
RESIDENT	564488.1	4153277	0.07526	8.97549	3.39	3.39	1.5	ALL	5
RESIDENT	564498.1	4153277	0.07823	9.18988	3.29	3.29	1.5	ALL	5
RESIDENT	564508.1	4153277	0.08135	9.39889	3.17	3.17	1.5	ALL	5
RESIDENT	564518.1	4153277	0.08511	9.6	3.08	3.08	1.5	ALL	5
RESIDENT	564528.1	4153277	0.08842	9.78991	3.14	3.14	1.5	ALL	5
RESIDENT	564458.1	4153287	0.06634	8.22606	3.52	3.52	1.5	ALL	5
RESIDENT	564468.1	4153287	0.06907	8.44957	3.45	3.45	1.5	ALL	5
RESIDENT	564478.1	4153287	0.07176	8.67395	3.41	3.41	1.5	ALL	5
RESIDENT	564488.1	4153287	0.07455	8.89794	3.37	3.37	1.5	ALL	5
RESIDENT	564498.1	4153287	0.07753	9.11994	3.25	3.25	1.5	ALL	5
RESIDENT	564508.1	4153287	0.08065	9.33784	3.08	3.08	1.5	ALL	5
RESIDENT	564518.1	4153287	0.08397	9.54928	2.96	2.96	1.5	ALL	5
RESIDENT	564458.1	4153297	0.06564	7.97723	3.47	3.47	1.5	ALL	5
RESIDENT	564468.1	4153297	0.06817	8.19597	3.39	3.39	1.5	ALL	5
RESIDENT	564478.1	4153297	0.07109	8.41593	3.37	3.37	1.5	ALL	5
RESIDENT	564488.1	4153297	0.07406	8.63601	3.35	3.35	1.5	ALL	5
RESIDENT	564498.1	4153297	0.07692	8.85474	3.28	3.28	1.5	ALL	5
RESIDENT	564458.1	4153307	0.065	7.89311	3.42	3.42	1.5	ALL	5
RESIDENT	564468.1	4153307	0.06767	8.11523	3.33	3.33	1.5	ALL	5
RESIDENT	564478.1	4153307	0.07023	8.33854	3.33	3.33	1.5	ALL	5
RESIDENT	564488.1	4153307	0.07288	8.5621	3.33	3.33	1.5	ALL	5
RESIDENT	564458.1	4153317	0.06417	8.02944	3.37	3.37	1.5	ALL	5
RESIDENT	564468.1	4153317	0.06653	8.2495	3.27	3.27	1.5	ALL	5
RESIDENT	564478.1	4153317	0.06905	8.47014	3.29	3.29	1.5	ALL	5
RESIDENT	564458.1	4153327	0.0631	8.32001	3.34	3.34	1.5	ALL	5
RESIDENT	564468.1	4153327	0.06555	8.53239	3.26	3.26	1.5	ALL	5
RESIDENT	564458.1	4153337	0.06183	8.56019	3.31	3.31	1.5	ALL	5

Max by Receptor Type	Annual Concentration (AVERAGE CONC) [ug/m^3]	1-hr Concentration (AVERAGE CONC) [ug/m^3]
Resident	0.72615	12.67537

Resident	Annual Concentration (AVERAGE CONC) [ug/m^3]	1-hr Concentration (AVERAGE CONC) [ug/m^3]
Benzene	3.46E-04	6.03E-03
CCl4	2.32E-03	4.05E-02
Chloroform	3.03E-02	5.29E-01
1,4-Dioxane	6.62E-04	1.16E-02
Formaldehyde	2.09E-02	3.65E-01
Hexane	3.09E-03	5.39E-02
HCl	3.26E-02	5.70E-01
IsopropylAlcoh	9.01E-02	1.57E+00
Methanol	2.74E-01	4.78E+00
MethyleneChlor	3.52E-03	6.15E-02
Toluene	2.82E-03	4.92E-02
Xylenes	5.43E-03	9.48E-02
DMF	1.04E-03	1.82E-02
TCE	1.49E-03	2.60E-02
Hydrazine	2.38E-05	4.15E-04
Perc	1.88E-04	3.27E-03
Glutaraldhyd	8.42E-04	1.47E-02
Triethylamine	3.91E-04	6.83E-03
HF	6.85E-03	1.20E-01
MethylBromide	2.39E-01	4.18E+00
Acrylamide	2.36E-04	4.13E-03
EDC	9.68E-03	1.69E-01

Resident	1	1	71432	Benzene	3.46E-04	0.006033	0	0	0
Resident	1	1	56235	CCl4	2.32E-03	0.040481	0	0	0
Resident	1	1	67663	Chloroforn	3.03E-02	0.52857	0	0	0
Resident	1	1	71432	1,4-Dioxan	6.62E-04	0.011564	0	0	0
Resident	1	1	50000	Formaldeh	2.09E-02	0.364842	0	0	0
Resident	1	1	110543	Hexane	3.09E-03	0.053888	0	0	0
Resident	1	1	7647010	HCl	3.26E-02	0.569824	0	0	0
Resident	1	1	67630	Isopropyl A	9.01E-02	1.572817	0	0	0
Resident	1	1	67561	Methanol	2.74E-01	4.782909	0	0	0
Resident	1	1	75092	Methylene	3.52E-03	0.061495	0	0	0
Resident	1	1	108883	Toluene	2.82E-03	0.049247	0	0	0
Resident	1	1	1330207	Xylenes	5.43E-03	0.094756	0	0	0
Resident	1	1	68122	DMF	1.04E-03	0.018178	0	0	0
Resident	1	1	79016	TCE	1.49E-03	2.60E-02	0	0	0
Resident	1	1	302012	Hydrazine	2.38E-05	4.15E-04	0	0	0
Resident	1	1	127184	Perc	1.88E-04	3.27E-03	0	0	0
Resident	1	1	111308	Glutaraldh	8.42E-04	0.014697	0	0	0
Resident	1	1	121448	Triethylam	3.91E-04	0.006833	0	0	0
Resident	1	1	7664393	HF	6.85E-03	0.119508	0	0	0
Resident	1	1	74839	Methyl Brc	2.39E-01	4.176988	0	0	0
Resident	1	1	79061	Acrylamide	2.36E-04	4.13E-03	0	0	0
Resident	1	1	107062	EDC	9.68E-03	0.168884	0	0	0

*HARP - HRACalc v21081 4/21/2022 5:11:41 PM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	564798.1	4153037	9901	DieselExhP	0.00019	1.03E-07	28YrCancer	*	1.03E-07
2	564808.1	4153037	9901	DieselExhP	0.00021	1.14E-07	28YrCancer	*	1.14E-07
3	564788.1	4153047	9901	DieselExhP	0.00018	9.76E-08	28YrCancer	*	9.76E-08
4	564798.1	4153047	9901	DieselExhP	0.00019	1.03E-07	28YrCancer	*	1.03E-07
5	564808.1	4153047	9901	DieselExhP	0.00021	1.14E-07	28YrCancer	*	1.14E-07
6	564818.1	4153047	9901	DieselExhP	0.00022	1.19E-07	28YrCancer	*	1.19E-07
7	564778.1	4153057	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
8	564788.1	4153057	9901	DieselExhP	0.00017	9.22E-08	28YrCancer	*	9.22E-08
9	564798.1	4153057	9901	DieselExhP	0.00019	1.03E-07	28YrCancer	*	1.03E-07
10	564808.1	4153057	9901	DieselExhP	0.00021	1.14E-07	28YrCancer	*	1.14E-07
11	564818.1	4153057	9901	DieselExhP	0.00022	1.19E-07	28YrCancer	*	1.19E-07
12	564768.1	4153067	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
13	564778.1	4153067	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
14	564788.1	4153067	9901	DieselExhP	0.00017	9.22E-08	28YrCancer	*	9.22E-08
15	564798.1	4153067	9901	DieselExhP	0.00019	1.03E-07	28YrCancer	*	1.03E-07
16	564808.1	4153067	9901	DieselExhP	0.0002	1.08E-07	28YrCancer	*	1.08E-07
17	564818.1	4153067	9901	DieselExhP	0.00022	1.19E-07	28YrCancer	*	1.19E-07
18	564758.1	4153077	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
19	564768.1	4153077	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
20	564778.1	4153077	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
21	564788.1	4153077	9901	DieselExhP	0.00017	9.22E-08	28YrCancer	*	9.22E-08
22	564798.1	4153077	9901	DieselExhP	0.00019	1.03E-07	28YrCancer	*	1.03E-07
23	564808.1	4153077	9901	DieselExhP	0.0002	1.08E-07	28YrCancer	*	1.08E-07
24	564818.1	4153077	9901	DieselExhP	0.00022	1.19E-07	28YrCancer	*	1.19E-07
25	564748.1	4153087	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
26	564758.1	4153087	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
27	564768.1	4153087	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
28	564778.1	4153087	9901	DieselExhP	0.00015	8.13E-08	28YrCancer	*	8.13E-08
29	564788.1	4153087	9901	DieselExhP	0.00017	9.22E-08	28YrCancer	*	9.22E-08
30	564798.1	4153087	9901	DieselExhP	0.00018	9.76E-08	28YrCancer	*	9.76E-08
31	564808.1	4153087	9901	DieselExhP	0.0002	1.08E-07	28YrCancer	*	1.08E-07
32	564818.1	4153087	9901	DieselExhP	0.00022	1.19E-07	28YrCancer	*	1.19E-07
33	564548.1	4153097	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
34	564738.1	4153097	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
35	564748.1	4153097	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
36	564758.1	4153097	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
37	564768.1	4153097	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
38	564778.1	4153097	9901	DieselExhP	0.00015	8.13E-08	28YrCancer	*	8.13E-08
39	564788.1	4153097	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
40	564798.1	4153097	9901	DieselExhP	0.00018	9.76E-08	28YrCancer	*	9.76E-08
41	564808.1	4153097	9901	DieselExhP	0.0002	1.08E-07	28YrCancer	*	1.08E-07
42	564538.1	4153107	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
43	564548.1	4153107	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
44	564558.1	4153107	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
45	564718.1	4153107	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08

46	564728.1	4153107	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
47	564738.1	4153107	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
48	564748.1	4153107	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
49	564758.1	4153107	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
50	564768.1	4153107	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
51	564778.1	4153107	9901	DieselExhP	0.00015	8.13E-08	28YrCancer	*	8.13E-08
52	564788.1	4153107	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
53	564798.1	4153107	9901	DieselExhP	0.00018	9.76E-08	28YrCancer	*	9.76E-08
54	564528.1	4153117	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
55	564538.1	4153117	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
56	564548.1	4153117	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
57	564558.1	4153117	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
58	564568.1	4153117	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
59	564708.1	4153117	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
60	564718.1	4153117	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
61	564728.1	4153117	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
62	564738.1	4153117	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
63	564748.1	4153117	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
64	564758.1	4153117	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
65	564768.1	4153117	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
66	564778.1	4153117	9901	DieselExhP	0.00015	8.13E-08	28YrCancer	*	8.13E-08
67	564788.1	4153117	9901	DieselExhP	0.00016	8.67E-08	28YrCancer	*	8.67E-08
68	564528.1	4153127	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
69	564538.1	4153127	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
70	564548.1	4153127	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
71	564558.1	4153127	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
72	564568.1	4153127	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
73	564578.1	4153127	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
74	564698.1	4153127	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
75	564708.1	4153127	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
76	564718.1	4153127	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
77	564728.1	4153127	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
78	564738.1	4153127	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
79	564748.1	4153127	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
80	564758.1	4153127	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
81	564768.1	4153127	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
82	564778.1	4153127	9901	DieselExhP	0.00014	7.59E-08	28YrCancer	*	7.59E-08
83	564518.1	4153137	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
84	564528.1	4153137	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
85	564538.1	4153137	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
86	564548.1	4153137	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
87	564558.1	4153137	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
88	564568.1	4153137	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
89	564578.1	4153137	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
90	564588.1	4153137	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
91	564688.1	4153137	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
92	564698.1	4153137	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08

93	564708.1	4153137	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
94	564718.1	4153137	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
95	564728.1	4153137	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
96	564738.1	4153137	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
97	564748.1	4153137	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
98	564758.1	4153137	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
99	564768.1	4153137	9901	DieselExhP	0.00013	7.05E-08	28YrCancer	*	7.05E-08
100	564508.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
101	564518.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
102	564528.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
103	564538.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
104	564548.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
105	564558.1	4153147	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
106	564568.1	4153147	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
107	564578.1	4153147	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
108	564588.1	4153147	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
109	564598.1	4153147	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
110	564678.1	4153147	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
111	564688.1	4153147	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
112	564698.1	4153147	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
113	564708.1	4153147	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
114	564718.1	4153147	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
115	564728.1	4153147	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
116	564738.1	4153147	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
117	564748.1	4153147	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08
118	564758.1	4153147	9901	DieselExhP	0.00012	6.51E-08	28YrCancer	*	6.51E-08
119	564498.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
120	564508.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
121	564518.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
122	564528.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
123	564538.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
124	564548.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
125	564558.1	4153157	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
126	564568.1	4153157	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
127	564578.1	4153157	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
128	564588.1	4153157	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
129	564598.1	4153157	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
130	564608.1	4153157	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
131	564668.1	4153157	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
132	564678.1	4153157	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
133	564688.1	4153157	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
134	564698.1	4153157	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
135	564708.1	4153157	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
136	564718.1	4153157	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
137	564728.1	4153157	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
138	564738.1	4153157	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
139	564748.1	4153157	9901	DieselExhP	0.00011	5.96E-08	28YrCancer	*	5.96E-08

140	564488.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
141	564498.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
142	564508.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
143	564518.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
144	564528.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
145	564538.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
146	564548.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
147	564558.1	4153167	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
148	564568.1	4153167	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
149	564578.1	4153167	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
150	564588.1	4153167	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
151	564598.1	4153167	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
152	564608.1	4153167	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
153	564618.1	4153167	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
154	564658.1	4153167	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
155	564668.1	4153167	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
156	564678.1	4153167	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
157	564688.1	4153167	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
158	564698.1	4153167	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
159	564708.1	4153167	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
160	564718.1	4153167	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
161	564728.1	4153167	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
162	564738.1	4153167	9901	DieselExhP	0.0001	5.42E-08	28YrCancer	*	5.42E-08
163	564478.1	4153177	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
164	564488.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
165	564498.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
166	564508.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
167	564518.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
168	564528.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
169	564538.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
170	564548.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
171	564558.1	4153177	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
172	564568.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
173	564578.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
174	564588.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
175	564598.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
176	564608.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
177	564618.1	4153177	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
178	564648.1	4153177	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
179	564658.1	4153177	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
180	564668.1	4153177	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
181	564678.1	4153177	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
182	564688.1	4153177	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
183	564698.1	4153177	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
184	564708.1	4153177	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
185	564718.1	4153177	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
186	564728.1	4153177	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08

187	564738.1	4153177	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
188	564468.1	4153187	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
189	564478.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
190	564488.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
191	564498.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
192	564508.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
193	564518.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
194	564528.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
195	564538.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
196	564548.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
197	564558.1	4153187	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
198	564568.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
199	564578.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
200	564588.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
201	564598.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
202	564608.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
203	564618.1	4153187	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
204	564648.1	4153187	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
205	564658.1	4153187	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
206	564668.1	4153187	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
207	564678.1	4153187	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
208	564688.1	4153187	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
209	564698.1	4153187	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
210	564708.1	4153187	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
211	564718.1	4153187	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
212	564728.1	4153187	9901	DieselExhP	9.00E-05	4.88E-08	28YrCancer	*	4.88E-08
213	564458.1	4153197	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
214	564468.1	4153197	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
215	564478.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
216	564488.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
217	564498.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
218	564508.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
219	564518.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
220	564528.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
221	564538.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
222	564548.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
223	564558.1	4153197	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
224	564568.1	4153197	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
225	564578.1	4153197	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
226	564588.1	4153197	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
227	564598.1	4153197	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
228	564608.1	4153197	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
229	564658.1	4153197	9901	DieselExhP	6.00E-05	3.25E-08	28YrCancer	*	3.25E-08
230	564668.1	4153197	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
231	564678.1	4153197	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
232	564688.1	4153197	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
233	564698.1	4153197	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08

234	564708.1	4153197	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
235	564718.1	4153197	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
236	564458.1	4153207	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
237	564468.1	4153207	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
238	564478.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
239	564488.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
240	564498.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
241	564508.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
242	564518.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
243	564528.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
244	564538.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
245	564548.1	4153207	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
246	564558.1	4153207	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
247	564568.1	4153207	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
248	564578.1	4153207	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
249	564588.1	4153207	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
250	564598.1	4153207	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
251	564668.1	4153207	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
252	564678.1	4153207	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
253	564688.1	4153207	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
254	564698.1	4153207	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
255	564708.1	4153207	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
256	564458.1	4153217	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
257	564468.1	4153217	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
258	564478.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
259	564488.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
260	564498.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
261	564508.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
262	564518.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
263	564528.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
264	564538.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
265	564548.1	4153217	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
266	564558.1	4153217	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
267	564568.1	4153217	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
268	564578.1	4153217	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
269	564588.1	4153217	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
270	564678.1	4153217	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
271	564688.1	4153217	9901	DieselExhP	7.00E-05	3.80E-08	28YrCancer	*	3.80E-08
272	564698.1	4153217	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
273	564458.1	4153227	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
274	564468.1	4153227	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
275	564478.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
276	564488.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
277	564498.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
278	564508.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
279	564518.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
280	564528.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08

281	564538.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
282	564548.1	4153227	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
283	564558.1	4153227	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
284	564568.1	4153227	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
285	564578.1	4153227	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
286	564688.1	4153227	9901	DieselExhP	8.00E-05	4.34E-08	28YrCancer	*	4.34E-08
287	564458.1	4153237	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
288	564468.1	4153237	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
289	564478.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
290	564488.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
291	564498.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
292	564508.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
293	564518.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
294	564528.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
295	564538.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
296	564548.1	4153237	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
297	564558.1	4153237	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
298	564568.1	4153237	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
299	564458.1	4153247	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
300	564468.1	4153247	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
301	564478.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
302	564488.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
303	564498.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
304	564508.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
305	564518.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
306	564528.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
307	564538.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
308	564548.1	4153247	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
309	564558.1	4153247	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
310	564458.1	4153257	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
311	564468.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
312	564478.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
313	564488.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
314	564498.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
315	564508.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
316	564518.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
317	564528.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
318	564538.1	4153257	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
319	564548.1	4153257	9901	DieselExhP	5.00E-05	2.71E-08	28YrCancer	*	2.71E-08
320	564458.1	4153267	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancer	*	1.63E-08
321	564468.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
322	564478.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
323	564488.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
324	564498.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
325	564508.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
326	564518.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08
327	564528.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancer	*	2.17E-08

328	564538.1	4153267	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
329	564458.1	4153277	9901	DieselExhP	3.00E-05	1.63E-08	28YrCancei	*	1.63E-08
330	564468.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
331	564478.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
332	564488.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
333	564498.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
334	564508.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
335	564518.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
336	564528.1	4153277	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
337	564458.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
338	564468.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
339	564478.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
340	564488.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
341	564498.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
342	564508.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
343	564518.1	4153287	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
344	564458.1	4153297	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
345	564468.1	4153297	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
346	564478.1	4153297	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
347	564488.1	4153297	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
348	564498.1	4153297	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
349	564458.1	4153307	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
350	564468.1	4153307	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
351	564478.1	4153307	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
352	564488.1	4153307	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
353	564458.1	4153317	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
354	564468.1	4153317	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
355	564478.1	4153317	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
356	564458.1	4153327	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
357	564468.1	4153327	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08
358	564458.1	4153337	9901	DieselExhP	4.00E-05	2.17E-08	28YrCancei	*	2.17E-08

y\Operation\DPM\ShorewayDPM_28yrs_HRAInput.hra

SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_F
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CON(	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 4/21/2022 5:11:41 PM - Chronic Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	564798.1	4153037	9901	DieselExhP	0.00019	NonCancer	0.00E+00	0.00E+00	0.00E+00
2	564808.1	4153037	9901	DieselExhP	0.00021	NonCancer	0.00E+00	0.00E+00	0.00E+00
3	564788.1	4153047	9901	DieselExhP	0.00018	NonCancer	0.00E+00	0.00E+00	0.00E+00
4	564798.1	4153047	9901	DieselExhP	0.00019	NonCancer	0.00E+00	0.00E+00	0.00E+00
5	564808.1	4153047	9901	DieselExhP	0.00021	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	564818.1	4153047	9901	DieselExhP	0.00022	NonCancer	0.00E+00	0.00E+00	0.00E+00
7	564778.1	4153057	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	564788.1	4153057	9901	DieselExhP	0.00017	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	564798.1	4153057	9901	DieselExhP	0.00019	NonCancer	0.00E+00	0.00E+00	0.00E+00
10	564808.1	4153057	9901	DieselExhP	0.00021	NonCancer	0.00E+00	0.00E+00	0.00E+00
11	564818.1	4153057	9901	DieselExhP	0.00022	NonCancer	0.00E+00	0.00E+00	0.00E+00
12	564768.1	4153067	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
13	564778.1	4153067	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	564788.1	4153067	9901	DieselExhP	0.00017	NonCancer	0.00E+00	0.00E+00	0.00E+00
15	564798.1	4153067	9901	DieselExhP	0.00019	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	564808.1	4153067	9901	DieselExhP	0.0002	NonCancer	0.00E+00	0.00E+00	0.00E+00
17	564818.1	4153067	9901	DieselExhP	0.00022	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	564758.1	4153077	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
19	564768.1	4153077	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	564778.1	4153077	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
21	564788.1	4153077	9901	DieselExhP	0.00017	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	564798.1	4153077	9901	DieselExhP	0.00019	NonCancer	0.00E+00	0.00E+00	0.00E+00
23	564808.1	4153077	9901	DieselExhP	0.0002	NonCancer	0.00E+00	0.00E+00	0.00E+00
24	564818.1	4153077	9901	DieselExhP	0.00022	NonCancer	0.00E+00	0.00E+00	0.00E+00
25	564748.1	4153087	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
26	564758.1	4153087	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
27	564768.1	4153087	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
28	564778.1	4153087	9901	DieselExhP	0.00015	NonCancer	0.00E+00	0.00E+00	0.00E+00
29	564788.1	4153087	9901	DieselExhP	0.00017	NonCancer	0.00E+00	0.00E+00	0.00E+00
30	564798.1	4153087	9901	DieselExhP	0.00018	NonCancer	0.00E+00	0.00E+00	0.00E+00
31	564808.1	4153087	9901	DieselExhP	0.0002	NonCancer	0.00E+00	0.00E+00	0.00E+00
32	564818.1	4153087	9901	DieselExhP	0.00022	NonCancer	0.00E+00	0.00E+00	0.00E+00
33	564548.1	4153097	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
34	564738.1	4153097	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
35	564748.1	4153097	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
36	564758.1	4153097	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
37	564768.1	4153097	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
38	564778.1	4153097	9901	DieselExhP	0.00015	NonCancer	0.00E+00	0.00E+00	0.00E+00
39	564788.1	4153097	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
40	564798.1	4153097	9901	DieselExhP	0.00018	NonCancer	0.00E+00	0.00E+00	0.00E+00
41	564808.1	4153097	9901	DieselExhP	0.0002	NonCancer	0.00E+00	0.00E+00	0.00E+00
42	564538.1	4153107	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
43	564548.1	4153107	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
44	564558.1	4153107	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
45	564718.1	4153107	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

46	564728.1	4153107	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
47	564738.1	4153107	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
48	564748.1	4153107	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
49	564758.1	4153107	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
50	564768.1	4153107	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
51	564778.1	4153107	9901	DieselExhP	0.00015	NonCancer	0.00E+00	0.00E+00	0.00E+00
52	564788.1	4153107	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
53	564798.1	4153107	9901	DieselExhP	0.00018	NonCancer	0.00E+00	0.00E+00	0.00E+00
54	564528.1	4153117	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
55	564538.1	4153117	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
56	564548.1	4153117	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
57	564558.1	4153117	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
58	564568.1	4153117	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
59	564708.1	4153117	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
60	564718.1	4153117	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
61	564728.1	4153117	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
62	564738.1	4153117	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
63	564748.1	4153117	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
64	564758.1	4153117	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
65	564768.1	4153117	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
66	564778.1	4153117	9901	DieselExhP	0.00015	NonCancer	0.00E+00	0.00E+00	0.00E+00
67	564788.1	4153117	9901	DieselExhP	0.00016	NonCancer	0.00E+00	0.00E+00	0.00E+00
68	564528.1	4153127	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
69	564538.1	4153127	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
70	564548.1	4153127	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
71	564558.1	4153127	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
72	564568.1	4153127	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
73	564578.1	4153127	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
74	564698.1	4153127	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
75	564708.1	4153127	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
76	564718.1	4153127	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
77	564728.1	4153127	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
78	564738.1	4153127	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
79	564748.1	4153127	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
80	564758.1	4153127	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
81	564768.1	4153127	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
82	564778.1	4153127	9901	DieselExhP	0.00014	NonCancer	0.00E+00	0.00E+00	0.00E+00
83	564518.1	4153137	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
84	564528.1	4153137	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
85	564538.1	4153137	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
86	564548.1	4153137	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
87	564558.1	4153137	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
88	564568.1	4153137	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
89	564578.1	4153137	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
90	564588.1	4153137	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
91	564688.1	4153137	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
92	564698.1	4153137	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

93	564708.1	4153137	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
94	564718.1	4153137	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
95	564728.1	4153137	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
96	564738.1	4153137	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
97	564748.1	4153137	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
98	564758.1	4153137	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
99	564768.1	4153137	9901	DieselExhP	0.00013	NonCancer	0.00E+00	0.00E+00	0.00E+00
100	564508.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
101	564518.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
102	564528.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
103	564538.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
104	564548.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
105	564558.1	4153147	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
106	564568.1	4153147	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
107	564578.1	4153147	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
108	564588.1	4153147	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
109	564598.1	4153147	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
110	564678.1	4153147	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
111	564688.1	4153147	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
112	564698.1	4153147	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
113	564708.1	4153147	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
114	564718.1	4153147	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
115	564728.1	4153147	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
116	564738.1	4153147	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
117	564748.1	4153147	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00
118	564758.1	4153147	9901	DieselExhP	0.00012	NonCancer	0.00E+00	0.00E+00	0.00E+00
119	564498.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
120	564508.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
121	564518.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
122	564528.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
123	564538.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
124	564548.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
125	564558.1	4153157	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
126	564568.1	4153157	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
127	564578.1	4153157	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
128	564588.1	4153157	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
129	564598.1	4153157	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
130	564608.1	4153157	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
131	564668.1	4153157	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
132	564678.1	4153157	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
133	564688.1	4153157	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
134	564698.1	4153157	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
135	564708.1	4153157	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
136	564718.1	4153157	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
137	564728.1	4153157	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
138	564738.1	4153157	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
139	564748.1	4153157	9901	DieselExhP	0.00011	NonCancer	0.00E+00	0.00E+00	0.00E+00

140	564488.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
141	564498.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
142	564508.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
143	564518.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
144	564528.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
145	564538.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
146	564548.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
147	564558.1	4153167	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
148	564568.1	4153167	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
149	564578.1	4153167	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
150	564588.1	4153167	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
151	564598.1	4153167	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
152	564608.1	4153167	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
153	564618.1	4153167	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
154	564658.1	4153167	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
155	564668.1	4153167	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
156	564678.1	4153167	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
157	564688.1	4153167	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
158	564698.1	4153167	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
159	564708.1	4153167	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
160	564718.1	4153167	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
161	564728.1	4153167	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
162	564738.1	4153167	9901	DieselExhP	0.0001	NonCancer	0.00E+00	0.00E+00	0.00E+00
163	564478.1	4153177	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
164	564488.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
165	564498.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
166	564508.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
167	564518.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
168	564528.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
169	564538.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
170	564548.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
171	564558.1	4153177	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
172	564568.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
173	564578.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
174	564588.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
175	564598.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
176	564608.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
177	564618.1	4153177	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
178	564648.1	4153177	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
179	564658.1	4153177	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
180	564668.1	4153177	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
181	564678.1	4153177	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
182	564688.1	4153177	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
183	564698.1	4153177	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
184	564708.1	4153177	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
185	564718.1	4153177	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
186	564728.1	4153177	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

187	564738.1	4153177	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
188	564468.1	4153187	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
189	564478.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
190	564488.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
191	564498.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
192	564508.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
193	564518.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
194	564528.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
195	564538.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
196	564548.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
197	564558.1	4153187	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
198	564568.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
199	564578.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
200	564588.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
201	564598.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
202	564608.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
203	564618.1	4153187	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
204	564648.1	4153187	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
205	564658.1	4153187	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
206	564668.1	4153187	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
207	564678.1	4153187	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
208	564688.1	4153187	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
209	564698.1	4153187	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
210	564708.1	4153187	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
211	564718.1	4153187	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
212	564728.1	4153187	9901	DieselExhP	9.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
213	564458.1	4153197	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
214	564468.1	4153197	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
215	564478.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
216	564488.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
217	564498.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
218	564508.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
219	564518.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
220	564528.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
221	564538.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
222	564548.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
223	564558.1	4153197	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
224	564568.1	4153197	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
225	564578.1	4153197	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
226	564588.1	4153197	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
227	564598.1	4153197	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
228	564608.1	4153197	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
229	564658.1	4153197	9901	DieselExhP	6.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
230	564668.1	4153197	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
231	564678.1	4153197	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
232	564688.1	4153197	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
233	564698.1	4153197	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

234	564708.1	4153197	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
235	564718.1	4153197	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
236	564458.1	4153207	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
237	564468.1	4153207	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
238	564478.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
239	564488.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
240	564498.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
241	564508.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
242	564518.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
243	564528.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
244	564538.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
245	564548.1	4153207	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
246	564558.1	4153207	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
247	564568.1	4153207	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
248	564578.1	4153207	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
249	564588.1	4153207	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
250	564598.1	4153207	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
251	564668.1	4153207	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
252	564678.1	4153207	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
253	564688.1	4153207	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
254	564698.1	4153207	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
255	564708.1	4153207	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
256	564458.1	4153217	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
257	564468.1	4153217	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
258	564478.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
259	564488.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
260	564498.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
261	564508.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
262	564518.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
263	564528.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
264	564538.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
265	564548.1	4153217	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
266	564558.1	4153217	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
267	564568.1	4153217	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
268	564578.1	4153217	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
269	564588.1	4153217	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
270	564678.1	4153217	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
271	564688.1	4153217	9901	DieselExhP	7.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
272	564698.1	4153217	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
273	564458.1	4153227	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
274	564468.1	4153227	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
275	564478.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
276	564488.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
277	564498.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
278	564508.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
279	564518.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
280	564528.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

281	564538.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
282	564548.1	4153227	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
283	564558.1	4153227	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
284	564568.1	4153227	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
285	564578.1	4153227	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
286	564688.1	4153227	9901	DieselExhP	8.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
287	564458.1	4153237	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
288	564468.1	4153237	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
289	564478.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
290	564488.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
291	564498.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
292	564508.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
293	564518.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
294	564528.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
295	564538.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
296	564548.1	4153237	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
297	564558.1	4153237	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
298	564568.1	4153237	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
299	564458.1	4153247	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
300	564468.1	4153247	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
301	564478.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
302	564488.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
303	564498.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
304	564508.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
305	564518.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
306	564528.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
307	564538.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
308	564548.1	4153247	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
309	564558.1	4153247	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
310	564458.1	4153257	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
311	564468.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
312	564478.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
313	564488.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
314	564498.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
315	564508.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
316	564518.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
317	564528.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
318	564538.1	4153257	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
319	564548.1	4153257	9901	DieselExhP	5.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
320	564458.1	4153267	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
321	564468.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
322	564478.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
323	564488.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
324	564498.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
325	564508.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
326	564518.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
327	564528.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

328	564538.1	4153267	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
329	564458.1	4153277	9901	DieselExhP	3.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
330	564468.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
331	564478.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
332	564488.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
333	564498.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
334	564508.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
335	564518.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
336	564528.1	4153277	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
337	564458.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
338	564468.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
339	564478.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
340	564488.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
341	564498.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
342	564508.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
343	564518.1	4153287	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
344	564458.1	4153297	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
345	564468.1	4153297	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
346	564478.1	4153297	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
347	564488.1	4153297	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
348	564498.1	4153297	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
349	564458.1	4153307	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
350	564468.1	4153307	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
351	564478.1	4153307	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
352	564488.1	4153307	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
353	564458.1	4153317	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
354	564468.1	4153317	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
355	564478.1	4153317	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
356	564458.1	4153327	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
357	564468.1	4153327	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
358	564458.1	4153337	9901	DieselExhP	4.00E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00

ay\Operation\DPM\ShorewayDPM_28yrs_HRAInput.hra

KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DC	WATER_DC	FISH_DOSE	CROP_DOS	BEEF_DOSE
0.00E+00	*	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	8.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00 *	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DAIRY_DOS	PIG_DOSE	CHICKEN_D	EGG_DOSE	1ST_DRIVE	2ND_DRIVE	3RD_DRIVE	PASTURE_C	FISH_CONC	WATER_CC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
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0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION	0.00E+00	0.00E+00	0.00E+00

)NC

*HARP - HRACalc v21081 5/11/2022 10:40:13 AM - Cancer Risk - Input File: C:\Users\34236\Desktop\1301 Shorew

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	1	1	71432	Benzene	0.000346	1.71E-08	28YrCancer	*	1.71E-08
2	1	1	56235	CCl4	0.00232	1.72E-07	28YrCancer	*	1.72E-07
3	1	1	67663	Chloroform	0.0303	2.84E-07	28YrCancer	*	2.84E-07
4	1	1	71432	Benzene	0.000662	3.26E-08	28YrCancer	*	3.26E-08
5	1	1	50000	Formaldeh	0.0209	2.16E-07	28YrCancer	*	2.16E-07
6	1	1	110543	Hexane	0.00309	0.00E+00	28YrCancer	*	0.00E+00
7	1	1	7647010	HCl	0.0326	0.00E+00	28YrCancer	*	0.00E+00
8	1	1	67630	Isopropyl A	0.0901	0.00E+00	28YrCancer	*	0.00E+00
9	1	1	67561	Methanol	0.274	0.00E+00	28YrCancer	*	0.00E+00
10	1	1	75092	Methylene	0.00352	6.07E-09	28YrCancer	*	6.07E-09
11	1	1	108883	Toluene	0.00282	0.00E+00	28YrCancer	*	0.00E+00
12	1	1	1330207	Xylenes	0.00543	0.00E+00	28YrCancer	*	0.00E+00
13	1	1	68122	DMF	0.00104	0.00E+00	28YrCancer	*	0.00E+00
14	1	1	79016	TCE	0.00149	5.14E-09	28YrCancer	*	5.14E-09
15	1	1	302012	Hydrazine	2.38E-05	1.99E-07	28YrCancer	*	1.99E-07
16	1	1	127184	Perc	0.000188	1.95E-09	28YrCancer	*	1.95E-09
17	1	1	111308	Glutaraldhy	0.000842	0.00E+00	28YrCancer	*	0.00E+00
18	1	1	121448	Triethylam	0.000391	0.00E+00	28YrCancer	*	0.00E+00
19	1	1	7664393	HF	0.00685	0.00E+00	28YrCancer	*	0.00E+00
20	1	1	74839	Methyl Bro	0.239	0.00E+00	28YrCancer	*	0.00E+00
21	1	1	79061	Acrylamide	0.000236	5.23E-07	28YrCancer	*	5.23E-07
22	1	1	107062	EDC	0.00968	3.44E-07	28YrCancer	*	3.44E-07

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SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_R
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CONC	WATER_CONC
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00			0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00
0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v21081 5/11/2022 10:40:13 AM - Acute Risk - Input File: C:\Users\34236\Desktop\1301 Shorewa

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	1	1	71432	Benzene	0.006033	NonCancer	0.00E+00	0.00E+00	2.23E-04
2	1	1	56235	CCl4	0.040481	NonCancer	0.00E+00	2.13E-05	0.00E+00
3	1	1	67663	Chloroform	0.52857	NonCancer	0.00E+00	3.52E-03	0.00E+00
4	1	1	71432	Benzene	0.011564	NonCancer	0.00E+00	0.00E+00	4.28E-04
5	1	1	50000	Formaldeh	0.364842	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	1	1	110543	Hexane	0.053888	NonCancer	0.00E+00	0.00E+00	0.00E+00
7	1	1	7647010	HCl	0.569824	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	1	1	67630	Isopropyl A	1.572817	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	1	1	67561	Methanol	4.782909	NonCancer	0.00E+00	1.71E-04	0.00E+00
10	1	1	75092	Methylene	0.061495	NonCancer	4.39E-06	4.39E-06	0.00E+00
11	1	1	108883	Toluene	0.049247	NonCancer	0.00E+00	9.85E-06	0.00E+00
12	1	1	1330207	Xylenes	0.094756	NonCancer	0.00E+00	4.31E-06	0.00E+00
13	1	1	68122	DMF	0.018178	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	1	1	79016	TCE	0.026	NonCancer	0.00E+00	0.00E+00	0.00E+00
15	1	1	302012	Hydrazine	0.000415	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	1	1	127184	Perc	0.00327	NonCancer	0.00E+00	1.64E-07	0.00E+00
17	1	1	111308	Glutaraldhy	0.014697	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	1	1	121448	Triethylam	0.006833	NonCancer	0.00E+00	2.44E-06	0.00E+00
19	1	1	7664393	HF	0.119508	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	1	1	74839	Methyl Bro	4.176988	NonCancer	0.00E+00	1.07E-03	0.00E+00
21	1	1	79061	Acrylamide	0.00413	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	1	1	107062	EDC	0.168884	NonCancer	0.00E+00	0.00E+00	0.00E+00

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KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	2.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-04	0.00E+00
0.00E+00	2.13E-05	2.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	3.52E-03	3.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.71E-04	0.00E+00	2.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.85E-06	0.00E+00	9.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.31E-06	0.00E+00	4.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.64E-07	0.00E+00	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.98E-04	0.00E+00	4.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.07E-03	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL

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*HARP - HRACalc v21081 5/11/2022 10:40:13 AM - Chronic Risk - Input File: C:\Users\34236\Desktop\1301 Shorev

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	SCENARIO	CV	CNS	IMMUN
1	1	1	71432	Benzene	0.000346	NonCancer	0.00E+00	0.00E+00	0.00E+00
2	1	1	56235	CCl4	0.00232	NonCancer	0.00E+00	5.80E-05	0.00E+00
3	1	1	67663	Chloroform	0.0303	NonCancer	0.00E+00	0.00E+00	0.00E+00
4	1	1	71432	Benzene	0.000662	NonCancer	0.00E+00	0.00E+00	0.00E+00
5	1	1	50000	Formaldeh	0.0209	NonCancer	0.00E+00	0.00E+00	0.00E+00
6	1	1	110543	Hexane	0.00309	NonCancer	0.00E+00	4.41E-07	0.00E+00
7	1	1	7647010	HCl	0.0326	NonCancer	0.00E+00	0.00E+00	0.00E+00
8	1	1	67630	Isopropyl A	0.0901	NonCancer	0.00E+00	0.00E+00	0.00E+00
9	1	1	67561	Methanol	0.274	NonCancer	0.00E+00	0.00E+00	0.00E+00
10	1	1	75092	Methylene	0.00352	NonCancer	8.80E-06	8.80E-06	0.00E+00
11	1	1	108883	Toluene	0.00282	NonCancer	0.00E+00	0.00E+00	0.00E+00
12	1	1	1330207	Xylenes	0.00543	NonCancer	0.00E+00	7.76E-06	0.00E+00
13	1	1	68122	DMF	0.00104	NonCancer	0.00E+00	0.00E+00	0.00E+00
14	1	1	79016	TCE	0.00149	NonCancer	0.00E+00	2.48E-06	0.00E+00
15	1	1	302012	Hydrazine	2.38E-05	NonCancer	0.00E+00	0.00E+00	0.00E+00
16	1	1	127184	Perc	0.000188	NonCancer	0.00E+00	0.00E+00	0.00E+00
17	1	1	111308	Glutaraldhy	0.000842	NonCancer	0.00E+00	0.00E+00	0.00E+00
18	1	1	121448	Triethylam	0.000391	NonCancer	0.00E+00	0.00E+00	0.00E+00
19	1	1	7664393	HF	0.00685	NonCancer	0.00E+00	0.00E+00	0.00E+00
20	1	1	74839	Methyl Bro	0.239	NonCancer	0.00E+00	4.78E-02	0.00E+00
21	1	1	79061	Acrylamide	0.000236	NonCancer	0.00E+00	0.00E+00	0.00E+00
22	1	1	107062	EDC	0.00968	NonCancer	0.00E+00	0.00E+00	0.00E+00

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KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00
0.00E+00	5.80E-05	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.01E-04	1.01E-04	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-04	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.29E-05	0.00E+00	1.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	6.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.76E-06	0.00E+00	7.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	1.30E-05	0.00E+00	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00
5.37E-06	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.78E-02	4.78E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	2.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DC	WATER_DC	FISH_DOSE	CROP_DOS	BEEF_DOSE
0.00E+00	*	3.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.09E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.74E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	5.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	1.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	8.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	3.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	6.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.39E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	*	9.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DAIRY_DOS	PIG_DOSE	CHICKEN_D	EGG_DOSE	1ST_DRIVE	2ND_DRIVE	3RD_DRIVE	PASTURE_C	FISH_CONC	WATER_CC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION			0.00E+00	0.00E+00	0.00E+00

)NC

Max by Receptor Type	Cancer (in one million)	Acute HI	Chronic HI	Total HI
Resident	1.80	0.01	0.06	0.07

Max by Receptor Type	Cancer (in one million)	Acute HI	Chronic HI	Total HI	PM2.5 Concentration
Resident	0.12	0.00	0.00	0.00	0.02315

Cumulative HRA Analysis

Stationary Source Risk & Hazards Screening Report

Area of Interest (AOI) Information

Area : 5,752,074.33 ft²

Apr 25 2022 14:58:37 Pacific Daylight Time

Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Facilities 2018	7	N/A	N/A

Permitted Facilities 2018

#	FACID	Name	Address	City	St
1	4529	Nikon Precision Inc	1399 Shoreway Road	Belmont	CA
2	13347	Jameco Electronics	1355 Shoreway Road	Belmont	CA
3	14035	Silicon Valley Clean Water Belmont Pump Stn	1385 Shoreway Road	Belmont	CA
4	17718	City of Belmont	110 Sem Lane	Belmont	CA
5	108258	City of Belmont	110 Sem Ln	Belmont	CA
6	112041	Mid Peninsula Water District	3 Dairy Ln	Belmont	CA
7	15253-12	Oracle Corporation	500 Oracle Parkway	Redwood City	CA

#	Zip	County	Cancer	Hazard	PM_25	Type	Count
1	94002	San Mateo	0.000	0.000	0.000	Contact BAAQMD	1
2	94002	San Mateo	2.490	0.000	0.000	Generators	1
3	94002	San Mateo	1.330	0.000	0.000	Generators	1
4	94002	San Mateo	17.590	0.030	0.010	Contact BAAQMD	1
5	94002	San Mateo	0.450	0.000	0.000	Gas Dispensing Facility	1
6	94002	San Mateo	0.120	0.000	0.000	Gas Dispensing Facility	1
7	94065	Santa Clara	1.520	0.000	0.000	Generators	1

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.

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Stationary Source Data Request

Instructions

Please provide all contact and project information and submit this form with a printout of the Stationary Source Risk and Hazards Screening Report (instructions below) available via the Permitted Stationary Source Risk and Hazards GIS map to Matthew Hanson at mhanson@baaqmd.gov. **This form is not applicable for school projects.** Please submit a Public Records Request for all data requests related to school projects.

Information

Contact Name	Darrin Trageser	Project Name	1301 Shoreway Road
Affiliation	ICF	Address	1301 Shoreway Road
Phone	(916) 231-7683	City	Belmont
Email	darrin.trageser@icf.com	County	San Mateo
Date	04/25/2022	Type (residential, commercial, mixed use, industrial, etc.)	Commercial

Fill in requested data parameters and additional comments below:

Process for retrieving screening report:

1. Go to GIS map
2. Click on the "screening" widget (top left)
3. Click on "draw"
4. Select draw mode
5. Draw parcel of interest
6. Click "report"
7. Download CSV and print pdf

Revised 5.3.2021

Plant#	Plant Nam	Address	City	St	Zip	County	UTM_E (kn	UTM_N (kr	Cancer_20	Hazard_20	PM2.5_20	Type
4529	Nikon Prec	1399 Shore	Belmont	CA	94002	San Mateo	564741	4153222		8.40E-05		(2) Semiconductor Manufacturing Sources
13347	Jameco Ele	1355 Shore	Belmont	CA	94002	San Mateo	564909	4153145	2.489214	0.002463	0.003214	Generators
14035	Silicon Vall	1385 Shore	Belmont	CA	94002	San Mateo	564985.7	4153033	1.331684	0.000358	0.003405	Generators
17718	City of Belr	110 Sem La	Belmont	CA	94002	San Mateo	564693	4153386	17.5861	0.026683	0.014108	(2) Generators, (1) Compressor
108258	City of Belr	110 Sem Lr	Belmont	CA	94002	San Mateo	564773.4	4153313	0.445857	0.001963		Gas Dispensing Facility
112041	Mid Penins	3 Dairy Ln	Belmont	CA	94002	San Mateo	564634.7	4153233	0.122611	0.00054		Gas Dispensing Facility
15253-12	Oracle Cor	500 Oracle	Redwood (	CA	94065	Santa Clara	564924.2	4153587	1.518805	0.002528	0.001932	Generators
24385	BPR Prope	1201 Shore	Belmont	CA	94002	San Mateo			No Data Available			(1) Nat. Gas Generator

Diesel Internal Combustion (IC) Engine Distance Multiplier Tool: This distance multiplier tool refines the screening values for cancer risk and PM2.5 concentrations found in the District's Stationary Source Screening Analysis Tool for permitted facilities which contain only diesel IC engines, to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

Diesel Internal Combustion Engines

Distance (meters)	Distance (feet)	Distance adjustment multiplier	Enter Risk or Hazard	Adjusted Risk or Hazard	Enter PM2.5 Concentration	Adjusted PM2.5 Concentration
0	0.0	1.000		0		0
5	16.4	1.000		0		0
10	32.8	1.000		0		0
15	49.2	1.000		0		0
20	65.6	1.000		0		0
25	82.0	0.85		0		0
30	98.4	0.73		0		0
35	114.8	0.64		0		0
40	131.2	0.58		0		0
50	164.0	0.5		0		0
60	196.9	0.41		0		0
70	229.7	0.31		0		0
80	262.5	0.28		0		0
90	295.3	0.25		0		0
100	328.1	0.22		0		0
110	360.9	0.18		0		0
120	393.7	0.16		0		0
130	426.5	0.15		0		0
140	459.3	0.14	2.4892143	0.348490002	0.003213616	0.000449906
150	492.1	0.12		0		0
160	524.9	0.1		0		0
180	590.6	0.09	1.3316835	0.119851516	0.003405346	0.000306481
200	656.2	0.08		0		0
220	721.8	0.07		0		0
240	787.4	0.06		0		0
260	853.0	0.05		0		0
280	918.6	0.04	1.518805	0.060752202	0.001931836	7.72734E-05

Generic Distance Multiplier Tool: This distance multiplier tool refines the screening values to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

Generic Case

Distance (meters)	Distance (feet)	Multiplier	Enter Risk or Hazard	Adjusted Risk or Hazard	Enter PM2.5 Concentration	Adjusted PM2.5 Concentration
0	0.0	1.000		0		0
5	16.4	1.000		0		0
10	32.8	0.883		0		0
15	49.2	0.855		0		0
20	65.6	0.827		0		0
25	82.0	0.801		0		0
30	98.4	0.775		0		0
35	114.8	0.750		0		0
40	131.2	0.726		0		0
45	147.6	0.702		0		0
50	164.0	0.679		0		0
55	180.4	0.658		0		0
60	196.9	0.636		0		0
65	213.3	0.616		0		0
70	229.7	0.596		0		0
75	246.1	0.577		0		0
80	262.5	0.558		0		0
85	278.9	0.540		0		0
90	295.3	0.523		0		0
95	311.7	0.506		0		0
100	328.1	0.489		0		0
105	344.5	0.474		0		0
110	360.9	0.458		0		0
115	377.3	0.444		0		0
120	393.7	0.429		0		0
125	410.1	0.415		0		0
130	426.5	0.402		0		0
135	442.9	0.389		0		0
140	459.3	0.376		0		0
145	475.7	0.364		0		0
150	492.1	0.353		0		0
155	508.5	0.341		0		0
160	524.9	0.330		0		0

165	541.3	0.319		0		0
170	557.7	0.309		0		0
175	574.1	0.299		0		0
180	590.6	0.290		0		0
185	607.0	0.280		0		0
190	623.4	0.271		0		0
195	639.8	0.262		0		0
200	656.2	0.254		0		0
205	672.6	0.246		0		0
210	689.0	0.238		0		0
215	705.4	0.230		0		0
220	721.8	0.223		0		0
225	738.2	0.216		0		0
230	754.6	0.209		0		0
235	771.0	0.202		0		0
240	787.4	0.195		0		0
245	803.8	0.189		0		0
250	820.2	0.183		0		0
255	836.6	0.177		0		0
260	853.0	0.171		0		0
265	869.4	0.166		0		0
270	885.8	0.160		0		0
275	902.2	0.155		0		0
280	918.6	0.150		0		0
285	935.0	0.145		0		0
290	951.4	0.141		0		0
295	967.8	0.136		0		0
300	984.3	0.132	17.5861023	2.316909155	0.014107989	0.00185868

FID	railpm25	railcan	majstrpm25	majstrcanc	highpm25	highcancer	Road_PM25	RoadCan	X	Y
0	0.0196882	10.26119995	0.057308599	2.244600058	1.337769985	69.11889648	1.39507854	71.36349487	564808.1	4153096.82

Existing Sources of Health Risks to Highest MEIR

Plant Name	Existing Source	Source Address	Distance to Receptor (feet)	Cancer	Hazard	PM2.5	Notes
Nikon Precision Inc	(2) Semiconductor Manuf	1399 Shoreway Road	**989**	**0**	**8.40E-05**	**0**	
Jameco Electronics	Generators	1355 Shoreway Road	**459**	**0.348490002**	**0.00246277**	**0.00044991**	
Silicon Valley Clean Wat	Generators	1385 Shoreway Road	**591**	**0.119851516**	**0.00035784**	**0.00030648**	
City of Belmont	(2) Generators, (1) Compr	110 Sem Lane	**984**	**2.316909155**	**0.02668274**	**0.00185868**	
City of Belmont	Gas Dispensing Facility	110 Sem Ln	**984**	**0.445857146**	**0.00196256**	**0**	
Mid Peninsula Water Di	Gas Dispensing Facility	3 Dairy Ln	**645**	**0.122610708**	**0.00053971**	**0**	
Oracle Corporation	Generators	500 Oracle Parkway	**2,400**	**0.060752202**	**0.00252818**	**7.7273E-05**	
N/A	Highway			69.11889648		1.33776999	ArcMap cancer risk and PM2.5 concentration data from BAAQMD
N/A	Major Roads			2.244600058		0.0573086	ArcMap cancer risk and PM2.5 concentration data from BAAQMD
N/A	Rail			10.26119995		0.0196882	ArcMap cancer risk and PM2.5 concentration data from BAAQMD
			Total Risks	**85.03916722**	**0.03461779**	**1.41745913**	

Existing, Project, and Total Health Risks

		Cancer	Hazard	PM2.5
Existing	MEIR	85.03917	0.034618	1.417459
Mitigated Project	MEIR	7.33	0.08	0.14
Mitigated Total	MEIR	92.37	0.11	1.56
BAAQMD Cumulative Threshold		100	10	0.8

Total HRA Results

Health Risk Source Type		Cancer (in one million)	Acute HI	Chronic HI	Total HI	PM2.5 Concentration
Construction		5.411	0.000	0.003	0.003	0.118
Operation - DPM_PM2.5 (Generator, Mobile)		0.119	0.000	0.000	0.000	0.023
Operation - ROG (Lab)		1.801	0.008	0.065	0.073	0.000
	Total	**7.331**	**0.008**	**0.068**	**0.076**	**0.141**

AERMOD Output Available Upon Request

Appendix C

Biological Resources Report











H. T. HARVEY & ASSOCIATES

Ecological Consultants

1301 Shoreway Road Project
Biological Resources Report

H. T. Harvey #4640-01

Prepared for:

ICF
201 Mission Street, Suite 1500
San Francisco, CA 94105

Prepared by:

H. T. Harvey & Associates

June 2022

983 University Avenue, Building D • Los Gatos, CA 95032 • Ph: 408.458.3200 • F: 408.458.3210

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List of Preparers

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Section 1. Introduction

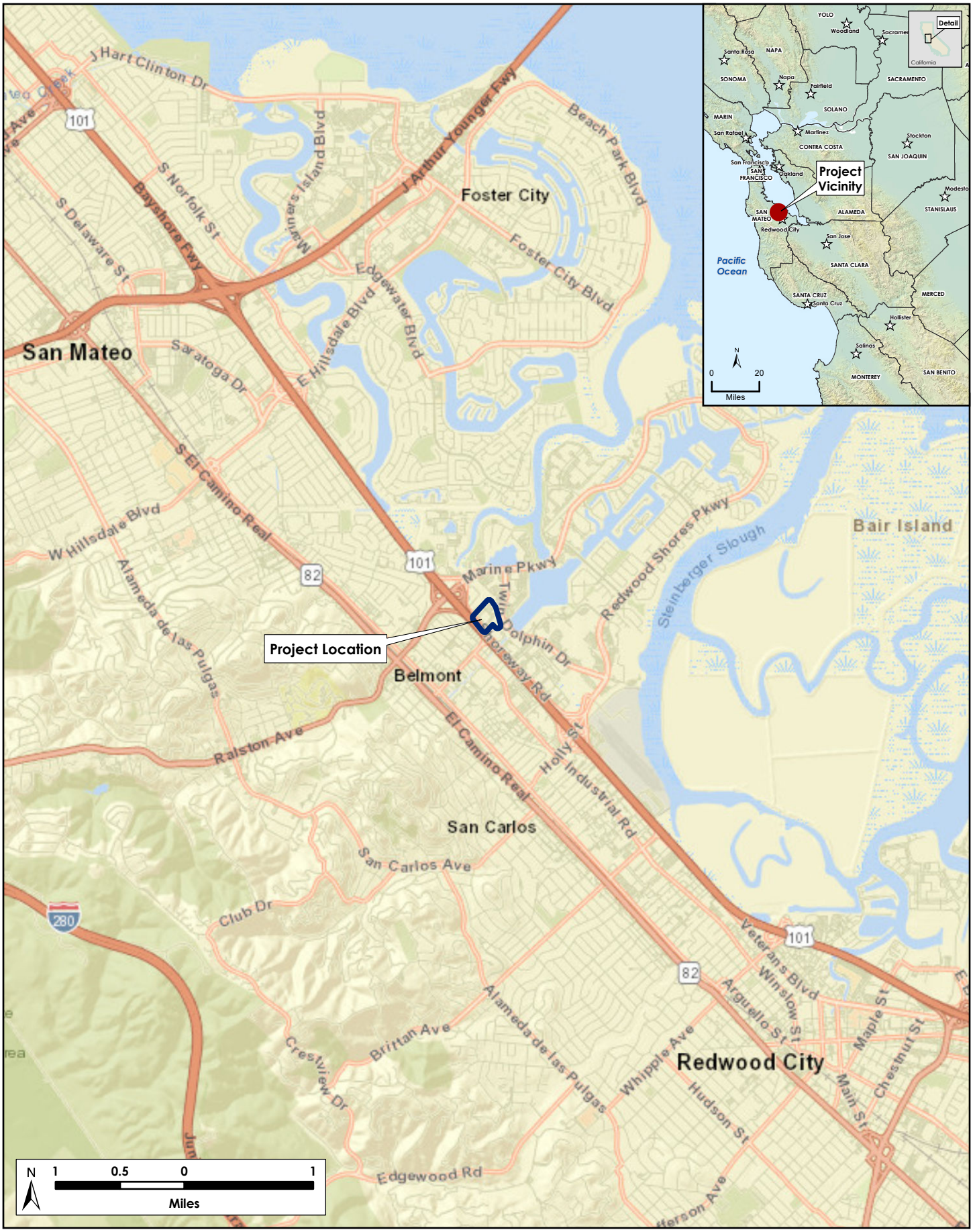
This report describes the biological resources present on the 1301 Shoreway Road Project site, as well as the potential biological impacts of proposed project development activities and measures necessary to reduce these impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the project's plans and description provided to H. T. Harvey & Associates by ICF and Four Corners Properties as of May 17, 2022.

1.1 Project Location

The approximately 6.9-acre project site consists of a single parcel located at 1301 Shoreway Road in the City of Belmont, California (Figure 1). The site is bounded by Shoreway Road and Highway 101 to the southwest, commercial development to the northwest, a Pacific Gas and Electric (PG&E) substation to the southeast, and a tidal section of Belmont Creek and narrow strip of ruderal grassland to the northeast (Figure 2). The project site is located on the *San Mateo*, *California* 7.5-minute United States Geological Survey (USGS) quadrangle.

1.2 Project Description

The applicant is seeking entitlements to construct a Class-A building for office, technology, and/or R&D, including life sciences. As shown on Figure 1, the project would consist of demolition of all existing on-site uses and construction of an eight-story 270,446 square foot building (Building 1), a seven-story 271,589 square-foot building (Building 2), and a 441,280 square foot parking garage with nine levels above grade. The total proposed building footprint on the project site would be 983,315 gross square feet. The parking garage and surface parking lots would provide approximately 1,626 parking stalls.



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Figure 1. Vicinity Map
1301 Shoreway Road Project Biological Resources Report (4640-01)
June 2022



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Figure 2. Project Site
1301 Shoreway Road Project Biological Resources Report (4640-01)
June 2022

Section 2. Methods

2.1 Background Review

Prior to conducting a site visit, H. T. Harvey and Associates ecologists reviewed background information on the sensitive biological resources potentially present in and immediately adjacent to the project site. The information reviewed included records from the California Natural Diversity Database (CNDDB 2022) and the California Native Plant Society's (CNPS's) Online Rare Plant Inventory (2022), focused on the *San Mateo, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (which includes the project site) and three adjacent quadrangles to the north, northwest, and west: *San Francisco South*, *Hunter's Point*, and *Montara Mountain*. Our searches focused on the distribution and habitats of vascular plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, or 3 that occur in any of the USGS quadrangles listed above.

We reviewed CNDDB records for special-status animals and natural communities of concern in the vicinity of the project site, defined in this report as the area within a 5-mile (mi) radius of the project site. Additionally, the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify soils that underlay the project site (NRCS 2022), and the USFWS's National Wetland Inventory (NWI) Wetlands Mapper was consulted to review pre-existing mapping of aquatic features, including wetlands, streams, and sloughs, that may be present in the project site (NWI 2022). Historical aerial imagery of the project site obtained from Google Earth Pro (Google, Inc. 2022) was also evaluated. Other information reviewed included various technical publications available through the USFWS, California Department of Fish and Wildlife (CDFW), and other sources.

2.2 Site Visits

H. T. Harvey & Associates plant ecologist Mark Bibbo, M.S., surveyed the "project study area" (defined as the project boundary plus surrounding areas within 100 feet, which were studied to allow for assessment of indirect impacts of the project) on April 25, 2022. H. T. Harvey & Associates wildlife ecologists Jane Lien, B.S. and Steve Rottenborn, Ph.D. surveyed the project study area on May 3 and May 10, 2022, respectively. The purpose of these surveys was to (1) assess existing biotic habitats and plant and animal communities in the project site, (2) assess the site for its potential to support special-status species and their habitats, and (3) identify potential jurisdictional habitats (such as waters of the U.S./State) on and adjacent to the project site. Mr. Bibbo mapped the edge of tidal marsh just outside the project site boundary to help define the upper limits of the San Francisco Bay Conservation and Development Commission's (BCDC's) bay jurisdiction.

H. T. Harvey & Associates mapped biotic habitats within the project study area using a combination of field observations (recorded via the Apple iPad GIS Kit Pro application) and aerial imagery signatures. Habitat types were distinguished using natural community descriptions discussed in Holland (1986), Sawyer et al. (2009), and CDFW's Vegetation Classification and Mapping Program (CDFW 2022). Plant species within each habitat were

identified using Baldwin et al. (2012). Habitat acreages were calculated using geographic information systems (GIS) and aerial imagery interpretation.

Section 3. Regulatory Setting

Biological resources within the project footprint are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal Regulations

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may be subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 Code of Federal Regulations Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide."

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: No wetlands or other waters of the United States are present on the project site. Outside of the project site to the northeast, the tidal channel that is Belmont Creek as well as the tidal salt marsh habitat along its banks would be considered wetlands and waters of the U.S. subject to CWA jurisdiction. The landward edge of the tidal salt marsh habitat is shown on Figure 3. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Clean Water Act permit from the USACE would be necessary for project implementation.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and/or those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of Bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions and/or the presence of obstructions. Historical Section 10 waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence, and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into waters of the U.S. If a project also proposes to discharge dredged or fill material and/or introduce other potential obstructions in navigable waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: Belmont Creek adjacent to the project site represents Section 10 waters, and tidal wetlands below the mean high water elevation are also regulated under Section 10. Any work within Section 10 waters would require a Letter of Permission from the USACE. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Section 10 permit from the USACE would be necessary for project implementation.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or *take*, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a project.

Project Applicability: No federally listed plant species occur on or near the project site. Federally listed animal species are also absent from the project site itself. However, several federally listed animals occur, or could

potentially occur, in tidal wetlands and waters along Belmont Creek, including the green sturgeon (*Acipenser medirostris*), Central California Coast steelhead (*Oncorhynchus mykiss*), California Ridgway's rail (*Rallus obsoletus obsoletus*), and salt marsh harvest mouse (*Reithrodontomys raviventris*). The longfin smelt (*Spirinchus thaleichthys*), a federal candidate species, may also occur in Belmont Creek. Of these species, the salt marsh harvest mouse is the only one that could potentially occur in upland ruderal grassland habitat immediately adjacent to the site, though implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid the need for incidental take approval for this species.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from the NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with the NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by the NMFS.

Project Applicability: EFH and FMP-managed fish species are absent from the project site itself. However, all subtidal and intertidal habitats within Belmont Creek are designated as EFH for a number of species that are federally managed under the following three FMPs:

- Coastal Pelagic FMP – northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), mackerel, squid
- Pacific Groundfish FMP – various rockfish, soles, and sharks
- Pacific Salmon FMP – Chinook salmon (*Oncorhynchus tshawytscha*)

The northern anchovy, starry flounder (*Platichthys stellatus*), English sole (*Parophrys vetulus*), Chinook salmon, and leopard shark (*Triakis semifasciata*) may use tidal channels, mudflats, and marsh edge habitats of the lowermost reaches of Belmont Creek as nursery and foraging habitat. In addition, juvenile and adult Chinook salmon and steelhead may stray into Belmont Creek when foraging. Juvenile Chinook salmon also use marsh edges, protected tidal channels, and creeks for foraging and growth. The project does not include any direct impacts to Belmont Creek or its associated wetlands, and implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid impacts on EFH or FMP-managed fish.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An *active* nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird

Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: All native bird species that occur on the project site are protected under the MBTA.

3.1.6 Marine Mammal Protection Act

The Marine Mammal Protection Act prohibits the take of marine mammals, with certain exceptions, in waters under the jurisdiction of the U.S. or by citizens of the U.S. on the high seas, as well as the importation of marine mammals and marine mammal products into the U.S. Take is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is defined as "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

Project Applicability. No marine mammals are expected to occur on the project site itself. However, all waters within Belmont Creek are waters under the jurisdiction of the U.S., and all marine mammals that occur in these waters are protected under the Marine Mammal Protection Act. One of six recognized Pacific harbor seal (*Phoca vitulina richardsi*) haul-out sites on the west side of the South San Francisco Bay is located in the lower reaches of Belmont Creek (Fox 2008), but harbor seals are not expected to wander upstream to forage adjacent to the project site due to the shallow depth and narrow width of the channel adjacent to the project site. Therefore, the project will not result in impacts to protected marine mammals.

3.2 State Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the state include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. In these new guidelines, riparian habitats are not specifically described as waters of

the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The *Procedures* describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that a proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: No wetlands or other waters of the state are present on the project site. Outside of the project site to the northeast, the tidal channel that is Belmont Creek as well as the tidal salt marsh habitat along its banks would be considered wetlands and waters of the state. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Clean Water Act or Porter-Cologne approvals from the RWQCB would be necessary for project implementation.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in *take* of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of *take* under the California Fish and Game Code. The CDFW, however, has interpreted *take* to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: No state-listed plant species occur on or near the project site. State-listed animal species that occur, or could potentially occur, in tidal wetlands and waters along Belmont Creek adjacent to the project site are the longfin smelt, California Ridgway's rail, California black rail (*Laterallus jamaicensis coturniculus*), and salt marsh harvest mouse. Of these species, the salt marsh harvest mouse is the only one that could potentially occur in upland ruderal grassland habitat immediately adjacent to the site, though implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid take of this species.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to avoid or reduce significant environmental impacts of projects that they approve when it is feasible to do so by adopting project alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Natural Resources Agency promulgated guidelines for implementing CEQA known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per CEQA Guidelines Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the CNPS Inventory of Rare and Endangered Plants. The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA's Section 15380 criteria, and adverse effects to these species may be considered significant. Impacts on plants that are listed by the CNPS on CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2022). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP's) currently accepted list of vegetation alliances and associations (CDFW 2022).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the project in the context of this biological resources report. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, the CDFW extends its jurisdiction to encompass riparian habitats that function as part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of the CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, the CDFW would claim jurisdiction over a stream's bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, the CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify the CDFW of any proposed activity that may modify a river, stream, or lake. If the CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Specific sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered "take" by the CDFW.

Under the California Fish and Game Code Section 7050, the Marine Life Management Act (MLMA) requires the CDFW to ensure the sustainable use of California's living marine resources.

Project Applicability: CDFW jurisdiction under Section 1602 of the California Fish and Game Code would extend up to the tops of the banks of Belmont Creek adjacent to (but outside of) the project site and include all associated tidal salt marsh habitat. However, the project does not include any impacts to Belmont Creek or its associated wetlands or banks, and therefore no Section 1602 Streambed Alteration Agreement from the CDFW would be necessary for project implementation.

Most native bird, mammal, and other wildlife species that occur on the project site and in the immediate vicinity are protected by the California Fish and Game Code. Project impacts on these species are discussed in Section 6.

3.2.5 State Water Resources Control Board Stormwater Regulation

Construction Phase. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with state requirements to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the project and it must include the use of best management practices (BMPs) to protect water quality until the site is stabilized.

Standard permit conditions under the Construction General Permit requires that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, the Construction General Permit does not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence, or result in take of any federally listed endangered or threatened species.

Post-Construction Phase. In many Bay Area counties, including San Mateo County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

Project Applicability. The project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit.

3.3 Local Regulations

3.3.1 City of Belmont General Plan

Section 5, *Conservation Element*, of the City of Belmont 2035 General Plan (City of Belmont 2017) includes a number of policies designed to protect and conserve biological resources in the City. General Plan policies that may be applicable to the 1301 Shoreway Road project include the following:

- Policy 5.3-1: Support the protection, preservation, restoration, and enhancement of habitats of State or federally listed rare, threatened, endangered and/or other sensitive and special status species, and favor enhancement of contiguous areas over small, segmented remainder parcels.
- Policy 5.3-2: Continue to maintain, protect, restore, and enhance Belmont's ecologically important areas and seek to reduce impacts on them, including the creek corridors, the open space, and the wetlands around O'Neill Slough.
- Policy 5.3-3: To the greatest extent feasible, ensure that development does not disturb sensitive habitat and special status species by requiring appropriate and feasible mitigation measures.
- Policy 5.3-4: Maintain functional wildlife corridors and habitat linkage in order to contribute to regional biodiversity and the viability of rare, unique or sensitive biological resources throughout the city and region.
- Policy 5.3-5: In design and construction, require use of best practices that preserve natural resources, such as soil, trees, native plants, and permeable surfaces.
- Policy 5.3-6: Avoid light pollution and unnecessary glare by requiring development projects to use design features and shielding methods that cast outdoor light downward and minimize glare and to install the minimum amount of outdoor lighting necessary for safety and security.
- Policy 5.3-7: Encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure the maximum number and variety of well-adapted plants are maintained.
- Policy 5.3-8: Use native or drought-resistant vegetation in landscaping on City-owned property, and encourage private property owners to use native or drought-resistant vegetation in landscaping on private property.
- Policy 5.3-9: Promote the healthy growth of trees and control the removal of trees within the city.
- Policy 5.4-3: Protect, restore, and enhance a continuous corridor of native riparian vegetation and wildlife habitat along Belmont's waterways, water bodies, and wetlands.
- Policy 5.4-4: Preserve and enhance the natural riparian environment along waterway corridors, including Belmont Creek, by minimizing environmental and visual impacts.
- Policy 5.5-3: Require development projects to incorporate structural and non-structural BMPs to mitigate or reduce the projected increases in pollutant loads, in accordance with the NPDES permit guidelines.

Project Applicability: The project is subject to policies of the City's General Plan protecting biological resources.

3.3.2 City of Belmont Tree Ordinance

The City provides tree protection under the Municipal Code (2017-1120) and Municipal Code Chapter 25: *Trees*. This ordinance details permit requirements for tree related work, including the removal, pruning, and planting of trees. Pruning or removal of street trees is illegal without a permit issued by the City, and doing so without a permit may result in a fine. The City ordinance includes the following classes of trees; 1) coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), coast redwood (*Sequoia sempervirens*), madrone (*Arbutus menziesii*), bay laurel

(*Umbellularia californica*) and buckeye (*Aesculus californica*) having a single main stem or trunk of ten inches or more diameter at breast height (dbh), measured across the widest face of the trunk at four and one-half (4.5) feet above the natural grade, 2) all other species with a main stem or trunk of 14 inches or more dbh; and 3) multi-stemmed trees totaling eighteen inches or more dbh. In addition to a permit application, an independent arborist report is required when the tree is in good health, the tree is growing within 10 feet or closer to existing structures, being removed as part of a building structure not within the footprint of the new structure, and for any protected sized redwoods and coast live oak trees.

AMMs for trees that can be protected on site typically include implementation of tree protection zones (i.e., protecting trees that are intended to remain on the site from incidental project disturbance) and development of a tree protection plan by a certified arborist. In addition, the project proponent would be required to comply with the City of Belmont Municipal Code and submit permit applications for removal or damage of all trees covered by the ordinance.

Project Applicability: Trees potentially subject to the City's tree ordinance are present on the site, and some will likely be removed by project construction. The project will comply with the City of Belmont tree replacement guidelines and policies for any protected trees that will be removed as part of the project.

3.3.3 The McAteer-Petris Act

The McAteer-Petris Act, enacted on September 17, 1965, serves as a legal provision under California state law to preserve San Francisco Bay from indiscriminate filling. The act initially established the BCDC as a temporary state agency charged with preparing a plan for the long-term use of the San Francisco Bay. In August 1969, the McAteer-Petris Act was amended to make BCDC a permanent regulatory agency to incorporate the policies of the Bay Plan (BCDC 2012). BCDC jurisdiction includes a 100-foot wide band along the shoreline of the San Francisco Bay. The *shoreline* is defined as all areas that are subject to tidal action from the south end of the San Francisco Bay to the Golden Gate (Point Bonita–Point Lobos), and to the Sacramento River line (a line between Stake Point and Simmons Point, extended northeasterly to the mouth of Marshall Cut). The BCDC will claim all sloughs (specifically marshlands lying between mean high tide and up to 5 feet above mean sea level where marsh vegetation is present); tidelands (lands between mean high tide and mean low tide); and submerged lands (land lying below mean low tide) in this region. The McAteer-Petris Act also requires that "maximum feasible public access, consistent with a project be included as part of each project to be approved by the BCDC."

Project Applicability: Along the majority of the Bay shoreline, where the land is bordered by the open waters of the Bay and vegetated marsh is absent, BCDC's Bay jurisdiction is defined by the mean high water (MHW) elevation, which is 6.39 feet NAVD88. Along the tidal channel of Belmont Creek, where narrow bands of tidal salt marsh are present, BCDC's Bay jurisdiction is defined as MHW plus the upper extent of marsh vegetation. A 100-foot area extending landward of the extent of Bay jurisdiction is defined as the BCDC shoreline band (Figure 3). Although the project does not propose any activities within BCDC's Bay jurisdiction (e.g., within the tidal marsh), the 100-foot shoreline band extends onto the project site. If any project activities are proposed within the shoreline band, a permit from BCDC may be necessary.



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Figure 3. Biotic Habitats Map
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Section 4. Environmental Setting

4.1 General Project Area Description

The project site and study area is located in the City of Belmont, on the edge of the Redwood Shores development. The study area is bounded by Shoreway Road and Highway 101 to the southwest, commercial development to the northwest, a PG&E substation to the southeast, and a tidal section of Belmont Creek and narrow strip of ruderal grassland to the northeast (Figure 2). A public access trail is present on the levee between the project site and the Belmont Creek.

According to historical mapping of the shoreline in this area by the San Francisco Estuarine Institute (SFEI), the general area of the project site consists of land that was historically tidal marsh lands that were filled in the mid-20th century. The study area is generally topographically uniform and flat with elevations ranging from approximately 10 to 12 feet (ft) (WGS84) (Google, Inc. 2022). Soils are mapped as Urban land-Orthents, reclaimed complex, 0 to 2 percent slopes, which is a common soil classification for locations along the San Francisco Bay Shoreline that consists of fill soils.

4.2 Land Cover/Habitat Types

The entire 6.9-acre project site is developed and landscaped, being occupied by an existing commercial building, extensive surrounding pavement, and associated landscaping. Just outside the project site boundary, additional land cover/habitat types mapped within the study area include ruderal grassland in a narrow strip immediately east of the project site and open water/tidal aquatic habitat and tidal salt marsh habitat along Belmont Creek. These habitat types are depicted on Figure 3 and are described in detail below. Plant species observed during the reconnaissance survey are listed in Appendix A, and representative photos of these habitat types are provided in Appendix B.

4.2.1 Developed/Landscaped

Vegetation. Developed/landscaped areas comprise the dominant land cover type in the study area, occupying the entire project footprint. This land cover type includes the existing building on the site, the large paved parking lot surrounding the building, and associated landscaping throughout the site as well as along the perimeter. Landscaping on the site consists of ornamental trees, shrubs, and groundcovers that are typical of commercial developments in the area.

Wildlife. The hardscape on the project site provides limited habitat for wildlife species, and wildlife species that are present in these areas are tolerant of human disturbance and adapted to breeding or foraging on developed structures and surfaces. Non-native European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) may nest on adjacent developed structures and forage on hardscape on the project site. Native

raccoons (*Procyon lotor*) and non-native Virginia opossums (*Didelphis virginianus*), Norway rats (*Rattus norvegicus*), black rats (*Rattus rattus*), and feral cats (*Felis catus*) that inhabit nearby lands will forage in developed areas.

The landscaped portions of the project site provide habitat for wildlife species that are adapted to breeding in or foraging on non-native landscaped vegetation. During the June 2022 surveys, native bird species such as the black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), and house finch (*Haemorhous mexicanus*) were observed foraging in the landscape vegetation on the project site. In addition, many of the wildlife species that use adjacent ruderal and marsh habitats may move through the landscaped portions of the project site when traveling between more natural habitats.

4.2.2 Ruderal Grassland

Vegetation. Just outside the project site boundary, along the eastern edge of the site, vegetation consists of ruderal grassland occupying the space between the edge of the project site's landscaping and the levee slope along the tidal marsh. This vegetation is dominated by non-native annual grasses such as wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*), and fobs such as fennel (*Foeniculum vulgare*) and cheeseweed (*Malva neglecta*). Other common and abundant non-native species present include Chilean sea fig (*Carpobrotus chilensis*), black mustard (*Brassica nigra*), stork's bill filaree (*Erodium cicutarium*), vetch (*Vicia sativa*), summer mustard (*Hirschfeldia incana*), wild lettuce (*Lactuca serriola*), and horseweed (*Erigeron canadensis*).

Wildlife. Wildlife use of ruderal habitat on the site is limited by high levels of human disturbance in adjacent areas, the limited extent of the ruderal habitat, and the isolation of these habitat remnants from more extensive habitats elsewhere in the region. As a result, truly grassland-associated wildlife species are absent from the small patch of ruderal habitat on the project site. Instead, the wildlife species that occur in this habitat on the site are species that occur in adjacent urban or marsh areas and use this ruderal habitat for foraging. Such species include birds such as the native Brewer's blackbird (*Euphagus cyanocephalus*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachyrhynchos*), black phoebe, mourning dove (*Zenaida macroura*), house finch, northern mockingbird (*Mimus polyglottos*), and the nonnative European starling. Reptiles such as the western fence lizard (*Seloporus occidentalis*) and gopher snake (*Pituophis catenifer*), and mammals such as the raccoon, striped skunk (*Mephitis mephitis*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and Valley pocket gopher (*Thomomys bottae*) occur in the ruderal grassland as well.

4.2.3 Tidal Salt Marsh and Open Water/Tidal Channel

Vegetation. Outside the project site boundary, but within the expanded 100-foot component of the project study area, tidal salt marsh is present along Belmont Creek. Tidal salt marsh occurs with a 100 to 200 foot corridor confined by approximately five-foot-tall levees on either side of the creek corridor. The tidal salt marsh is dominated by a dense monoculture of pickleweed (*Salicornia pacifica*). Other species present with low cover or along the edge of the salt marsh include gumplant (*Grindelia stricta*), alkali heath (*Frankenia salina*), and jaumea (*Jaumea carnosa*). Non-native species present in the salt marsh include Algerian sea lavender (*Limonium ramosissimum*), alkali Russian thistle (*Salsola soda*), and seaside alkaligrass (*Puccinellia maritima*).

Belmont Creek runs through the middle of the tidal salt marsh and is shown on Figure 3 as open water/tidal channel (areas below the Mean High Water elevation of 6.39 ft. NAVD88). Due to the tidal nature of Belmont Creek in this reach, those areas are alternately inundated or exposed mud based on the daily tidal cycle. These areas are occupied by a continuous cover of nonnative smooth cordgrass (*Spartina alterniflora*), especially along the upper edges of the primary channel. Two side channels branch from the main stem of Belmont Creek within the study area and emanate from culverts in the levee.

Wildlife. Northern coastal salt marsh supports some of the most imperiled wildlife species in the San Francisco Bay, as much of this habitat was historically converted to other land uses. However, many of these rare species do not occur in the project study area, or will only occur as occasional dispersants or foragers, due to the limited extent of the marsh habitat in the project study area. The California Ridgway's rail, for example, nests in more extensive marshes downstream of the project site in cordgrass, dense stands of pickleweed, and marsh gumplant (McBroom 2020, CNDDB 2022). Similarly, California black rails are known to occur in northern coastal salt marsh downstream of the project study area, primarily as winter residents (CNDDB 2022). Neither rail species is expected to nest in the project study area, however, due to the narrow extent of the marsh and high levels of human disturbance. The salt marsh harvest mouse occurs in the upper zone of tidal salt marshes, especially where pickleweed is the dominant plant, and may nest in the tidal marshes and forage in upland habitats adjacent to the project site. Alameda song sparrows (*Melospiza melodia pusillula*) also nest in salt marshes in dense herbaceous vegetation and may nest in the marshes adjacent to the project site. Shorebirds, swallows, herons, egrets, blackbirds, and other avian species roost and forage in small numbers here as well, but most do not breed in these areas. Common waterbirds such as mallards (*Anas playtrhynchos*), American coots (*Fulica americana*), and gadwall (*Anas strepera*) forage within Belmont Creek, while wading birds such as herons and egrets forage along the shoreline. However, diving ducks and other waterbirds typical of the lower reaches of Belmont Slough and the bay itself are absent, or present only in low numbers, in this portion of Belmont Creek due to the narrow nature of the channel and high levels of human disturbance.

4.3 Wildlife Movement

Wildlife movement in the site vicinity takes many forms, and is different for the various suites of species associated with the area. Bird and bat species move readily over the landscape, foraging over and within both natural lands and landscaped areas of Redwood Shores, adjacent Cities of Redwood City and Belmont, and the adjacent Bair Island. Fish species move along the Belmont Creek corridor, some as residents and some as occasional foragers from the San Francisco Bay. Mammals of different species move within their home ranges, but also disperse between patches of habitat. Generally, reptiles and amphibians similarly settle within home ranges, sometimes moving to central breeding areas, upland refugia, or hibernacula in a predictable manner, but also dispersing to new areas. Some species, especially among the birds and bats, are migratory, moving into or through Redwood Shores during specific seasons. Aside from bats, there are no other mammal species in the site vicinity that are truly migratory. However, the young of many mammal species disperse from their natal home ranges, sometimes moving over relatively long distances in search of new areas in which to establish.

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. On a broader level, corridors also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. In extreme cases, environmental corridors provide narrow connectivity past poor or hostile habitat areas between large areas of open space on a local or regional scale.

4.3.1 Belmont Creek

Belmont Creek, which lies directly adjacent to the project site, originates on the eastern slope of Pulgas Ridge and flows eastward for 3 mi through residential and commercial areas of San Carlos and Belmont before reaching the tidal portions of the creek via an engineered channel. This tidal slough eventually makes its way to the San Francisco Bay approximately 1.6 mi downstream of the project site. The reach of the slough adjacent to the project site is relatively narrow, and measures approximately 160 ft, between the north and south levees.

Belmont Creek functions as a wildlife movement corridor, connecting aquatic habitats associated with the San Francisco Bay with high-density residential and commercial habitats to the south. This creek is not known to support a steelhead run, or to have supported steelhead historically (Leidy 1984), though other fish are expected to move up and down Belmont Creek past the site.

The tidal marsh habitat and exposed mudflats along the Belmont Creek corridor are useful for migrating birds, which stop to rest and forage there. In addition, the portion of Belmont Creek and adjacent upland habitats on the project site support a suite of native medium-sized mammals (e.g., raccoons, skunks, and black-tailed jackrabbits) and small mammals (e.g., California ground squirrels and deer mice). However, due to the presence of Highway 101 (a significant impediment to movement of terrestrial wildlife along Belmont Creek) not far upstream from the project site, as well as the intensive urban development southwest of Highway 101, Belmont Creek does not provide an important corridor for wildlife movement between bayside areas and natural habitats in the foothills of the Santa Cruz Mountains to the west.

4.3.2 Pacific Flyway Stopover

The wetlands along the edge of the San Francisco Bay comprise one of the most important coastal wintering and migratory stopover foraging habitats for Pacific Flyway shorebirds and waterfowl, most of which do not breed in the Bay but which use it during migration and in winter for feeding and resting. The San Francisco Bay supports higher proportions of the total wintering and migrating shorebirds on the U.S. Pacific coast than any other wetland (Western Hemisphere Shorebird Reserve Network 2009). Hundreds of thousands of shorebirds and approximately 25 species of waterfowl making their way south from the Arctic, Alaska, and western Canada pass through the region in the fall. The Western Hemisphere Shorebird Reserve Network has designated the San Francisco Bay Estuary as a site of "Hemispheric Importance" (its highest ranking), and the North American Waterfowl Management Plan has listed it as one of 34 waterfowl habitats of major concern in North America. However, the wetlands in Belmont Creek are not particularly valuable to these migratory birds

owing to the limited extent of these habitats, adjacent human disturbance, and the narrow nature of Belmont Creek adjacent to the project site.

Migratory birds, including terrestrial species and waterbirds associated with the Bay, migrate along the edge of San Francisco Bay. For example, nocturnal migrant birds that find themselves over the Bay in the morning will seek roosting and foraging areas along the edge of the Bay. As a result, numbers of migrant birds moving through/past the project site would be higher than expected based on the low quality of habitat currently present on the predominantly developed site.

In summary, the project footprint is not a particularly important area for movement by non-flying wildlife, and it does not contain any high-quality corridors allowing dispersal of such animals. However, migratory birds are expected to occur adjacent to, or at least fly through/past, the project site in moderate abundance.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3 above.

For purposes of this analysis, "special-status" plants are considered plant species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

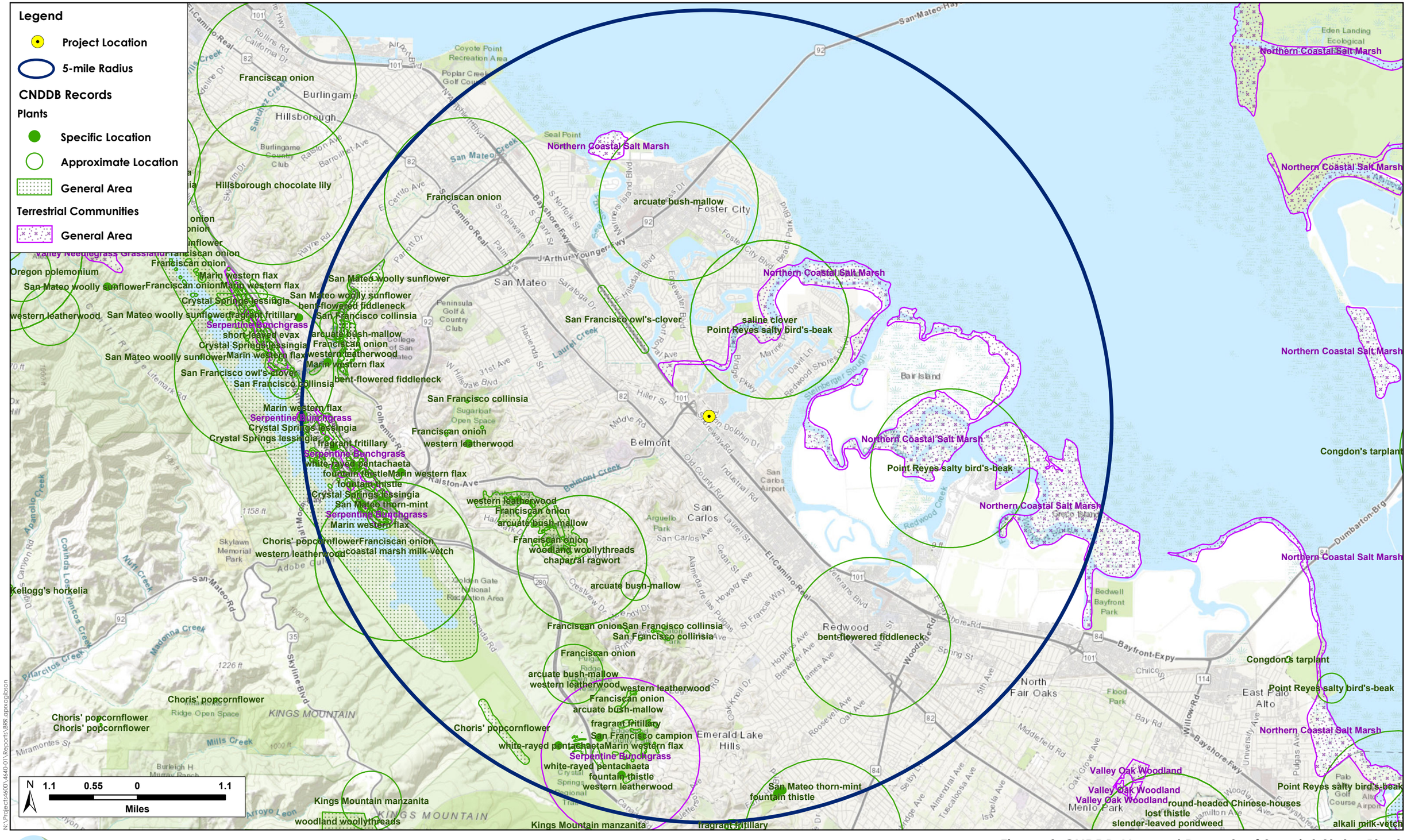
For purposes of this analysis, "special-status" animals are considered animal species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur on the project site was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figures 4 and 5 depict CNDDB records of special-status plant and animal species, respectively in the general vicinity of the project site. These generalized maps show areas where special-status species are known to occur or have occurred historically.

5.1 Special-Status Plant Species

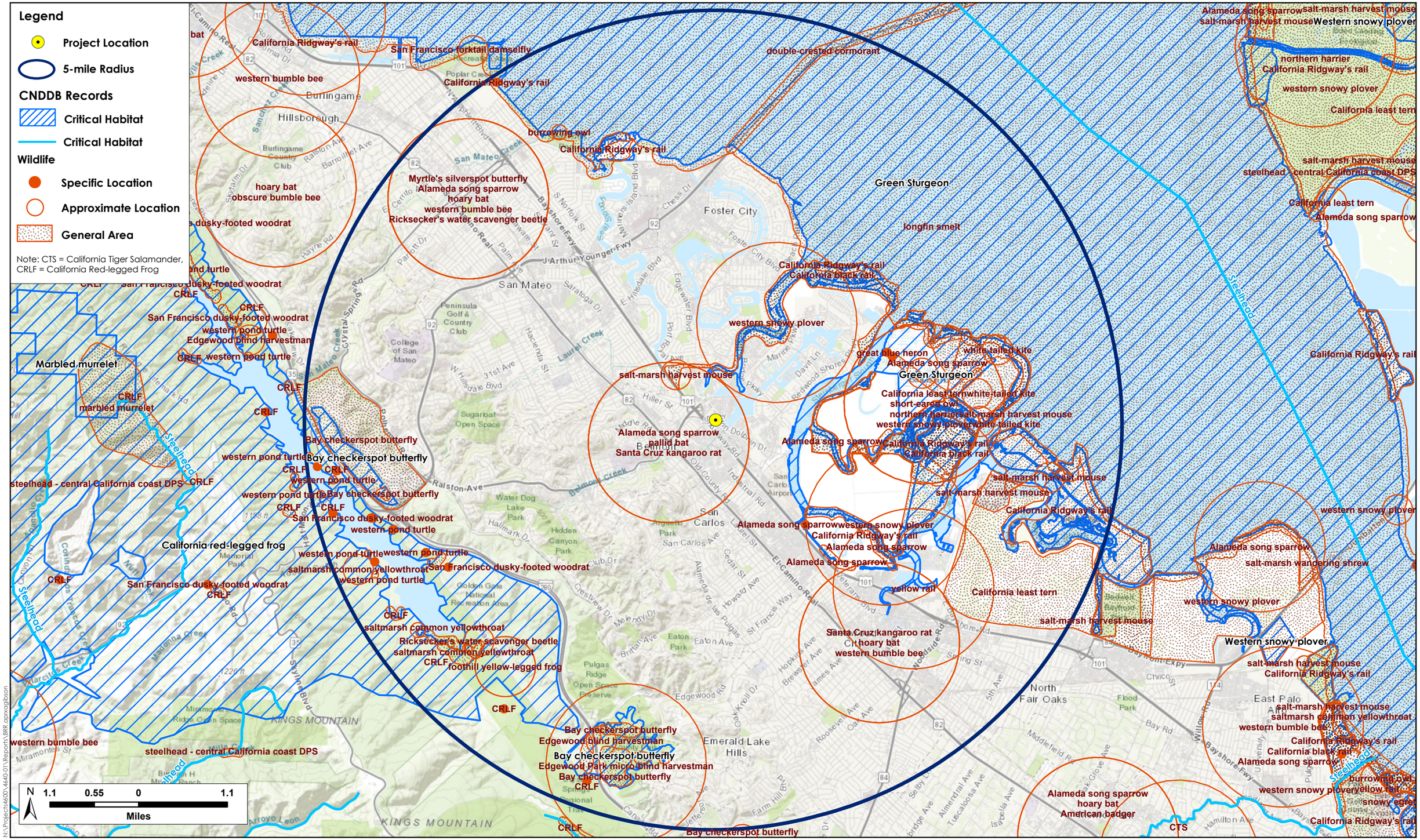
The CNPS (2022) and CNDDB (2022) identify 110 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the project site for CRPR 1 or 2 species, or in Santa Mateo County for CRPR 3 and 4 species. All 110 of those potentially occurring special-status plant species were determined to be absent from the project site for at least one of the following reasons: (1) lack of



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Figure 4. CNDDB-Mapped Records of Special-Status Plants
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Figure 5. CNDDB-Mapped Records of Special-Status Animals

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suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the project site; and/or (4) the species is considered extirpated. The project site itself is entirely developed and lacks suitable habitat for special-status plant species. The tidal salt marsh within the project study area was not considered suitable habitat for special-status plant species that are known from the vicinity for the following reason; 1) there are no extant records of special-status species that typically occur in tidal salt marsh elsewhere along the San Francisco South Bay shoreline (e.g. California sea-blite [*Suaeda californica*], Alkali milk-vetch [*Astragalus tener* var. *tener*], or Point Reyes bird's beak [*Chloropyron maritimum* ssp. *palustre*]) within a 5-mile radius of the project site, and 2) the tidal salt marsh present in the study area is a monoculture of pickleweed and the suitable microhabitat required for those species (e.g. openings in the pickleweed cover) are absent. Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is a special-status plant species that can sometimes be present in ruderal grassland along the Bay Shoreline. However, the ruderal grassland present on the levee face and along the Bay Trail was not considered suitable habitat for Congdon's tarplant due to the dense cover of fennel and non-native annual grasses (wild oats and bromes). In addition, this species, even when it occurs in ruderal grassland habitat, is typically associated with seasonally moist swales in ruderal grassland, which are not present in the study area.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence of special-status animal species known to occur or potentially occurring in the general project region are presented in Table 1. Figure 5 depicts the CNDDB-mapped locations of special-status animals in the project vicinity.

No special-status animal species are expected to reside or breed on, or otherwise heavily use, the project site itself due to the lack of suitable habitat on the entirely developed/landscaped site. However, the following special-status animal species may reside or breed in habitats within the study area adjacent to the site: the salt marsh harvest mouse, Alameda song sparrow, white-tailed kite (*Elanus leucurus*), and salt marsh wandering shrew.

Several other special-status animal species may occur on or immediately adjacent to the project site only as occasional foragers, migrants, or transients; these are the monarch butterfly (*Danaus plexippus*), California Ridgway's rail, California black rail, western pond turtle (*Actinemys marmorata*), American peregrine falcon (*Falco peregrinus anatum*), tricolored blackbird (*Agelaius tricolor*), pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus blossevillii*). In addition, several special-status animal species may occur as occasional foragers, migrants, or transients in the aquatic habitat in Belmont Creek adjacent to the project site. These are the green sturgeon, longfin smelt, Central California coast steelhead, and Central Valley fall-run Chinook salmon. None of these species is expected to breed on or near the project site, or to regularly use the project site, and the project site itself does not provide important habitat for these species. Thus, the project's effects on nonbreeding habitat for these species are not expected to result in appreciable impacts on regional populations, and no avoidance or minimization measures for these species are warranted.

Several special-status bird species are protected as California species of special concern only when nesting. Vaux's swift occurs on the project site as an uncommon visitor during migration, but suitable nesting habitat for this species is absent from the site and from adjacent areas. Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), yellow warbler (*Setophaga petechia*), and northern harrier (*Circus hudsonius*) may also occur in adjacent habitats as occasional nonbreeding foragers, but are not expected to nest on or adjacent to the site. Because these species only occur on the project site as nonbreeders, they are not considered "special-status" when they occur.

Eleven of the special-status animal species listed in Table 1 are not expected to occur on or adjacent to the project site because the study area lacks suitable habitat and/or is outside the known range of the species. These are the California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), western snowy plover (*Charadrius nivosus nivosus*), California least tern (*Sternula antillarum browni*), black skimmer (*Rynchops niger*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), California brown pelican (*Pelecanus occidentalis californicus*), golden eagle (*Aquila chrysaetos*), and Pacific harbor seal. These species are determined to be absent from the study area.

Table 1. Special-status Animal Species, Their Status, and Potential for Occurrence on the Project Site

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Federal or State Endangered, Threatened, or Candidate Species			
Monarch butterfly (*Danaus plexippus*)	FC	Requires milkweeds (*Asclepias* spp.) for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats. Individuals congregate in winter roosts, primarily in Mexico and in widely scattered locations on the central and southern California coast.	**Absent as Breeder.** The monarch butterfly occurs within the project region primarily as a migrant. Monarchs are known to form over-wintering congregations near Newark in Alameda County and in coastal locations (CNDDB 2022). However, no such congregations are known from the project site or its vicinity. Breeding habitat (i.e., milkweed plants) is absent from the project site, and due to the extensive hardscape on the site, few nectar plants were observed. Therefore, if this species occurs on the site, it does so only as a transient during spring and fall migration.
Green sturgeon (*Acipenser medirostris*)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site. Green sturgeon are relatively rare in the South San Francisco Bay and may forage infrequently and in low numbers in accessible portions of Belmont Creek. However, the reach of Belmont Creek adjacent to the project site is too shallow to be accessible to the species except at high tide, and no suitable spawning habitat is present in or upstream of Belmont Creek. Thus, the species may occur in Belmont Creek only as an occasional forager and only during high tide. All tidally influenced areas of the San Francisco Bay, up to the elevation of mean higher high water, including the portion of Belmont Creek adjacent to the project site, have been designated as critical habitat for this species.
Longfin smelt (*Spirinchus thaleichthys*)	FC, ST	Spawns in fresh water in the upper end of the San Francisco Bay; may occur year-round in the South Bay.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site, and the species is not known to spawn in aquatic habitat in the project vicinity. However, adults and yearling juveniles may be present as occasional foragers in Belmont Creek adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Central California coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site. Steelhead were not found in Belmont Creek during fish sampling in the 1980s (Leidy 1984, Leidy et al. 2005) and are thought to be absent from the Belmont Creek watershed (Becker et al. 2007). However, Belmont Creek adjacent to the project site is tidally influenced and there are no complete barriers to steelhead moving up the slough to forage. Therefore, the possibility of occasional individuals straying into Belmont Creek cannot be ruled out. All tidally influenced areas of the San Francisco Bay, up to the elevation of mean higher high water, including the portion of Belmont Creek adjacent to the project site, have been designated as critical habitat for this species.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**Absent.** The California red-legged frog is known to occur 5 mi to the west at Crystal Springs Reservoir and 8 mi to the northwest near the San Francisco International Airport. However, this species has been extirpated from the majority of the project region, and the project site is too isolated and distant from existing breeding populations to sustain a population of red-legged frogs. Thus, California red-legged frogs are determined to be absent from the project site.
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	FE, SE, SP	Prefer densely vegetated freshwater habitats. May use upland burrows for aestivation.	**Absent.** The San Francisco garter snake occurs at very few locations in San Mateo County. The only known population of San Francisco garter snakes on the east side of the San Francisco peninsula occurs near the San Francisco International Airport, 8 mi to the northwest. No suitable habitat for this species is present on the project site, and the site is isolated from the nearest known remaining populations by extensive urbanization. Thus, this species is determined to be absent.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
California Ridgway's rail (*Rallus obsoletus obsoletus*)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	**Absent (May be Present in Adjacent Areas).** Annual surveys conducted for California Ridgway's rails as part of the Invasive Spartina Project detected Ridgway's rails during the breeding season within 1.25 miles of the project site in lower portions of Belmont Slough in 2017 and 2020 (McBroom 2018 and 2021). In 2019, rails were detected in the upper portion of the slough, approximately 0.25 mile north of the project site (McBroom 2019). However, no marsh habitat is present on the project site to provide habitat for this species. Further, the marsh habitat along the portion of Belmont Creek adjacent to the site does not provide high-quality nesting habitat for California Ridgway's rails due to the narrow width of the marsh habitat, the short and sparse vegetation present, the regular inundation of this habitat by daily tides, and high levels of adjacent human disturbance. Further, eBird records from this portion of slough indicate that birders have detected no individual Ridgway's rails, despite a relatively large number (392) of complete checklists of detected species (Cornell Lab of Ornithology 2022). This species typically nests and forages in broader salt or brackish marshes with well-developed tidal channels (conditions that are absent from the portion of Belmont Creek adjacent to the site). Thus, if Ridgway's rails occur in the adjacent portion of Belmont Creek at all, they are expected to occur only as occasional foragers. They are not expected to nest in portions of the marsh within 700 feet (the typical no-disturbance buffer distance for this species) of the project site.
California black rail (*Laterallus jamaicensis coturniculus*)	ST, SP	Nests in fresh, brackish, and tidal salt marsh.	**Absent (May be Present in Adjacent Areas).** Few black rails have been observed in marshes on the east side of the San Francisco peninsula, and most recent records are from the nonbreeding season (CNDDB 2022). The marsh habitat adjacent to the project site does not provide suitable nesting habitat for black rails due to the narrow width of the marsh habitat; the short, sparse vegetation present; the regular inundation of this habitat by daily tides; and high levels of adjacent human disturbance. This habitat does provide marginally suitable foraging habitat for black rails. Thus, at most, stray individuals may forage along Belmont Creek on or adjacent to the site infrequently and in low numbers, if at all.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Western snowy plover (*Charadrius nivosus nivosus*)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pans in San Francisco Bay saline managed ponds.	**Absent.** No suitable nesting or foraging habitat for snowy plovers occurs on the project site due to a lack of suitable salt pan habitat and high levels of human disturbance. Snowy plover nests were observed on salt evaporator ponds in the Bair Island area 2.5 mi to the southeast of the project site in 1975–1976 (CNDDB 2022). However, snowy plovers are no longer known to nest at Bair Island. No critical habitat for snowy plovers has been designated within, or in the vicinity of, the project site (USFWS 2012).
California least tern (*Sternula antillarum browni*)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In the South Bay, nests in salt pannes and on an old airport runway. Forages for fish in open waters.	**Absent.** Least terns are not known or expected to nest on or adjacent to the project site. In 1976, least terns nested on dried salt evaporator ponds 5–6 mi to the southeast (CNDDB 2022), but least terns are no longer known to nest at these locations. Least terns forage primarily in managed ponds and over the open Bay and have not been observed foraging in narrow tidal sloughs (such as the portion of Belmont Creek adjacent to the project site). Thus, least terns are not expected to forage on or immediately adjacent to the project site. The site also lacks suitable roosting habitat, as immediately adjacent human disturbance precludes the use of upland areas as least tern roost sites, and no such least tern roosts have been observed in these areas.
Tricolored blackbird (*Agelaius tricolor*)	ST	Nests near fresh water in dense emergent vegetation.	**Absent as Breeder.** Tricolored blackbirds typically nest in extensive stands of tall emergent herbaceous vegetation in nontidal freshwater marshes and ponds, which are not present on or immediately adjacent to the project site. This species is not known to nest in tidal habitats in the Redwood Shores area, and has not been recorded nesting on or near the project site. However, tricolored blackbirds may forage on the project site during the nonbreeding season.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed. Also occurs in diked and brackish marshes, nontidal wetlands, and some adjacent upland habitats.	**Absent (May be Present in Adjacent Areas).** Salt marsh harvest mice have been documented along Belmont Creek approximately 1.25 mi northeast (2.0 mi downstream) of the project site, as well as in marshes at the end of the Redwood Shores Peninsula (Shellhammer 2005). While no suitable marsh habitat for this species is present on the project site, suitable pickleweed-dominated habitat for this species occurs east of and adjacent to the project site in the tidal salt marsh. Recent radio tracking studies have demonstrated that the species uses a wider array of habitats than previously understood, including brackish marshes, nontidal managed wetlands, and some adjacent upland habitats as well (Smith 2019). Further, the species has a much broader diet than the pickleweed-centered diet previously assumed; when presented a variety of seasonally abundant foods, salt marsh harvest mouse diets comprised 45 different native and non-native plant species, including several nonnative annual grasses (Smith 2019). Thus, the ruderal grassland that borders Belmont Creek adjacent to the project site may offer suitable foraging habitat, and individual salt marsh harvest mice may forage occasionally in these areas. Individuals inhabiting adjacent marsh habitat could also take refuge in these ruderal areas during extreme high tides (i.e., king tides). A narrow pedestrian trail parallels the marsh habitat, and longitudinally divides this upland grassland habitat; however, the trail is not so wide (approximately 3-4 feet) as to be an absolute barrier to dispersal. Thus, salt marsh harvest mice may occur in the ruderal grassland habitat adjacent to the project site, though they are expected do so infrequently and in very small numbers.
California Species of Special Concern			
Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*)	CSSC	Cool rivers and large streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	**Absent (May be Present in Adjacent Areas).** There is no aquatic habitat on the project site, and no suitable spawning habitat for this species occurs in Belmont Creek. The status of salmonid use of the Belmont Creek watershed is unknown, but Chinook salmon are not known to spawn in Belmont Creek (Leidy et al. 2005). Nevertheless, small numbers of juveniles or fall-run adults from other runs could potentially occur as migrants or foragers in Belmont Creek.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Western pond turtle (*Actinemys marmorata*)	CSSC	Permanent or nearly permanent water in a variety of habitats.	**Absent (May be Present in Adjacent Areas).** The nearest CNDDB (2022) record is from 4.5 mi to the west near the Crystal Springs Reservoir. Suitable foraging habitat for western pond turtles may be present within Belmont Creek upstream of the project site. However, breeding populations of western pond turtles have been extirpated from most urbanized areas in the project region. Nevertheless, it is possible that occasional pond turtles from populations in freshwater habitats upstream in Belmont Creek could potentially disperse downstream to Belmont Creek, although they would be expected to do so in extremely low numbers, if at all.
Black skimmer (*Rynchops niger)*	CSSC (nesting)	Nests on abandoned levees and islands in saline managed ponds and marshes.	**Absent.** No suitable islands for nesting are present on the project site or in Belmont Creek, and the portion of the slough adjacent to the site is too narrow to support foraging by this species. Thus, black skimmers are not expected to occur on or adjacent to the project site.
Northern harrier (*Circus hudsonius*)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	**Absent as Breeder.** Habitat within and immediately adjacent to the project site is not suitable for nesting by northern harriers due to high levels of adjacent human disturbance. Northern harriers nest at Bair Island and may nest in larger, more remote marsh habitats along lower Belmont Creek, and are common foragers along Belmont Creek. This species may occasionally forage in the ruderal habitat on the project site. Due to the proximity of human disturbance, northern harriers are not expected to nest close enough (i.e., within 300 ft) to project impact areas to be disturbed by project activities.
Vaux's swift (*Chaetura vauxi*)	CSSC (nesting)	Nests in snags in coastal coniferous forests or, occasionally, in chimneys. Forages aerially over many habitats.	**Absent as Breeder.** Vaux's swifts are not known to nest in the Foster City/Belmont area (Sequoia Audubon Society 2001). No snags or chimneys are present on or immediately adjacent to the project site to provide suitable sites for nesting. Occasional migrants forage aerially over the site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels.	**Absent.** Historically, burrowing owls nested approximately 2.5 mi southeast of the project site near Bair Island (Sequoia Audubon Society 2001), but nesting in this area is not a regular occurrence. Burrowing owls have also been observed during the winter months in various locations surrounding the project site, but have not been recorded on the project site itself (Cornell Lab of Ornithology 2022). Burrows of California ground squirrels suitable for nesting and roosting by burrowing owls are not currently present on or adjacent to the project site, and burrowing owls are not expected to occur on the site due to the narrow, restricted extent of the available grassland habitat, absence of small mammal burrows, and high levels of human disturbance.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	**Absent.** Loggerhead shrikes occur occasionally in the project vicinity during the winter months (Cornell Lab of Ornithology 2022). However, the small areas of ruderal habitat on the project site are too narrow and isolated from more expansive grasslands in the region to provide suitable nesting or foraging habitat for this species (even by migrants).
Yellow warbler (*Setophaga petechia*)	CSSC (nesting)	Nests in riparian woodland and scrub, forages in a variety of habitat types.	**Absent.** Although yellow warblers are common migrants in and adjacent to the project site, they are not known or expected to nest in the study area due to the absence of suitable habitat, and this species is considered a species of special concern only when nesting.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	**Absent.** Common yellowthroats occur year-round in marshes of the Redwood Shores peninsula (Cornell Lab of Ornithology 2022). The ruderal habitat on the project site is not suitable for nesting by common yellowthroats due to the relatively low height and only intermittently dense cover of the vegetation. Further, the marsh habitat adjacent to the site in Belmont Creek does not provide suitable nesting or foraging habitat for this species due to the low height of the vegetation. Although this species may occur elsewhere along Belmont Creek, it is not expected to nest or forage on or adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Alameda song sparrow (*Melospiza melodia pusillula*)	CSSC	Nests in salt marsh habitat, primarily in marsh gumplant and cordgrass along channels.	**Absent as Breeder (May Breed in Adjacent Areas).** Suitable vegetation for nesting by a few pairs of Alameda song sparrows is present in the marsh habitat immediately adjacent to the project site, and this species may forage on the site during the breeding season. The location of the interface between populations of the Alameda song sparrow (*pusillula*) and the common race that breeds in freshwater riparian habitats in the region (*gouldiii*) is not definitive due to difficulties distinguishing these subspecies in the field. However, the *pusillula* subspecies is known to nest in marsh habitat in the project region, and is presumed to be present in the marshes along Belmont Creek. Individual song sparrows from several subspecies may forage on the project site year-round.
Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*)	CSSC	Nests in pickleweed dominant salt marsh, adjacent ruderal habitat, moist grasslands, and, rarely, drier grasslands.	**Absent as Breeder.** In the South San Francisco Bay, Bryant's savannah sparrows nest primarily in short pickleweed-dominated portions of diked/muted tidal salt marsh habitat and in adjacent ruderal habitats (Rottenborn 2007). The marsh and ruderal habitats along Belmont Creek are ostensibly suitable for nesting by Bryant's savannah sparrows, but the species is not expected to nest on or adjacent to the site due to the narrow nature of the channel along this portion of the slough. During the nonbreeding season, *alaudinus* and other savannah sparrow subspecies may forage in open habitats throughout the project site.
Salt marsh wandering shrew (*Sorex vagrans halicoetes*)	CSSC	Medium to high marsh 6–8 ft above sea level with abundant driftwood and common pickleweed.	**Absent (May be Present in Adjacent Areas).** Salt marsh wandering shrews occur most often in medium-to-high wet tidal marsh (6–8 ft above sea level), with abundant driftwood and other debris for cover (Shellhammer 2000). Typically, they are found in fairly tall pickleweed, in which they build nests, and they may be found in Belmont Creek in areas of tall pickleweed. No suitable marsh habitat to support this species occurs on the project site, but suitable pickleweed-dominated habitat for this species occurs immediately outside the project site in northern coastal salt marsh habitat. Occasional individuals inhabiting adjacent marsh habitat could take refuge in ruderal areas adjacent to the marsh habitat during king tides, but they are not expected to move so far from the marsh that they occur on the ruderal areas immediately adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**Absent as Breeder.** No known extant populations of pallid bats occur on in the project region. Suitable breeding habitat for pallid bats is absent from the project site and immediately adjacent areas. Individual pallid bats may move through the site occasionally, as this species forages for miles surrounding a maternity colony.
Western red bat (*Lasiurus blossevillii*)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat.	**Absent as Breeder.** Individual western red bats occur in the project vicinity in low numbers as migrants and winter residents, but this species does not breed in the project vicinity. Individual western red bats may roost in the foliage of trees virtually anywhere in the project region, but are expected to roost primarily in riparian areas. Occasional individuals may forage over the site year-round.
State Fully Protected Species			
California brown pelican (*Pelecanus occidentalis californicus*)	SP	Undisturbed islands near estuarine, marine, subtidal, and marine pelagic waters.	**Absent.** Brown pelicans are regular nonbreeding visitors in San Mateo County. They are occasionally known to forage in open-water habitat near the project site, but Belmont Creek is too narrow to provide suitable foraging habitat for this species. Thus, brown pelicans are absent from the project site, even as occasional nonbreeding foragers.
American peregrine falcon (*Falco peregrinus anatum*)	SP	Forages in many habitats; nests on cliffs and tall bridges and buildings.	**Absent as Breeder.** Suitable nesting habitat (e.g. cliffs, tall buildings, or electrical towers) is absent from the project site and its immediate vicinity. Further, peregrine falcons are not known or expected to nest on or adjacent to the project site due to high levels of human disturbance. Individuals of this species occur as occasional foragers in the vicinity (Cornell Lab of Ornithology 2022) and may occasionally forage along Belmont Creek on and adjacent to the project site.
Golden eagle (*Aquila chrysaetos*)	SP	Nests on cliffs or in large trees (rarely on electrical towers), forages in open areas.	**Absent.** Suitable nesting habitat is absent from the project site. Occasional nonbreeding individuals are observed in the Redwood City area infrequently (Cornell Lab of Ornithology 2022), but golden eagles are not known to nest in the vicinity. This species is expected to forage infrequently in open habitats in the project region, such as at Bair Island, but is not expected to forage on or adjacent to the project site due to the limited extent of available foraging habitat and high levels of adjacent human disturbance.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees, forages in grasslands, marshes, and ruderal habitats.	**May be present.** White-tailed kites are known to nest in eastern San Mateo County throughout the open areas bordering the San Francisco Bay (Sequoia Audubon Society 2001, Cornell Lab of Ornithology 2022). Suitable trees for nesting are absent from the project site, but up to one pair of white-tailed kites could nest in suitable nest trees within 300 feet of the project site, which is the typical nest buffer distance for this species. Individuals may forage occasionally on the project site and in adjacent marsh habitat year-round.
Other Special-status Species			
Pacific harbor seal (*Phoca vitulina richardsi*)	MMPA	Throughout the northern Atlantic and Pacific Oceans along coastal waters, river mouths, and bays	**Absent.** Harbor seals are permanent residents of the San Francisco Bay, and a primary haul-out site for harbor seals is located near the mouth of Belmont Creek 2.5 mi northeast of the project site. However, no pupping sites or suitable haul-out sites are present on or adjacent to the project site, and the slough adjacent to the project site is too narrow and shallow to provide suitable foraging habitat. The species is thus determined to be absent.

Key to Abbreviations:
Status: Federally Endangered (FE); Federally Threatened (FT); Federal Candidate (FC); State Endangered (SE); State Threatened (ST); State Fully Protected (SP); California Species of Special Concern (CSSC); Protected under the Marine Mammal Protection Act (MMPA).

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDB 2022). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings reflect the condition of a habitat within natural communities and are defined using NatureServe's standard heritage program methodology as follows (Faber-Langendoen et al. 2012):

- G1/S1: Critically imperiled
- G2/S2: Imperiled
- G3/S3: Vulnerable
- G4/S4: Apparently secure
- G5/S4: Secure

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1–G3, all of the vegetation associations within it will also be of high priority (CDFW 2022). The CDFW provides VegCAMP's currently accepted list of vegetation alliances and associations (CDFW 2022). Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

Sensitive Natural Communities. A query of sensitive habitats in the CNDDB (2022) identified five sensitive natural communities as occurring within the twelve 7.5-minute USGS quadrangles containing or surrounding the project site: (1) northern coastal salt marsh (Rank G3/S3.2), (2) northern maritime chaparral (Rank G1/S1.2), (3) serpentine bunchgrass (Rank G2/S2.2), (4) valley needlegrass grassland (Rank G3/S3.1), and (5) valley oak woodland (Rank G3/S2.1). None of these sensitive natural communities is present on the project site itself. Northern coastal salt marsh is characterized by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed, cordgrass, and sometimes saltgrass. The tidal salt marsh adjacent to the project site, along Belmont Creek, is dominated by pickleweed therefore represents northern coastal salt marsh. The other sensitive habitats recorded in the region by CNDDB (northern maritime chaparral,

serpentine bunchgrass, valley needlegrass grassland, and valley oak woodland) are all absent from the project site.

Sensitive Vegetation Alliances. The tidal salt marsh in the project study area qualifies as a *Sarcocornia pacifica* (*Salicornia depressa*) (Pickleweed mats) Alliance (CDFW 2022). This alliance is ranked as G4/S3; globally it is "apparently secure", but on a state-wide level it is "vulnerable" (S3), and therefore would be considered by CDFW as sensitive natural community. However, no sensitive vegetation alliances are present on the project site itself.

Sensitive Habitats (Wetlands and Waters of the U.S./State). No sensitive habitats are present on the project site itself, although Belmont Creek and its associated tidal marsh, east of the site, are considered sensitive habitats. While a formal wetland delineation was not carried out as part of this analysis, the extent of the aquatic habitat and adjacent tidal marsh wetland as shown on Figure 3 represents the approximate extent of Waters of the U.S. In addition, the ruderal levee slope along the creek's banks may be considered a "buffer" of waters of the State by the RWQCB. The bed and banks of Belmont Creek would also be regulated by the CDFW under Section 1602 of the California Fish and Game Code.

Essential Fish Habitat. No EFH or FMP-managed fish species are present on the project site itself. As discussed in Section 3.1.4, the intertidal and subtidal habitats within Belmont Creek adjacent to the project site are considered EFH by NMFS. EFH is habitat that is essential to the long-term survival and health of a fishery and includes those habitats that support all life stages and all habitats that support breeding, spawning, feeding, and growth to maturity of a managed species. The San Francisco Bay has been designated EFH for three FMPs within the project vicinity: the Pacific Coast Groundfish, Coastal Pelagic Species, and Pacific Coast Salmon. In the study area, intertidal habitats within Belmont Creek up to the elevation of mean higher high water are considered to be EFH. However, these habitats are outside of the project footprint.

Section 6. Impacts and Recommended Measures

CEQA and the State CEQA Guidelines provide guidance in evaluating impacts of projects on biological resources and determining which impacts will be significant. The Act defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project."

Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G (Chapter IV) may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

A. "have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"

B. "have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"

C. "Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means"

D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"

E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"

F. "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan"

Potential impacts on biological resources as a result of the proposed project were systematically evaluated at the project level. These impacts were first evaluated to qualitatively describe how proposed project activities could impact biological resources. The potential significance of each impact was then determined, first without implementation of any recommended measures to avoid or minimize impacts. If an impact was determined to be potentially significant, in the absence of any recommended measures, then measures to reduce the impact to a less-than-significant level were identified and described.

6.1 Impacts on Special-Status Species: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Recommended Measures)

6.1.1 Impacts on Common Species and Habitats (Less than Significant)

The project will impact virtually all 6.9 acres of developed/landscaped land uses on the project site in some way, either through conversion to other developed areas or conversion of currently developed areas to landscaping. While landscape plans are not currently available, the conversion of parking lot and hardscape to landscaped habitat will increase the overall quality of habitat on the project site. Individuals of the common plant and animal species that currently inhabit the project site will be temporarily impacted through the removal of trees and buildings, construction of new structures and amenities, and landscaping. However, those common plant and animal species that occur on the site are regionally abundant and are present in widely available habitats in the region. As a result, the project would impact only a very small proportion of their regional populations. Furthermore, once the project is completed, the site will support higher-quality habitat and many of those species that occupy the site now will occupy the site after construction. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

6.1.2 Impacts on Fish and Fish Habitat (Less than Significant with Recommended Measures)

No suitable habitat for fish, including special-status fish, designated critical habitat for federally listed fish, EFH, and FMP-managed species will be impacted directly by the project. During very high flows, fish could potentially occur as close as the near edge of the tidal marsh along Belmont Creek, approximately 40 ft or more from the project site, but no closer. However, construction of the project may result in indirect adverse effects on fish and their habitats due to short-term increases in suspended sediment and turbidity near the project site as a result of run-off and potential leaking or spills of chemical contaminants or hazardous materials (gasoline, oil, grease, concrete) onto the ground from use of heavy equipment adjacent to slough. Increased suspended sediment and turbidity may have direct effects on special-status fish and FMP-managed species by interfering with visual foraging, interfering with migratory behavior, and injuring gills. Indirect effects could include increasing susceptibility to predation and reducing availability of food. Leaking or spills of chemical contaminants or hazardous materials could be toxic to special-status fish, FMP-managed species, and their prey. Due to the regional rarity of special-status fish and the ecological importance of EFH and FMP-managed fish species, such impacts would be significant under CEQA in the absence of recommended measures to avoid or minimize impacts.

As described in Section 3.2.5, the project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit. Collectively, these requirements are likely to reduce the project's impacts on water quality in Belmont Creek substantially. In addition, implementation of the following recommended measure would reduce impacts on fish and their habitat due to project construction and associated water-quality effects to less-than-significant levels.

Water Quality. During construction, the project shall employ the following measures to treat and minimize runoff from the project site.

- All relevant erosion control, sediment control, source control, treatment control, material management, and stormwater management measures consistent with the latest edition of the California Stormwater Quality Association "Stormwater Best Management Practices Handbook," available at www.capmphandbooks.com, will be implemented.
- Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations). Feasible measures shall be implemented to ensure that hazardous materials are properly handled and the quality of wetland and aquatic resources is protected.
- If any fueling of equipment needs to occur in areas directly draining to the wetlands along Belmont Creek, containment shall be provided in such a manner that any accidental spill of fuel shall not be able to enter the water or contaminate sediments that may come in contact with water.
- A hazardous materials management/fuel spill containment plan will be developed and implemented by the construction contractor and given to all contractors working on the project, with at least one copy of the plan located on the site at all times. The purpose of the plan is to provide construction managers, environmental compliance monitors, and regulatory agencies with a detailed description of hazardous materials management, spill prevention, and spill response/cleanup measures associated with the construction of the project elements. The primary objective of the plan is to prevent a spill of hazardous materials. Elements of the plan will include, but are not limited to the following:
    - A discussion of hazardous materials management, including delineation of hazardous material and hazardous waste storage area, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas;
    - Materials Safety Data Sheets for all chemicals used and stored on site;
    - An inventory list of emergency equipment;
    - Spill control and countermeasures including employee spill prevention/response training;
    - Notification and documentation procedures; and
    - A monthly reporting plan.
- Vehicles will be checked daily for oil or fuel leaks and will be washed only at an approved area. No washing of vehicles will occur within areas directly draining to the wetlands along Belmont Creek.
- Within 100 ft of tidal wetlands along Belmont Creek, the work site, areas adjacent to the site, and access areas will be maintained in an orderly condition, free and clear from debris and discarded

materials. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust onto adjacent areas or wetlands or waterways. Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the project site.

- Stockpiled materials in areas draining to the tidal wetlands along Belmont Creek will be covered by plastic sheeting, tarps, or similar material that can be secured during wind and rain. A sediment fence or berm will be installed around stockpiled dredged material to prevent runoff from transporting sediment into sensitive habitats (such as wetlands and open waters).
- Water conservation methods will ensure that water used in the project site does not create surface flows capable of carrying pollutants to the nearby slough channel. All personnel, including sub-contractors, will be instructed on the practical methods of preventing leaks or over-use of watering, and will be required to adhere to the practices in the detail sheets provided.
- Silt fencing will be erected along the limits of disturbance between the project site and wetlands along Belmont Creek during construction activities that could potentially result in siltation of wetlands and open waters of Belmont Creek.

6.1.3 Impacts on Breeding Birds (Less than Significant with Recommended Measures)

Although no special-status birds breed on the project site itself, two special-status bird species may breed in low numbers in habitats adjacent to the site – the Alameda song sparrow and white-tailed kite. Given these species' territorial nature and the quality of habitat adjacent to the site, no more than 2-3 pairs of song sparrows and one pair of white-tailed kites is expected to breed close to the site. Because no suitable habitat for these species is present within the project site itself, the project will not result in direct, physical impacts to individuals or nests of these species, or in the loss of these species' habitat. However, activities that occur during the nesting season (generally February 1 through August 31) and cause a substantial increase in noise or human activity near active nests may result in the abandonment of active nests (i.e., nests with eggs or young). Heavy ground disturbance, noise, and vibrations caused by project activities could potentially disturb nesting and foraging individuals and cause them to move away from work areas.

In addition, a number of non-special-status bird species may nest on or adjacent to the site. Some of these species nest in ornamental vegetation or on the existing building on the site, while others nest in similar substrates in immediately adjacent areas. Demolition and construction activities during the avian breeding season could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the lack of sensitive habitats on the project site, the habitats on the project site support only regionally common, urban-adapted breeding birds and support only a very small proportion of these species' regional populations. In addition, birds are expected to nest and forage on the project site in greater abundance after project construction is completed due to the proposed landscaping.

All native bird species that nest on or adjacent to the project site, including both special-status species such as the Alameda song sparrow and white-tailed kite and non-special-status species, are protected by the federal MBTA and the California Fish and Game Code. Implementation of the following recommended measures would reduce project impacts on nesting birds by avoiding disturbance of active nests during project demolition and construction.

Seasonal Avoidance. To the extent feasible, tree removal, demolition, and the start of construction activities should be scheduled to avoid the nesting season. If such activities take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Preconstruction/Pre-disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds should be conducted by a qualified biologist to ensure that no nests of migratory birds will be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of tree removal, demolition, ground disturbance, or construction activities for each construction phase. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings, and the ground) in and immediately adjacent to the impact areas for migratory bird nests.

Buffers. If an active nest is found within areas that would be disturbed by project activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

6.1.4 Impacts on Nonbreeding Special-Status Birds (Less than Significant)

Several special-status bird species may occur within or near the project site as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed on or near the project impact area due to the absence of suitable breeding habitat. These are the California Ridgway's rail and California black rail, which may occasionally forage in the tidal marsh along Belmont Creek adjacent to the project site; American peregrine falcon, which may occasionally forage over or adjacent to the site (most likely along Belmont Creek); and tricolored blackbird, which may forage adjacent to the site near Belmont Creek.

Project activities would not result in the loss or disturbance of any suitable habitat for these species, as the project site does not currently provide suitable foraging habitat. Although individuals foraging in adjacent habitats may be temporarily disturbed by construction activities, such disturbance would not result in injury, mortality, or loss of important foraging opportunities for these species. As a result, the project will have very little impact on these species' regionally available foraging habitat and no impact on regional populations of these species. For all these reasons, impacts of the project on nonbreeding special-status birds would be less than significant.

6.1.5 Impacts on the Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew (Less than Significant with Recommended Measures)

Small numbers of salt marsh harvest mice and salt marsh wandering shrews may occur in pickleweed-dominated habitats along Belmont Creek, and individual salt marsh harvest mice and salt marsh wandering shrews may forage and/or take refuge during king tides within the ruderal grassland habitat located adjacent to the project boundary. Although these species are not expected to disperse into the construction area itself, they could potentially occur (at least in low numbers and infrequently in ruderal habitat immediately adjacent to the construction area). In the absence of recommended measures, project activities may result in the injury or mortality of salt marsh harvest mice and salt marsh wandering shrews as a result of crushing by equipment, vehicle traffic, and worker foot traffic if those activities are not clearly confined to the project site.

Small mammals within suitable habitat outside the project site will be subjected to increased noise and vibrations during construction. However, no studies have been conducted to determine what noise levels result in disturbance of salt marsh harvest mice. Should salt marsh harvest in nearby marsh habitat be disturbed by project activities, including noise or vibration, and move away from the source, they would move away from the project site and toward higher-quality marsh habitat farther out in Belmont Creek. Thus, project noise levels are not expected to cause salt marsh harvest mice or salt marsh wandering shrews to flush out into the open, or to increase mortality of individuals due to of predation. Furthermore, suitable habitat adjacent to the project site would only be subjected to substantially increased noise and vibrations during construction; following completion of construction, individual mice or shrews would re-occupy any habitat that was vacated during construction. Therefore, project noise impacts would not result in take of individual salt marsh harvest mice or salt marsh wandering shrews.

Building 2 and the parking structure would be located closer to the tidal marsh along Belmont Creek than the existing building, and the roofs of these buildings could potentially be used as perched by predatory birds that may prey on salt marsh harvest mice and salt marsh wandering shrews. However, ample perches in the form of trees, fencelines, light poles, and other structures are already present along the creek under existing conditions, and the construction of these buildings is not expected to result in a substantial increase in predation pressure on these special-status mammals.

Given the rarity of these species, any loss of use of suitable habitat or increase in predation of these species as a result of an increase in lighting would be a significant impact. Implementation of recommended measures

below, as well as recommended measures to minimize potential impacts of lighting (*Lighting Impact Reduction Measures* below), would reduce these potential impacts on salt marsh harvest mice, salt marsh wandering shrews, and their habitat to less-than-significant levels.

Worker Environmental Awareness Program. Before any construction activities begin, a qualified biologist will conduct a training session for all construction personnel. At a minimum, the training will include descriptions of the salt marsh harvest mouse and salt marsh wandering shrew, their habitats, the laws protecting them, the general measures that are being implemented to conserve these species as they relate to the project, and the boundaries within which the project may be accomplished.

Exclusion Barrier. Prior to the start of construction activities along the eastern edge of the project site, a barrier will be installed at the outer limits of the work area on the east side of the project site to exclude salt marsh harvest mice and salt marsh wandering shrews from the project site. This barrier will consist of a 3-ft tall, tight cloth, smooth plastic, or sheet-metal (or similar material) fence toed into the soil at least 3 inches deep and supported with stakes placed on the inside of the barrier. Following the installation of the barrier, designated construction personnel will check its integrity each morning that construction activities occur, and will initiate repairs immediately as needed.

Environmentally Sensitive Area Fencing. Prior to the start of construction activities along the eastern edge of the project site, the project limits on the east side of the site will be clearly demarcated with highly visible Environmentally Sensitive Area fencing to avoid inadvertent disturbance of any habitat outside of the designated construction area during construction activities. This fencing can be combined with the exclusion barrier but must not be outside that barrier.

Immediate Work Stoppage. If a salt marsh harvest mouse, salt marsh wandering shrew, or an animal that could be one of these species is observed on the project site during project activities, all work that could result in the injury or death of the individual will stop immediately and a qualified biologist will be immediately notified. The animal will be allowed to leave the area on its own and will not be handled.

6.1.6 Impacts on Nonbreeding Special-Status Mammals (Less than Significant)

The western red bat (a California species of special concern) usually roosts in the foliage of trees (Pierson et al. 2006). Day and night roosts are often located along the edges of riparian areas, near streams, grasslands, and even urban areas. During the breeding season, western red bats establish individual tree roosts and occasionally small maternity colonies in riparian habitats (Zeiner et al. 1990). Western red bats do not breed in San Mateo County, but may occasionally be present on the project site as a migrant or winter resident. Unlike most birds, bats experience daily bouts of torpor to save energy during seasonally cool periods. As a result, torpid bats cannot immediately fly away when disturbed, and typically require upwards of 40 minutes to arouse and flee. Therefore, there is some potential for tree removal to injure or kill individual red bats. Although little is known about the habitat use of western red bats during the nonbreeding season (Pierson et al. 2006), western red bats are uncommon, and no more than one or two individuals could be impacted by the project.

The pallid bat is a crevice-roosting bat, and there is some potential that dispersing individuals could roost in crevices in trees or in buildings on the project site. Removal of trees or demolition of existing buildings could result in injury or mortality of individual pallid bats if any area present at the time. However, due to the intensity of urban development in the project area and lack of habitat for a large roost, there is no expectation that a maternity colony or large roost of pallid bats would occur on the site. Therefore, the number of individuals that could be impacted is very low, if any are impacted at all.

Because of the low probability of such impacts, and because such limited impacts on the western red bat and pallid bat would affect only a very small proportion of regional populations of these species, project impacts would not rise to the CEQA standard of having a *substantial* adverse effect and would therefore be less than significant.

6.1.7 Impacts on Animals due to Increased Lighting (Less than Significant with Recommended Measures)

The installation of lighting on buildings and around roads, paths, and parking lots may result in potential impacts on animal species. Many animals, both special-status and common species, are sensitive to light cues, which influence their physiology and shape their behaviors, particularly during the breeding season (Ringer 1972, de Molenaar et al. 2006). Artificial light has been used as a means of manipulating breeding behavior and productivity in captive birds for decades (de Molenaar et al. 2006), and has been shown to influence the territorial singing behavior of wild birds (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006). While it is difficult to extrapolate results of experiments on captive birds to wild populations, it is known that photoperiod (the relative amount of light and dark in a 24-hour period) is an essential cue triggering physiological processes as diverse as growth, metabolism, development, breeding behavior, and molting (de Molenaar et al. 2006). This holds true for mammals and other taxa as well (Beier 2006), suggesting that increases in ambient light may interfere with these processes across a wide range of species, resulting in impacts on wildlife populations. Artificial lighting may also indirectly affect animals by increasing the nocturnal activity of predators such as owls, hawks, and mammalian predators (Negro et al 2000, Longcore and Rich 2004, DeCandido and Allen 2006, Beier 2006). The presence of artificial light may influence habitat use by rodents (Beier 2006) and breeding birds (Rogers et al. 2006, de Molenaar et al. 2006) by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing migrating birds to be attracted to bright lights is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds are frequently drawn from their migratory flight paths into the vicinity of an artificial light source, where they will reduce their flight speeds, increase vocalizations, and/or end up circling the lit area, effectively "captured" by the light (Herbert 1970, Gauthreaux and Belser 2006, Sheppard and Phillips 2015, Van Doren et al. 2017). When birds are drawn to artificial lights during their migration, they may become disoriented and possibly blinded by the intensity of the light (Gauthreaux and Belser 2006). The disorienting and blinding effects of artificial lights directly impact migratory birds by causing collisions with light structures,

buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect impacts on migrating birds might include orientation mistakes and increased length of migration due to light-driven detours.

Up-lighting refers to light that projects upwards above the fixture. There are two primary ways in which the luminance of up-lights might impact the movements of birds. First, local birds using habitats on a site may become disoriented during flights among foraging areas and fly toward the lights, colliding with the lights or with nearby structures. Second, nocturnally migrating birds may alter their flight direction or behavior upon seeing lights; the birds may be drawn toward the lights or may become disoriented, potentially striking objects such as buildings, adjacent power lines, or even the lights themselves.

The project will result in the construction of buildings and other features that will necessitate lighting within and around the project footprint. Lighting from the project would be the result of light fixtures illuminating buildings, building architectural lighting, and parking structure and pedestrian lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting can potentially spill into adjacent natural areas such as Belmont Creek. If lighting of Belmont Creek were to increase, animals using these areas (including special-status species such as salt marsh harvest mice and salt marsh wandering shrews) may be subject to increased predation, decreased habitat availability (for species that show aversions to increased lighting), and alterations of physiological processes if development under the proposed project produces appreciably greater illuminance than the existing conditions. This impact on local wildlife populations is potentially significant under CEQA due to the high ecological value of the adjacent portion of Belmont Creek and its tidal wetlands. In addition, lighting from the project also has some potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds moving along the San Francisco Bay at night may be (1) attracted to the site, where they are more likely to collide with buildings; and/or (2) disoriented by night lighting, potentially causing them to collide with the buildings (bird collision impacts are described further in Section 6.4.2).

As described in Section 3.3.1, the City of Belmont 2035 General Plan (City of Belmont 2017) includes Policy 5.3-6 to avoid and minimize light pollution ("Avoid light pollution and unnecessary glare by requiring development projects to use design features and shielding methods that cast outdoor light downward and minimize glare and to install the minimum amount of outdoor lighting necessary for safety and security"). Compliance with General Plan Policy 5.3-6 will minimize impacts of outdoor lighting on ecologically sensitive habitats and sensitive species associated with Belmont Creek. In combination with Policy 5.3-6, implementation of the following recommended measures would reduce impacts of project lighting on animals to less-than-significant levels.

> **Lighting Impact Reduction Measures.** The following measures will be implemented to reduce spillover of lighting into, or glare/increased luminance perceived by animals using Belmont Creek, as well as adverse effects of lighting on migratory birds.

- Exterior lighting shall be minimized (e.g., by turning lights off) in accordance with recommendations from the International Dark-Sky Association (2011) from midnight until dawn, at a minimum, except as needed for safety and City code compliance.

- Spillage of lighting from building interiors shall be minimized using occupancy sensors, dimmers, or other mechanisms from midnight until dawn, at a minimum, during bird migration seasons (February–May and August–November). If desired, this measure may be voluntarily implemented year-round.

6.2 Impacts on Sensitive Communities: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Recommended Measures)

6.2.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (Less than Significant with Recommended Measures)

The CDFW defines sensitive natural communities and vegetation alliances using NatureServe's standard heritage program methodology (CDFW 2022), as described above in Section 5.3. Aquatic, wetland, and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS (see Section 6.3 below). Project impacts on sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, were considered and evaluated.

The project will not have direct impacts on tidal salt marsh (considered a sensitive natural community as "northern coastal salt marsh"), or open water/tidal aquatic habitat. However, construction could result in impacts on water quality, which would degrade these sensitive habitats, as described in Section 6.1.2; in the absence of recommended measures to avoid and minimize such impacts, these impacts could be significant given the ecological value of tidal wetland and aquatic habitats.

Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the project. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and maintained during the project and it must include the use of BMPs to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances or wash racks, among other elements.

In many Bay Area counties, including San Mateo County, projects must also comply with the *California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit* (MRP) (Water Board Order No. R2-2015-0049). This MRP requires that all projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. These same features will be used to treat any stormwater that flows to the off-site brackish marsh during large storm events. Compliance with these stormwater requirements and implementation of the recommended measure (*Water Quality*) in Section 6.1.2 would reduce water-quality impacts to less-than-significant levels.

Shading from Building 2 and the parking garage could have some effect on vegetation in wetlands along Belmont Creek. Building 2 would be seven stories tall and the parking garage would be nine stories tall. Given their proximity to the edge of the tidal wetlands (approximately 110 ft), these buildings could cast some shade over wetlands along the creek. Being situated on the southwest side of the creek, these buildings will cast a shadow on tidal wetlands during portions of the afternoon. However, the setbacks between the buildings and the creek's tidal wetlands, and the northern, eastern, and southern exposure of these wetlands to the sun (without shading from buildings) most of the time, are expected to minimize any adverse effects of shading from buildings on wetlands along Belmont Creek, and no substantial loss or degradation of tidal wetlands will result from increased shading.

6.3 Impacts on Wetlands: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant with Recommended Measures)

As described in Section 6.2, the project will not have direct impacts on tidal salt marsh or open water/tidal aquatic habitat. However, construction could result in impacts on water quality, which would degrade these sensitive habitats, as described in Section 6.1.2; in the absence of recommended measures to avoid and minimize such impacts, these impacts could be significant given the ecological value of tidal wetland and aquatic habitats. Compliance with stormwater requirements and implementation of the recommended measure (*Water Quality*) in Section 6.1.2 would reduce impacts on water quality within wetlands to less-than-significant levels. Wetlands could also be impacted by shading from new buildings, but for reasons described in Section 6.2, such impacts would not result in substantial loss or degradation of tidal wetlands.

6.4 Impacts on Wildlife Movement: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife

corridors, or impede the use of native wildlife nursery sites (Less than Significant with Recommended Measures)

6.4.1 Impacts on Terrestrial Wildlife Movement (Less than Significant)

The marsh and upland habitats along Belmont Creek serve as a movement pathway for terrestrial species, providing vegetative cover and foraging opportunities. Common, urban-adapted species such as raccoons and striped skunks may use the vegetation along Belmont Creek and landscaped areas along its margins to move east and west through the Redwood Shores area. Small mammals, such as mice and shrews, will also use this vegetation as cover to move between habitats. The project site does not extend beyond the current developed footprint; thus, development of the site would not impede animal movement along this wildlife movement pathway. In addition, the project site already consists of heavily disturbed habitats that are currently of little value to migrating wildlife. The redevelopment of the project site will have very little impact on wildlife movement, especially given that the adjacent marsh that will remain intact and navigable. Further, the terrestrial wildlife species that use these habitats are acclimated to high levels of disturbance and habitat fragmentation in the Belmont area. Therefore, construction of the project is not expected to result in significant impacts on the movements of individuals, and would not rise to the level of a substantial adverse effect on habitat connectivity and wildlife movement under CEQA.

6.4.2 Impacts due to Bird Collisions with Buildings (Less than Significant with Recommended Measures)

Under existing conditions, terrestrial land uses and habitat conditions on the project site and in surrounding vicinity consist primarily of developed areas such as buildings, parking lots, and busy roadways. Vegetation in most of these areas is very limited in extent, and consists primarily of non-native landscape trees and shrubs. Belmont Creek borders the project site on the east, and consists of a narrow tidal marsh, lined with nonnative ruderal grassland and scattered, nonnative, ornamental landscape trees. Nonnative vegetation supports fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation (without well-developed ground cover, understory, and canopy layers) further limits resources available to birds. Thus, although a number of urban-adapted bird species will regularly use the vegetation on the project site and surrounding developed areas, they typically do so in low numbers. As a result, the number of individual landbirds that inhabit and regularly use vegetation on the project site at any given time under existing conditions is relatively low.

Following project construction, the number of birds that use the site may increase somewhat due to the proposed expansion of landscaped areas on the site and the planting of additional landscape trees, shrubs, and herbaceous vegetation. Landscape plantings throughout the project site will consist of a mix of native and nonnative trees, as well as primarily native shrubs and herbaceous plants. Some of this vegetation, including native coast live oak trees (*Quercus agrifolia*), will offer relatively high-value foraging and cover resources for native birds relative to existing conditions. Overall, however, due to the continued lack of large areas of native vegetation and lack of structural complexity, the addition of landscaped areas to the project site will not create high-quality bird habitat within this area.

The project site is located at the base of the Redwood Shores peninsula, adjacent to a narrow reach of Belmont Creek and within approximately one mile of more the extensive tidal marshes surrounding the peninsula. These marshes provide regionally important habitat for many species of waterbirds and marsh-associated birds. A review of data associated with the "Sem Ln. public access trail" eBird hotspot located along the trail immediately east of the project site indicates that 139 species of birds have been recorded along Belmont Creek adjacent to the project site (Cornell Lab of Ornithology 2022). The majority of these species are common resident, migrant, or wintering wading birds, waterfowl, and passerines (i.e., songbirds).

In general, bird species that are attracted to marsh and aquatic habitats in the project vicinity are expected to move past the project site when flying along Belmont Creek, or when flying between these habitats. The numbers of these birds moving past the site will vary by time of year and by species. Many birds, such as waterfowl, often tend to move in large groups, while other species, such as Alameda song sparrows, will move through individually. Local bird numbers also vary by time of year, as many birds form small to large flocks during winter and migration, and occur in more widely spaced pairs during the breeding season. Shorebirds and waterbirds are unlikely to disperse from the adjacent reach of Belmont Creek onto the project site, as these species are strongly associated with tidal habitats and open water. Therefore, no shorebirds or waterbirds are expected to move onto or through the project site regularly or in numbers.

Landbirds, however, will be attracted to trees and landscaped areas on the site, and will primarily move between the areas of landscaping on the site and in the surrounding vicinity. Moderate numbers of migratory songbirds are concentrated at the edge of the San Francisco Bay during spring and fall migration, though they tend to use more heavily vegetated areas such as riparian corridors or large, well-vegetated parks such as Coyote Point in San Mateo, or Shoreline Park in Mountain View. No heavily vegetated park areas or natural habitat such as riparian vegetation is present in the vicinity of the project site to attract migrating songbirds (or would be present with project implementation), and the project site is not located between two high-quality habitat areas such that songbirds would be flying past the site at an altitude as low as the proposed buildings. As a result, there is no expectation that migratory songbirds would be particularly attracted to, or would make heavy use of, the habitats in the site vicinity.

Nevertheless, due to the disproportionately high habitat value of the undeveloped tidal marshes surrounding the Redwood Shores peninsula compared to more developed areas of Belmont, as well as the relatively large number of migrants seasonally concentrated along the edge of the San Francisco Bay, fairly large numbers of birds are expected to fly past the project site relative to regional populations. Resident birds that are present in the vicinity year-round will use the vegetated habitats along Belmont Creek in moderate numbers for foraging, and songbirds migrating along the Pacific Flyway will utilize these habitats in moderate numbers for resting and foraging. As a result, higher numbers of birds are expected to be present along Belmont Creek compared to the surrounding developed areas of Belmont. Resident and migratory songbirds may disperse outward from the slough looking for foraging, resting, nesting, or roosting sites. During such dispersal, these birds could move toward and onto the project site and into the site's landscape vegetation.

Sensitive and rare bird species that occur in the site vicinity are discussed in the sections above. The only high-quality habitat for state and federally listed bird species (i.e., the California Ridgway's rail and California black rail) in the vicinity is located downstream of the site, and these species are not expected to fly past the site on a regular basis (and, hence, are not expected to be at-risk for collisions with glass on the proposed building). Small numbers of Alameda song sparrows, Bryant's savannah sparrows, and northern harriers, and larger numbers of yellow warblers, all California species of special concern when breeding, occur in the ruderal and marsh habitats adjacent to the project site and are expected to fly past the site in small numbers year-round. Several other sensitive species may occasionally fly over the site as occasional migrants, transients, or foragers, but are also not expected to occur on the site in appreciable numbers. No additional sensitive or rare bird species are expected to occur in the site vicinity.

It has been well documented that glass windows and building façades can result in injury or mortality of birds due to birds' collisions with these surfaces (Klem et al. 2009, Sheppard and Phillips 2015). Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. The extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates (Gelb and Delacretaz 2009, Borden et al. 2010, Cusa et al. 2015, Riding et al. 2020). Further, the greatest risk of avian collisions with buildings occurs in the area within 60 feet of the ground because this is the area in which most bird activity occurs (San Francisco Planning Department 2011, Sheppard and Phillips 2015).

Three separate buildings are proposed to be constructed on the project site. Two of these buildings (Buildings 1 and 2) are office, technology, and/or R&D, including life sciences, buildings, and the third is a parking garage. The three buildings create a central courtyard amenity space. The central portion of the site will be an open, landscaped area vegetated with a mix of native and nonnative trees, and predominantly native shrubs and native herbaceous plants. Resident and migratory landbirds are expected to be present along Belmont Creek, and some could disperse onto the project site from these areas. These birds will be drawn westward into landscaped habitats adjacent to the building facades into the interior landscaped areas adjacent to buildings one and two, as well as into the narrower, north-south landscaped passageway between these two buildings (Figure 6). Additionally, birds are likely to move westward from Belmont Creek along the northern boundary of the project site, as large trees, including native coast live oaks, are proposed along this boundary. As a result, there is some potential for bird collisions with the glass facades of the proposed buildings.

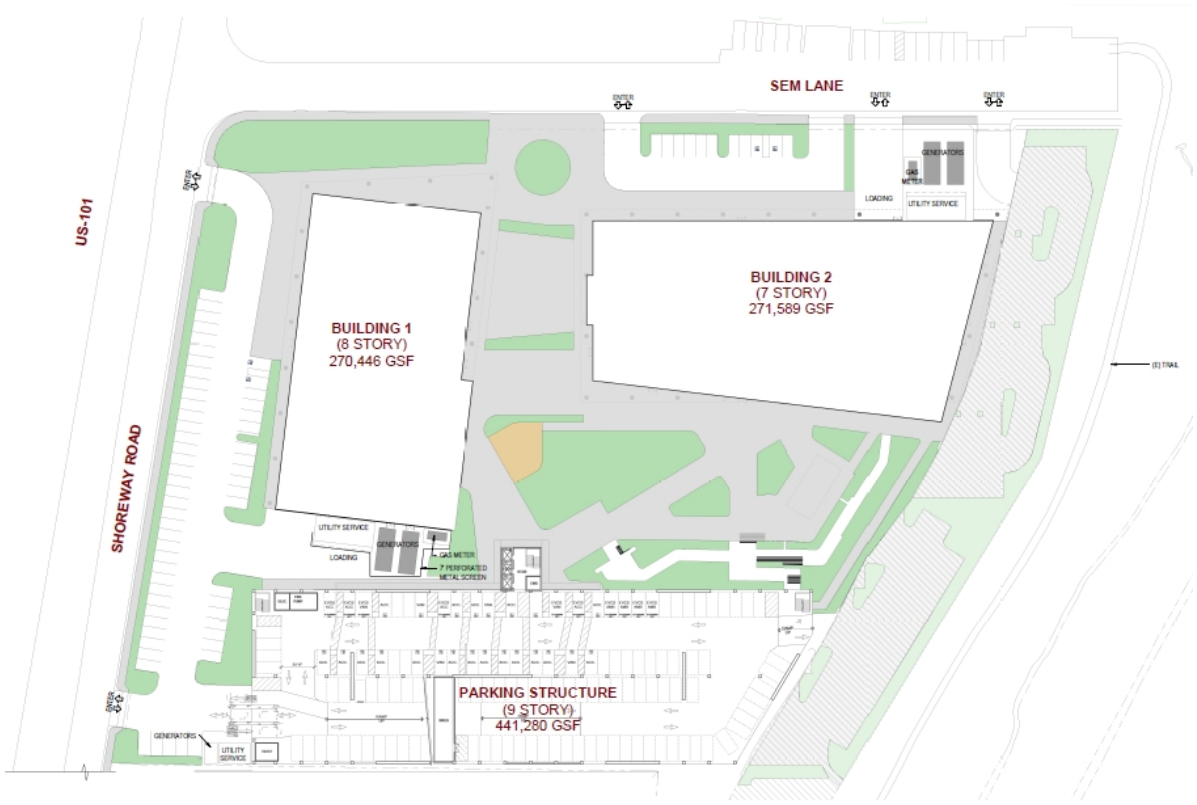


Figure 6. Site Plan. Resident and migratory landbirds are expected to disperse onto the site from Belmont Creek to the east (right) into landscaped areas adjacent to and between the buildings and along the northern margin of the site, where they may encounter glass building façades.

Certain architectural features of the proposed buildings may reduce their overall collision risk to birds. Based on the project plans, the proposed parking garage will have very little glass on its façade, and thus, will not pose a heightened collision risk to birds. Further, Buildings 1 and 2 may feature spandrel and opaque glass, vertical mullion extensions (i.e., fins), minimized and shielded exterior lighting, and recessed glass facades in some areas. Fins and recessed glazing increase the visibility of the building to birds approaching from varying oblique angles, and opaque and spandrel glass reduce the risk of collision due to transparency. Nevertheless, the facades of Buildings 1 and 2 are expected to present large expanses of reflective glass where birds can potentially perceive reflected sky and/or vegetation and collide with the glass as they attempt to reach those reflections. Thus, the extensive glazing proposed on Buildings 1 and 2 will likely result in some bird collisions.

The risk of collisions is highest where existing and proposed vegetation will be reflected in this glass, along the east and north facades of Building 1, and along all facades of Building 2. Such collisions are likely to be most frequent within 60 feet of the ground, where extensive glazing would be located opposite landscape vegetation, where birds will be drawn into the site from adjacent undeveloped habitats by landscape vegetation, and at the altitudes where most bird activity occurs. The risk is lower along the western and southern facades of Building 2, where less extensive (and less resource-rich) locally nonnative vegetation is proposed, and where the adjacent roadways (Bayshore Freeway and Shoreway Road) limit bird abundance. Given that a moderate number of

resident and migratory landbirds are expected to occur on the site after project completion, there is potential for avian collisions to occur frequently enough to result in a significant impact under CEQA. Implementation of the recommended measures for bird-safe building design below, as well as compliance with General Plan Policy 5.3-6 (regarding exterior lighting) and implementation of recommended measures (*Lighting Impact Reduction Measures*) in Section 6.1.7, would reduce these potential impacts to less-than-significant levels.

Implement Bird-Safe Building Design. Glazing on identified bird hazards (the east and north facades of Building 1 and all facades of Building 2) will be treated with a bird-safe glazing treatment such that no more than 10% of the total façade area from 0–60 feet above grade consists of untreated glazing. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted. Bird-safe glazing would have the following parameters:

a. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

   OR

b. Bird-safe glazing shall have a Threat Factor[1] less than or equal to 30.

To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the buildings will have a visible reflectance of 15% or lower.

6.5 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.5.1 Impacts Due to the Removal of Ordinance-Sized Trees (Less than Significant)

The proposed project will remove trees on the project site, likely including trees that meet the definition of "protected" trees by City of Belmont. Per the City of Belmont Tree Ordinance, permits from the City's planning and building department and payment of a fee are required for the removal of any trees which meet the definition of "protected" tree, as defined in Section 3.3.2 above. The removal of trees protected by the City of

[1] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/uploads/2021/01/Master-spreadsheet-1-25-2021.xlsx.

Belmont's tree ordinance, in the absence of compliance with the City's Municipal Code, would be considered potentially significant under CEQA.

As described in Section 3.3.1, the City of Belmont 2035 General Plan (City of Belmont 2017) includes policies that protect natural resources such as trees. The most relevant policies are 5.3-5 ("In design and construction, require use of best practices that preserve natural resources, such as soil, trees, native plants, and permeable surfaces") and 5.3-9 ("Promote the healthy growth of trees and control the removal of trees within the city"). Compliance with these policies will minimize project impacts on ordinance-sized trees. In addition, in accordance with the provisions of the City of Belmont tree protection ordinance, the project will comply with standard City of Belmont tree removal permit conditions and replace trees that are removed in accordance with these tree removal policies. Such compliance would reduce any potential impacts due to conflicts with the City's tree preservation ordinance to less-than-significant levels under CEQA.

6.6 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (Less Than Significant)

The San Bruno Mountain Habitat Conservation Plan is the only Habitat Conservation Plan that has been approved in San Mateo County, but this plan does not cover the project site or the surrounding vicinity. No Natural Community Conservation Plans have been approved or are in preparation in San Mateo County. Therefore, the proposed project would not conflict with any adopted Habitat Conservation Plans or Natural Community Conservation Plans, or with any other approved local, regional, or state habitat conservation plans.

6.7 Cumulative Impacts

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. The cumulative impact on biological resources resulting from the project in combination with other projects in the project vicinity and larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project; compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

Future development activities in this part of Belmont may result in impacts on the same habitat types and species that will be affected by the project. Implementation of the project, in combination with other projects in the area and other activities that impact the species that are affected by this project, could contribute to cumulative effects on special-status fish and EFH, federally or state protected wetlands and waters, habitat for

nonbreeding special-status species, migratory birds, and roosting bats. However, these projects will all comply with conditions of their City approvals (e.g., CEQA measures) as well as the conditions of any applicable regulatory agency permits, to avoid, minimize, and mitigate impacts on these resources, thus reducing cumulative impacts.

The 1301 Shoreway Road Project would implement recommended measures as necessary to reduce impacts on biological resources, as described above. Thus, the project will not have a cumulatively considerable contribution to cumulative impacts on biological resources.

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Appendix A. List of Observed Plants

Scientific Name	Common Name
Acacia melanoxylon	Blackwood acacia
Avena fatua	Wild oats
Baccharis pilularis	Coyote brush
Brassica nigra	Black mustard
Bromus diandrus	Ripgut brome
Bromus hordeaceus	Soft chess
Carduus pycnocephalus	Italian thistle
Carpobrotus chilensis	Chilean sea fig
Distichlis spicata	Salt grass
Erigeron canadensis	Horseweed
Erodium cicutarium	Stork's bill filaree
Eucalyptus conferruminata	Spider gum
Eucalyptus sideroxylon	Red iron bark
Festuca perennis	Italian rye grass
Foeniculum vulgare	Fennel
Frankenia salina	Alkali heath
Geranium dissectum	Wild geranium
Grindelia stricta	Gumweed
Hirschfeldia incana	Summer mustard
Hordeum murinum	Foxtail barley
Jaumea carnosa	Jaumea
Lactuca serriola	Prickly lettuce
Lepidium latifolium	Perennial pepperweed
Malva spp.	cheeseweed
Medicago polymorpha	California burclover
Plantago elongata	Coast plantain
Polypogon monspeliensis	Rabbitsfoot grass
Puccinellia maritima	Seaside alkaligrass
Rhamnus alaternus	Italian buckthorn
Rumex crispus	Curly dock
Salicornia pacifica	Pickleweed
Salsola soda	alkali Russian thistle
Silybum marianum	Milk thistle

Spartina alterniflora	smooth cordgrass
Stipa miliacea ssp. *miliacea*	Smilo grass
Trifolium hirtum	Rose clover
Vicia sativa	vetch

Appendix B. Representative Photos of the Study Area



Photo 1. Belmont Creek, tidal salt marsh, and ruderal grassland adjacent to the project site.



Photo 2. Belmont Creek and tidal salt marsh adjacent to the project site.



Photo 3. Developed/landscaped surface parking lot on the project site.

Appendix D

Arborist Report

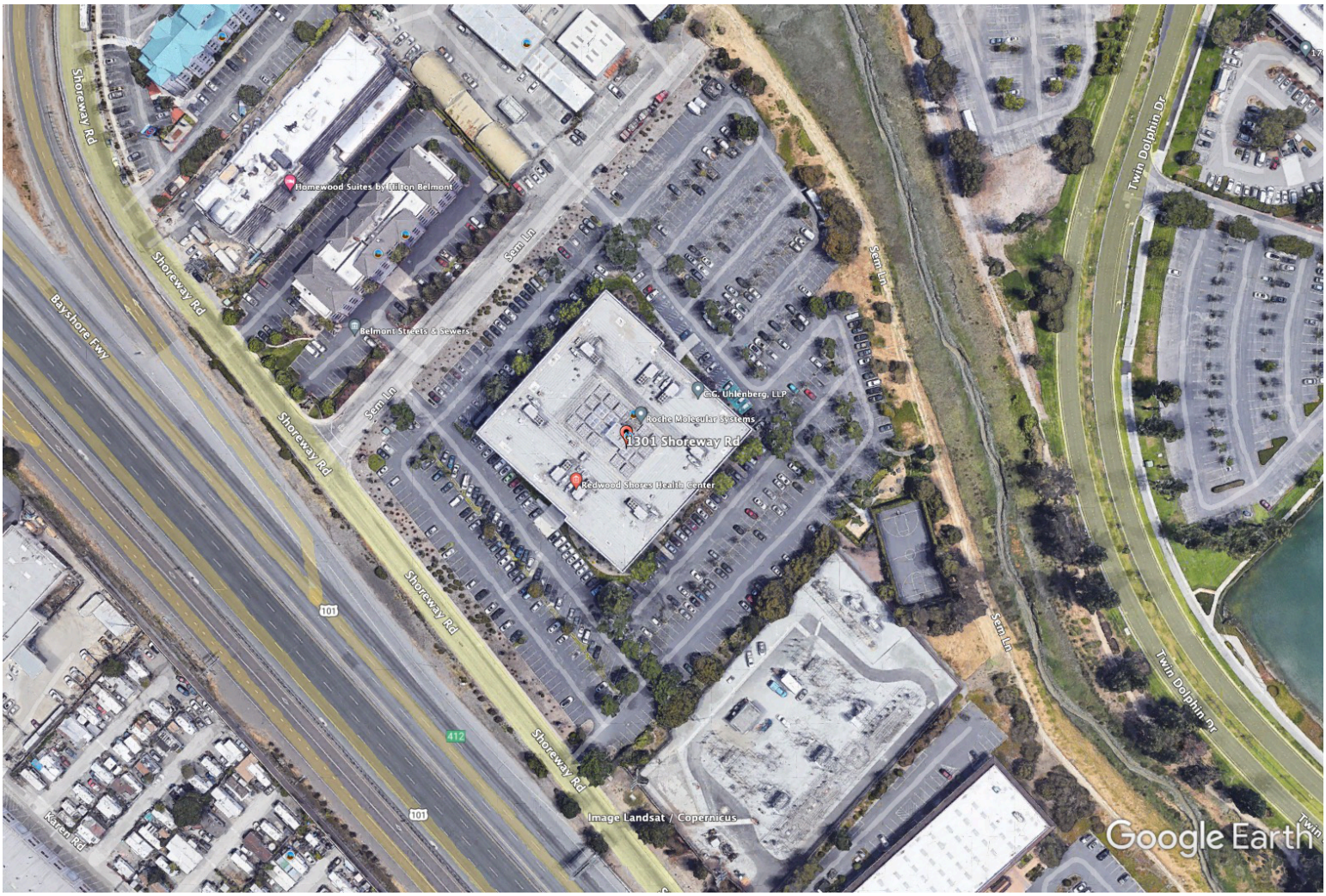
TREES, BUGS, DIRT

LANDSCAPE CONSULTING & TRAINING

ARBORIST REPORT

1301 Shoreway Road, Belmont CA

May 12, 2022



Prepared For: DGA
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SUMMARY
I located one hundred and seventy six trees on site. Sixteen tree species were identified. Tree trunk diameters range from 1 to 44.3 inches, averaging 9.2 inches. Tree health and form ranges from very poor to good, averaging poor. Structure ranges from very poor to excellent, averaging poor. Nineteen trees are good candidates for transplanting, boxing and holding for two to three years. Sixteen protected trees are located along (non-street) public rights of way. Eighteen protected trees are street trees. Twenty two protected trees are "large diameter". Removal of all trees on site is requested by the Client.

INTRODUCTION

ASSIGNMENT

I was hired by DGA (Client), to measure, map, tag as needed, digitally image, inventory & evaluate trees at 1301 Shoreway Road, Belmont, and to provide an Arborist Report that includes a summary of my observations, a tree location map, and other relevant information.

LIMITS OF ASSIGNMENT

- Trees were not surveyed, locations are approximate
- Trees not evaluated below ground or aerially
- Invasive or destructive methods were used to assess tree health
- Trees located outside of property lines were not mapped, or evaluated.
- Design alternatives to preserve trees, tree preservation guidelines, and tree appraisals not provided
- Soils analysis and interpretation not provided in this report

PURPOSE AND USE

This report is intended to provide information for the Client and the City of Belmont as part of the development and tree removal permit process.

BACKGROUND

The City of Belmont Municipal Code Chapter 25, protects street trees, right of way trees, large diameter trees, principal native trees of a certain size, and trees planted historically if required.

OBSERVATIONS

LOCATION

1301 Shoreway Road, Belmont CA

SETTING

The site is relatively flat except for mounded planting areas on Shoreway Road and Sem Lane, and includes paved driveways, curbs, gutters, sidewalks, a building with landscaping around it, a parking lot with planted medians and cutouts. Soils are classified as urban land (66%), **orthents** (30%), Novato series (2%, and Reyes series (1%). Novato soil series, typically found in tidal marshes, is located next to the property and is a very deep, very poorly drained soil. Typically this is a clay textured soil, with a water table near the soil surface. Most roots are found in the top sixteen inches.

METHODS

On May 9th and 10th 2022 I identified and mapped all trees within the proposed development envelope. I measured **trunk circumferences** at 4.6 feet above grade, tagged trunks, digitally imaged trees and assessed their **health, structural quality** and **form**.

Documents used:

- City of Belmont Municipal Code, Chapter 25
- Google Earth Pro, 2020
- US Soil Survey, Standard Soil Series Descriptions, Oregon State University
- Alta Survey Base, 5.5.2022, SWA

Measurements & Calculations

- Trunk circumferences measured at 4.6 feet above grade, unless otherwise noted
- Trunk circumferences measured with a tape wrapped around each trunk and divided by 3.14 to calculate diameter, rounded off to one significant digit
- Multiple trunks are reported individually as circumferences, combined and reported as
- Three largest multiple trunks summed to evaluate whether or not it is a “large diameter tree”

Health Structure & Form Evaluation Standards

+numerical rating; zero (dead), one (very poor), two (poor), three (fair), four (good), five (excellent)

+ form assessed by rating specimens on their deviance from the norm for the species in this region, visual qualities such as attractiveness, and engineering functions such as screening, shading and creating views

+qualitative descriptions and items assessed for health & structure include

- rooting zone - bare, mulched, limited space, weeds, competing vegetation, moisture, debris
- root crown region (trunk & root junction) - buried, clear, pests, diseases, wet, wounds, cavities
- trunk - taper, lack of taper, wounds, lean, growth cracks, stress cracks, pests, diseases, wounds
- scaffold (major) branches - taper, distribution branches, strength of branch connections, wounds, pests
- smaller branches - distribution, size, amount, strength of connections, pests, diseases
- twigs - annual growth, color, size, distribution, dead/live
- foliage - color, size, distribution, pests, diseases, leaf fall

DATA- See Appendix A for full data set

NUMBER & STATUS OF TREES

176 trees identified to species & locations mapped

- 120 trees not protected by city ordinance
- 22 protected large diameter trees
- 18 protected street trees
- 16 protected rights of way trees

SPECIES

Sixteen different species of trees were identified as follows:

name	***Genus species***	**number per species**
Sydney wattle	*Acacia longifolia*	2
blackwood acacia	*Acacia melanoxylon*	2
hedge maple	*Acer campestre*	12
marina strawberry tree	*Arbutus X marina*	8
deodar cedar	*Cedrus deodara*	3
bushy yate	*Eucalyptus lehmanii*	9
Raywood ash	*Fraxinus oxycarpa `Raywood'*	40
ginkgo tree	*Ginkgo biloba*	11
sweetgum	*Liquidambar styraciflua*	10
corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	3
Brisbane box	*Lophostemon confertus*	48
cajeput tree	*Melaleuca quinquenervia*	1
myoporum	*Myoporum laetum*	6
black stem pittosporum	*Pittosporum tenuifolium*	5
purple leaf plum	*Prunus cerasifera*	10
swamp myrtle	*Tristaniopsis laurina*	6
	TOTAL	**176**

SIZE

Tree trunk diameters range from 1.0 to 44.3 inches, averaging 9.2 inches.

HEALTH, STRUCTURE, AND FORM OF ALL TREES

- health and form ranges from very poor to good, averaging poor
- structure ranges from very poor to excellent, averaging poor

ANALYSIS - See Table B for Full Data Set

PROTECTED STATUS in Belmont CA

- 56 trees protected
    - 22 large diameter
    - 18 streets
    - 16 public rights of way

TRANSPLANTABLE

19 trees are good candidates for transplanting, containerizing, and holding for two to three years. Those trees are recommended based on health, structure, form, size and species.

APPENDIX A - DATA

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
52	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	23	*7.3*	fair	fair	fair	*Mound*
53	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	12	*3.8*	fair	fair	fair	*Unbalanced. On mound.*
54	*Sem*	marina strawberry tree	*Arbutus X marina*	12	*3.8*	fair	fair	fair	*Edge of mound. Large trunk cavity. Lions tailed.*
55	*Sem*	purple leaf plum	*Prunus cerasifera*	19	*6.1*	fair	poor	fair	*Measured at 2.5 feet. Multiple scaffold/ trunks with included bark, embedded tree ties*
56	*Sem*	marina strawberry tree	*Arbutus X marina*	7	*2.2*	poor	very poor	very poor	*Falling over, staked & tied*
57	*Edge of mound*	marina strawberry tree	*Arbutus X marina*	17	*5.4*	good	fair	fair	*Lions tailed*
58	*Edge of mound*	marina strawberry tree	*Arbutus X marina*	20	*6.4*	good	fair	fair	
59	*Edge of mound*	marina strawberry tree	*Arbutus X marina*	15	*4.8*	fair	fair	fair	*Leaning*
60	*edge of mound*	purple leaf plum	*Prunus cerasifera*	11	*3.5*	good	fair	fair	
61	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	16	*5.1*	very poor	very poor	very poor	
62	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	5,6,7	*5.7*	good	good	good	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
63	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	9.5	*3.0*	good	fair	fair	*Unbalanced*
64	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	3	*1.0*	poor	poor	poor	*Stunted*
65	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	3	*1.0*	very poor	very poor	very poor	*Stunted*
66	*Perim-eter*	hedge maple	*Acer campestre*	10	*3.2*	good	good	good	
67	*Perim-eter*	cajeput tree	*Melaleuca quinquenervi a*	48.5	*15.4*	good	fair	good	
68	*Perim-eter*	hedge maple	*Acer campestre*	12	*3.8*	good	fair	fair	*Odd shape*
69	*Perim-eter*	hedge maple	*Acer campestre*	10	*3.2*	good	fair	fair	*Odd shape*
70	*Perim-eter*	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	13	*4.1*	good	good	good	
1502	*Shore-way*	marina strawberry tree	*Arbutus X marina*	18	*5.7*	fair	fair	fair	*On mound, leaning, lions tailed*
1505	*Shore-way*	black stem pittosporu m	*Pittosporum tenuifolium*	17	*5.4*	poor	poor	poor	*Measured at 3'. Severe trunk lean. Large trunk cavity. Stunted . On mound*
1506	*Shore-way*	black stem pittosporu m	*Pittosporum tenuifolium*	18	*5.7*	fair	poor	fair	*Measured at 3'. Lions tailed shrub. On mound*
1507	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	14	*4.5*	fair	fair	fair	*On mound*
1508	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*On mound . Measured at 4'*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1509	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*Unbalanced. On mound. Measured at 4'*
1511	*Shore-way*	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*On mound. Lions tailed*
1512	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	57.5	*18.3*	fair	fair	fair	*Lions tailed*
1513	*Sem*	marina strawberry tree	*Arbutus X marina*	15	*4.8*	fair	fair	fair	*Edge of mound*
1514	*Edge of mound*	black stem pittosporu m	*Pittosporum tenuifolium*	17.5	*5.6*	fair	fair	fair	
1515	*Sem*	marina strawberry tree	*Arbutus X marina*	30	*9.6*	fair	fair	fair	*Unbalanced. Edge of mound*
1517	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	56	*17.8*	fair	fair	fair	*Dieback*
1519	*Sem*	black stem pittosporu m	*Pittosporum tenuifolium*	16	*5.1*	poor	poor	poor	*Sun scalded trunk*
1520	*Sem*	purple leaf plum	*Prunus cerasifera*	19	*6.1*	fair	poor	fair	*Measured at 2.5 feet. Multiple scaffold/ trunks with included bark,*
1522	*Sem*	black stem pittosporu m	*Pittosporum tenuifolium*	11	*3.5*	very poor	very poor	very poor	*Measured at 4'. Sun scalded trunk. Dying back*
1524	*Sem*	purple leaf plum	*Prunus cerasifera*	11	*3.5*	fair	poor	fair	*Measured at 2'. Multiple scaffold/ trunks with included bark,*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1526	*Nw corner past parking*	blackwood acacia	*Acacia melanoxylon*	54	*17.2*	fair	fair	fair	*Near public row*
1527	*Nw corner past parking*	blackwood acacia	*Acacia melanoxylon*	37	*11.8*	poor	poor	poor	*Trunk leaning. Stunted*
1528	*Nw corner past parking*	myoporum	*Myoporum laetum*	16,17,10.5,15 ,16,11,11,12	*34.6*	poor	poor	poor	*Multiple trunks with included bark. Infested with myoporum thrips.*
1530	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	25,21,15,12,1 8,21	*35.7*	poor	poor	fair	*Multiple trunks with included bark. Dieback*
1531	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	30	*9.6*	fair	poor	poor	*Trunk cavity, intertwined with #1532*
1532	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	19,25	*14.0*	fair	poor	poor	*Intertwined with 1531, torn scaffold*
1533	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	23	*7.3*	poor	poor	poor	*Unbalanced. Dieback*
1534	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	22,18,19	*18.8*	poor	poor	poor	*Unbalanced. Dieback. Multi trunks with included bark*
1535	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	34	*10.8*	poor	poor	poor	
1536	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	22,27	*15.6*	poor	poor	poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1537	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	27	*8.6*	very poor	very poor	very poor	*Dieback*
1538	*Past parking lot*	bushy yate	*Eucalyptus lehmanii*	37	*11.8*	fair	fair	fair	*Dominant*
1539	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31	*9.9*	fair	poor	poor	*Dieback lions tailed*
1540	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	29.5	*9.4*	poor	fair	poor	*Dieback*
1541	*Past parking lot*	myoporum	*Myoporum laetum*	34	*10.8*	very poor	very poor	very poor	*Severe thrips infestation. Dying*
1542	*Past parking lot*	myoporum	*Myoporum laetum*	16,14	*9.6*	very poor	very poor	very poor	*Fallen. Dying. Thrips.*
1543	*Past parking lot*	myoporum	*Myoporum laetum*	40	*12.7*	poor	poor	poor	*Trunk leaning, engulfed by ice plant, cavities, thrips*
1544	*Past parking lot*	myoporum	*Myoporum laetum*	18,24,27	*22.0*	poor	very poor	poor	*Fallen & leaning trunks. Thrips . Trunk cavities & included bark*
1546	*Past parking lot*	myoporum	*Myoporum laetum*	15,16,19,19	*22.0*	very poor	very poor	very poor	*Fallen & leaning trunks with included bark, thrips*
1547	*Past parking lot*	Sydney wattle	*Acacia longifolia*	14	*4.5*	very poor	very poor	very poor	
1548	*Past parking lot*	Sydney wattle	*Acacia longifolia*	10,8,8	*8.3*	very poor	very poor	very poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1549	*past ne corner of parking lot*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	44	*14.0*	poor	poor	poor	*Engulfed by ice plant, trunk leaning, dieback*
1550	*past north parking lot*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	56	*17.8*	poor	poor	poor	*In fine fescue turf, large branches dying back*
1554	*Past north parking lot*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	74	*23.6*	poor	poor	poor	*In fine fescue turf, large branches dying back*
1555	*Past north parking lot*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	45	*14.3*	fair	fair	fair	*In fine fescue, 10% Dieback*
1556	*North parking lot median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	50	*15.9*	fair	fair	fair	
1557	*Shore-way, parking lot entrance*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	75	*23.9*	fair	poor	fair	*Lions tailed*
1558	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	42.5	*13.5*	poor	fair	poor	*Top sparse & dying back*
1559	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	33	*10.5*	poor	fair	poor	*Thin*
1560	*Median*	Brisbane box	*Lophostemon confertus*	30	*9.6*	very poor	poor	poor	*Very stunted & thin*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1561	*Median*	Brisbane box	*Lophostemon confertus*	39	*12.4*	fair	poor	fair	*Lions tailed*
1562	*Median*	Brisbane box	*Lophostemon confertus*	48	*15.3*	poor	poor	fair	*Lions tailed, thin*
1563	*Median*	Brisbane box	*Lophostemon confertus*	29	*9.2*	poor	poor	poor	*Chlorotic*
1564	*Median*	Brisbane box	*Lophostemon confertus*	44	*14.0*	fair	fair	fair	*Girdling root*
1565	*Median*	Brisbane box	*Lophostemon confertus*	33	*10.5*	poor	poor	poor	*Chlorotic sparse stunted , Codominant scaffolds with included bark*
1566	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	22	*7.0*	poor	very poor	very poor	*Large trunk cavity*
1567	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	poor	poor	poor	
1568	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	24	*7.6*	very poor	very poor	very poor	
1569	*Perim-eter*	hedge maple	*Acer campestre*	10	*3.2*	good	good	good	
1570	*Perim-eter*	hedge maple	*Acer campestre*	8	*2.5*	good	fair	fair	*Unbalanced*
1571	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	5.5	*1.8*	fair	fair	fair	
1572	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	5	*1.6*	good	fair	fair	*Unbalanced*
1576	*Perim-eter*	hedge maple	*Acer campestre*	9	*2.9*	good	fair	fair	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1577	*Perim-eter*	hedge maple	*Acer campestre*	7.5	*2.4*	good	good	good	
1578	*Perim-eter*	hedge maple	*Acer campestre*	6	*1.9*	fair	fair	fair	
1580	*Building perim-eter*	deodar cedar	*Cedrus deodara*	98	*31.2*	fair	good	fair	*Top sparse, yellowing*
1581	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	77	*24.5*	poor	poor	poor	*Dieback*
1583	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	61	*19.4*	fair	fair	fair	
1584	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	38	*12.1*	fair	fair	fair	
1585	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	34	*10.8*	fair	fair	poor	
1586	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	35.5	*11.3*	fair	fair	poor	*Codominant*
1587	*Cutout*	Brisbane box	*Lophostemon confertus*	24	*7.6*	poor	fair	fair	
1588	*Cutout*	Brisbane box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	very poor	
1589	*Cutout*	Brisbane box	*Lophostemon confertus*	23	*7.3*	very poor	very poor	very poor	
1590	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	
1591	*Cutout*	Brisbane box	*Lophostemon confertus*	20	*6.4*	poor	fair	poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1592	*Cutout*	Brisbane box	*Lophostemon confertus*	13	*4.1*	very poor	poor	poor	
1593	*Cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	
1594	*Cutout*	Brisbane box	*Lophostemon confertus*	10	*3.2*	very poor	very poor	very poor	
1595	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	poor	very poor	very poor	
1596	*Cutout*	Brisbane box	*Lophostemon confertus*	14.5	*4.6*	very poor	very poor	very poor	
1597	*Cutout*	Brisbane box	*Lophostemon confertus*	13.5	*4.3*	very poor	very poor	very poor	
1598	*Cutout*	Brisbane box	*Lophostemon confertus*	17	*5.4*	very poor	very poor	very poor	
1599	*Cutout*	Brisbane box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	very poor	
1600	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	25.5	*8.1*	poor	poor	poor	
1602	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	20	*6.4*	poor	poor	poor	
1603	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28.5	*9.1*	poor	poor	poor	*Long trunk cavity*
1604	*Cutout*	Brisbane box	*Lophostemon confertus*	11	*3.5*	very poor	very poor	very poor	
1605	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	32	*10.2*	poor	poor	poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1606	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31.5	*10.0*	fair	fair	fair	
1607	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26.5	*8.4*	poor	poor	poor	*Dieback*
1608	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28	*8.9*	poor	poor	poor	*Dieback*
1609	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	poor	poor	poor	*Sparse*
1610	*Cutout*	Brisbane box	*Lophostemon confertus*	11	*3.5*	very poor	very poor	very poor	*Sparse, minimal*
1611	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28	*8.9*	poor	poor	poor	
1612	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	23	*7.3*	very poor	very poor	very poor	
1613	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	62	*19.7*	poor	poor	poor	*Dieback*
1614	*Median*	ginkgo tree	*Ginkgo biloba*	3,2.5	*1.8*	poor	poor	poor	*Stunted*
1615	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	3	*1.0*	poor	poor	poor	*Stunted*
1616	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	41	*13.1*	fair	poor	poor	*Codominant*
1617	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	45	*14.3*	fair	fair	fair	*Codominant*
1618	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	48	*15.3*	fair	fair	fair	*Trunk cavity, leaning*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1619	*Perim-eter*	hedge maple	*Acer campestre*	9	*2.9*	good	good	good	
1620	*Perim-eter*	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	7	*2.2*	good	good	good	
1621	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	3	*1.0*	fair	fair	fair	
1623	*Perim-eter*	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	12.5	*4.0*	good	good	good	
1626	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	13,12,8,7	*12.7*	poor	fair	fair	*Stunted. Multi trunk with included bark*
1627	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	11,12,16,10	*15.6*	poor	fair	fair	*Twig dieback. Multi trunk with included bark*
1628	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	22.5,21.5,17, 14	*23.9*	poor	fair	fair	*Hacked away from building , multiple trunks with included bark . Twig dieback*
1629	*Perim-eter*	hedge maple	*Acer campestre*	9.5	*3.0*	excelle nt	good	good	*Codominant scaffolds with included bark*
1630	*Perim-eter*	hedge maple	*Acer campestre*	8	*2.5*	good	good	good	
1632	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	20,20,20	*19.1*	fair	poor	fair	*Hacked away from building , multiple trunks with included bark*
1633	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	4	*1.3*	good	fair	good	
1634	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	15.5,12.5,16	*44.3*	fair	poor	poor	*Hacked away from building , multiple trunks with included bark*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1636	*Perim-eter*	ginkgo tree	*Ginkgo biloba*	4.5	*1.4*	poor	poor	poor	*Stunted*
1637	*Perim-eter*	purple leaf plum	*Prunus cerasifera*	19,14.5,16,37	*27.5*	fair	poor	poor	*Hacked away from building , Codominant trunks with included bark*
1638	*Perim-eter*	hedge maple	*Acer campestre*	8.5	*2.7*	good	fair	fair	
1639	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	69	*22.0*	very poor	very poor	very poor	*Dieback*
1640	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	58	*18.5*	poor	poor	poor	*Dieback*
1641	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	42.5	*13.5*	fair	fair	fair	
1642	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	45	*14.3*	fair	fair	fair	
1643	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	42	*13.4*	poor	poor	poor	
1644	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	41	*13.1*	poor	poor	poor	*Dead scaffold, dieback*
1646	*Perim-eter*	deodar cedar	*Cedrus deodara*	76	*24.2*	good	good	good	*Hacked away from building*
1647	*Perim-eter*	sweetgum	*Liquidambar styraciflua*	51	*16.2*	fair	fair	fair	*Hacked away from building*
1649	*Perim-eter*	deodar cedar	*Cedrus deodara*	71	*22.6*	fair	good	fair	*Sparse*
1650	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31	*9.9*	poor	fair	poor	*Dieback sparse*

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1651	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	poor	*Leaning, stunted*
1652	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*Dieback*
1653	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	*Dieback*
1654	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	*Leaning, sparse top*
1655	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	*Leaf burn, sparse , chlorotic*
1657	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	20	*6.4*	poor	poor	poor	*Sparse*
1658	*Parking lot cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	poor	very poor	very poor	*Leaning, stunted*
1659	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	37	*11.8*	poor	poor	poor	*Sparse*
1661	*Cutout*	Brisbane box	*Lophostemon confertus*	20.5	*6.5*	very poor	very poor	very poor	
1662	*Cutout*	Brisbane box	*Lophostemon confertus*	17	*5.4*	poor	poor	poor	
1663	*Cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	
1664	*Cutout*	Brisbane box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1665	*Cutout*	Brisbane box	*Lophostemon confertus*	20	*6.4*	poor	poor	poor	
1666	*Cutout*	Brisbane box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	
1667	*Cutout*	Brisbane box	*Lophostemon confertus*	19	*6.1*	poor	poor	very poor	
1668	*Cutout*	Brisbane box	*Lophostemon confertus*	8	*2.5*	very poor	very poor	very poor	
1669	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26	*8.3*	fair	fair	fair	
1670	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	fair	fair	fair	
1671	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	35	*11.1*	fair	fair	fair	
1672	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	fair	fair	fair	
1673	*Cutout*	Brisbane box	*Lophostemon confertus*	14.5	*4.6*	very poor	very poor	very poor	
1674	*Cutout*	Brisbane box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	
1675	*Cutout*	Brisbane box	*Lophostemon confertus*	24	*7.6*	very poor	poor	very poor	
1676	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	
1677	*Cutout*	Brisbane box	*Lophostemon confertus*	24	*7.6*	very poor	poor	very poor	
1678	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	

#	*Locale*	Name	*Genus species*	Trunk Circum-ference (inches)	*Trunk Diam-eter inches*	Health	Structure	Form	*Notes*
1679	*Cutout*	Brisbane box	*Lophostemon confertus*	16	*5.1*	poor	poor	poor	
1680	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26	*8.3*	fair	fair	fair	
1681	*Cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	poor	very poor	*Dieback*
1682	*Cutout*	Brisbane box	*Lophostemon confertus*	16.5	*5.3*	very poor	poor	very poor	*Stunted, leaf burn, trunk wound*
1683	*Cutout*	Brisbane box	*Lophostemon confertus*	25	*8.0*	poor	poor	poor	*Leaning . Trunk wound.*
1684	*Cutout*	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*Leaning sparse*
1685	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	21	*6.7*	poor	poor	poor	
1686	*Median*	Raywood ash	*Fraxinus oxycarpa `Raywood'*	19	*6.1*	poor	poor	poor	

APPENDIX B - ANALYSIS

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1547	Sydney wattle	*Acacia longifolia*	14	*4.5*	very poor	very poor	very poor	*No*		***row***	***yes***
1548	Sydney wattle	*Acacia longifolia*	10,8,8	*8.3*	very poor	very poor	very poor	*No*		***row***	***yes***
1526	blackwood acacia	*Acacia melanoxylon*	54	*17.2*	fair	fair	fair	*No*	*Near public row*	***large diameter***	***yes***
1527	blackwood acacia	*Acacia melanoxylon*	37	*11.8*	poor	poor	poor	*No*	*Trunk leaning. Stunted*	***none known***	***no***
68	hedge maple	*Acer campestre*	12	*3.8*	good	fair	fair	*No*	*Odd shape*	***none known***	***no***
69	hedge maple	*Acer campestre*	10	*3.2*	good	fair	fair	*No*	*Odd shape*	***none known***	***no***
1578	hedge maple	*Acer campestre*	6	*1.9*	fair	fair	fair	*No*		***none known***	***no***
1569	hedge maple	*Acer campestre*	10	*3.2*	good	good	good	*Yes*		***none known***	***no***
1570	hedge maple	*Acer campestre*	8	*2.5*	good	fair	fair	*Yes*	*Unbalanced*	***none known***	***no***
1576	hedge maple	*Acer campestre*	9	*2.9*	good	fair	fair	*Yes*		***none known***	***no***
1577	hedge maple	*Acer campestre*	7.5	*2.4*	good	good	good	*Yes*		***none known***	***no***
1630	hedge maple	*Acer campestre*	8	*2.5*	good	good	good	*Yes*		***none known***	***no***
1619	hedge maple	*Acer campestre*	9	*2.9*	good	good	good	*Yes*		***none known***	***no***
66	hedge maple	*Acer campestre*	10	*3.2*	good	good	good	*Yes*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1629	hedge maple	*Acer campestre*	9.5	*3.0*	excellent	good	good	*Yes*	*Codominant scaffolds with included bark*	***none known***	***no***
1638	hedge maple	*Acer campestre*	8.5	*2.7*	good	fair	fair	*Yes*		***none known***	***no***
59	marina strawberry tree	*Arbutus X marina*	15	*4.8*	fair	fair	fair	*No*	*Leaning*	***none known***	***no***
57	marina strawberry tree	*Arbutus X marina*	17	*5.4*	good	fair	fair	*Yes*	*Lions tailed*	***none known***	***no***
58	marina strawberry tree	*Arbutus X marina*	20	*6.4*	good	fair	fair	*Yes*		***none known***	***no***
54	marina strawberry tree	*Arbutus X marina*	12	*3.8*	fair	fair	fair	*No*	*Edge of mound. Large trunk cavity. Lions tailed.*	***street***	***yes***
56	marina strawberry tree	*Arbutus X marina*	7	*2.2*	poor	very poor	very poor	*No*	*Falling over, staked & tied*	***street***	***yes***
1502	marina strawberry tree	*Arbutus X marina*	18	*5.7*	fair	fair	fair	*Yes*	*On mound, leaning, lions tailed*	***street***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1513	marina strawb erry tree	*Arbutus X marina*	15	*4.8*	fair	fair	fair	*Yes*	*Edge of mound*	***street***	***yes***
1515	marina strawb erry tree	*Arbutus X marina*	30	*9.6*	fair	fair	fair	*Yes*	*Unbalan ced. Edge of mound*	***street***	***yes***
1580	deodar cedar	*Cedrus deodara*	98	*31.2*	fair	good	fair	*No*	*Top sparse, yellowin g*	***large diamete r***	***yes***
1646	deodar cedar	*Cedrus deodara*	76	*24.2*	good	good	good	*No*	*Hacked away from building*	***large diamete r***	***yes***
1649	deodar cedar	*Cedrus deodara*	71	*22.6*	fair	good	fair	*No*	*Sparse*	***large diamete r***	***yes***
1531	bushy yate	*Eucalyptus lehmanii*	30	*9.6*	fair	poor	poor	*No*	*Trunk cavity, intertwi ned with #1532*	***row***	***yes***
1532	bushy yate	*Eucalyptus lehmanii*	19,25	*14.0*	fair	poor	poor	*No*	*Intertwi ned with 1531, torn scaffold*	***row***	***yes***
1533	bushy yate	*Eucalyptus lehmanii*	23	*7.3*	poor	poor	poor	*No*	*Unbalan ced. Dieback*	***row***	***yes***
1535	bushy yate	*Eucalyptus lehmanii*	34	*10.8*	poor	poor	poor	*No*		***row***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1536	bushy yate	*Eucalyptus lehmanii*	22,27	*15.6*	poor	poor	poor	*No*		***row***	***yes***
1537	bushy yate	*Eucalyptus lehmanii*	27	*8.6*	very poor	very poor	very poor	*No*	*Dieback*	***large diameter***	***yes***
1538	bushy yate	*Eucalyptus lehmanii*	37	*11.8*	fair	fair	fair	*No*	*Dominant*	***row***	***yes***
1530	bushy yate	*Eucalyptus lehmanii*	25,21,15, 12,18,21	*35.7*	poor	poor	fair	*No*	*Multiple trunks with included bark. Dieback*	***large diameter***	***yes***
1534	bushy yate	*Eucalyptus lehmanii*	22,18,19	*18.8*	poor	poor	poor	*No*	*Unbalanced. Dieback. Multi trunks with included bark*	***large diameter***	***yes***
1549	Raywood ash	*Fraxinus oxycarpa `Raywood'*	44	*14.0*	poor	poor	poor	*No*	*Engulfed by ice plant, trunk leaning, dieback*	***row***	***?***
1555	Raywood ash	*Fraxinus oxycarpa `Raywood'*	45	*14.3*	fair	fair	fair	*No*	*In fine fescue, 10% Dieback*	***row***	***?***
1517	Raywood ash	*Fraxinus oxycarpa `Raywood'*	56	*17.8*	fair	fair	fair	*No*	*Dieback*	***large diameter***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1550	Raywood ash	*Fraxinus oxycarpa `Raywood'*	56	*17.8*	poor	poor	poor	*No*	*In fine fescue turf, large branches dying back*	***large diameter***	***yes***
1554	Raywood ash	*Fraxinus oxycarpa `Raywood'*	74	*23.6*	poor	poor	poor	*No*	*In fine fescue turf, large branches dying back*	***large diameter***	***yes***
1581	Raywood ash	*Fraxinus oxycarpa `Raywood'*	77	*24.5*	poor	poor	poor	*No*	*Dieback*	***large diameter***	***yes***
1512	Raywood ash	*Fraxinus oxycarpa `Raywood'*	57.5	*18.3*	fair	fair	fair	*No*	*Lions tailed*	***large diameter***	***yes***
1557	Raywood ash	*Fraxinus oxycarpa `Raywood'*	75	*23.9*	fair	poor	fair	*No*	*Lions tailed*	***large diameter***	***yes***
1639	Raywood ash	*Fraxinus oxycarpa `Raywood'*	69	*22.0*	very poor	very poor	very poor	*No*	*Dieback*	***large diameter***	***yes***
1640	Raywood ash	*Fraxinus oxycarpa `Raywood'*	58	*18.5*	poor	poor	poor	*No*	*Dieback*	***large diameter***	***yes***
61	Raywood ash	*Fraxinus oxycarpa `Raywood'*	16	*5.1*	very poor	very poor	very poor	*No*		***none known***	***no***
1585	Raywood ash	*Fraxinus oxycarpa `Raywood'*	34	*10.8*	fair	fair	poor	*No*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1586	Raywood ash	*Fraxinus oxycarpa `Raywood'*	35.5	*11.3*	fair	fair	poor	*No*	*Codominant*	***none known***	***no***
1600	Raywood ash	*Fraxinus oxycarpa `Raywood'*	25.5	*8.1*	poor	poor	poor	*No*		***none known***	***no***
1602	Raywood ash	*Fraxinus oxycarpa `Raywood'*	20	*6.4*	poor	poor	poor	*No*		***none known***	***no***
1603	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28.5	*9.1*	poor	poor	poor	*No*	*Long trunk cavity*	***none known***	***no***
1605	Raywood ash	*Fraxinus oxycarpa `Raywood'*	32	*10.2*	poor	poor	poor	*No*		***none known***	***no***
1606	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31.5	*10.0*	fair	fair	fair	*No*		***none known***	***no***
1607	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26.5	*8.4*	poor	poor	poor	*No*	*Dieback*	***none known***	***no***
1611	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28	*8.9*	poor	poor	poor	*No*		***none known***	***no***
1612	Raywood ash	*Fraxinus oxycarpa `Raywood'*	23	*7.3*	very poor	very poor	very poor	*No*		***none known***	***no***
1539	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31	*9.9*	fair	poor	poor	*No*	*Dieback lions tailed*	***none known***	***no***
1540	Raywood ash	*Fraxinus oxycarpa `Raywood'*	29.5	*9.4*	poor	fair	poor	*No*	*Dieback*	***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1556	Raywood ash	*Fraxinus oxycarpa `Raywood'*	50	*15.9*	fair	fair	fair	*No*		***none known***	***no***
1558	Raywood ash	*Fraxinus oxycarpa `Raywood'*	42.5	*13.5*	poor	fair	poor	*No*	*Top sparse & dying back*	***none known***	***no***
1559	Raywood ash	*Fraxinus oxycarpa `Raywood'*	33	*10.5*	poor	fair	poor	*No*	*Thin*	***none known***	***no***
1566	Raywood ash	*Fraxinus oxycarpa `Raywood'*	22	*7.0*	poor	very poor	very poor	*No*	*Large trunk cavity*	***none known***	***no***
1567	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	poor	poor	poor	*No*		***none known***	***no***
1568	Raywood ash	*Fraxinus oxycarpa `Raywood'*	24	*7.6*	very poor	very poor	very poor	*No*		***none known***	***no***
1608	Raywood ash	*Fraxinus oxycarpa `Raywood'*	28	*8.9*	poor	poor	poor	*No*	*Dieback*	***none known***	***no***
1650	Raywood ash	*Fraxinus oxycarpa `Raywood'*	31	*9.9*	poor	fair	poor	*No*	*Dieback sparse*	***none known***	***no***
1659	Raywood ash	*Fraxinus oxycarpa `Raywood'*	37	*11.8*	poor	poor	poor	*No*	*Sparse*	***none known***	***no***
1669	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26	*8.3*	fair	fair	fair	*No*		***none known***	***no***
1670	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	fair	fair	fair	*No*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1671	Raywood ash	*Fraxinus oxycarpa `Raywood'*	35	*11.1*	fair	fair	fair	*No*		***none known***	***no***
1672	Raywood ash	*Fraxinus oxycarpa `Raywood'*	27	*8.6*	fair	fair	fair	*No*		***none known***	***no***
1680	Raywood ash	*Fraxinus oxycarpa `Raywood'*	26	*8.3*	fair	fair	fair	*No*		***none known***	***no***
1685	Raywood ash	*Fraxinus oxycarpa `Raywood'*	21	*6.7*	poor	poor	poor	*No*		***none known***	***no***
1686	Raywood ash	*Fraxinus oxycarpa `Raywood'*	19	*6.1*	poor	poor	poor	*No*		***none known***	***no***
1613	Raywood ash	*Fraxinus oxycarpa `Raywood'*	62	*19.7*	poor	poor	poor	*No*	*Dieback*	***none known***	***no***
1632	ginkgo tree	*Ginkgo biloba*	20,20,20	*19.1*	fair	poor	fair	*No*	*Hacked away from building, multiple trunks with included bark*	***large diameter***	***yes***
64	ginkgo tree	*Ginkgo biloba*	3	*1.0*	poor	poor	poor	*No*	*Stunted*	***none known***	***no***
65	ginkgo tree	*Ginkgo biloba*	3	*1.0*	very poor	very poor	very poor	*No*	*Stunted*	***none known***	***no***
1614	ginkgo tree	*Ginkgo biloba*	3,2.5	*1.8*	poor	poor	poor	*No*	*Stunted*	***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1615	ginkgo tree	*Ginkgo biloba*	3	*1.0*	poor	poor	poor	*No*	*Stunted*	***none known***	***no***
1621	ginkgo tree	*Ginkgo biloba*	3	*1.0*	fair	fair	fair	*No*		***none known***	***no***
1636	ginkgo tree	*Ginkgo biloba*	4.5	*1.4*	poor	poor	poor	*No*	*Stunted*	***none known***	***no***
62	ginkgo tree	*Ginkgo biloba*	5,6,7	*5.7*	good	good	good	*Yes*		***none known***	***no***
63	ginkgo tree	*Ginkgo biloba*	9.5	*3.0*	good	fair	fair	*Yes*	*Unbalanced*	***none known***	***no***
1571	ginkgo tree	*Ginkgo biloba*	5.5	*1.8*	fair	fair	fair	*Yes*		***none known***	***no***
1572	ginkgo tree	*Ginkgo biloba*	5	*1.6*	good	fair	fair	*Yes*	*Unbalanced*	***none known***	***no***
1583	sweetgum	*Liquidambar styraciflua*	61	*19.4*	fair	fair	fair	*No*		***large diameter***	***yes***
1584	sweetgum	*Liquidambar styraciflua*	38	*12.1*	fair	fair	fair	*No*		***large diameter***	***yes***
1616	sweetgum	*Liquidambar styraciflua*	41	*13.1*	fair	poor	poor	*No*	*Codominant*	***none known***	***no***
1617	sweetgum	*Liquidambar styraciflua*	45	*14.3*	fair	fair	fair	*No*	*Codominant*	***none known***	***no***
1618	sweetgum	*Liquidambar styraciflua*	48	*15.3*	fair	fair	fair	*No*	*Trunk cavity, leaning*	***none known***	***no***
1641	sweetgum	*Liquidambar styraciflua*	42.5	*13.5*	fair	fair	fair	*No*		***none known***	***no***
1642	sweetgum	*Liquidambar styraciflua*	45	*14.3*	fair	fair	fair	*No*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1643	sweetgum	*Liquidambar styraciflua*	42	*13.4*	poor	poor	poor	*No*		***none known***	***no***
1644	sweetgum	*Liquidambar styraciflua*	41	*13.1*	poor	poor	poor	*No*	*Dead scaffold, dieback*	***none known***	***no***
1647	sweetgum	*Liquidambar styraciflua*	51	*16.2*	fair	fair	fair	*No*	*Hacked away from building*	***none known***	***no***
70	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	13	*4.1*	good	good	good	*No*		***none known***	***no***
1620	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	7	*2.2*	good	good	good	*No*		***none known***	***no***
1623	corkscrew tulip tree	*Liriodendron tulipifera `Tortuosum'*	12.5	*4.0*	good	good	good	*No*		***none known***	***no***
1560	Brisbane box	*Lophostemon confertus*	30	*9.6*	very poor	poor	poor	*No*	*Very stunted & thin*	***none known***	***no***
1561	Brisbane box	*Lophostemon confertus*	39	*12.4*	fair	poor	fair	*No*	*Lions tailed*	***none known***	***no***
1562	Brisbane box	*Lophostemon confertus*	48	*15.3*	poor	poor	fair	*No*	*Lions tailed, thin*	***none known***	***no***
1563	Brisbane box	*Lophostemon confertus*	29	*9.2*	poor	poor	poor	*No*	*Chlorotic*	***none known***	***no***
1564	Brisbane box	*Lophostemon confertus*	44	*14.0*	fair	fair	fair	*No*	*Girdling root*	***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1565	Brisbane box	*Lophostemon confertus*	33	*10.5*	poor	poor	poor	*No*	*Chlorotic sparse stunted , Codominant scaffolds with included bark*	***none known***	***no***
1587	Brisbane box	*Lophostemon confertus*	24	*7.6*	poor	fair	fair	*No*		***none known***	***no***
1588	Brisbane box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	very poor	*No*		***none known***	***no***
1589	Brisbane box	*Lophostemon confertus*	23	*7.3*	very poor	very poor	very poor	*No*		***none known***	***no***
1590	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	*No*		***none known***	***no***
1591	Brisbane box	*Lophostemon confertus*	20	*6.4*	poor	fair	poor	*No*		***none known***	***no***
1592	Brisbane box	*Lophostemon confertus*	13	*4.1*	very poor	poor	poor	*No*		***none known***	***no***
1593	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*No*		***none known***	***no***
1594	Brisbane box	*Lophostemon confertus*	10	*3.2*	very poor	very poor	very poor	*No*		***none known***	***no***
1595	Brisbane box	*Lophostemon confertus*	16	*5.1*	poor	very poor	very poor	*No*		***none known***	***no***
1596	Brisbane box	*Lophostemon confertus*	14.5	*4.6*	very poor	very poor	very poor	*No*		***none known***	***no***
1597	Brisbane box	*Lophostemon confertus*	13.5	*4.3*	very poor	very poor	very poor	*No*		***none known***	***no***
1598	Brisbane box	*Lophostemon confertus*	17	*5.4*	very poor	very poor	very poor	*No*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1599	Brisba ne box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	very poor	*No*		***none known***	***no***
1604	Brisba ne box	*Lophostemon confertus*	11	*3.5*	very poor	very poor	very poor	*No*		***none known***	***no***
1609	Brisba ne box	*Lophostemon confertus*	16	*5.1*	poor	poor	poor	*No*	*Sparse*	***none known***	***no***
1610	Brisba ne box	*Lophostemon confertus*	11	*3.5*	very poor	very poor	very poor	*No*	*Sparse, minimal*	***none known***	***no***
1651	Brisba ne box	*Lophostemon confertus*	14	*4.5*	very poor	very poor	poor	*No*	*Leaning, stunted*	***none known***	***no***
1652	Brisba ne box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*No*	*Dieback*	***none known***	***no***
1653	Brisba ne box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	*No*	*Dieback*	***none known***	***no***
1654	Brisba ne box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	*No*	*Leaning, sparse top*	***none known***	***no***
1655	Brisba ne box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	*No*	*Leaf burn, sparse , chlorotic*	***none known***	***no***
1657	Brisba ne box	*Lophostemon confertus*	20	*6.4*	poor	poor	poor	*No*	*Sparse*	***none known***	***no***
1658	Brisba ne box	*Lophostemon confertus*	15	*4.8*	poor	very poor	very poor	*No*	*Leaning, stunted*	***none known***	***no***
1661	Brisba ne box	*Lophostemon confertus*	20.5	*6.5*	very poor	very poor	very poor	*No*		***none known***	***no***
1662	Brisba ne box	*Lophostemon confertus*	17	*5.4*	poor	poor	poor	*No*		***none known***	***no***
1663	Brisba ne box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*No*		***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1664	Brisbane box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	*No*		***none known***	***no***
1665	Brisbane box	*Lophostemon confertus*	20	*6.4*	poor	poor	poor	*No*		***none known***	***no***
1666	Brisbane box	*Lophostemon confertus*	18	*5.7*	very poor	very poor	very poor	*No*		***none known***	***no***
1667	Brisbane box	*Lophostemon confertus*	19	*6.1*	poor	poor	very poor	*No*		***none known***	***no***
1668	Brisbane box	*Lophostemon confertus*	8	*2.5*	very poor	very poor	very poor	*No*		***none known***	***no***
1673	Brisbane box	*Lophostemon confertus*	14.5	*4.6*	very poor	very poor	very poor	*No*		***none known***	***no***
1674	Brisbane box	*Lophostemon confertus*	19	*6.1*	very poor	poor	poor	*No*		***none known***	***no***
1675	Brisbane box	*Lophostemon confertus*	24	*7.6*	very poor	poor	very poor	*No*		***none known***	***no***
1676	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	*No*		***none known***	***no***
1677	Brisbane box	*Lophostemon confertus*	24	*7.6*	very poor	poor	very poor	*No*		***none known***	***no***
1678	Brisbane box	*Lophostemon confertus*	16	*5.1*	very poor	very poor	very poor	*No*		***none known***	***no***
1679	Brisbane box	*Lophostemon confertus*	16	*5.1*	poor	poor	poor	*No*		***none known***	***no***
1681	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	poor	very poor	*No*	*Dieback*	***none known***	***no***
1682	Brisbane box	*Lophostemon confertus*	16.5	*5.3*	very poor	poor	very poor	*No*	*Stunted, leaf burn, trunk wound*	***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1683	Brisbane box	*Lophostemon confertus*	25	*8.0*	poor	poor	poor	*No*	*Leaning. Trunk wound.*	***none known***	***no***
1684	Brisbane box	*Lophostemon confertus*	15	*4.8*	very poor	very poor	very poor	*No*	*Leaning sparse*	***none known***	***no***
67	cajeput tree	*Melaleuca quinquenervia*	48.5	*15.4*	good	fair	good	*No*		***none known***	***no***
1528	myoporum	*Myoporum laetum*	16,17,10.5,15,16,11,11,12	*34.6*	poor	poor	poor	*No*	*Multiple trunks with included bark. Infested with myoporum thrips.*	***row***	***yes***
1541	myoporum	*Myoporum laetum*	34	*10.8*	very poor	very poor	very poor	*No*	*Severe thrips infestation. Dying*	***row***	***yes***
1542	myoporum	*Myoporum laetum*	16,14	*9.6*	very poor	very poor	very poor	*No*	*Fallen. Dying. Thrips.*	***row***	***yes***
1543	myoporum	*Myoporum laetum*	40	*12.7*	poor	poor	poor	*No*	*Trunk leaning, engulfed by ice plant, cavities, thrips*	***row***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1546	myopo rum	*Myoporum laetum*	15,16,19 ,19	*22.0*	very poor	very poor	very poor	*No*	*Fallen & leaning trunks with included bark, thrips*	***row***	***yes***
1544	myopo rum	*Myoporum laetum*	18,24,27	*22.0*	poor	very poor	poor	*No*	*Fallen & leaning trunks. Thrips . Trunk cavities & included bark*	***large diamete r***	***yes***
1514	black stem pittosp orum	*Pittosporum tenuifolium*	17.5	*5.6*	fair	fair	fair	*No*		***none known***	***no***
1505	black stem pittosp orum	*Pittosporum tenuifolium*	17	*5.4*	poor	poor	poor	*No*	*Measure d at 3'. Severe trunk lean. Large trunk cavity. Stunted . On mound*	***street***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1506	black stem pittosporum	*Pittosporum tenuifolium*	18	*5.7*	fair	poor	fair	*No*	*Measured at 3'. Lions tailed shrub. On mound*	***street***	***yes***
1519	black stem pittosporum	*Pittosporum tenuifolium*	16	*5.1*	poor	poor	poor	*No*	*Sun scalded trunk*	***street***	***yes***
1522	black stem pittosporum	*Pittosporum tenuifolium*	11	*3.5*	very poor	very poor	very poor	*No*	*Measured at 4'. Sun scalded trunk. Dying back*	***street***	***yes***
1628	purple leaf plum	*Prunus cerasifera*	22.5,21.5,17,14	*23.9*	poor	fair	fair	*No*	*Hacked away from building, multiple trunks with included bark . Twig dieback*	***large diameter***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1634	purple leaf plum	*Prunus cerasifera*	15.5,12.5,16	*44.3*	fair	poor	poor	*No*	*Hacked away from building, multiple trunks with included bark*	***large diameter***	***yes***
1637	purple leaf plum	*Prunus cerasifera*	19,14.5,16,37	*27.5*	fair	poor	poor	*No*	*Hacked away from building, Codominant trunks with included bark*	***large diameter***	***yes***
60	purple leaf plum	*Prunus cerasifera*	11	*3.5*	good	fair	fair	*No*		***none known***	***no***
1626	purple leaf plum	*Prunus cerasifera*	13,12,8,7	*12.7*	poor	fair	fair	*No*	*Stunted. Multi trunk with included bark*	***none known***	***no***
1627	purple leaf plum	*Prunus cerasifera*	11,12,16,10	*15.6*	poor	fair	fair	*No*	*Twig dieback. Multi trunk with included bark*	***none known***	***no***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1633	purple leaf plum	*Prunus cerasifera*	4	*1.3*	good	fair	good	*Yes*		***none known***	***no***
55	purple leaf plum	*Prunus cerasifera*	19	*6.1*	fair	poor	fair	*No*	*Measured at 2.5 feet. Multiple scaffold/ trunks with included bark, embedded tree ties*	***street***	***yes***
1520	purple leaf plum	*Prunus cerasifera*	19	*6.1*	fair	poor	fair	*No*	*Measured at 2.5 feet. Multiple scaffold/ trunks with included bark,*	***street***	***yes***
1524	purple leaf plum	*Prunus cerasifera*	11	*3.5*	fair	poor	fair	*No*	*Measured at 2'. Multiple scaffold/ trunks with included bark,*	***street***	***yes***
52	swamp myrtle	*Tristaniopsis laurina*	23	*7.3*	fair	fair	fair	*No*	*Mound*	***street***	***yes***
1507	swamp myrtle	*Tristaniopsis laurina*	14	*4.5*	fair	fair	fair	*No*	*On mound*	***street***	***yes***

#	Name	*Genus species*	Trunk Circum-ference inches	*Trunk Diam-eter inches*	Health	Structure	Form	*Trans-plant*	*Notes*	*City of Belmont Tree Type*	*City of Belmont Protected ?*
1508	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*No*	*On mound . Measured at 4'*	***street***	***yes***
1509	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*No*	*Unbalanced. On mound. Measured at 4'*	***street***	***yes***
1511	swamp myrtle	*Tristaniopsis laurina*	13	*4.1*	fair	fair	fair	*No*	*On mound. Lions tailed*	***street***	***yes***
53	swamp myrtle	*Tristaniopsis laurina*	12	*3.8*	fair	fair	fair	*No*	*Unbalanced. On mound.*	***street***	***yes***

APPENDIX C - GLOSSARY

dripline - region underneath tree canopy

form - genetically determined appearance that includes spread, height & configuration

health - tree growth as expressed by foliage, twigs, branches & trunks including resistance to pests

orthents - young soils that lack horizon development and are usually very shallow. They are often referred to as skeletal soil

root crown – region where trunk and root system meet, also called `buttress' or `butt'

row - right of way

rooting zone – area where roots are likely to survive, beginning at the trunk and extending up to three times the radius of a tree's dripline region

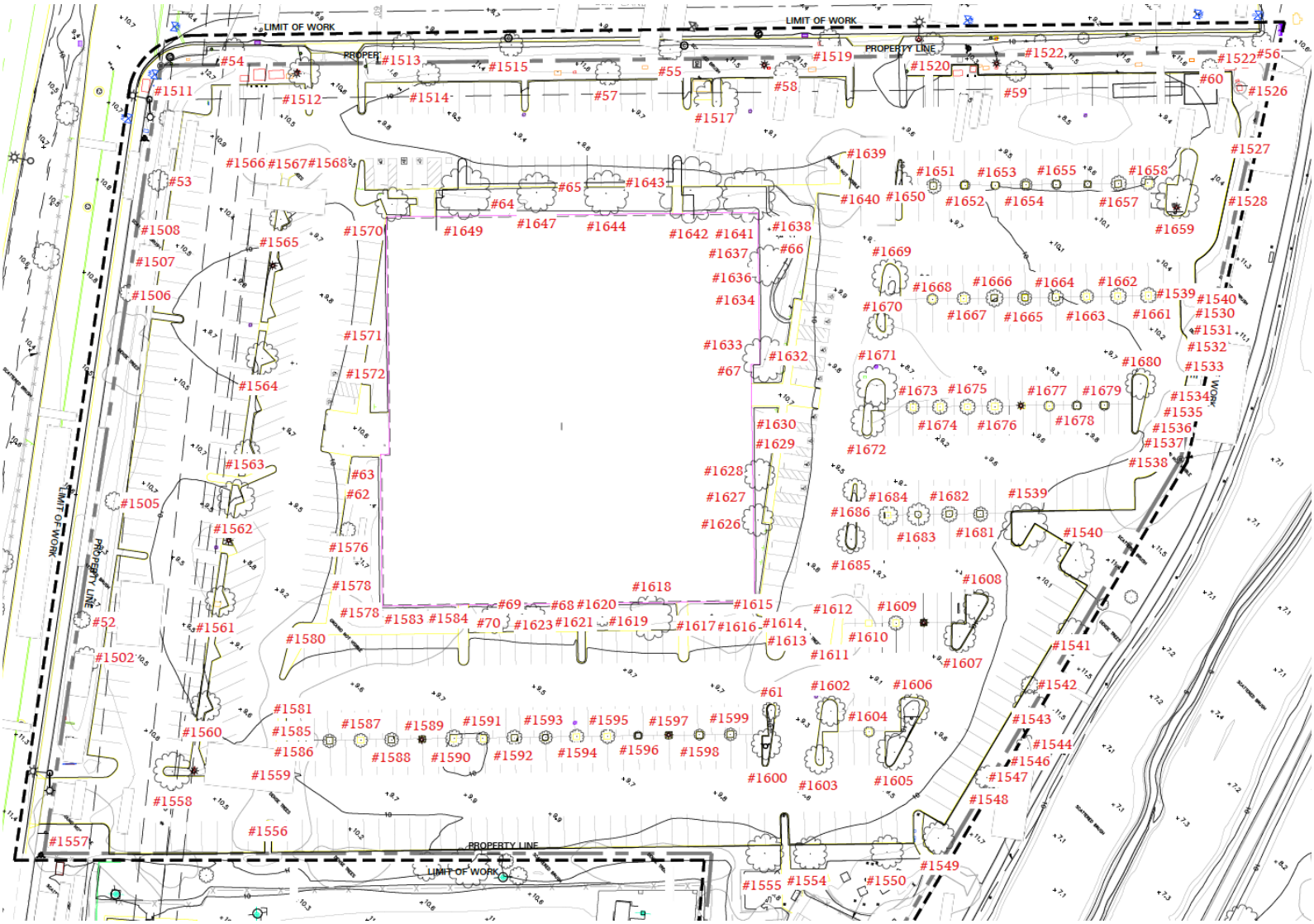
scaffold – large, structural branch

structure - physical and mechanical qualities of tree

trunk circumference – measurement of trunk, distance around

trunk diameter - trunk circumference divided by 3.14

APPENDIX D - TREE LOCATION MAP *ALSO AVAILABLE AS PDF FILE*



APPENDIX E - CERTIFICATE OF PERFORMANCE

I, Michael Baefsky certify:

- That I have reviewed the City of Belmont Municipal Code, Chapter 25
- That I have evaluated the subject trees, and stated my findings accurately. The extent of the evaluation is stated in the attached report;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions, and conclusions stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted professional practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I certify that I am Registered Consulting Arborist #456, a member of the American Society of Consulting Arborists, and am Certified Arborist & Qualified Risk Assessor #WE0222A, Agricultural Pest Control Advisor #074617, Qualified Applicator #99864, Licensed Landscape Contractor (inactive) #931410, and have been involved in the practice of Arboriculture, Integrated Pest Management, Plant Health Care and Ecological Soils Management, and the study of soils and horticulture for over thirty years.

Michael Baefsky

Appendix E

Energy Calculations

Construction Fuel Consumption

On-Site Diesel[1] (off-road construction Equipment)	$MTCO_2e$	Gallons of Fuel[4]	County Fuel in 2024 (Start of Construction)	Percent
Demolition	0	0		
Site Preparation/Grading	614	60,522		
Building Construction	1,423	140,232		
Paving	1,245	122,680		
Architectural Coating	35	3,456		
Total	3,318	326,890	24,133,919	1.354%
Off-Site Diesel[1] (on-road construction trips)				
Demolition	27	2,705		
Site Preparation/Grading	97	9,567		
Building Construction	477	46,956		
Paving	277	27,255		
Architectural Coating	22	2,195		
Total	900	88,678	24,133,919	0.367%
Off-Site Gasoline[2]				
Demolition	0	0		
Site Preparation/Grading	10	1,112		
Building Construction	97	10,975		
Paving	55	6,211		
Architectural Coating	18	2,013		
Total	179	20,312	228,100,163	0.009%
Total Diesel Fuel	415,568	415,568	24,133,919	1.722%
Total Gasoline Fuel	20,312	20,312	228,100,163	0.009%
Total Construction Fuel	4,397	435,880	252,234,082	1.731%

Construction Phase[3]	Demolition			Demo/Site Clearing/Shoring/Mass Excavation -Grading			Building Construction - Building Construction		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)
2024	0	27	0	614	97	10	600	194	36
2025	0	0	0	0	0	0	539	171	31
2026	0	0	0	0	0	0	0	0	0
Total	**0**	**27**	**0**	**614**	**97**	**10**	**1,138**	**365**	**67**

Construction Phase[3]	Building Exterior - Building Construction			Building Interior - Architectural Coating			Off and On-Site Improvements - Paving		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)
2024	0	0	0				0	0	0
2025	198	78	21	24	16	12	658	148	31
2026	87	34	9	11	7	5	587	129	23
Total	**285**	**111**	**29**	**35**	**22**	**18**	**1,245**	**277**	**55**

Notes:

[1] Fuel used for off-road, hauling, and vendor trips assumed to be diesel.

[2] Fuel used for worker trips assumed to be gasoline.

[3] $MTCO_2e$ rates from CalEEMod (3.0 Construction Emissions Details).

[4] For CO2e emissions, see Chapter 13 (page 94); Conversion Ratios: Climate Registry, General Reporting Protocol, 2016.

Construction Water Energy

Daily Soil Disturbance[1]	591.5	acres
Days of Soil Disturbance[2]	169	days
Water Concentration[3]	3,020	gallons/acre
Water Energy Intensity[4]	6,807	kWh/MG
Total Construction Water	301.890	million gallons
Construction Water Energy	2,054,964	kWh
	2.055	GWh
San Mateo County Annual Electricity	4,177	GWh
Percentage Increase	0.049%	
	2,055	MWh
	4,177,360.00	MWh

Notes:

[1] Total daily acres disturbed from offroad equipment per CalEEMod (3.0 Construction Emissions Detail) and maximum SCAQMD LST values for soil-disturbing equipment.

[2] Number of days of construction with soil-disturbing equipment per CalEEMod (5.1 Construction Schedule).

[3] Water application rate per Air and Waste Management Association's Air Pollution Engineering Manual.

[4] Water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32.

Operational Fuel

Vehicle Type	Percent	Annual VMT[1]	MPG[2]	Annual Fuel (Gallons)	Fuel Type	San Mateo County Gallons (2026)[3]	RS Percent
Passenger Cars	95.0%	15,024,811	21.6	695,593	Gas	220,111,112	0.316%
Light/Medium Trucks	4.8%	761,353	17.2	44,265	Diesel	24,228,799	0.183%
Heavy Trucks/Other	0.2%	31,540	6.1	5,171	Diesel	24,228,799	0.021%
Total	1.00	15,817,688		49,435			0.204%

Land Use[5]	LDA	LDT1	LDT2	MCY	MDV	LHD1	LHD2	MHD	OBUS	UBUS	SBUS	MH	HHD
Enclosed Parking with Elevator	0.458	0.0747	0.2390	0.0292	0.1490	0.0259	0.0066	0.0105	0.0014	0.0006	0.0004	0.0027	0.0020
General Office Building	0.458	0.0747	0.2390	0.0292	0.1490	0.0259	0.0066	0.0105	0.0014	0.0006	0.0004	0.0027	0.0020

Notes:

[1] Total annual operational VMT based on annual VMT from CalEEMod (5.9 Operational Mobile Sources).

[2] Average fuel economy derived from Department of Transportation.

[3] Total annual county fuel per EMFAC 2021 model of projected operational fuel usage.

Operational Water Energy

UNMITIGATED		
Unmitigated Indoor	268.0	million gallons
Indoor Energy Intensity Factor[1]	6,807	kWh/MG
Unmitigated Outdoor	59	million gallons
Outdoor Energy Intensity Factor[2]	6,807	kWh/MG
Operational Water Energy	2,228,216	kWh
Operational Water Energy	2.228	GWh
San Mateo County Annual Electricity	4177.36	GWh
Percentage Increase	0.053%	
MITIGATED		
Mitigated Indoor	268.0	million gallons
Indoor Energy Intensity Factor[1]	6,807	kWh/MG
Mitigated Outdoor	59	million gallons
Outdoor Energy Intensity Factor[2]	6,807	kWh/MG
Operational Water Energy	2,228,216	kWh
Operational Water Energy	2.2282	GWh
San Mateo County Annual Electricity	68,485	GWh
Percentage Increase	0.00%	

Land Use[3]	**Unmitigated (gal/year)**		**Mitigated (gal/year)**	
	Indoor	**Outdoor**	**Indoor**	**Outdoor**
Enclosed Parking with Elevator	0	0	0	0
General Office Building	267,973,000	59,368,800	267,973,000	59,368,800
Total Operational Water (MG/year)	**267.973**	**59.369**	267.973	59

Notes:

[1] Indoor water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32. Factor includes supply, treatment, distribution, and wastewater.

[2] Outdoor water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32. Factor includes supply, treatment, and distribution.

[3] Operational water use values per CalEEMod (5.12 Operational Water and Wastewater Consumption).

Elecricity/Natural Gas Energy

UNMITIGATED			
	Unmitigated Project Annual Energy	San Mateo County Annual Energy[3]	Percentage Increase
Electricity (kWh/yr)	9,113,160	4,177,361,534	0.218%
Electricity (GWh/yr)	9.113	4,177	0.218%
Natural Gas (kBTU/yr)	13,646,800	20,421,807,300	0.067%
Natural Gas (therms/yr)	136,468	204,218,073	0.067%
MITIGATED			
	Mitigated Project Annual Energy	San Mateo County Annual Energy[3]	Percentage Increase
Electricity (kWh/yr)	9,113,160	4,177,361,534	0.218%
Electricity (GWh/yr)	9.1132	4,177	0.218%
Natural Gas (kBTU/yr)	0	20,421,807,300	0.000%
Natural Gas (therms/yr)	0	204,218,073	0.000%

Land Use	Electricity[1] (kWh/yr)		Natural Gas[2] (kBTU/yr)	
	Unmitigated	Mitigated	Unmitigated	Mitigated
Enclosed Parking Elevator	2,551,360	2,551,360	0	0
General Office Building	6,561,800	6,561,800	13,646,800	0
Total Energy	9,113,160	9,113,160	13,646,800	0

Notes:

[1] Electricity use per CalEEMod (5.11 Operational Energy Consumption).

[2] Natural Gas use per CalEEMod (5.11 Operational Energy Consumption).

[3] County total energy values from California Energy Commission energy reports available through ecdms.energy.ca.gov. (year 2022)

Appendix F

Geotechnical Investigation

CORNERSTONE EARTH GROUP

TYPE OF SERVICES	Geotechnical Investigation
PROJECT NAME	Shoreway Road Office Complex
LOCATION	1301 Shoreway Road Belmont, California
CLIENT	Four Corners Properties II, LLC 339 South San Antonio Road, Suite 2B Los Altos, California
PROJECT NUMBER	448-6-3
DATE	June 23, 2022



CORNERSTONE EARTH GROUP

Type of Services	**Geotechnical Investigation**
Project Name	**Shoreway Road Office Complex**
Location	**1301 Shoreway Road** **Belmont, California**
Client	**Four Corners Properties II, LLC**
Client Address	**339 South San Antonio Road, Suite 2B** **Los Altos, California**
Project Number	**448-6-3**
Date	**June 23, 2022**

Prepared by **Stephen C. Ohlsen, P.E.**
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CORNERSTONE EARTH GROUP

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APPENDIX B: LABORATORY TEST PROGRAM
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CORNERSTONE EARTH GROUP

Type of Services	**Geotechnical Investigation**
Project Name	**Shoreway Road Office Complex**
Location	**1301 Shoreway Road** **Belmont, California**

SECTION 1: INTRODUCTION

This geotechnical report was prepared for the sole use of Four Corners Properties II, LLC for the 1301 Shoreway Development project in Belmont, California. The location of the site is shown on the Vicinity Map, Figure 1. For our use, we were provided with the following document:

- A conceptual site plan titled "1301 Shoreway – The Estuary, Belmont, California", dated March 22, 2022.

1.1 PROJECT DESCRIPTION

Based on information provided, the project consists of redeveloping the 7-acre site for a new high-tech/office campus. The new campus will include two office buildings and a parking garage. Building 1 and 2 will be at-grade, 7 floors each, and have approximate footprints of 29,000 square feet and 43,500 square feet, respectively. The at-grade parking garage will be 8-levels and have an approximate footprint of 56,800 square feet. A "bridge connection" will connect Buildings 1 and 2 at Level 4. A landscape courtyard, service yard, and at-grade pavement occupy the remainder of the site.

We anticipate Buildings 1 and 2 will be steel-frame construction and the garage will be concrete-frame construction. Structural loads are not available at this time; however, structural loads are expected to be typical for similar structures. Grading is expected to be minor over most of the site with cuts and fills generally on the order of 1 to 2 feet.

1.2 SCOPE OF SERVICES

Our scope of services was presented in our proposal dated January 10, 2022 and consisted of field and laboratory programs to evaluate physical and engineering properties of the subsurface soils, engineering analysis to prepare recommendations for site work and grading, building foundations, flatwork, retaining walls, and pavements, and preparation of this report. Brief descriptions of our exploration and laboratory programs are presented below.

1.3 EXPLORATION PROGRAM

Field exploration consisted of seven borings drilled on February 22, 23, and 24, 2022 with truck-mounted, hollow-stem auger drilling equipment and ten Cone Penetration Tests (CPTs) advanced on February 14, 16, and 17, 2022. The borings were drilled to depths of approximately 5½ to 80 feet, the CPTs were advanced to depths of approximately 75 to 100 feet. Practical refusal was encountered while advancing CPT-1 through CPT-6, CPT-8, and CPT-10. Multiple attempts were made due to shallow refusal while advancing CPT-3. Seismic shear wave velocity measurements were collected from CPT-1 and CPT-6. Borings EB-1 to EB-4, EB-6, and EB-7 were advanced adjacent to CPTs for direct evaluation of physical samples to correlated soil behavior. The borings and CPTs were backfilled with cement grout in accordance with San Mateo County requirements; exploration notifications were provided to the County as required.

The approximate locations of our exploratory borings and CPTs are shown on the Site Plan, Figure 2. Details regarding our field program are included in Appendix A.

1.4 LABORATORY TESTING PROGRAM

In addition to visual classification of samples, the laboratory program focused on obtaining data for foundation design and seismic ground deformation estimates. Testing included moisture contents, dry densities, washed sieve analyses, Plasticity Index tests, and consolidation tests. Details regarding our laboratory program are included in Appendix B.

1.5 ENVIRONMENTAL SERVICES

Environmental services were not requested for this project. If environmental concerns are determined to be present during future evaluations, the project environmental consultant should review our geotechnical recommendations for compatibility with the environmental concerns.

SECTION 2: REGIONAL SETTING

2.1 GEOLOGICAL SETTING

The site is located on an alluvial plain adjacent to the San Francisco Bay shoreline and is bordered by the peninsula segment of the Santa Cruz Mountains on the west. The site is in an area adjacent to the San Francisco Bay where Holocene age (11,000 years or less before present) alluvial fan deposits account for the majority of Quaternary sediment. These sediments shed from the northwest-trending uplands of the Peninsula hills (Santa Cruz Mountains) located within the western portion of the San Mateo and adjacent quadrangles. The gentle easterly sloping alluvial plane within the San Mateo Quadrangle is covered by Holocene or latest Pleistocene to Holocene alluvial fan and associated deposits (Witter et al., 2006). Fan deposits generally consist of unconsolidated, interbedded clays and sands, and generally grade from coarser deposits adjacent to the base of the Santa Cruz Mountains to finer deposits as the topographic gradient decreases. The rolling foothills located west of the site are underlain by bedrock units of the Franciscan Complex consisting primarily northwest trending bands of

sandstone and chert (Pampeyan, 1994, Brabb et al, 1998). Franciscan complex bedrock is thought to extend beneath the Quaternary alluvial section area in the general vicinity of the site and adjacent areas along the bay shoreline (Pampeyan, 1994; Brabb et al, 1998).

More locally, a large outcrop of Franciscan rocks is located 1,400 feet south of the project site. Here the rocks consist of sandstone, conglomerate and chert. These bedrock units are cut by the Angelo Fault (a pre-Quaternary fault) (see Faulting). The map of Pampeyan indicates deep borings, at a similar distance from the site as the outcropping, have encountered the surface of Franciscan Complex bedrock at altitudes of 10 to 14 feet above MSL, which when corrected for ground surface elevations corresponds to depths of 10 to 8 feet below the ground surface.

2.2 REGIONAL SEISMICITY

While seismologists cannot predict earthquake events, geologists from the U.S. Geological Survey have recently updated (in 2015) earlier estimates from their 2014 Uniform California Earthquake Rupture Forecast (Version 3; UCERF3) publication. The estimated probability of one or more magnitude 6.7 earthquakes (the size of the destructive 1994 Northridge earthquake) expected to occur somewhere in the San Francisco Bay Area has been revised (increased) to 72 percent for the period 2014 to 2043 (Aagaard et al., 2016). The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward Fault.

The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. The table below presents the State-considered active faults within 25 kilometers of the site.

Table 1: Approximate Fault Distances

Fault Name	Distance	
	(miles)	(kilometers)
San Andreas (1906)	4.1	6.7
Monte Vista-Shannon	6.2	10.1
San Gregorio	10.6	17.1
Hayward (Total Length)	14.3	23.1

A regional fault map is presented as Figure 3, illustrating the relative distances of the site to significant fault zones.

SECTION 3: SITE CONDITIONS

3.1 SITE BACKGROUND

To evaluate site history, we reviewed historic aerial imagery and topographic maps provided online by Historical Aerials (www.historicaerials.com) between 1946 and 2018, and our previous experience work in the area. Earlier topographic maps predating the 1980's indicate the site was generally undeveloped, but subject to some grading on the former bay margin site. A summary of pertinent surface changes at and near the vicinity of the site is as follows:

- 1946: Belmont Creek appears to have already been channelized to the north east and southeast, but outlet at the current Redwood Shores Lagoon. There is some early, but unknown, development use on the adjacent PG&E site at that time.
- 1956: Belmont Creek has been directed into approximately its current configuration and Highway 101 appears constructed to the southwest. The project site still appears undeveloped.
- 1968: The adjacent property to the north appears partially developed.
- 1982: The current structure appeared to be constructed.
- 1993: The site and surrounding roads and development appear similar to the current development.
- 2018: No pertinent surface changes are observed.

3.2 SURFACE DESCRIPTION

The site consists of a single parcel (APN: 040-371-110) per the County of San Mateo website and is bordered by Shoreway Road and Highway 101 to the southwest, a PG&E electrical substation to the southeast, Belmont Creek to the northeast, and Sem Lane to the northwest. At the time of our field explorations, an existing four-story commercial/medical office building occupied the site, with a footprint of about 48,000 square feet, and appeared to be currently in use. The structure is reported to be about 40 years old, and the foundation type of the existing structure is unknown. The commercial office structure was generally surrounded with asphalt concrete parking lots and drive aisles, as well as landscaped medians and borders. The asphalt concrete pavements appeared aged, and generally in poor to fair condition. A few mature trees border the commercial structure and the site border. An enclosed sport court was present in the southeast corner of the site.

Landscaped berms, about 3 to 5 feet in height, border the site along Sem Lane and Shoreway Road; the remainder of the site appears relatively level. The pavement areas are sloped to drain. Minor signs of ponding were observed within the pavement areas during our field explorations.

A decomposed granite walking path exists along the top of Belmont Creek bank. The bank is similar in elevation to the parking lot, and generally appears to be about 7 to 10 feet in height above the main channel of the creek. The low-flow channel in the middle of the creek appears deeper. No obvious signs of slope failures were observed along the creek bank. A couple of discontinuities along the bank appeared to potentially be fill dumped along the bank; no cracking

or deformation was present to suggest a potential slope failure. A large storm drain outlet to the creek was noted extending from the creek bank just northeast of the north corner of the property.

3.3 SUBSURFACE CONDITIONS

Below the surface pavements, our explorations encountered existing undocumented fill underlain by young estuarine deposits (Bay Mud), underlain by older alluvial soils to the maximum depths explored during this investigation. A more detailed description of the subsurface conditions is presented in the following sections.

3.3.1 Undocumented Fills

As previously discussed, the entire area is generally overlain by fills placed historically in the area to develop the prior bay margin site. Below the surface pavements, our borings encountered undocumented fill ranging from approximately 3 to 8½ feet in thickness. The fills were variable in content and generally consisted of medium stiff to hard lean clay with sand to sandy lean clay, medium stiff sandy fat clay, dense silty sand with gravels, and loose to medium dense clayey sand with gravel. Plasticity Index testing in the fills at depths of about 1½ to 2 feet indicated PIs ranging from 4 to 25, indicating low to moderate expansion potential to wetting and drying cycles.

3.3.2 Bay Mud

The existing fill is underlain by estuarine deposits consisting of soft to medium stiff fat clay, known locally as Bay Mud. The upper approximately 1½ to 2½ feet of the Bay Mud, typically referred to as Bay Mud “crust”, is generally medium stiff, over-consolidated due to historic wetting and drying cycles, and is generally considered only moderately compressible. The Bay Mud crust is underlain by approximately 2 to 7½ feet of soft, highly compressible clay to depths ranging from 8 to 15 feet. In addition, Bay Mud is generally considered to be severely corrosive to underground steel and potentially detrimental to buried structural concrete with low sulfate resistance.

Moisture contents of the Bay Mud typically range from about 40 to 80 percent for the crust and from 80 to 95 percent for the soft clay beneath the crust. One of our samples encountered abundant organics and had a moisture content of 147 percent.

3.3.3 Older Alluvial Soils

Beneath the Bay Mud our borings and CPTs encountered alluvial deposits generally consisting of interbedded layers of stiff to very stiff lean clay with sand, medium dense to very dense clayey sand with gravel, and stiff to very stiff sandy lean clay to depths of approximately 80 feet below existing grades. Some medium stiff lean clays were also encountered at depths between about 21 to 32 feet at some locations. Below the terminal depth of our exploratory borings, our CPT soundings interpreted soil types consisting of clays and silts with interbedded layers of dense to very dense sands to a depth of 100 feet, the maximum depth explored. These older

alluvial soils, often referred to as Older Bay Clays, are generally over-consolidated and considered to have moderate to low potential for consolidation.

3.3.4 Plasticity/Expansion Potential

We performed three Plasticity Index (PI) tests on representative samples of the existing near surface undocumented fills collected from our borings at depths of about 1½ to 2 feet. Test results were used to evaluate expansion potential of surficial soils. The results of the surficial PI tests indicated PIs ranging from 4 to 25, indicating low to moderate expansion potential to wetting and drying cycles.

3.3.5 In-Situ Moisture Contents

For the existing fills overlying the Bay Mud ranging in depth from about 3 to 8½ feet beneath the surface, laboratory testing indicated that the in-situ moisture contents within the fills range from about 5 percent under to 35 percent over the estimated laboratory optimum moisture.

3.4 GROUNDWATER

Groundwater was encountered in our exploratory borings at depths ranging from about 4 to 14 feet below current grades. Additionally, groundwater is generally considered to be at or near the top of the Bay Mud, which we encountered at a depth as high as 3 feet below existing grade. Seasonally, the fill located above Bay Mud can become saturated due to perched water from surface infiltration.

We also reviewed groundwater data available online from the website GeoTracker, https://geotracker.waterboards.ca.gov/. Nearby monitoring well data indicates that groundwater was measured at depths of approximately 4 to 7 feet below grade at wells located at 511 O'Neill Ave in Belmont, California on June 14, 2004. The wells are located approximately ⅓ of a mile southwest from the proposed development.

Based on the above, we used a design groundwater depth of 2½ feet. In general, fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, tidal influence, regional fluctuations, and other factors.

SECTION 4: GEOLOGIC HAZARDS

4.1 FAULT SURFACE RUPTURE

As discussed above several significant faults are located within 25 kilometers of the site. The site is not located within a State-designated Alquist Priolo Earthquake Fault Zone. A review of published sources has not revealed any documented faults trending through the site (Pampeyan, 1994; Brabb et al., 1998; ICBO, 1998). As mentioned earlier, the Angelo Fault is located approximately 1,500 feet southwest of the site. This fault does not cut any formations that are Quaternary in age and therefore this fault is not considered active or potentially active. A second discontinuous fault (the "Belmont Hill Fault") is located approximately ¾ mile

southwest of the site. This fault is also a pre-Quaternary fault. Our review of aerial photos and site reconnaissance did not reveal any geomorphic or aerial photo features suggestive of any faults trending through the site. As shown in Figure 3, no known surface expression of fault traces is thought to cross the site. It is our judgement that fault surface rupture hazard is not a significant geologic hazard at the site.

4.2 ESTIMATED GROUND SHAKING

Moderate to severe (design-level) earthquakes can cause strong ground shaking, which is the case for most sites within the Bay Area. A site modified peak ground acceleration (PGA_M) was determined in accordance with the 2019 California Building Code (CBC) and Section 21.5 of ASCE 7-16. Therefore, we recommend a site-specific MCE_G peak ground acceleration, PGA_M, of 0.77g for this project.

4.3 LIQUEFACTION POTENTIAL

The site is within a State-designated Liquefaction Hazard Zone (CGS, San Mateo Quadrangle, 2018). Our field and laboratory programs addressed this issue by testing and sampling potentially liquefiable layers to depths of at least 50 feet, performing visual classification on sampled materials, evaluating CPT data, and performing various tests to further classify soil properties.

4.3.1 Background

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering, soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (lateral spreading) (NCEER 1998). Limited field and laboratory data is available regarding ground deformation due to settlement; however, in clean sand layers settlement on the order of 2 to 4 percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap.

4.3.2 Analysis

As discussed in the “Subsurface” section above, several sand layers were encountered below the design groundwater depth of 2½ feet. Following the liquefaction analysis framework in the 2008 monograph, *Soil Liquefaction During Earthquakes* (Idriss and Boulanger, 2008), incorporating updates in *CPT and SPT Based Liquefaction Triggering Procedures* (Boulanger and Idriss, 2014), and in accordance with CDMG Special Publication 117A guidelines (CDMG, 2008) for quantitative analysis, these layers were analyzed for liquefaction triggering and potential post-liquefaction settlement. These methods compare the ratio of the estimated cyclic shaking (Cyclic Stress Ratio - CSR) to the soil’s estimated resistance to cyclic shaking (Cyclic Resistance Ratio - CRR), providing a factor of safety against liquefaction triggering. Factors of

safety less than or equal to 1.3 are considered to be potentially liquefiable and capable of post-liquefaction re-consolidation (i.e. settlement).

The CSR for each layer quantifies the stresses anticipated to be generated due to a design-level seismic event, is based on the peak horizontal acceleration generated at the ground surface discussed in the "Estimated Ground Shaking" section above, and is corrected for overburden and stress reduction factors as discussed in the procedure developed by Seed and Idriss (1971) and updated in the 2008 Idriss and Boulanger monograph.

The soil's CRR is estimated from the in-situ measurements from CPTs and laboratory testing on samples retrieved from our borings. SPT "N" values obtained from hollow-stem auger borings were not used in our analyses, as the "N" values obtained are less reliable in sands below groundwater. The tip pressures are corrected for effective overburden stresses, taking into consideration both the groundwater level at the time of exploration and the design groundwater level, and stress reduction versus depth factors. The CPT method utilizes the soil behavior type index (I_C) to estimate the plasticity of the layers.

The results of our CPT analyses (CPT-1 through CPT-10) are presented on Figures 4A through 4J of this report.

4.3.3 Summary

Our analyses indicate that some layers could potentially experience liquefaction triggering that could result in post-liquefaction total settlement at the ground surface ranging up to about ⅔ inch based on the Yoshimine (2006) method. As discussed in SP 117A, differential movement for level ground sites over deep soil sites will be up to about two-thirds of the total settlement between independent foundation elements. In our opinion, differential settlements are anticipated to be on the order of ½ inch or less between independent shallow foundation elements.

4.3.4 Ground Deformation and Surficial Cracking Potential

The methods used to estimate liquefaction settlements assume that there is a sufficient cap of non-liquefiable material to prevent ground deformation or sand boils. For ground deformation to occur, the pore water pressure within the liquefiable soil layer will need to be great enough to break through the overlying non-liquefiable layer, which could cause significant ground deformation and settlement. The work of Youd and Garris (1995) indicates that the surficial fills are potentially liquefiable and likely to cause ground deformation and surficial cracking at explorations CPT-1/EB-1. Based on our analysis, at our other exploration locations, the potential for ground deformation and surficial cracking appears low. However, as to be further discussed, we recommend the two office structures and parking garage be supported on pile foundations; therefore, the potential for ground deformation affecting the structures is low. Exterior improvements could be affected following strong ground shaking due to liquefaction and ground deformation and significant surficial cracking during strong seismic shaking. The owner generally accepts and anticipates repair of exterior improvements following an earthquake, if needed.

4.4 LATERAL SPREADING

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

A manmade drainage channel borders the southwest portion of the site in a generally southeast-northwest direction. The channel bottom appears to be approximately 7 to 10 feet below existing site grades with the edges sloped at approximately 3:1 (horizontal:vertical). As part of our liquefaction analyses, we calculated the Lateral Displacement Index (LDI) for potentially liquefiable layers based on methods presented in the 2008 monograph, *Soil Liquefaction During Earthquakes* (Idriss and Boulanger, 2008). LDI is a summation of the maximum shear strains versus depth, which is a measurement of the potential maximum displacement at that exploration location. Summations of the LDI values to a depth equal to twice the open face height were included. As shown on the Site Plan, Figure 2, explorations CPT-1/EB-1, CPT-2/EB-6, CPT-10/EB-7, and EB-5 were performed closest to the above-mentioned channel. Based on the soils encountered in Borings EB-5 to EB-7 and LDI analysis at CPT-2 and CPT-10, estimated displacements at these locations are zero feet. However, based on the soils encountered in Boring EB-1 and LDI analysis at CPT-1, estimated displacements at this location may be on the order of 0.1 to 0.3 feet.

Based on our analysis, it appears there is a potential for lateral displacements toward the channel at the northern corner (exploration location CPT-1/EB-1) of proposed Building 2. As the undocumented fills above the Bay Mud can be variable, in our opinion there is a potential for lateral movement at other locations along the northeast side of proposed Building 2, as such, we recommend mitigation of the potential for lateral spreading be performed along the entire northeastern side of Building 2.

Although our analysis at exploration locations performed within the proposed parking garage, CPT-10/EB-7 and EB-5, indicates the potential for lateral spreading is low, we note that our exploration locations were performed set back from the property line and the currently proposed layout has the northeastern side of the structure located along the property line directly adjacent to the bank for the channel. Due to the proximity of the northeast side of the proposed structure to the channel and bank, potential variability of undocumented fills, and the shallow Bay Mud, it is our opinion there could be some bank instability and potential lateral movement toward the channel and recommend additional mitigation along the northeastern side of the parking structure. Additional mitigation recommendations provided below.

4.4.1 Lateral Spreading Mitigation

Provided there is sufficient space between the proposed buildings and the property line, to mitigate the potential lateral spreading affecting the buildings, we recommend over-excavating the upper five feet below existing grades, but no deeper than a depth of 2½ feet above top of Bay Mud, along the northeastern edge of the site, between the property line along Belmont

Creek and edge of buildings, and replacement with engineered fill. The over-excavation may be limited to the width of excavation equipment, and a minimum of 8 feet. The over-excavation should extend laterally beyond the building corners to an imaginary line 1:1 from building corner to top of slope or to property line, whichever comes first. The excavation bottom should be compacted prior to backfilling the excavation. Due to the soft and wet Bay Mud beneath, we recommend only static compaction equipment be used. The excavation should be backfilled and compacted in lifts. Please refer to the "Compaction" section of this report for additional recommendations. Provided this mitigation is performed, in our opinion, the potential for lateral spreading to affect the site improvements will be reduced to a low potential. Potholes should be performed to confirm top of Bay Mud; over-excavation depths may vary depending on results.

Alternatively, a row of stitch piers may be installed along the northeastern edge of site, between the property line along Belmont Creek and the edge of buildings. The stitch piers should be spaced at 3 pier diameters apart, extend laterally beyond the building corner to an imaginary line 1:1 from building corner to top of slope or to property line, whichever comes first, and would likely extend a minimum of 20 feet below existing grades. Should this alternative be chosen, we should be contacted to provide further evaluation and additional recommendations, as needed.

As an alternative to over-excavation or stich piers, ground improvement may be used to mitigate the potential for lateral spreading to impact the proposed structures. Should this alternative be desired/chosen, a design-build ground improvement contractor should design the ground improvement and we should provide further evaluation and additional recommendations, as needed.

In areas where the mitigation alternatives mentioned above will not be performed or where there will not be sufficient space to mitigate the potential for lateral spreading due to the proximity of the proposed buildings to the property line, we recommend passive resistance against pile caps, grade beams, and pile along the northeast sides of the buildings be neglected. The structural engineer should be made aware of the potential for reduced lateral capacity for any portion of the building along the property line towards Belmont Creek. Once the building layouts and grading plans have been finalized, we should further evaluate and provide additional recommendations, as needed. Additional recommendations are provided in the "Foundations" section of this report.

4.5 SEISMIC SETTLEMENT/UNSATURATED SAND SHAKING

Loose to medium dense unsaturated sandy soils can settle during strong seismic shaking. We evaluated the potential for seismic compaction of the loose to medium dense sands based on the work by Robertson and Shao (2010). Based on our analyses, the potential for significant seismic settlement affecting the proposed improvements is low.

4.6 TSUNAMI/SEICHE

The terms tsunami or seiche are described as ocean waves or similar waves usually created by undersea fault movement or by a coastal or submerged landslide. Tsunamis may be generated at great distance from shore (far field events) or nearby (near field events). Waves are formed,

as the displaced water moves to regain equilibrium, and radiates across the open water, similar to ripples from a rock being thrown into a pond. When the waveform reaches the coastline, it quickly raises the water level, with water velocities as high as 15 to 20 knots. The water mass, as well as vessels, vehicles, or other objects in its path create tremendous forces as they impact coastal structures.

Tsunamis have affected the coastline along the Pacific Northwest during historic times. The Fort Point tide gauge in San Francisco recorded approximately 21 tsunamis between 1854 and 1964. The 1964 Alaska earthquake generated a recorded wave height of 7.4 feet and drowned eleven people in Crescent City, California. For the case of a far-field event, the Bay area would have hours of warning; for a near field event, there may be only a few minutes of warning, if any.

A tsunami or seiche originating in the Pacific Ocean would lose much of its energy passing through San Francisco Bay. Based on the mapping of tsunami inundation potential for the San Francisco Bay Area by CGS (conservation.ca.gov/cgs/tsunami/maps), areas most likely to be inundated are marshlands, tidal flats, and former bay margin lands that are now artificially filled, but are still at or below sea level, and are generally within 1½ miles of the shoreline. The site is approximately 2¼ miles inland from the San Francisco Bay shoreline and is approximately 8 to 10 feet above mean sea level. Additionally, the site is mapped by the California Geological Survey Tsunami Hazard Area Map as not being within a tsunami hazard area. Therefore, the potential for inundation due to tsunami or seiche is considered low.

4.7 FLOODING

Based on our internet search of the Federal Emergency Management Agency (FEMA) flood map public database, the site is located within Zone X, an area described as “0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile.” We recommend the project civil engineer be retained to confirm this information.

SECTION 5: BAY MUD SETTLEMENT

The site is underlain by up to approximately 3½ to 8½ feet of compressible Bay Mud. Analyses were performed to estimate the potential settlement associated with the placement of new fill and foundation loads. The analysis assumed a design period of 30 years commencing with the completion of construction.

Our settlement analysis was based on the site history, previous and supplemental laboratory data, and proposed construction. Given the site history and laboratory testing, we assumed the Bay Mud crust and the upper portion of the Bay Mud was slightly over-consolidated to a depth of about 9 to 10 feet below existing grades and the lower portion of the Bay Mud below a depth of about 9 to 10 feet was closer to normally consolidated under the weight of the existing fill.

Grading plans have not been provided and we are not aware of any fill placement/raising of site grades at this time.

5.1 AREAL FILL SETTLEMENT

We estimated 30-year settlements for various finish construction grades. The amount of future settlement is primarily dependent on the construction grade and the thickness of Bay Mud. We estimate that continuing settlement due to the existing fills at the site will be limited, and that primary consolidation due to the original construction will likely be less than 1 inch. We estimate that settlement from the placement of new fills will be on the order of approximately ½ to 2 inches for every foot of new fill placed. This settlement is due to the weight of the existing and any additional fills only; settlement from other loads would be in addition to these estimates.

Any underground utility pipes entering the building should be oversteepened and designed to accommodate the expected differential settlement between the building and the adjacent ground to avoid sags and backflow of gravity lines.

5.2 FLEXIBLE UTILITY CONNECTIONS

Due to the expected total and differential settlements, incorporating the anticipated settlements in the design of utilities and surface drainage will be necessary. Ball joints and sleeve type or other flexible couplings, as appropriate, should be considered between piping and the buildings and in utility areas in which large differential settlements are expected to occur. Hanging the utilities from the bottom of the structural slab and over steepening utilities that gravity drain should be considered where settlement is greater than tolerable. Additional considerations for construction on Bay Mud sites is presented below in Appendix C.

SECTION 6: CONCLUSIONS

6.1 SUMMARY

From a geotechnical viewpoint, the project is feasible provided the concerns listed below are addressed in the project design. Descriptions of each concern with brief outlines of our recommendations follow the listed concerns.

- Bay Mud settlement
- Potential for liquefaction-induced settlements
- Potential for lateral spreading
- Shallow groundwater
- Presence of undocumented fills
- Presence of moderately expansive soils
- Differential movement between exterior grades and to structure
- Slope stability
- Corrosion potential of near-surface soils

6.1.1 Bay Mud Settlement

As discussed in the Subsurface Conditions section, the site is underlain by approximately 3½ to 8½ feet of compressible Bay Mud that will settle under the weight of any new fills placed, or any building or other improvement loads. Even small grade changes can cause additional settlement of the underlying soft clays (Bay Mud). Because of the varying thicknesses of Bay Mud, the differential stress history of the subsurface materials due to previous site development, and the anticipated structural loads, we provide recommendations in this report to support the proposed office and parking garage structures on deep pile foundations. Based on our experience with other projects in the site vicinity, we anticipate a low noise and vibration deep foundation alternative such as Augercast Pressure Grouted (APG) piles will be desired. Detailed recommendations for these pile types are presented in the "Foundation" section below.

Differential settlement is anticipated to occur in areas where the thickness of any new fill, existing fill, or other loads vary abruptly, or where the thickness of the Bay Mud varies significantly over a short horizontal distance. Finished grading plans should be designed to avoid abrupt grade changes and irregular concentrations of loads to reduce differential settlement. To mitigate the effects of the anticipated differential settlements, we recommend that gravity flow utilities be designed to account for any future settlement to avoid grade reversal, sags or leakage from joint separation.

In addition, even where grades are similar and anticipated settlement is expected to be relatively uniform, differential settlement can occur due to variations in conditions, previous stress history, and other anomalies. Therefore, utilities should be designed for variations in differential settlement, including over-steepening gravity-flow utilities to accommodate such variations.

6.1.2 Potential for Liquefaction-Induced Settlements

As discussed, our liquefaction analysis indicates that there is a potential for liquefaction of localized sand layers during a significant seismic event. Our analysis indicates total liquefaction-induced settlement up to about ⅔ inch could occur, resulting in differential settlement up to ½ inch. Additionally, our analyses indicate there is a potential for ground deformation and surficial cracking at explorations CPT-1/EB-1 and we anticipate ground deformation and surficial cracking could occur at other locations across the site where potentially liquefiable surficial fills are present. However, as discussed, the buildings will be supported on pile foundations and the potential for ground deformation affecting the structures would be low. Foundations should be designed to tolerate the anticipated total and differential settlements. Detailed foundation recommendations are presented in the "Foundations" section.

6.1.3 Potential for Lateral Spread

As discussed above, our analysis indicates that lateral spreading could occur in the surficial fills towards the abutting Belmont Creek bank. Displacements on the order of 0.1 to 0.3 feet could potentially occur during strong seismic shaking along the northeastern edge of Building 2. Additionally, the current layout of the proposed parking structure extends up to the property line

directly adjacent to the Belmont Creek bank and we anticipate there could be potential lateral movement and slope instability along this edge. Please refer to the "Lateral Spreading" and "Foundations" sections of this report for additional mitigation recommendations.

6.1.4 Shallow Groundwater

Free groundwater was measured at depths ranging from approximately 4 to 14 feet below the existing ground surface in our borings prior to grouting. We anticipate groundwater to be at or near the top of the Bay Mud (encountered as shallow as about 3 feet below existing site grades) and perched groundwater could be encountered potentially higher up into the overlying existing fill material. Additionally, we anticipate groundwater or perched water levels can be encountered on Bay Mud sites as shallow as about 2 feet. Therefore, in our opinion, excavations deeper than approximately 2 feet may potentially be impacted by shallow groundwater, depending on how long the excavations are left open. Our experience with similar sites in the vicinity indicates that shallow groundwater could significantly impact grading and underground construction. These impacts typically consist of potentially wet and unstable pavement subgrade, difficulty achieving compaction, and difficult underground utility installation. Dewatering and shoring of utility trenches may be required in some isolated areas of the site. Detailed recommendations addressing this concern are presented in the "Earthwork" section of this report.

6.1.5 Presence of Undocumented Fill

Explorations within the location of the proposed buildings encountered approximately 3 to 8½ feet of undocumented fill. Based on our knowledge of other historic fills along the Bay, although not observed in our explorations, some rubble may be encountered in the fill and should be anticipated by deep foundation and underground contractors. In addition, previous building at the site will have foundations, slabs and other improvements that will have to be removed during demolition.

As discussed above, the proposed office structures will be supported on deep foundations. Per discussions with the structural engineer, we understand structural slabs will span between the pile caps and grade beams; as a result, the office structures will not be impacted by the existing fill material. However, we understand the at-grade level for the parking structure will likely consist of a conventional concrete slab-on-grade or on-grade asphalt pavements rather than a structural slab. If a concrete slab-on-grade or on-grade asphalt pavements are chosen for the parking structure, we anticipate settlement may occur due to variability of the underlying undocumented fills and long-term consolidation settlement of the Bay Mud. We recommend that concrete slabs-on-grade and asphalt pavements be separated/disconnected from columns and walls/deep foundation elements and the slab-on-grade or on-grade asphalt pavements be constructed on a properly prepared subgrade. In addition, to reduce the potential for damage to proposed surface improvements at the site due to differential settlement of the fill material, new exterior pavements and surface improvements should be constructed on a properly prepared subgrade. Detailed recommendations are provided in the "Earthwork" and "Concrete Slabs and Pedestrian Pavements" sections below.

6.1.6 Presence of Moderately Expansive Soils

As discussed above, the undocumented fill that blankets the site is variable and ranges from sands to moderately plastic clays, while the underlying Bay Mud is considered highly to very highly expansive. Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wetted. To reduce the potential for damage to the planned structures and improvements, building slabs should be designed as structural slabs to resist potential uplift pressure from expansive soils or underlain by a layer of non-expansive fill and exterior flatwork should have sufficient reinforcement and be supported on a layer of non-expansive fill. In addition, it is important to limit moisture changes in the surficial soils by using positive drainage away from buildings as well as limiting landscaping watering. We recommend that a plug of low-permeability clay soil, sand-cement slurry, or lean concrete be placed within trenches just outside where the trenches pass into building and pavement areas. Detailed grading and foundation recommendations addressing this concern are presented in the following sections.

6.1.7 Differential Movement from Exterior Grades to Structure

As discussed, the structures will be supported on pile foundations, and exterior grades and improvements supported on-grade, including buried utilities, are expected to be subject to significant long-term settlement. As a result, significant differential movement may occur between exterior improvements and structures, especially if any fill is placed at the site. The following items will need to be considered in design to avoid significant distress.

- Concrete flatwork at building entrances/exits should be structurally tied to the structure, creating hinged connections, to allow access and limit trip hazards.

- Where utilities transition to the structure, flexible utility connections or other types of mitigation may be necessary to prevent damage or disruption of utilities. Hanging the utilities from the bottom of the structural slab and over-steepening gravity utilities should be considered where differential settlement may exceed normal tolerances. Where utilities enter the pile supported building, we recommend designing utilities for estimated settlements discussed in the “Bay Mud Settlement” section above.

- Perimeter grade beams should be deep enough to avoid exposure of the bottom of the structure due to long-term settlement. This can be an eye sore, and sometimes worrisome to the occupants.

6.1.8 Slope Stability

The bank of Belmont Creek, bordering the site, appears stable with no visible signs of instability. However, the site is underlain by a relatively low strength clay layer (Bay Mud), and could become unstable should additional loads (e.g. stockpiles of materials, additional fills due to raising site grades, heavy equipment loads, etc.) be placed in close proximity to the creek bank. For this reason, we recommend that any additional loads be kept at least 30 feet away from the

creek bank. In addition, we recommend that any heavy equipment (e.g. cranes, etc.) be provided with adequate support to prevent a slope/bearing failure in the underlying Bay Mud.

6.1.9 Corrosion Potential of Near-Surface Soils

Based on our experience, Bay Mud is generally considered severely corrosive and detrimental to buried steel and cast iron improvements. Bay Mud and the fills overlying the Bay Mud are known to generally have high sulfate levels that could be corrosive to buried concrete structures. Site-specific corrosion testing and analysis has not been performed at this time. We recommend corrosion potential be taken into consideration for the project design and testing/analysis be performed to evaluate and determine corrosion control recommendations for the site development.

6.2 PLANS AND SPECIFICATIONS REVIEW

We recommend that we be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing the plans for construction.

6.3 CONSTRUCTION OBSERVATION AND TESTING

As site conditions may vary significantly between the small-diameter borings performed during this investigation, we also recommend that a Cornerstone representative be present to provide geotechnical observation and testing during earthwork and foundation construction. This will allow us to form an opinion and prepare a letter at the end of construction regarding contractor compliance with project plans and specifications, and with the recommendations in our report. We will also be allowed to evaluate any conditions differing from those encountered during our investigation and provide supplemental recommendations as necessary. For these reasons, the recommendations in this report are contingent of Cornerstone providing observation and testing during construction. Contractors should provide at least a 48-hour notice when scheduling our field personnel.

SECTION 7: EARTHWORK

In general, the site may be graded with relatively light-weight grading equipment; however, potential difficulties could arise due to shallow Bay Mud, existing fills, and shallow groundwater. We have provided general guidelines for earthwork construction and highlighted some of the more difficult aspects of earthwork on sites underlain by Bay Mud in Appendix C, Construction Guidelines on Bay Mud.

7.1 SITE DEMOLITION

All existing improvements not to be reused for the current development, including all foundations, flatwork, pavements, utilities, and other improvements should be demolished and removed from the site. Recommendations in this section apply to the removal of these

improvements, which are present on the site, prior to the start of mass grading or the construction of new improvements for the project.

Cornerstone should be notified prior to the start of demolition and should be present on at least a part-time basis during all backfill and mass grading as a result of demolition. Occasionally, other types of buried structures (wells, cisterns, debris pits, etc.) can be found on sites with prior development. If encountered, Cornerstone should be contacted to address these types of structures on a case-by-case basis.

7.1.1 Demolition of Existing Slabs, Foundations and Pavements

All slabs, foundations, and pavements should be completely removed from within planned building areas.

Special care should be taken during the demolition and removal of existing floor slabs, foundations, utilities and pavements to minimize disturbance of the subgrade. Excessive disturbance of the subgrade, which includes either native or previously placed engineered fill, resulting from demolition activities can have serious detrimental effects on planned foundation and paving elements.

Existing foundations are typically mat-slabs, shallow footings, or piers/piles. If slab or shallow footings are encountered, they should be completely removed. If piles or drilled piers are encountered, they should be cut off at an elevation at least 60-inches below proposed pile caps or the final subgrade elevation, whichever is deeper. The remainder of the pile or drilled pier could remain in place. Foundation elements to remain in place should be surveyed and superimposed on the proposed development plans to determine the potential for conflicts or detrimental impacts to the planned construction. Following review, additional mitigation or planned foundation elements may need to be modified.

7.1.2 Abandonment of Existing Utilities

All utilities should be completely removed from within planned building areas. For any utility line to be considered acceptable to remain within building areas, the utility line must be completely backfilled with grout or sand-cement slurry (sand slurry is not acceptable), the ends outside the building area capped with concrete, and the trench fills either removed and replaced as engineered fill with the trench side slopes flattened to at least 1:1, or the trench fills are determined not to be a risk to the structure. The assessment of the level of risk posed by the particular utility line will determine whether the utility may be abandoned in place or needs to be completely removed. The contractor should assume that all utilities will be removed from within building areas unless provided written confirmation from both the owner and the geotechnical engineer.

Utilities extending beyond the building area may be abandoned in place provided the ends are plugged with concrete, they do not conflict with planned improvements, and that the trench fills do not pose significant risk to the planned surface improvements. The weight of backfill

materials should balance the weight of materials removed, otherwise settlement of the underlying Bay Mud may be induced.

The risk for owners associated with abandoning utilities in place include the potential for future differential settlement of existing trench fills, and/or partial collapse and potential ground loss into utility lines that are not completely filled with grout.

7.2 SITE CLEARING AND PREPARATION

7.2.1 Site Stripping

The site should be stripped of all surface vegetation, and surface and subsurface improvements within the proposed development area. Demolition of existing improvements is discussed in the prior paragraphs. Surface vegetation and topsoil should be stripped to a sufficient depth to remove all material greater than 3 percent organic content by weight.

7.2.2 Tree and Shrub Removal

Trees and shrubs designated for removal should have the root balls and any roots greater than ½-inch diameter removed completely. Mature trees are estimated to have root balls extending to depths of 2 to 4 feet, depending on the tree size. Significant root zones are anticipated to extend to the diameter of the tree canopy. Grade depressions resulting from root ball removal should be cleaned of loose material and backfilled in accordance with the recommendations in the "Compaction" section of this report.

7.3 MITIGATION OF UNDOCUMENTED FILLS

As discussed previously, provided the proposed structures are supported on deep foundations with structural floors spanning between pile caps and grade beams, mitigation specifically for undocumented fill within the building areas will most likely not be required. Deep foundations should be installed in accordance with recommendations provided in the "Foundations" section of this report.

We understand the at-grade level for the parking structure may consist of a conventional concrete slab-on-grade or on-grade asphalt pavements rather than a structural slab. To fully mitigate the potential for future settlement due to undocumented fill, it is our general recommendation for all undocumented fills to be fully removed and replaced as engineered fill within building areas when a structural slab will not be constructed. This full mitigation reduces the potential for differential settlement beneath the slab-on-grade or on-grade asphalt pavements within the building area due to variations within the fill. However, we understand there may be cost implications with this recommendation and due to the underlying saturated, soft Bay Mud, reworking of all the fills may not be feasible or practical. At the owner's option, if the ground level of the parking structure will consist of a concrete slab-on-grade or on-grade asphalt, the fill may remain in place within the parking structure provided the upper 12 to 18 inches of existing fills below subgrade are recompacted as engineered fill to create a more uniform bearing surface. Please note, reworking the upper 12 to 18 inches of subgrade will not

fully reduce the potential for settlement due to variability in the existing fills. Some risk for additional settlement from not completely reworking the existing fills will need to be accepted by the design team. Additional settlement is also likely due to long-term consolidation of the underlying Bay Mud.

Fills extending into planned pavement and flatwork areas may be left in place provided they are determined to be a low risk for future differential settlement and that the upper 12 to 18 inches of fill below pavement subgrade is re-worked and compacted as discussed in the "Compaction" section below. Based on the blowcounts and densities of the undocumented fill encountered, it appeared that there was some compaction effort when placing them, however, this could be variable across the site.

7.4 TEMPORARY CUT AND FILL SLOPES

The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards.

Excavations performed during site demolition and utility removal should be sloped at 3:1 (horizontal:vertical) within the upper 3 feet below building subgrade. Excavations extending more than 3 feet below building subgrade and excavations in pavement and flatwork areas should be reviewed if temporary slopes are to be used due to the weak, soft underlying Bay Mud, which is subject to slope failure.

Support of excavation and trench walls in Bay Mud may be accomplished using sheet piles, braced shoring, or an equivalent method. This choice should be left to the contractor's judgment since economic considerations and/or the individual contractor's construction experience may determine which method is most appropriate. Shoring, bracing, and benching should be performed by the contractor in accordance with the strictest governing safety standards. Trench shields should not be allowed in excavations unless special placement methods are used and approved by the geotechnical engineer.

In general, the contractor should be responsible for all temporary trenches and excavations at the site and design of any required temporary shoring. Support of adjacent existing roadways or other improvements without distress should also be the contractor's responsibility. We recommend that the contractor forward plans for the above support systems to the structural engineer and geotechnical engineer for review prior to construction.

Improper shoring and delays in construction could result in movement of the excavation bottom, often referred to as base heave. Sloped excavations for manholes extending into Bay Mud may also experience deep-seated movement near the base of the excavation that may not be visible during construction. To help reduce the potential for base heave, once a pipe has been placed in an excavation, the trench should be backfilled the same day.

If care is taken during excavation, shoring, pipe placement, backfilling of the excavation and removal of the shoring, we do not anticipate circumstances or conditions that would adversely

affect the long-term performance of the pipeline. However, lack of attention to detail, especially during removal of shoring during the trench backfilling process, could result in creation of voids in the soil or other conditions that could adversely affect the long-term performance of the pipeline.

We recommend that utilities with trench backfill extending into Bay Mud be designed to balance stresses with the removed soil to avoid inducing additional stresses in the underlying Bay Mud. For deeper utilities, the use of lightweight backfill material may be required. Replacing excavated Bay Mud with heavier trench backfill material may result in additional local settlement, potentially causing a reversal in flows or sags in gravity utilities.

7.5 SUBGRADE PREPARATION

After site clearing and demolition is complete, and prior to backfilling any excavations resulting from fill removal or demolition, the excavation subgrade and subgrade within areas to receive additional site fills, slabs-on-grade and/or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the “Compaction” section below.

Any below-grade excavation could be located close to or in Bay Mud depending on the excavation depth and the amount of fill in that area. Stabilization of the bottom of these excavations will likely be required. Stabilization should be accomplished with 12 to 18 inches of clean crushed rock depending on the final depth and condition of subgrade. The crushed rock should be wrapped in filter fabric (Mirafi 140N or equivalent) as separation between the native clays and the crushed rock. If further stabilization is needed a stabilization fabric (Mirafi RS380i or equivalent) can be used. The final thickness of crushed rock needed should be based on the judgment of the contractor and the type of equipment and material loading that is likely to occur. Construction equipment is unlikely to be able to access the bottom of excavations without stabilized access. Destabilized or disturbed areas will require repair using methods approved by the geotechnical engineer. Increased stability could be obtained with the use of fabric or geogrids beneath the stabilization section of crushed rock. Excavations should be in accordance with recommendations for excavations in Bay Mud.

7.6 WET SOIL STABILIZATION GUIDELINES

Native soil and fill materials, especially soils with high fines contents such as clays and silty soils, can become unstable due to high moisture content, whether from high in-situ moisture contents or from winter rains. As the moisture content increases over the laboratory optimum, it becomes more likely the materials will be subject to softening and yielding (pumping) from construction loading or become unworkable during placement and compaction.

As discussed in the “Subsurface” section in this report, the in-situ moisture contents range from about 5 percent below to 30 percent over the estimated laboratory optimum in the fills above the underlying Bay Mud. Additionally, moisture contents of the Bay Mud beneath the surficial fills can be significantly higher above optimum moistures than mentioned above. The contractor should anticipate drying the soils prior to reusing them as fill; we do not recommend that Bay

Mud soils be reused as fill. In addition, repetitive rubber-tire loading will likely de-stabilize the soils.

There are several methods to address potential unstable soil conditions and facilitate fill placement and trench backfill. Below-grade excavation stabilization recommendations are provided above in the "Subgrade Preparation" section. Some of the methods are briefly discussed below. Implementation of the appropriate stabilization measures should be evaluated on a case-by-case basis according to the project construction goals and the site conditions.

7.6.1 Scarification and Drying

The subgrade may be scarified to a depth of 8 to 12 inches and allowed to dry to near optimum conditions, if sufficient dry weather is anticipated to allow sufficient drying. More than one round of scarification may be needed to break up the soil clods.

7.6.2 Removal and Replacement

As an alternative to scarification, the contractor may choose to over-excavate the unstable soils and replace them with dry on-site or import materials. A Cornerstone representative should be present to provide recommendations regarding the appropriate depth of over-excavation, whether a geosynthetic (stabilization fabric or geogrid) is recommended, and what materials are recommended for backfill.

7.6.3 Chemical Treatment

Where the unstable area exceeds about 5,000 to 10,000 square feet and/or site winterization is desired, chemical treatment with quicklime (CaO), kiln-dust, or cement may be more cost-effective than removal and replacement. Recommended chemical treatment depths will typically range from 12 to 18 inches depending on the magnitude of the instability.

As the underlying Bay Mud is known to have high sulfate levels, chemical treatment and the chemical treatment type should be performed with caution and evaluated by the chemical treatment contractor.

7.7 SHALLOW GROUNDWATER

Free groundwater was encountered in our borings at depths of about 4 to 14 feet below the current grades. We anticipate groundwater to be shallow, at or near the top of the highest Bay Mud levels we encountered, and potentially higher up into the overlying existing fill material. Additionally, we anticipate groundwater or perched water levels can be encountered on Bay Mud sites as shallow as about 2 feet. Therefore, in our opinion, excavations deeper than approximately 2 feet may potentially be impacted by shallow groundwater, depending on how long the excavations are left open. This depth might be higher or lower depending on the time of year. In our opinion, provided shallow excavations less than 2 feet deep are completed and backfilled within the same day, they will most likely remain relatively dry. If significant groundwater does accumulate, it should be removed from the excavation prior to backfilling.

7.8 MATERIAL FOR FILL

7.8.1 Re-Use of On-site Soils

Excavated Bay Mud should not be used as engineered fill. Bay Mud may not be suitable for use as landscape soil due to its marine origin and generally high sulfate content. Bay Mud encountered during excavation or grading should be segregated from the fill such that the drier fill material is not mixed with wet Bay Mud.

On-site soils with an organic content less than 3 percent by weight may be reused as general fill. General fill should not have lumps, clods or cobble pieces larger than 6 inches in diameter; 85 percent of the fill should be smaller than 2½ inches in diameter. Minor amounts of oversize material (smaller than 12 inches in diameter) may be allowed provided the oversized pieces are not allowed to nest together and the compaction method will allow for loosely placed lifts not exceeding 12 inches.

7.8.2 Re-Use of On-Site Site Improvements

Asphalt concrete (AC) grindings and aggregate base (AB) may be generated during site demolition. If the AC grindings are mixed with the underlying AB to meet Class 2 AB specifications, they may be reused within the new pavement and flatwork structural sections. AC/AB grindings may not be reused within the building footprint areas. Laboratory testing will be required to confirm the grindings meet project specifications. If grinding operations leave significant oversize chunks and does not meet the Class 2 AB gradation requirements, it may meet Caltrans subbase requirements. Depending on the quantities of oversized material, the grindings may still be used within the structural section; however, the pavement design will need to be modified to account for the difference, typically resulting in the addition of about 1 inch to the structural section.

7.8.3 Potential Import Sources

While we understand that no new fill is planned for the site at this time, imported and non-expansive material should be inorganic with a Plasticity Index (PI) of 15 or less, and not contain recycled asphalt concrete where it will be used within the habitable building areas. To prevent significant caving during trenching or foundation construction, imported material should have sufficient fines. Samples of potential import sources should be delivered to our office at least 10 days prior to the desired import start date. Information regarding the import source should be provided, such as any site geotechnical reports. If the material will be derived from an excavation rather than a stockpile, potholes will likely be required to collect samples from throughout the depth of the planned cut that will be imported. At a minimum, laboratory testing will include PI tests. Material data sheets for select fill materials (Class 2 aggregate base, ¾-inch crushed rock, quarry fines, etc.) listing current laboratory testing data (not older than 6 months from the import date) may be provided for our review without providing a sample. If current data is not available, specification testing will need to be completed prior to approval.

Environmental and soil corrosion characterization should also be considered by the project team prior to acceptance. Suitable environmental laboratory data to the planned import quantity should be provided to the project environmental consultant; additional laboratory testing may be required based on the project environmental consultant's review. The potential import source should also not be more corrosive than the on-site soils, based on pH, saturated resistivity, and soluble sulfate and chloride testing.

7.9 COMPACTION REQUIREMENTS

All fills, and subgrade areas where fill, slabs-on-grade, and pavements are planned, should be placed in loose lifts 8 inches thick or less and compacted in accordance with ASTM D1557 (latest version) requirements as shown in the table below. In general, clayey soils should be compacted with sheepsfoot equipment and sandy/gravelly soils with vibratory equipment; open-graded materials such as crushed rock should be placed in lifts no thicker than 18 inches and consolidated in place with vibratory equipment. Each lift of fill and all subgrade should be firm and unyielding under construction equipment loading in addition to meeting the compaction requirements to be approved. The contractor (with input from a Cornerstone representative) should evaluate the in-situ moisture conditions, as the use of vibratory equipment on soils with high moistures can cause unstable conditions. General recommendations for soil stabilization are provided in the "Wet Soil Stabilization Guidelines" section of this report. Where the soil's PI is 20 or greater, the expansive soil criteria should be used.

Table 2: Compaction Requirements

Description	Material Description	Minimum Relative[1] Compaction (percent)	Moisture[2] Content (percent)
General Fill (within upper 5 feet)	On-Site Expansive Soils	87 – 92	>3
	Low Expansion Soils	90	>1
General Fill (below a depth of 5 feet)	On-Site Expansive Soils	95	>3
	Low Expansion Soils	95	>1
Trench Backfill	On-Site Expansive Soils	87 – 92	>3
	Low Expansion Soils	90	>1
Trench Backfill (upper 6 inches of subgrade)	On-Site Low Expansion Soils	95	>1
Crushed Rock Fill	¾-inch Clean Crushed Rock	Consolidate In-Place	NA
Non-Expansive Fill	Imported Non-Expansive Fill	90	Optimum
Flatwork Subgrade	On-Site Expansive Soils	87 - 92	>3
	Low Expansion Soils	90	>1
Flatwork Aggregate Base	Class 2 Aggregate Base[3]	90	Optimum

Table 2 continues

Table 2: Compaction Requirements (continued)

Description	Material Description	Minimum Relative[1] Compaction (percent)	Moisture[2] Content (percent)
Pavement Subgrade	On-Site Expansive Soils	87 - 92	>3
	Low Expansion Soils	95	>1
Pavement Aggregate Base	Class 2 Aggregate Base[3]	95	Optimum
Asphalt Concrete	Asphalt Concrete	95 (Marshall)	NA

1 – Relative compaction based on maximum density determined by ASTM D1557 (latest version)
2 – Moisture content based on optimum moisture content determined by ASTM D1557 (latest version)
3 – Class 2 aggregate base shall conform to Caltrans Standard Specifications, latest edition, except that the relative compaction should be determined by ASTM D1557 (latest version)

7.9.1 Construction Moisture Conditioning

Expansive soils can undergo significant volume change when dried then wetted. The contractor should keep all exposed expansive soil subgrade (and also trench excavation side walls) moist until protected by overlying improvements (or trenches are backfilled). If expansive soils are allowed to dry out significantly, re-moisture conditioning may require several days of re-wetting (flooding is not recommended), or deep scarification, moisture conditioning, and re-compaction.

7.10 TRENCH BACKFILL

Utility lines constructed within public right-of-way should be trenched, bedded and shaded, and backfilled in accordance with the local or governing jurisdictional requirements. Utility lines in private improvement areas should be constructed in accordance with the following requirements unless superseded by other governing requirements.

All utility lines should be bedded and shaded to at least 6 inches over the top of the lines with crushed rock (⅜-inch-diameter or greater) or well-graded sand and gravel materials conforming to the pipe manufacturer's requirements. Open-graded shading materials should be consolidated in place with vibratory equipment and well-graded materials should be compacted to at least 90 percent relative compaction with vibratory equipment prior to placing subsequent backfill materials. Open-graded materials (i.e. crushed rock, pea gravel, etc.) should also be completely enclosed with filter fabric such as Mirafi 140N or approved equivalent when extending near and below the design groundwater.

General backfill over shading materials may consist of on-site native materials provided they meet the requirements in the "Material for Fill" section, and are moisture conditioned and compacted in accordance with the requirements in the "Compaction" section.

Where utility lines will cross perpendicular to strip footings, the footing should be deepened to encase the utility line, providing sleeves or flexible cushions to protect the pipes from anticipated foundation settlement, or the utility lines should be backfilled to the bottom of footing with sand-

cement slurry or lean concrete. Where utility lines will parallel footings and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the footing, either the footing will need to be deepened so that the pipe is above the foundation plane of influence or the utility trench will need to be backfilled with sand-cement slurry or lean concrete within the influence zone. Sand-cement slurry used within foundation influence zones should have a minimum compressive strength of 75 psi.

On expansive soils sites it is desirable to reduce the potential for water migration into building and pavement areas through the granular shading materials. We recommend that a plug of low-permeability clay soil, sand-cement slurry, or lean concrete be placed within trenches just outside where the trenches pass into building and pavement areas.

Bay Mud underground utility construction means and methods are generally left up to the contractor; however, excavations extending into Bay Mud will require shoring. Bay Mud is very weak, and may fail due to surcharge from equipment, or even under it's own weight. Utilities extending into Bay Mud should balance the weight of backfill materials with the weight of materials being removed as recommended in this section. In addition, dewatering will likely be necessary in trenches due to perched water or groundwater seepage as discussed in the "Construction Dewatering" section below.

7.11 SITE DRAINAGE

7.11.1 Surface Drainage

Ponding should not be allowed adjacent to building foundations, slabs-on-grade, or pavements. Hardscape surfaces should slope at least 2 to 3 percent towards suitable discharge facilities; landscape areas should slope at least 3 to 5 percent towards suitable discharge facilities. Roof runoff should be directed away from building areas in closed conduits, to approved infiltration facilities, or on to hardscaped surfaces that drain to suitable facilities. Retention, detention or infiltration facilities should be spaced at least 10 feet from buildings, and preferably at least 5 feet from slabs-on-grade or pavements. However, if retention, detention or infiltration facilities are located within these zones, we recommend that these treatment facilities meet the requirements in the Storm Water Treatment Design Considerations section of this report.

7.11.2 Construction Dewatering

Construction of underground utilities extending into the fill materials, or into the native Bay Mud, may require excavation dewatering due to perched water or groundwater. Because of the relatively low permeability of the Bay Mud, seepage from the native Bay Mud may be minimal; however, existing fill areas could potentially be saturated and excavations extending through them could be subject to seepage. The dewatering system should be designed and implemented by the contractor.

Depending on the groundwater quality, on-site retention, off-site disposal, or treatment prior to discharge, either into storm or sanitary sewer, may be required.

7.12 LOW-IMPACT DEVELOPMENT (LID) IMPROVEMENTS

The Municipal Regional Permit (MRP) requires regulated projects to treat 100 percent of the amount of runoff identified in Provision C.3.d from a regulated project's drainage area with low impact development (LID) treatment measures onsite or at a joint stormwater treatment facility. LID treatment measures are defined as rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment. A biotreatment system may only be used if it is infeasible to implement harvesting and use, infiltration, or evapotranspiration at a project site.

Technical infeasibility of infiltration may result from site conditions that restrict the operability of infiltration measures and devices. Various factors affecting the feasibility of infiltration treatment may create an environmental risk, structural stability risk, or physically restrict infiltration. The presence of any of these limiting factors may render infiltration technically infeasible for a proposed project. To aid in determining if infiltration may be feasible at the site, we provide the following site information regarding factors that may aid in determining the feasibility of infiltration facilities at the site.

- The near-surface soils at the site are variable and generally clayey and expected to have infiltration rates of less than 0.2 inches per hour. In our opinion, the fill soils will significantly limit the infiltration of stormwater.

- Groundwater is generally considered to be shallow, likely at or near the top of the highest Bay Mud levels encountered. Additionally, groundwater was observed as shallow as a depth of 4 feet below the current grade in our exploratory borings. Seasonal fluctuations can cause the fill located above the Bay Mud to become saturated with perched water.

- Infiltration measures, devices, or facilities may conflict with the location of existing or proposed underground utilities or easements. Infiltration measures, devices, or facilities should not be placed on top of or very near to underground utilities such that they discharge to the utility trench, restrict access, or cause stability concerns.

7.12.1 Storm Water Treatment Design Considerations

If storm water treatment improvements, such as shallow bio-retention swales, basins or pervious pavements, are required as part of the site improvements to satisfy Storm Water Quality (C.3) requirements, we recommend the following items be considered for design and construction.

7.12.1.1 General Bioswale Design Guidelines

- If possible, avoid placing bioswales or basins within 10 feet of the building perimeter or within 5 feet of exterior flatwork or pavements. If bioswales must be constructed within these setbacks, the side(s) and bottom of the trench excavation should be lined with 10-mil visqueen to reduce water infiltration into the surrounding soils.

- Bioswales constructed within 3 feet of proposed buildings may be within the foundation zone of influence for perimeter wall loads. Therefore, where bioswales will parallel foundations and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the foundation, the foundation will need to be deepened so that the bottom edge of the bioswale filter material is above the foundation plane of influence.

- The bottom of bioswale or detention areas should include a perforated drain placed at a low point, such as a shallow trench or sloped bottom, to reduce water infiltration into the surrounding soils near structural improvements, and to address the low infiltration capacity of the on-site clay soils.

7.12.1.2 Bioswale Infiltration Material

- Gradation specifications for bioswale filter material, if required, should be specified on the grading and improvement plans.

- Compaction requirements for bioswale filter material in non-landscaped areas or in pervious pavement areas, if any, should be indicated on the plans and specifications to satisfy the anticipated use of the infiltration area.

- If bioswales are to be vegetated, the landscape architect should select planting materials that do not reduce or inhibit the water infiltration rate, such as covering the bioswale with grass sod containing a clayey soil base.

- Due to the relatively loose consistency and/or high organic content of many bioswale filter materials, long-term settlement of the bioswale medium should be anticipated. To reduce initial volume loss, bioswale filter material should be wetted in 12-inch lifts during placement to pre-consolidate the material. Mechanical compaction should not be allowed, unless specified on the grading and improvement plans, since this could significantly decrease the infiltration rate of the bioswale materials.

- It should be noted that the volume of bioswale filter material may decrease over time depending on the organic content of the material. Additional filter material may need to be added to bioswales after the initial exposure to winter rains and periodically over the life of the bioswale areas, as needed.

7.12.1.3 Bioswale Construction Adjacent to Pavements

If bio-infiltration swales or basins are considered adjacent to proposed parking lots or exterior flatwork, we recommend that mitigative measures be considered in the design and construction of these facilities to reduce potential impacts to flatwork or pavements. Exterior flatwork, concrete curbs, and pavements located directly adjacent to bio-swales may be susceptible to settlement or lateral movement, depending on the configuration of the bioswale and the setback between the improvements and edge of the swale. To reduce the potential for distress to these

improvements due to vertical or lateral movement, the following options should be considered by the project civil engineer:

- Improvements should be setback from the edge of a bioswale (assuming a sloping bioswale) such that there is at least 1 foot of horizontal distance between the edge of improvements and the top edge of the bioswale excavation for every 1 foot of vertical bioswale depth, or

- Concrete curbs for pavements, or lateral restraint for exterior flatwork, located directly adjacent to a bioswale, or not meeting the above setback, should be designed to resist lateral earth pressures in accordance with the recommendations in the "Retaining Walls" section of this report, or concrete curbs or edge restraint should be adequately keyed into the native soil or engineered to reduce the potential for rotation or lateral movement of the curbs.

7.13 LANDSCAPE CONSIDERATIONS

Landscaping fill berms, retaining structures, or other landscaping features that cause abrupt changes in stress on the underlying Bay Mud may adversely affect the development by contributing to differential settlement adjacent to structures and pavements. We should review the landscape plans to identify potential settlement concerns and, if needed, provide supplemental recommendations.

Due to the potential for water perching above the Bay Mud, we recommend reducing the amount of surface water infiltrating these soils near foundations and exterior slabs-on-grade. This can typically be achieved by:

- Using drip irrigation

- Avoiding open planting within 3 feet of the building perimeter or near the top of slopes

- Regulating the amount of water distributed to lawns or planter areas by using irrigation timers

- Selecting landscaping that requires little or no watering, especially near foundations.

We recommend that the landscape architect consider these items when developing landscaping plans.

SECTION 8: 2019 CBC SEISMIC DESIGN CRITERIA

8.1 SEISMIC DESIGN CRITERIA

We developed site-specific seismic design parameters in accordance with Chapter 16, Chapter 18 and Appendix J of the 2019 California Building Code (CBC) and Chapters 11, 12, 20, and 21 and Supplement No. 1 of ASCE 7-16.

8.1.1 Site Location and Provided Data For 2019 CBC Seismic Design

The project is located at latitude 37.524373° and longitude -122.265985°, which is based on Google Earth (WGS84) coordinates at the approximate center of 1301 Shoreway Road in Belmont, California. We have assumed that a Seismic Importance Factor (I_e) of 1.00 has been assigned to the structure in accordance with Table 1.5-2 of ASCE 7-16 for structures classified as Risk Category II. The building period has not been provided by the project structural engineer.

8.2 2019 CBC SEISMIC DESIGN CRITERIA

As discussed in the "Subsurface" section of our report, our CPT and exploratory borings generally encountered medium dense to dense sands and soft to hard clay deposits to a depth of 100 feet, the maximum depth explored. Shear wave velocity (V_S) measurements were performed while advancing CPT-1 and CPT-6 to depths of approximately 95 and 99 feet, respectively, resulting in a time-averaged shear wave velocity of 222 and 236 meters per second (728 and 773 feet per second), respectively. We anticipate the average shear wave velocity to remain consistent down to 100 feet with the values mentioned above.

8.2.1 2019 CBC Seismic Design

As our explorations encountered deep alluvial soils with shear wave velocity for the upper 30 meters between 600 and 1200 feet per second, per section 20.3.2 of ASCE 7-16, we have classified the site as Soil Classification D, which is described as a "stiff soil" profile. Because we used site specific data from our explorations and laboratory testing, the site class should be considered as "determined" for the purposes of estimating the seismic design parameters from the code. Our site-specific ground motion hazard analysis considered a V_{S30} of 222 m/s (728 ft/s).

In accordance with Section 11.4.8 of ASCE 7-16, we performed a ground motion hazard analysis following Chapter 21, Section 21.2 of ASCE 7-16. We evaluated both Probabilistic MCE_R Ground Motions in accordance with Method 1 and Deterministic MCE_R Ground Motions to generate our recommended design response spectrum for the project, see Figure 5. The recommended design spectral accelerations and associated periods are also provided graphically on Figure 6.

SECTION 9: FOUNDATIONS

9.1 SUMMARY OF RECOMMENDATIONS

In our opinion, due to the presence of soft, highly compressible clays, the proposed structures should be supported on deep foundations in accordance with recommendations in the sections below. Similar to other projects in the area, we anticipate a low noise and low vibration foundation installation method will be desired. Therefore, we have developed recommendations for the use of augercast pressure grouted (APG) piles, which are presented in subsequent

report sections. Shallow foundation recommendations remain in the report for any light, auxiliary structures, such as equipment pads provided the settlements are tolerable.

There may be areas of deeper fill at the site than encountered in our explorations. Additionally, based on our knowledge of other historic fills along the Bay, although not encountered in our borings, rubble may be encountered in the fill. Pile contractors should anticipate variability in the fills at the site.

9.2 DEEP FOUNDATIONS

9.2.1 Augercast Piles

In our opinion, drilled, cast-in-place, augercast piles may be used. Augercast piles are concrete piles that are cast in place using a hollow-stem auger that drills to the design depth and then sand-cement grout (4,000 to 6,000 psi grout) is pumped through the hollow-stem as the drill stem is extracted. Two types of augercast piles are available: APG piles, which like piers, remove the soil column and replace it with grout; and APGD piles, which displace the soil column as the drill stem is advanced, similar to driven piles, prior to pumping the grout. Displacement augercast piles are generally limited to a depth of approximately 80 to 90 feet due to equipment limitations. Augercast piles are a low noise and vibration installation compared to driven piles. Various types of steel reinforcing, including rebar cages or H-piles may be installed into the still-wet grout after drilling to satisfy bending moment requirements.

9.2.2 Vertical Capacity

The proposed structural loads may be supported on augercast pressure-grouted piles (APG). Adjacent pile centers should be spaced at least three diameters apart (center to center); otherwise, a reduction in vertical capacity for group effects may be required. Grade beams should span between piles and/or pile caps in accordance with structural requirements. Floors should be designed as structural slabs to span between grade beams.

As no significantly thick, uniform, dense sand layer was encountered during our investigation that would provide adequate end bearing support, vertical capacity is based on frictional resistance. We evaluated the allowable vertical capacity for 16-inch and 18-inch diameter APG piles and present the results in Figure 7. As shown in the figure, we have assumed that the top of pile/bottom of pile cap occurs at 5 feet below existing site grades. The allowable capacities are for dead plus live loads; dead loads should not exceed two-thirds of the allowable capacities. The allowable capacities may be increased by one-third for wind and seismic loads. Uplift loads should not exceed 75 percent of the allowable downward vertical capacity under seismic loading. Gross capacity of the piles should be less than the structural capacity of the piles.

9.2.3 Lateral Capacity

Lateral load resistance is developed by the soil's resistance to pile bending. The magnitude of the shear and bending moment developed within the pile are dependent on the pile stiffness,

embedment length, the fixity of the pile into the pile cap (free or fixed-head conditions), the surrounding soil properties, the tolerable lateral deflection, and yield moment capacity of the pile.

We utilized the computer program L-Pile to model the load-deflection (p-y) curves representing the soil conditions surrounding the pile, and estimate the ultimate (Allowable Stress Design, ASD) lateral load capacity of the pile. The following tables present the probable response of the piles under short-term loading conditions; the structural engineer should apply an appropriate factor of safety on the shears and moments presented. If mitigation is not performed to reduce the potential for lateral spreading soil movement along the northeast side of Building 2 and the parking structure, as indicated on Figure 2, lateral capacity should be neglected for the pile caps, grade beams and the piles along the northeast sides of these buildings, which accounts for the potential loss of soil support beneath existing site grades. This depth should be further evaluated based on final grading plans and actual depth of top of piles beneath existing site grades.

Pile stiffness (EI) of 8.1 x 10^9 lb-in^2 and 1.3 x 10^{10} lb-in^2 has been assumed in our analysis for 16-inch and 18-inch APG piles, respectively. We reduced the stiffness of the piles for tension cracking in accordance with ACI 318-19, Section 6.6.3.1. We assumed a concrete compressive strength of 4,000 psi for the concrete modulus calculations. If the pile stiffness varies by less than 20 percent of our assumed stiffness, the lateral load parameters below may be interpolated by multiplying the values by the ratio of the different pile stiffness values. We should be retained to re-evaluate the lateral load capacity for piles with a stiffness significantly different from what was assumed.

Table 3: Ultimate (ASD) Lateral Load Capacity for APG Piles

Pile Type	Fixity Condition	Lateral Deflection (inches)	Maximum Shear (kips)	Maximum Moment (kip-feet)	Depth to Maximum Moment (feet)	Depth to Zero Moment (feet)
16-inch APG	Free-Head	0.25	7.8	22.6	6.3	17.0
		0.50	11.0	38.4	7.0	19.0
16-inch APG	Fixed-Head	0.25	14.8	61.9	0.0	19.0
		0.50	22.2	103.7	0.0	21.0
18-inch APG	Free-Head	0.25	9.8	33.9	7.7	19.0
		0.50	14.1	58.5	8.4	22.0
18-inch APG	Fixed-Head	0.25	19.6	92.5	0.0	22.0
		0.50	29.6	155.0	0.0	24.0

The above lateral capacities are for single piles and may not be representative of piles in groups. Group effects, including the layout of the piles within a group, can significantly reduce the overall lateral capacity. Therefore, the load deflection behavior of pile groups should be

modeled by applying a reduction ratio (group efficiency) factor, which is the ratio of the load carried by piles in a group as compared to the same number of isolated piles under similar conditions. At this time, final pile cap configurations have not been provided. We should be retained to review pile layout and structural loads and to evaluate what appropriate group efficiency reduction factors should be applied to different group conditions.

9.2.4 Passive Resistance against Pile Caps and Grade Beams

Passive resistance against pile caps and grade beams poured neat against native or engineered fill may also be considered; however, as the allowable lateral deflections of the piles are limited, full allowable passive pressures will not be developed. The structural engineer should evaluate appropriate allowable passive pressures that maintain strain compatibility between the piles and pile caps, if additional passive resistance is required. If desired, we can provide passive resistance values that are strain compatible with the deflection chosen by the structural engineer.

If mitigation along the northeast sides of Building 2 and the parking structure is not performed to reduce the potential for lateral soil movement, passive resistance against pile caps, grade beams, and top of pile along the northeast sides of these buildings, as indicated on Figure 2, should be neglected for the upper 7 feet below existing grades.

9.2.5 Pre-Production Test Program

In general, one field pile load test should be performed per 150 to 250 piles. We recommend a minimum of two test piles be performed; test pile locations should be performed at locations recommended by the geotechnical engineer. Static load tests include installing a test pile, which can either be in a production pile location or a sacrificial pile, with four surrounding piles that serve as anchor piles to resist the jacking pressure. We recommend a test load to prove out the design capacity and accounting for the additional load due to future downdrag, an additional 18 kips and 20 kips for 16- and 18-inch diameter piles, respectively. Alternatively, the pile could be loaded to failure. During test pile installation, the contractor should allow for monitoring of strains with strain-gauge pairs at approximately 5 feet from the pile tip, and at the bottom of the Bay Mud, to determine the amount of loading due to skin friction and end bearing. A member of our staff should be present during test pile installation and testing. All test pile information should be submitted to the geotechnical engineer for evaluation and modification, if necessary, of the recommended capacities. It is preferable that two to four weeks, or more if possible, be allowed in the schedule following test pile installation prior to testing.

9.2.6 Construction Considerations

The installation of all test and production piles should be observed on a full-time basis by a Cornerstone representative to confirm that the piles are constructed in accordance with our recommendations and project requirements. Since the piles will derive their capacity from skin friction, the production piles should be installed to the design tip elevation. The geotechnical project engineer should review the installation records for conformance. We may recommend

additional testing of piles, or additional installations, if any pile installations vary from normal installation practices. We recommend that pile contractors have at least 3 years of installation experience.

SECTION 10: CONCRETE SLABS AND PEDESTRIAN PAVEMENTS

10.1 INTERIOR STRUCTURAL SLAB

Because of the substantial settlements that will occur due to the consolidation of the underlying soft Bay Mud, first level floors for proposed structures should be designed to structurally span between pile caps and grade beams. Due to the moderate expansion potential of the near surface existing fill soils, unless the structural slab is specifically designed to handle the expansion potential of the underlying soils, we recommend the slabs be underlain by at least 12 inches of non-expansive fill (NEF) to reduce the potential for slab damage due to soil heave.

In addition, we recommend that consideration be given to deepening grade beams constructed along the perimeter of the proposed structures, if necessary, to prevent the exposure of the bottom of the structures due to long-term settlement of the adjacent grades. As an alternative, curtain walls may be used to hide the exposure of the bottom of the structures.

Our experience with tideland reclamation projects has shown that groundwater generally stabilizes, through evaporation, to the level of the top of the Bay Mud in uncovered areas. However, when the areas are covered by buildings or slabs-on-grade, evaporation becomes inhibited and groundwater rises by capillary action to depths near the bottom of the floor slabs. This can result in damp or wet floors. If desired to limit moisture rise through slab-on-grade floors, the guidelines presented in the “Moisture Protection Considerations” section of this report should be considered.

10.2 PARKING STRUCTURE

We understand it may be desired to have the at-grade/first level of the parking garage be a slab-on-grade or paved with asphalt concrete as an alternative to a conventional structural slab spanning between pile caps and grade beams as discussed above.

Garage slabs-on-grade should be at least 5 inches thick and if constructed with minimal reinforcement intended for shrinkage control only, should have a minimum compressive strength of 3,000 psi. If the slab will have heavier reinforcing because the slab will also serve as a structural diaphragm, the compressive strength may be reduced to 2,500 psi at the structural engineer’s discretion. The garage slab should also be supported on at least 12 inches of non-expansive fill (NEF) consisting of one of the following placed and compacted in accordance with the “Compaction” section of this report:

- Class 2 aggregate base,
- ¾-inch clean, crushed rock
- recycled AC/AB grindings
- lime-treated soil

The upper 4 inches of NEF should consist of either Class 2 aggregate base or ¾-inch clean, crushed rock. If there will be areas within the garage that are moisture sensitive, such as equipment and elevator rooms, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness. For lime-treated soil, additional testing will need to be performed to determine the appropriate lime percentage to be mixed with the subgrade soil.

If the at-grade/first level of the parking garage will be paved or slab-on-grade, we recommend the asphalt pavements or slab-on-grade be separated from the building (i.e. columns and walls) to help reduce potential differential movement at these locations as the structure supported on deep foundation elements will likely settle differently compared to paved asphalt concrete or slab-on-grade supported directly on soil subgrade. Once building finished floor and grading plans have been finalized, we should review to provide additional recommendations, as needed. In addition, even where grades are similar and anticipated settlements are expected to be relatively uniform, differential settlement can occur due to variations in conditions, previous stress history, and other anomalies. As such, to reduce the potential for differing subgrade support, we recommend the upper 12 to 18 inches of the existing fills be reworked and compacted as discussed in the "Mitigation of Undocumented Fills" section of this report.

Due to the underlying shallow Bay Mud, we anticipate that long term static settlement on the order of ½ to 2 inches could occur per foot of fill placed above existing grades should the at-grade/first level of the parking garage be supported on either slab-on-grade or pavement as opposed to a conventional structural slab. We also note that these alternatives will likely require additional long-term preventative maintenance to address potential settlements that may occur due to long term consolidation of the underlying compressible Bay Mud. Preventative maintenance is typically performed at 3- to 5-year intervals, depending on the deterioration rate of the pavement. It may be needed more frequently depending on the rate of settlement and anticipated level of traffic. Typical preventative maintenance techniques include crack sealing, asphalt patching, and slurry seal applications.

10.3 INTERIOR SLABS MOISTURE PROTECTION CONSIDERATIONS

The following general guidelines for concrete slab-on-grade construction where floor coverings are planned are presented for the consideration by the developer, design team, and contractor. These guidelines are based on information obtained from a variety of sources, including the American Concrete Institute (ACI) and are intended to reduce the potential for moisture-related problems causing floor covering failures, and may be supplemented as necessary based on project-specific requirements. The application of these guidelines or not will not affect the geotechnical aspects of the slab-on-grade performance.

- Place a minimum 15-mil vapor retarder conforming to ASTM E 1745, Class C requirements or better directly below the concrete slab; the vapor retarder should extend to the slab edges and be sealed at all seams and penetrations in accordance with manufacturer's recommendations and ASTM E 1643 requirements. A 4-inch-thick

capillary break, consisting of crushed rock should be placed below the vapor retarder and consolidated in place with vibratory equipment. The mineral aggregate shall be of such size that the percentage composition by dry weight as determined by laboratory sieves will conform to the following gradation:

Sieve Size	Percentage Passing Sieve
1”	100
¾”	90 – 100
No. 4	0 – 10
No. 200	0 – 5

The capillary break rock may be considered as the upper 4 inches of the non-expansive fill previously recommended within the “Interior Structural Slab” section above.

- The concrete water:cement ratio should be 0.45 or less. Mid-range plasticizers may be used to increase concrete workability and facilitate pumping and placement.
- Water should not be added after initial batching unless the slump is less than specified and/or the resulting water:cement ratio will not exceed 0.45.
- Polishing the concrete surface with metal trowels is not recommended.
- Where floor coverings are planned, all concrete surfaces should be properly cured.
- Water vapor emission levels and concrete pH should be determined in accordance with ASTM F1869-98 and F710-98 requirements and evaluated against the floor covering manufacturer’s requirements prior to installation.

10.4 EXTERIOR FLATWORK

Exterior concrete flatwork and sidewalks should be at least 4 inches thick and underlain by at least 6 inches of Class 2 aggregate base compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D1557, latest edition. We recommend that exterior slabs be isolated from adjacent improvements. In addition, consideration should be given to using closer than normal joint spacing to allow slabs to better conform to the expected settlement. We further recommend that the designer consider the high potential for differential movement in selecting appropriate reinforcing steel, dowels, and cold joints. Hinge connections should be used wherever differential settlements may be detrimental to exterior flatwork, such as at building connections or abrupt changes in grade or surface loads. If concrete flatwork will be subject to wheel loads, they should be designed in accordance with the “Portland Cement Concrete Pavements” section of this report.

10.5 EQUIPMENT PAD FOUNDATIONS

At this time, we are not aware of what equipment pads will be constructed as well as specific details for any equipment pads for the project. However, proposed equipment pads may be

designed as structural mat foundations, provided the estimated settlements discussed below are acceptable from a structural viewpoint.

For our analysis, we estimated that average areal mat pressures for the exterior equipment pads will be on the order of 350 pounds per square foot (psf). Assuming an average areal mat pressure of 350 psf and that the mats would be supported near existing grade, we estimate that long-term settlements of the equipment pads will be on the order of 1 to 4 inches in addition to settlement due to fill placement. We note that if the equipment pads will not be supported on deep foundation elements, they should be designed for an additional ½-inch of differential settlement across 30 feet, due to the potential for liquefaction induced settlements. This should be reviewed once the pad dimensions are determined. Since the proposed buildings will be supported on deep foundations and subject to relatively small settlements, based on the assumed mat pressure, utilities connecting the exterior equipment to the buildings should be designed to accommodate at least 4 inches of differential movement. If the mats are raised by placing additional fill, or mat pressures are higher, significantly higher settlements are likely to occur.

If the settlements discussed above are not tolerable to the design team, exterior equipment pads may be supported on deep foundations in accordance with the recommendations presented above.

SECTION 11: VEHICULAR PAVEMENTS

11.1 ASPHALT CONCRETE

The following asphalt concrete pavement recommendations tabulated below are based on the Procedure 608 of the Caltrans Highway Design Manual, estimated traffic indices for various pavement-loading conditions, and on a design R-value of 5. The design R-value was chosen based on engineering judgement considering the variable surface conditions.

Table 4: Asphalt Concrete Pavement Recommendations

Design Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base[1] (inches)	Total Pavement Section Thickness (inches)
4.0	2.5	7.5	10.0
4.5	2.5	9.5	12.0
5.0	3.0	10.0	13.0
5.5	3.0	12.0	15.0
6.0	3.5	13.0	16.5
6.5	4.0	14.0	18.0

[1]Caltrans Class 2 aggregate base; minimum R-value of 78; subgrade R-value of 5

It should be noted that pavements within emergency vehicle access easements should be designed to withstand fire truck vehicles in accordance to local jurisdiction requirements.

Frequently, the full asphalt concrete section is not constructed prior to construction traffic loading. This can result in significant loss of asphalt concrete layer life, rutting, or other pavement failures. To improve the pavement life and reduce the potential for pavement distress through construction, we recommend the full design asphalt concrete section be constructed prior to construction traffic loading. Alternatively, a higher traffic index may be chosen for the areas where construction traffic will use the pavements.

Asphalt concrete pavements constructed on expansive subgrade where the adjacent areas will not be irrigated for several months after the pavements are constructed may experience longitudinal cracking parallel to the pavement edge. These cracks typically form within a few feet of the pavement edge and are due to seasonal wetting and drying of the adjacent soil. The cracking may also occur during construction where the adjacent grade is allowed to significantly dry during the summer, pulling moisture out of the pavement subgrade. Any cracks that form should be sealed with bituminous sealant prior to the start of winter rains. One alternative to reduce the potential for this type of cracking is to install a moisture barrier at least 24 inches deep behind the pavement curb.

11.2 PORTLAND CEMENT CONCRETE

The Portland Cement Concrete (PCC) pavement recommendations outlined below are based on methods presented in American Concrete Pavement Association (ACPA, 2006). The following table presents minimum PCC pavements thicknesses for various traffic loading categories and the anticipated maximum Average Daily Truck Traffic (ADTT).

Table 5: PCC Pavement Recommendations

Traffic Category	Minimum PCC Thickness[1] (inches)	Class 2 Aggregate Base (inches)
Maximum ADTT = 10	5.5	6.0
Maximum ADTT = 50	6.0	6.0

[1]Subgrade design R-Value = 5

The PCC thicknesses above are based on a concrete compressive strength of at least 3,500 psi, and laterally restraining the PCC with curbs or concrete shoulders. Adequate expansion and control joints should be included. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness. Due to the expansive surficial soils present, we recommend that the construction and expansion joints be dowelled.

We recommend that PCC pavements be isolated from adjacent improvements. We further recommend that the designer consider the high potential for differential movement in selecting appropriate reinforcing steel, dowels, and cold joints. Hinge connections should be used wherever differential settlements may be detrimental to PCC pavements, such as at building connections or abrupt changes in grade or surface loads.

11.3 TRASH ENCLOSURES

Pads where trash containers will be stored, and where garbage trucks will park while emptying trash containers, should be constructed on Portland Cement Concrete. We recommend that the trash enclosure pads and stress (landing) pads where garbage trucks will store, pick up, and empty trash be increased to a minimum PCC thickness of 7 inches. The compressive strength, underlayment, and construction details should be consistent with the above recommendations for PCC pavements.

SECTION 12: RETAINING WALLS

12.1 STATIC LATERAL EARTH PRESSURES

The structural design of any site retaining wall should include resistance to lateral earth pressures that develop from the soil behind the wall, any undrained water pressure, surcharge loads acting behind the wall, and the potential for differential movement due to surcharge of the underlying highly compressible Bay Mud. To limit differential settlement, we recommend site walls be limited to about 2 to 3 feet. Please note the differential loading caused by retaining walls can cause significant differential settlement. Provided a drainage system is constructed behind the wall to prevent the build-up of hydrostatic pressures as discussed in the section below, we recommend that the walls with level backfill be designed for the following pressures:

Table 6: Recommended Lateral Earth Pressures

Wall Condition	Lateral Earth Pressure*	Additional Surcharge Loads
Unrestrained – Cantilever Wall	45 pcf	⅓ of vertical loads at top of wall
Restrained – Braced Wall	45 pcf + 8H** psf	½ of vertical loads at top of wall

* Lateral earth pressures are based on an equivalent fluid pressure for level backfill conditions
** H is the distance in feet between the bottom of footing and top of retained soil

If adequate drainage cannot be provided behind the wall, an additional equivalent fluid pressure of 40 pcf should be added to the values above for both restrained and unrestrained walls for the portion of the wall that will not have drainage. Damp proofing or waterproofing of the walls may be considered where moisture penetration and/or efflorescence are not desired.

12.2 SEISMIC LATERAL EARTH PRESSURES

The 2019 CBC states that lateral pressures from earthquakes should be considered in the design of retaining walls. At this time, we are not aware of any retaining walls for the project.

However, minor landscaping walls (i.e. walls 6 feet or less in height) may be proposed. In our opinion, design of these walls for seismic lateral earth pressures in addition to static earth pressures is not warranted. Additionally, as mentioned above, to limit differential settlement, we recommend site retaining walls be limited to about 2 to 3 feet.

12.3 WALL DRAINAGE

Adequate drainage should be provided by a subdrain system behind all walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 12 inches out from the wall and to within 2 feet of outside finished grade. Alternatively, ½-inch to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as Mirafi 140N or approved equivalent. The upper 2 feet of wall backfill should consist of compacted on-site soil. The subdrain outlet should be connected to a free-draining outlet or sump.

12.4 BACKFILL

Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls with a PI less than 20 should be compacted to at least 95 percent relative compaction using light compaction equipment. If the soil's PI is 20 or greater, expansive soil criteria should be used as discussed in the "Compaction" section of this report. Where no surface improvements are planned, backfill should be compacted to at least 90 percent for soils with a PI less than 20. Expansive soil criteria should be followed for soils with a PI of 20 or greater. If heavy compaction equipment is used, the walls should be temporarily braced.

12.5 FOUNDATIONS

We should review the location of any site retaining walls prior to design. In general, conventional retaining walls may be supported on a continuous spread footing. Spread footings should bear on the fill material that blankets the site, be at least 18 inches wide, and extend at least 18 inches below the lowest adjacent grade.

Footings constructed to the above dimensions and in accordance with the "Earthwork" recommendations of this report should be designed using a low bearing pressure to limit total settlement. We recommend a maximum allowable bearing pressure of 1,000 psf. This pressure is a net value, the weight of the footing may be neglected for the portion of the footing extending below grade (typically, the full footing depth). Top and bottom mats of reinforcing steel should be included in continuous footings to help span irregularities and differential settlement.

SECTION 13: LIMITATIONS

This report, an instrument of professional service, has been prepared for the sole use of Four Corner Properties II, LLC specifically to support the design of the Shoreway Road Office

Complex project in Belmont, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in Northern California at the time this report was prepared. No warranty, expressed or implied, is made or should be inferred.

Recommendations in this report are based upon the soil and groundwater conditions encountered during our subsurface exploration. If variations or unsuitable conditions are encountered during construction, Cornerstone must be contacted to provide supplemental recommendations, as needed.

Four Corner Properties II, LLC may have provided Cornerstone with plans, reports and other documents prepared by others. Four Corner Properties II, LLC understands that Cornerstone reviewed and relied on the information presented in these documents and cannot be responsible for their accuracy.

Cornerstone prepared this report with the understanding that it is the responsibility of the owner or his representatives to see that the recommendations contained in this report are presented to other members of the design team and incorporated into the project plans and specifications, and that appropriate actions are taken to implement the geotechnical recommendations during construction.

Conclusions and recommendations presented in this report are valid as of the present time for the development as currently planned. Changes in the condition of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Therefore, the conclusions and recommendations presented in this report may be invalidated, wholly or in part, by changes beyond Cornerstone's control. This report should be reviewed by Cornerstone after a period of three (3) years has elapsed from the date of this report. In addition, if the current project design is changed, then Cornerstone must review the proposed changes and provide supplemental recommendations, as needed.

An electronic transmission of this report may also have been issued. While Cornerstone has taken precautions to produce a complete and secure electronic transmission, please check the electronic transmission against the hard copy version for conformity.

Recommendations provided in this report are based on the assumption that Cornerstone will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design, and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, Cornerstone cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Cornerstone's report by others. Furthermore, Cornerstone will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services.

SECTION 14: REFERENCES

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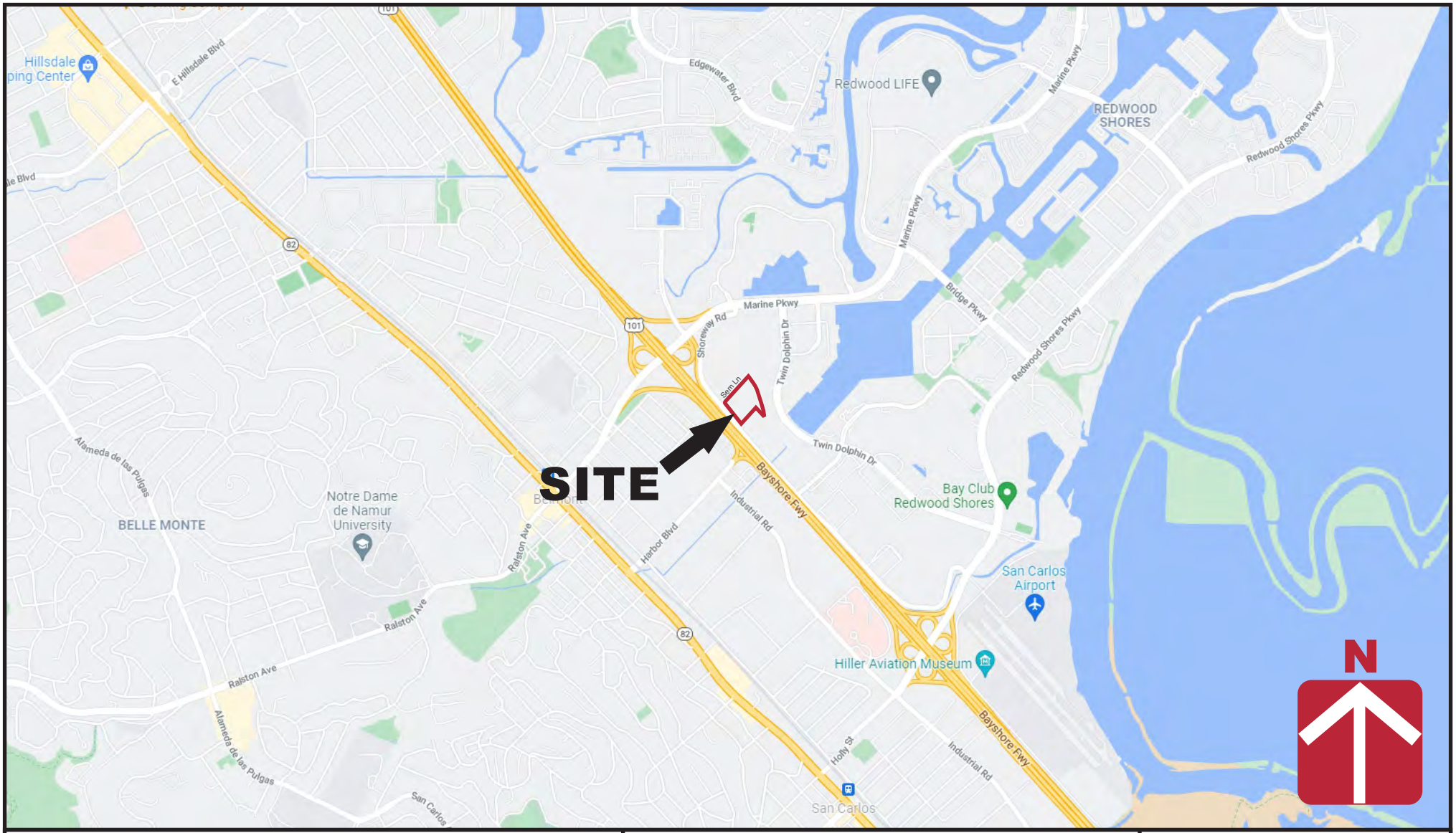
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Vicinity Map

Shoreway Road Office Complex
Belmont, CA

Project Number	448-6-3
Figure Number	Figure 1
Date	April 2022
Drawn By	RRN

EB-1
CPT-1
CPT-2
EB-6
CPT-3
EB-7
CPT-10
EB-5
EB-2
CPT-4
CPT-9
CPT-5
CPT-7
EB-3
CPT-6
EB-4
CPT-8
Sem Lane
Shoreway Road
Approximate Site Boundary
Highway 101
BUILDING 2 7 FLOORS
BUILDING 1 7 FLOORS
PARKING GARAGE
N

Legend

- Building areas impacted by potential lateral spread or slope instability
- Approximate location of exploratory boring (EB)
- Approximate location of cone penetration test (CPT)

0 100 200
APPROXIMATE SCALE (FEET)

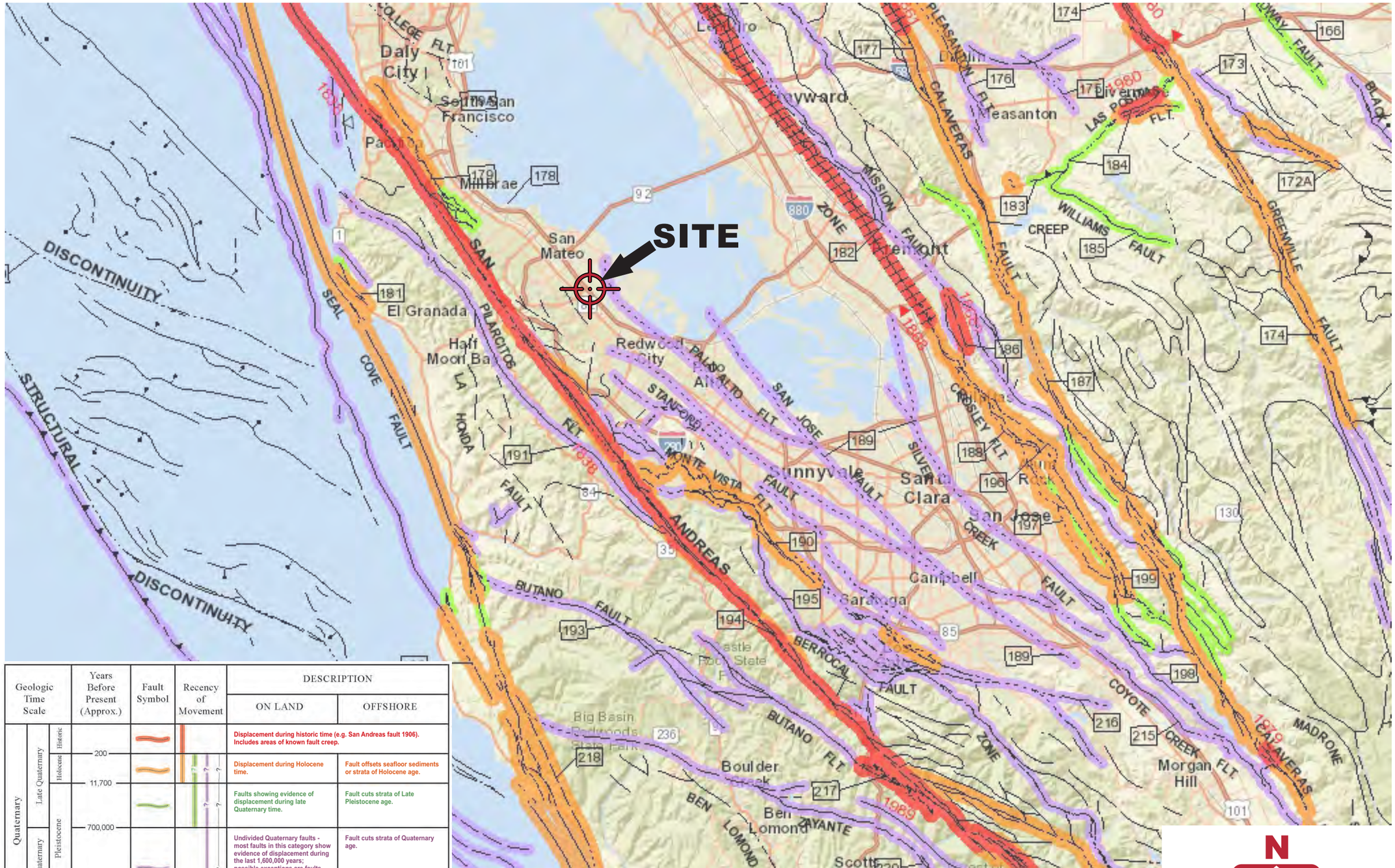
Base by Google Earth, dated 09/26/2020
Overlay: 1301_Concept_Site Plan_220324

Project Number 448-6-3
Figure Number Figure 2
Drawn By RRN
Date April 2022

Site Plan

Shoreway Road Office Complex
Belmont, CA

CORNERSTONE EARTH GROUP



Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION	
						ON LAND	OFFSHORE
Quaternary	Late Quaternary	Historic	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
		Holocene	11,700		? ? ?	Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
	Early Quaternary	Pleistocene	700,000		? ?	Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
			1,600,000'		?	Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Pilo-Pleistocene age.	Fault cuts strata of Quaternary age.
Pre-Quaternary			4.5 billion (Age of Earth)			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

N

0 5 10

APPROXIMATE SCALE (MILES)

Base by California Geological Survey - 2010 Fault Activity Map of California (Jennings and Bryant, 2010)

Project Number	448-6-3
Figure Number	Figure 3
Date	April 2022
Drawn By	RRN

Regional Fault Map

Shoreway Road Office Complex
Belmont, CA

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FIGURE 4A

CPT NO. 1

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	5
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.59	(Inches)
TOTAL SEISMIC SETTLEMENT	**0.6**	**INCHES**

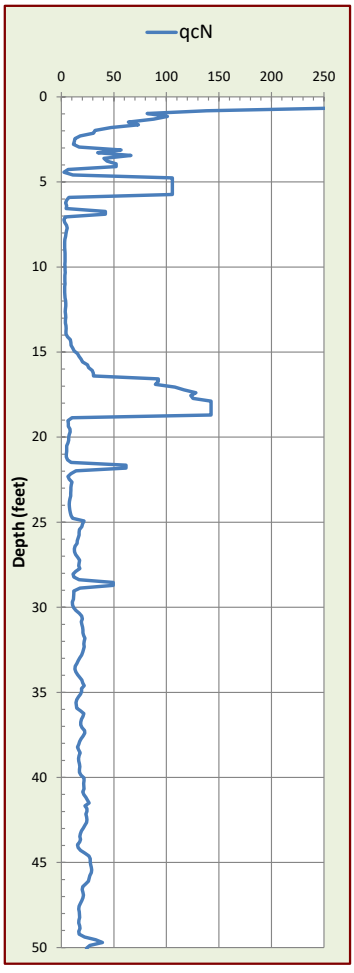
POTENTIAL LATERAL DISPLACEMENT

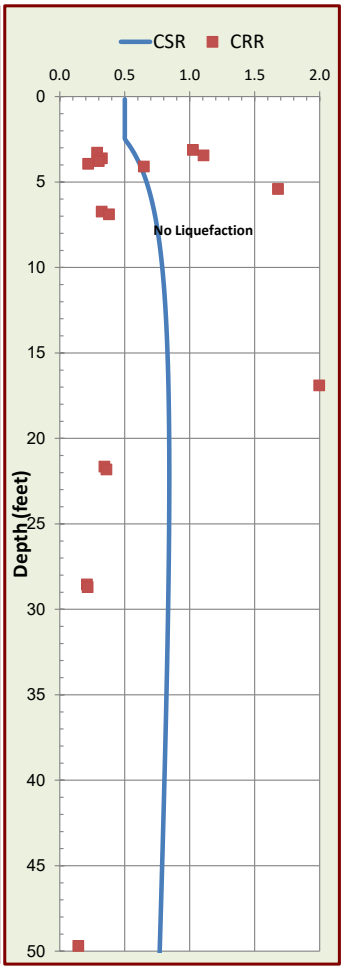
LDI[2]	0.17	L/H	10.0
LDI[1] Corrected for Distance	0.16	(4 < L/H < 40)	

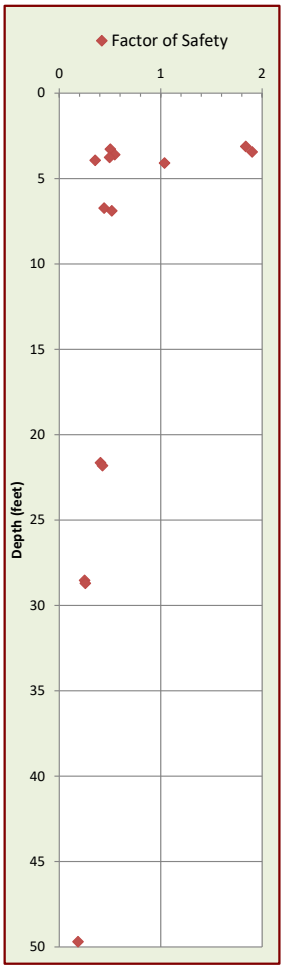
EXPECTED RANGE OF DISPLACEMENT

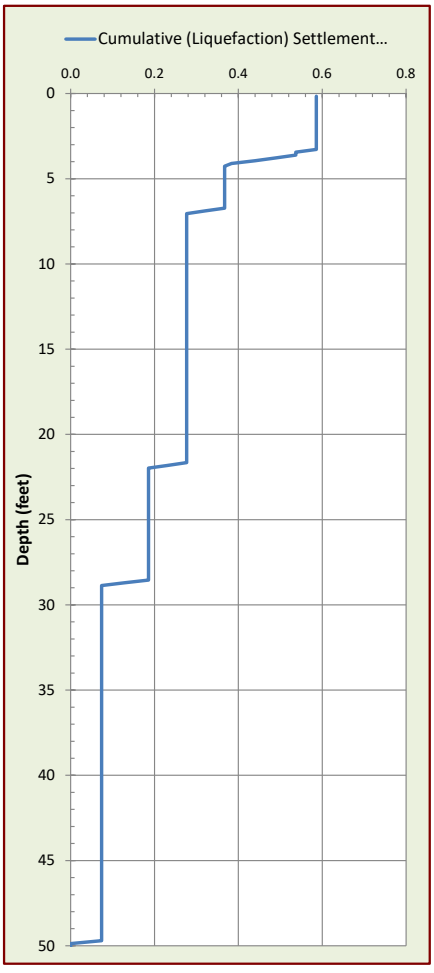
0.1 to 0.3 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









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FIGURE 4B

CPT NO. 2

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	3
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.00	(Inches)
TOTAL SEISMIC SETTLEMENT	0.0	INCHES

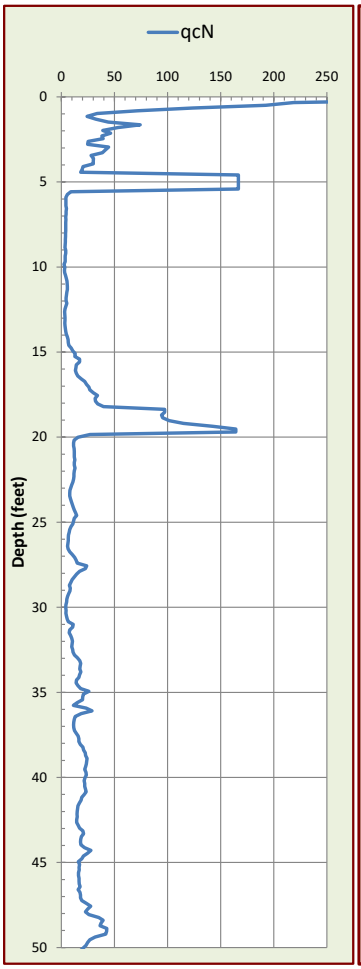
POTENTIAL LATERAL DISPLACEMENT

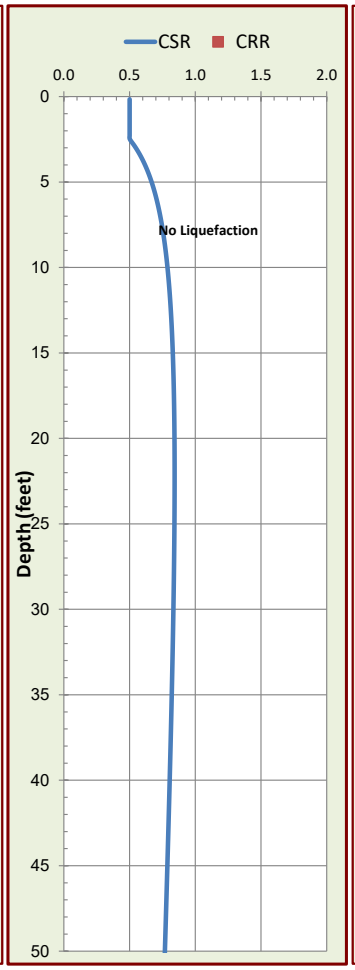
LDI[2]	0.00	L/H	7.0
LDI[1] Corrected for Distance	0.00	(4 < L/H < 40)	

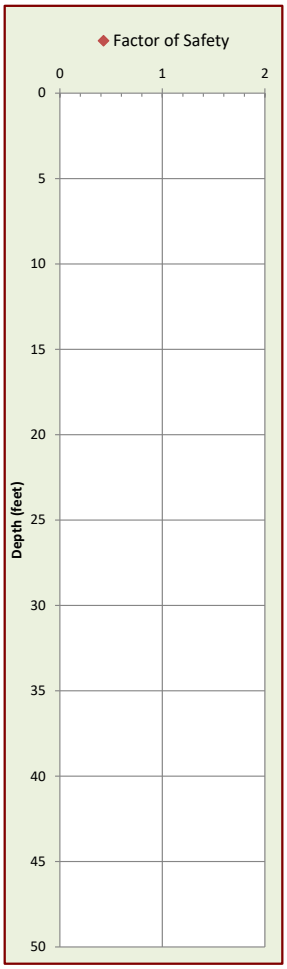
EXPECTED RANGE OF DISPLACEMENT

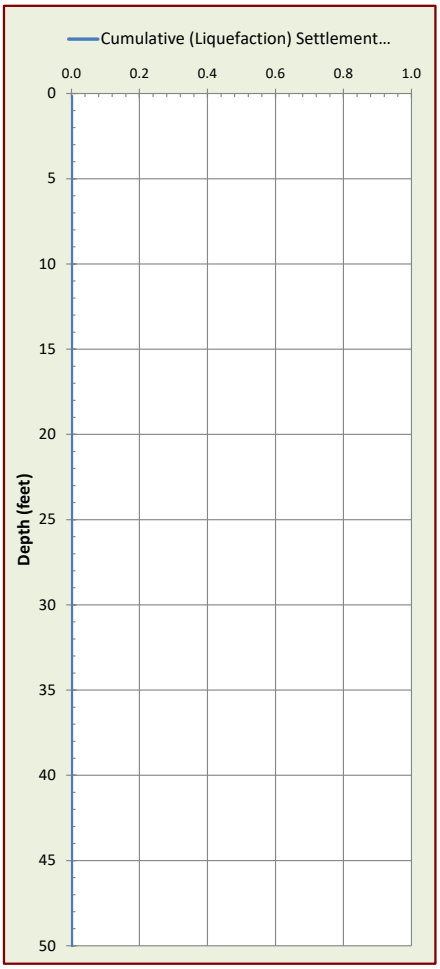
0.0 to 0.0 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









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FIGURE 4C

CPT NO. 3

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	5
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.10	(Inches)
TOTAL SEISMIC SETTLEMENT	0.1	INCHES

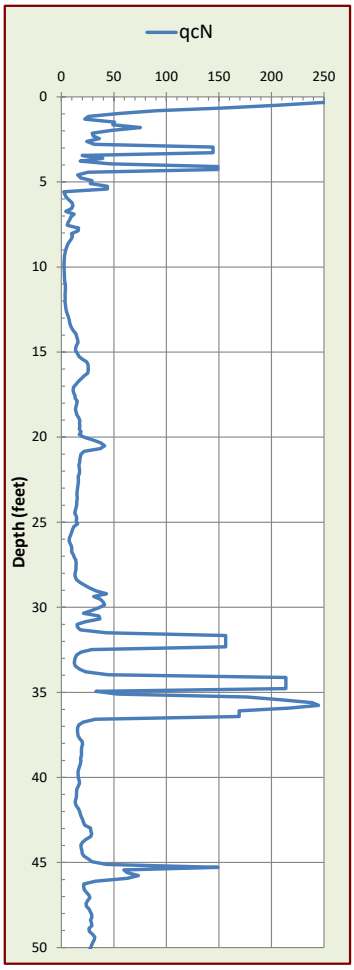
POTENTIAL LATERAL DISPLACEMENT

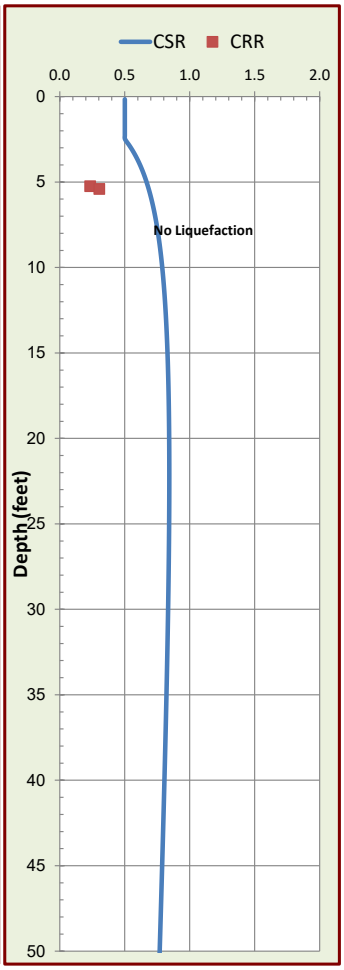
LDI[2]	0.06	L/H	22.0
LDI[1] Corrected for Distance	0.03	(4 < L/H < 40)	

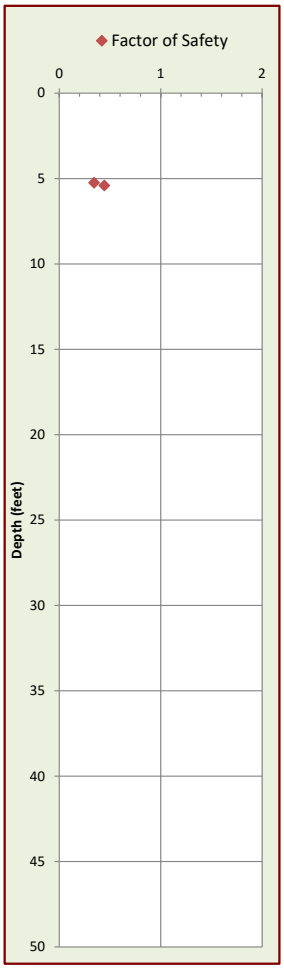
EXPECTED RANGE OF DISPLACEMENT

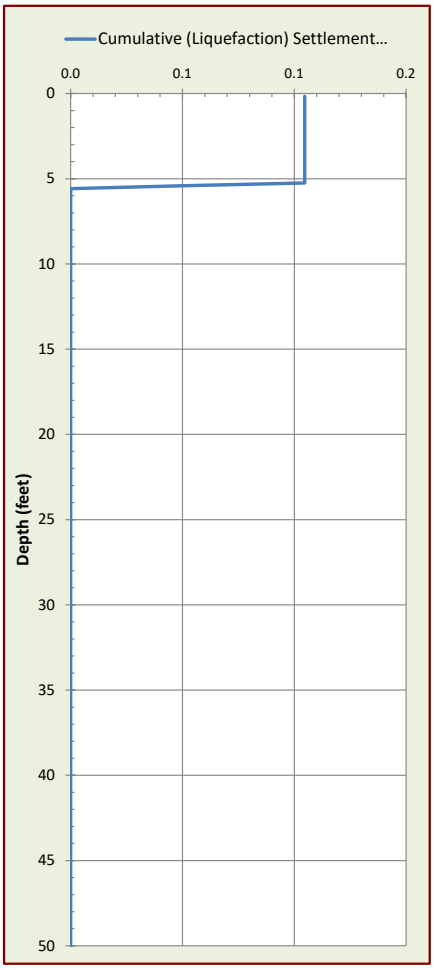
0.0 to 0.1 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









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FIGURE 4D

CPT NO. 4

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.823	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	7
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.07	(Inches)
TOTAL SEISMIC SETTLEMENT	0.1	INCHES

POTENTIAL LATERAL DISPLACEMENT

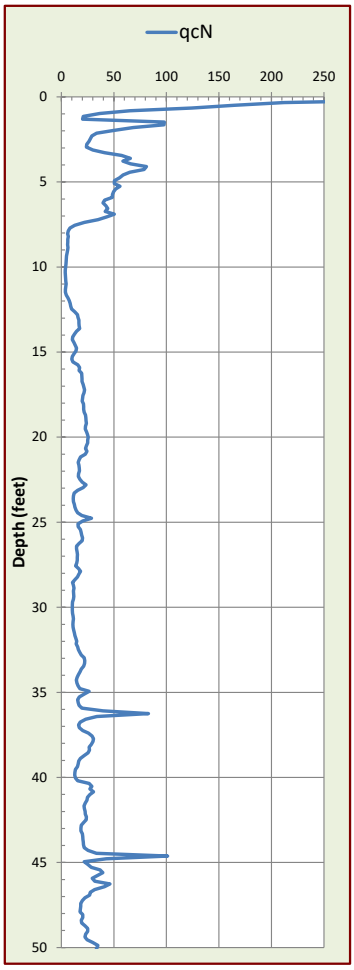
LDI[2]	0.00	L/H	37.0
LDI[1] Corrected for Distance	0.00	(4 < L/H < 40)	

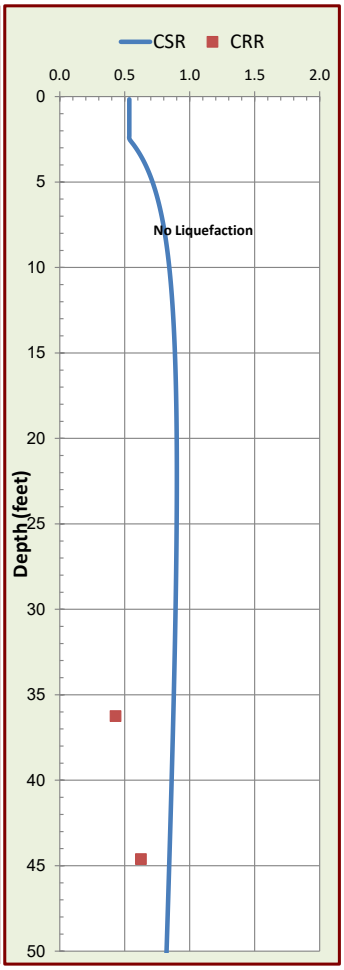
EXPECTED RANGE OF DISPLACEMENT

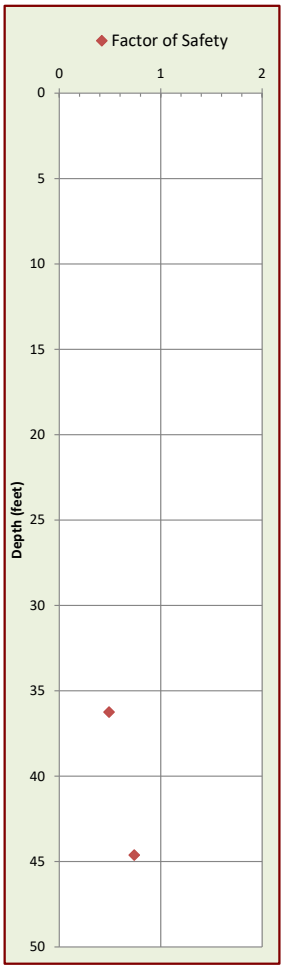
0.0 to 0.0 feet

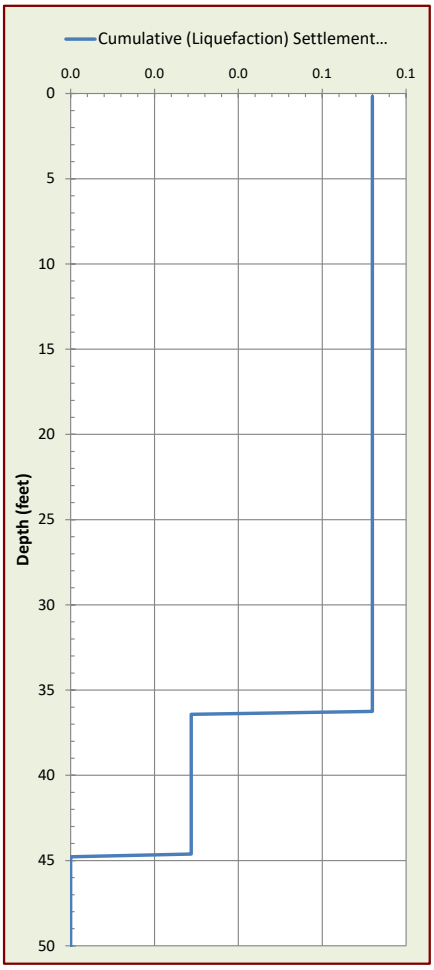
[1]Not Valid for L/H Values < 4 and > 40.

[2]LDI Values Only Summed to 2H Below Grade.









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FIGURE 4E

CPT NO. 5

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	7
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

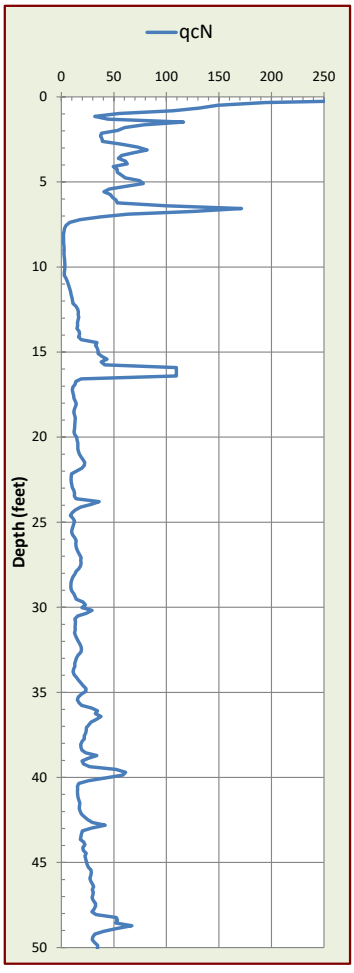
DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.00	(Inches)
TOTAL SEISMIC SETTLEMENT	0.0	INCHES

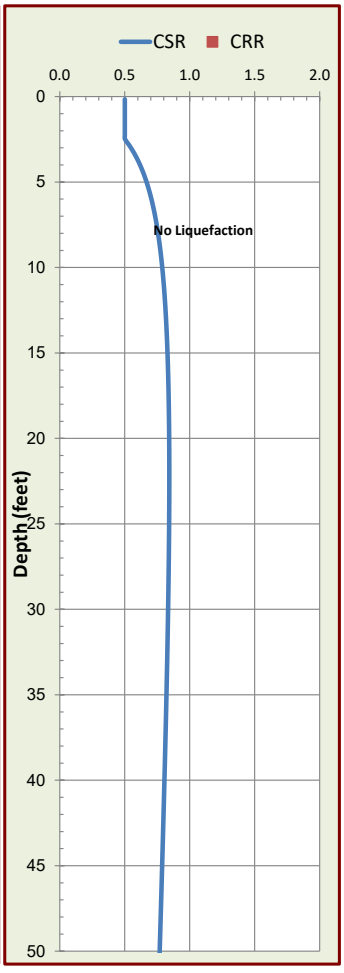
POTENTIAL LATERAL DISPLACEMENT

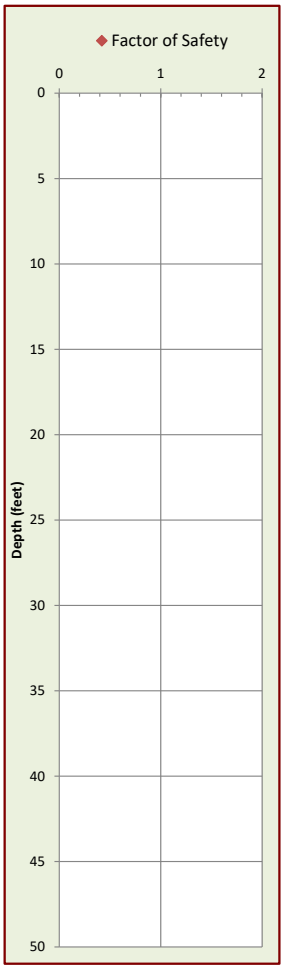
LDI[2]	0.00	L/H	48.0
LDI[1] Corrected for Distance	0.00	(4 < L/H < 40)	

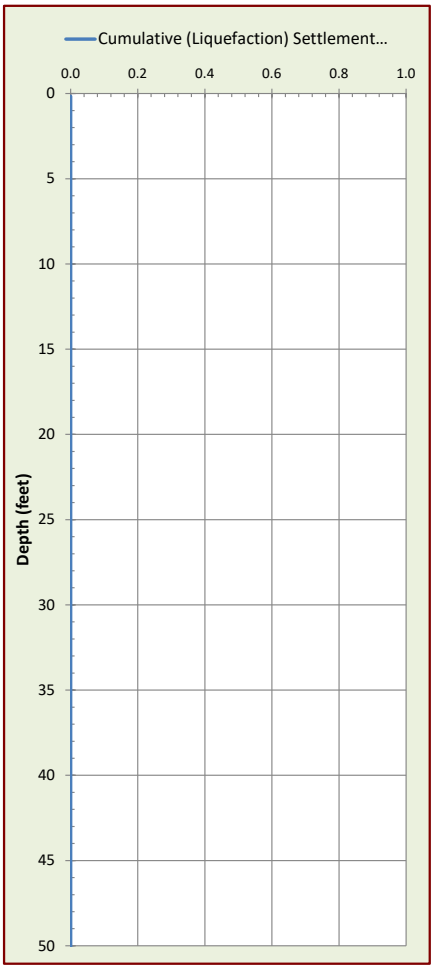
EXPECTED RANGE OF DISPLACEMENT: 0.0 to 0.0 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









CORNERSTONE EARTH GROUP

FIGURE 4F

CPT NO. 6

© 2014 Cornerstone Earth Group, Inc.

PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	4
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.05	(Inches)
TOTAL SEISMIC SETTLEMENT	**0.1**	**INCHES**

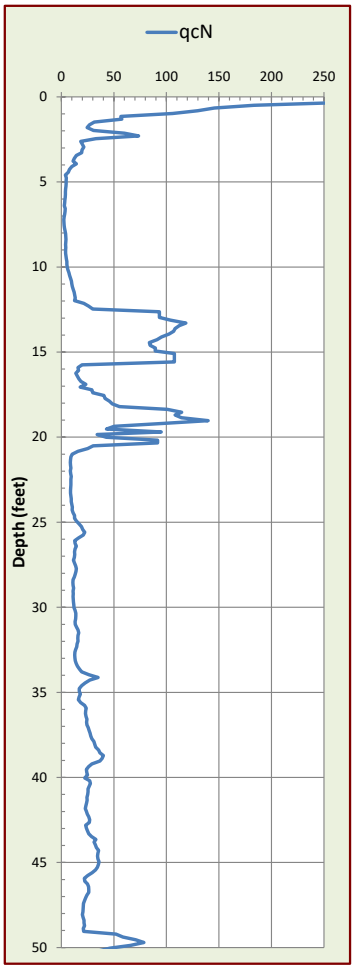
POTENTIAL LATERAL DISPLACEMENT

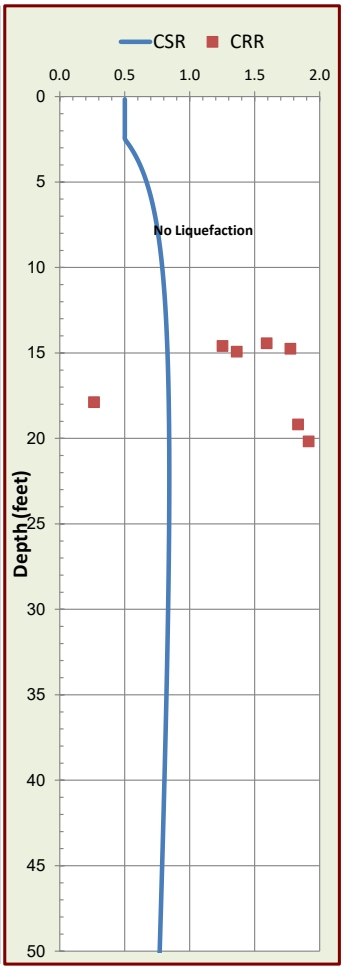
LDI[2]	0.03	L/H	52.0
LDI[1] Corrected for Distance	0.01	(4 < L/H < 40)	

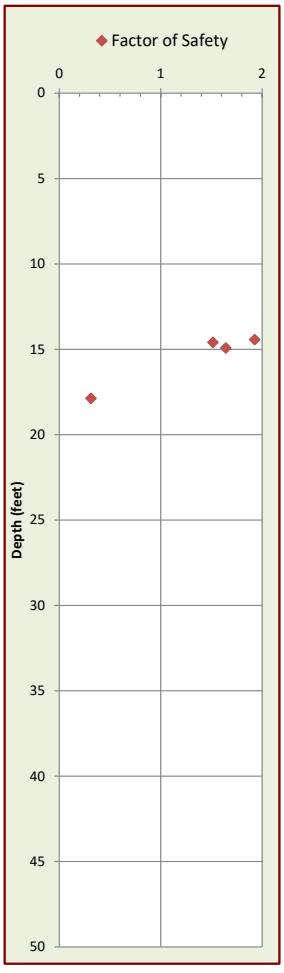
EXPECTED RANGE OF DISPLACEMENT

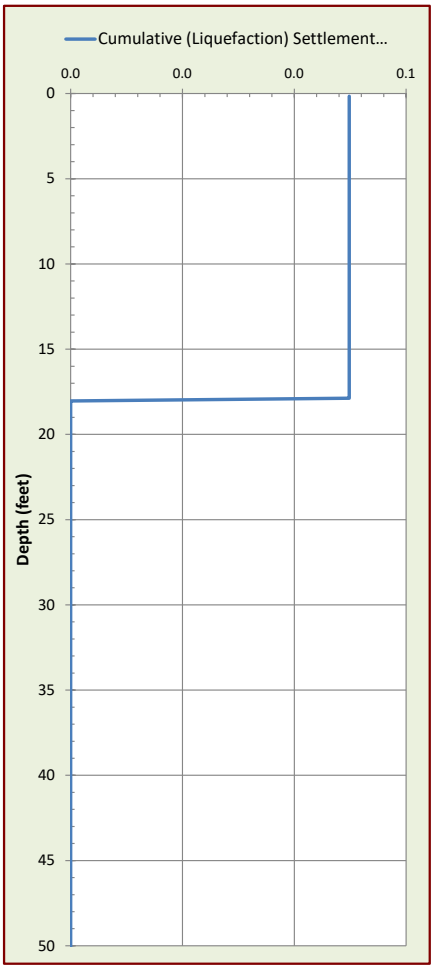
0.0 to 0.0 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









CORNERSTONE EARTH GROUP

FIGURE 4G

CPT NO. 7

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	5
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.14	(Inches)
TOTAL SEISMIC SETTLEMENT	**0.1**	**INCHES**

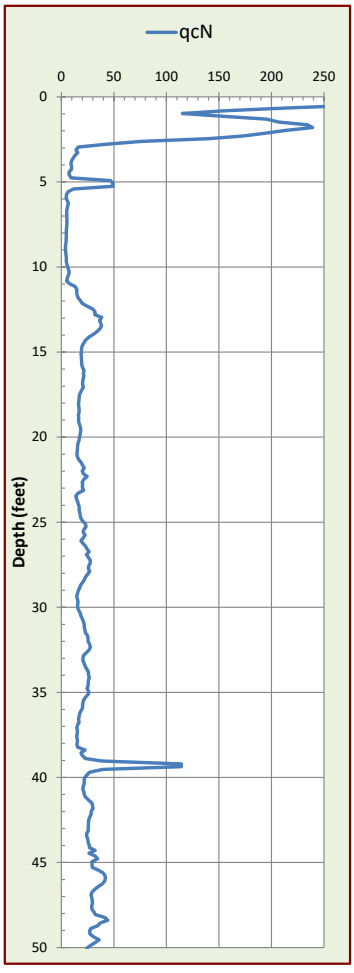
POTENTIAL LATERAL DISPLACEMENT

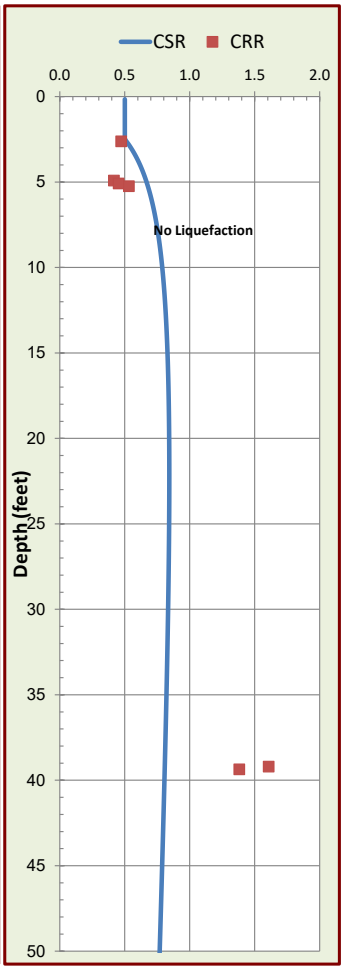
LDI[2]	0.05	L/H	43.0
LDI[1] Corrected for Distance	0.01	(4 < L/H < 40)	

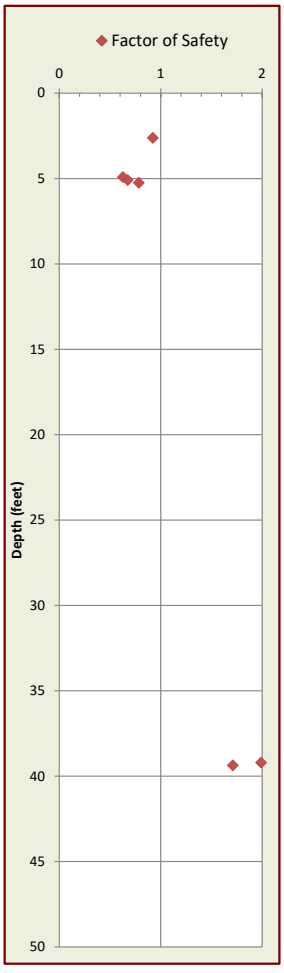
EXPECTED RANGE OF DISPLACEMENT

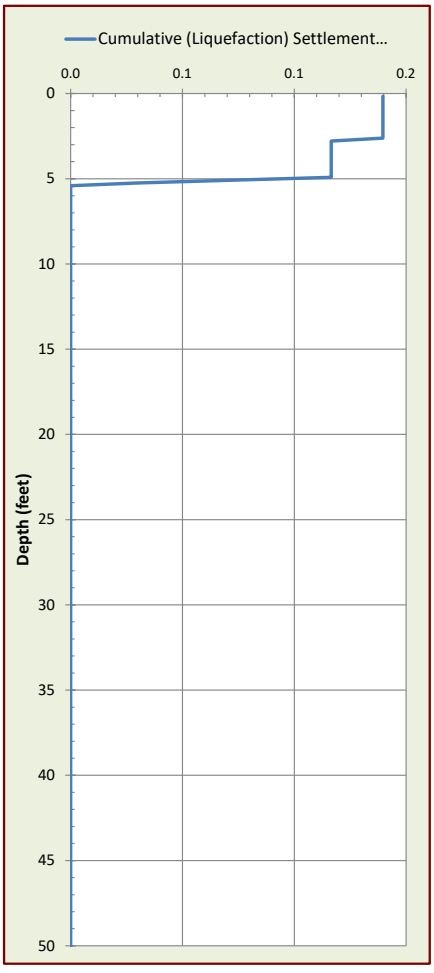
0.0 to 0.0 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









CORNERSTONE EARTH GROUP

FIGURE 4H

CPT NO. 8

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	6
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.00	(Inches)
TOTAL SEISMIC SETTLEMENT	0.0	INCHES

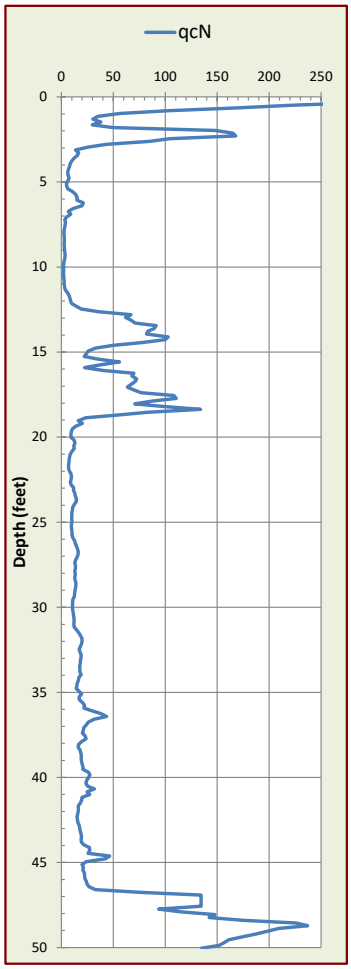
POTENTIAL LATERAL DISPLACEMENT

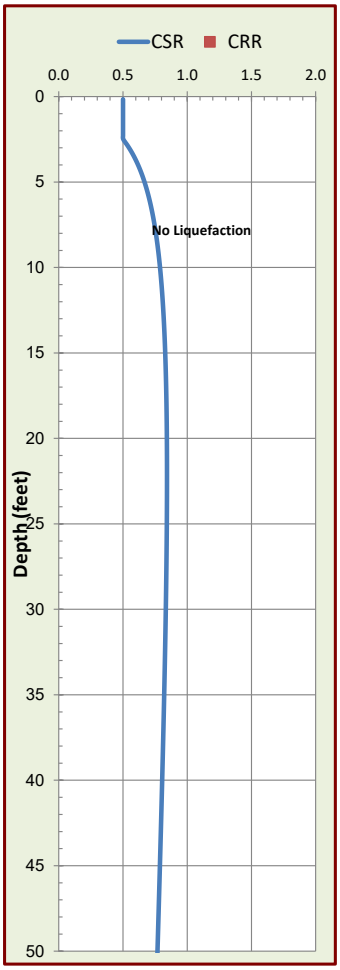
LDI[2]	0.00	L/H	41.0
LDI[1] Corrected for Distance	0.00	(4 < L/H < 40)	

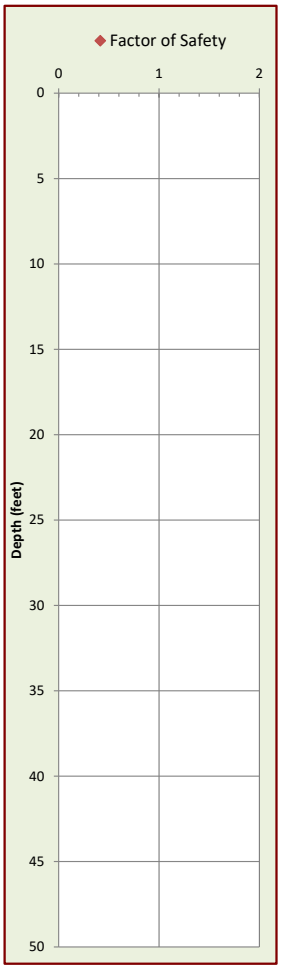
EXPECTED RANGE OF DISPLACEMENT

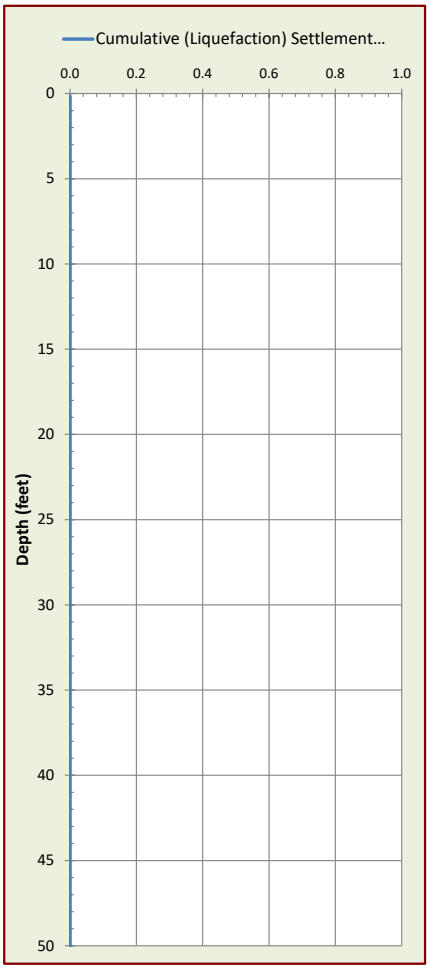
0.0 to 0.0 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









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FIGURE 4I

CPT NO. 9

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	5
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.42	(Inches)
TOTAL SEISMIC SETTLEMENT	0.4	INCHES

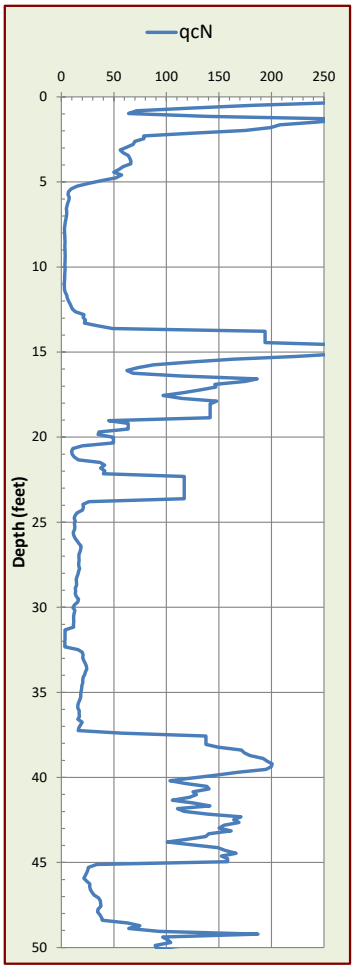
POTENTIAL LATERAL DISPLACEMENT

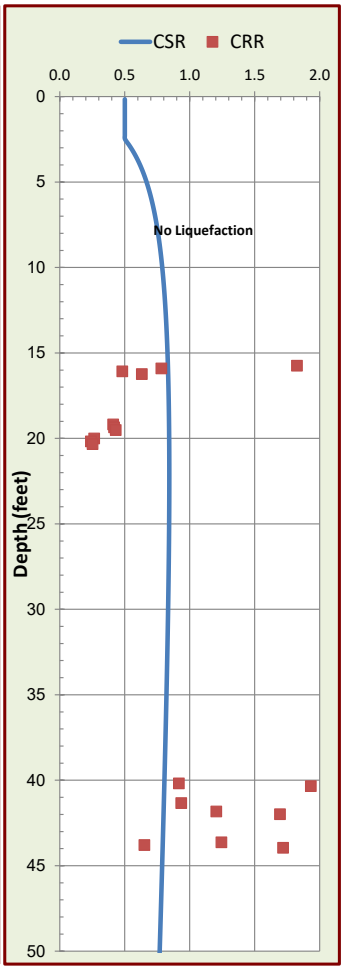
LDI[2]	0.09	L/H	26.0
LDI[1] Corrected for Distance	0.04	(4 < L/H < 40)	

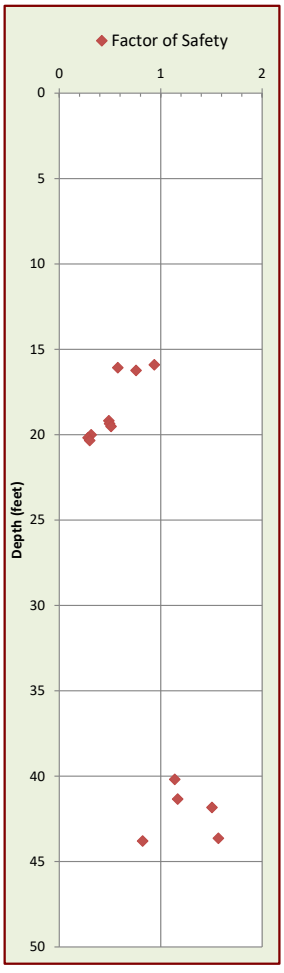
EXPECTED RANGE OF DISPLACEMENT

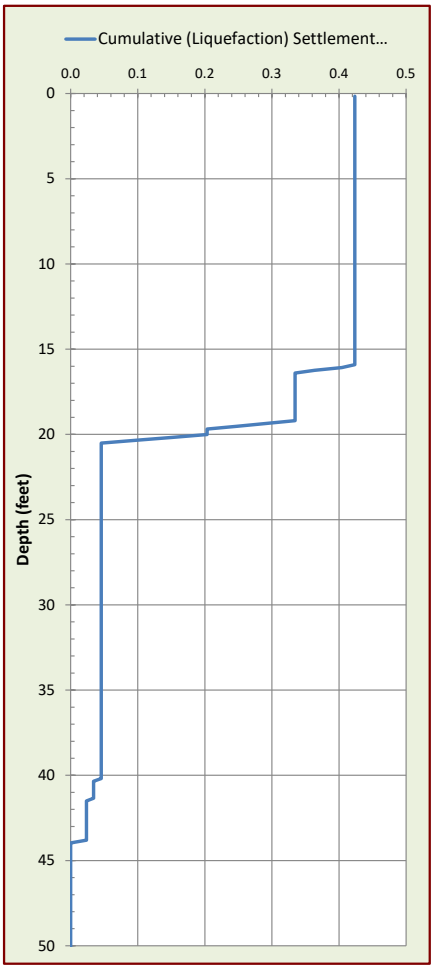
0.0 to 0.1 feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









CORNERSTONE EARTH GROUP

FIGURE 4J

CPT NO. 10

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PROJECT/CPT DATA

Project Title	Shoreway Road Office Complex
Project No.	448-6-3
Project Manager	SCO

SEISMIC PARAMETERS

Controlling Fault	San Andreas	
Earthquake Magnitude (Mw)	7.38	
PGA (Amax)	0.77	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	4
Design Water Depth (feet)	2.5
Ave. Unit Weight Above GW (pcf)	120
Ave. Unit Weight Below GW (pcf)	125

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	2.5	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.23	(Inches)
TOTAL SEISMIC SETTLEMENT	0.2	INCHES

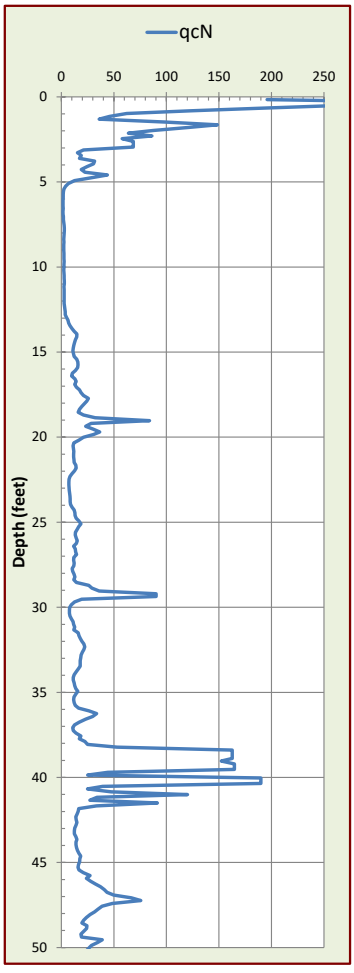
POTENTIAL LATERAL DISPLACEMENT

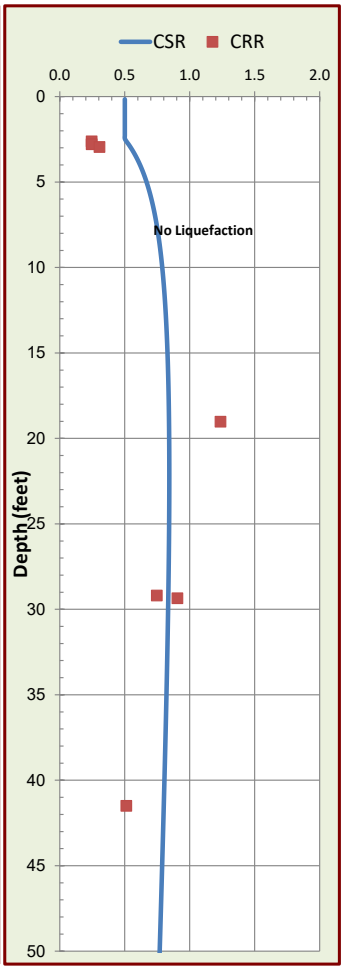
LDI[2]	0.10	L/H	11.0
LDI[1] Corrected for Distance	0.09	(4 < L/H < 40)	

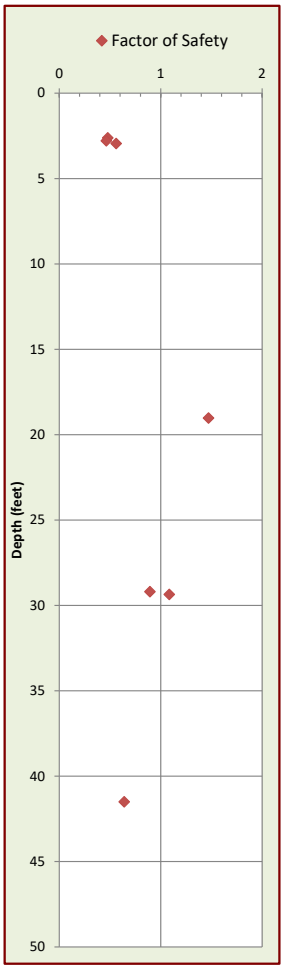
EXPECTED RANGE OF DISPLACEMENT

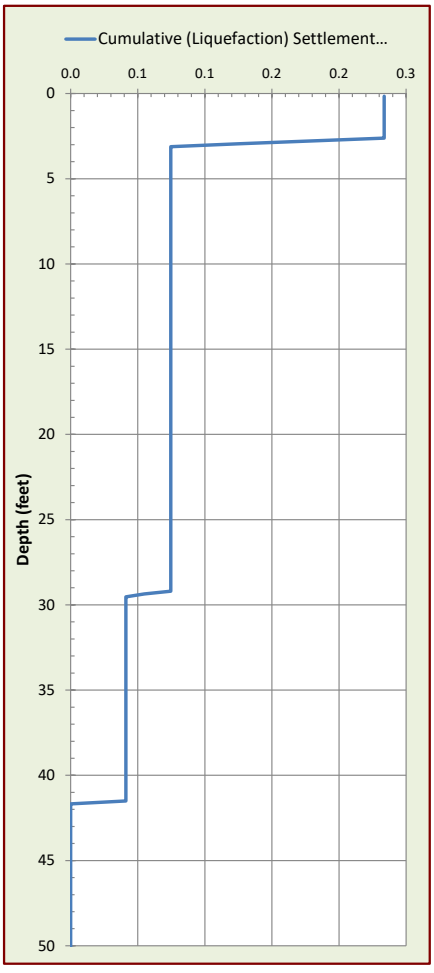
0.0 to 0.2 feet

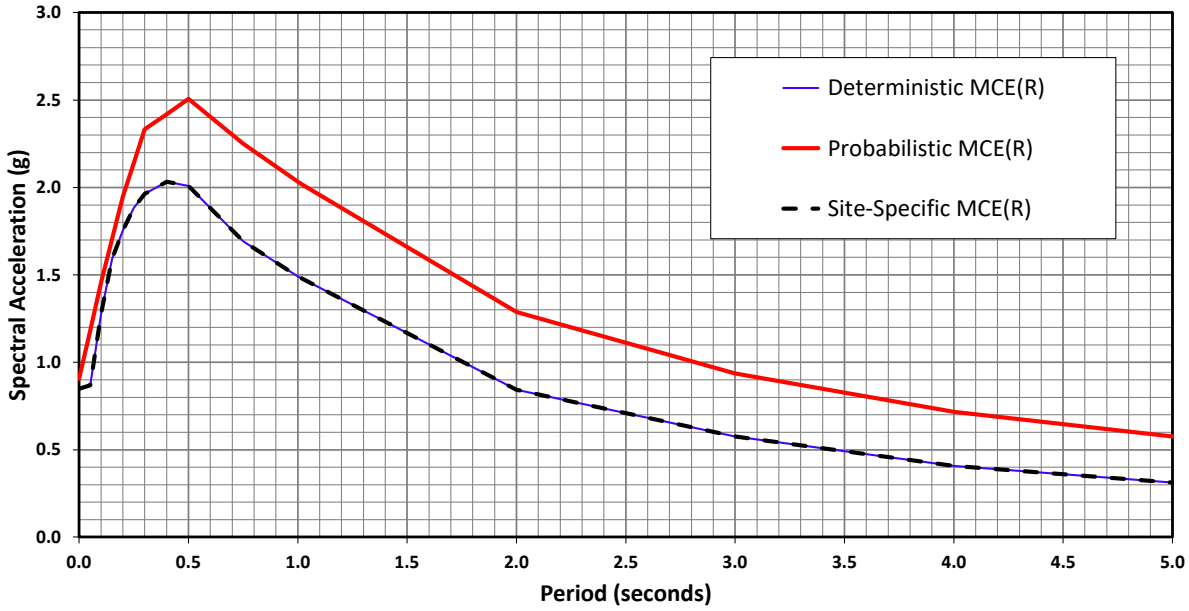
[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.











The Site-Specific Maximum Considered Earthquake (MCE_R) is defined as the lesser of the following at all periods:

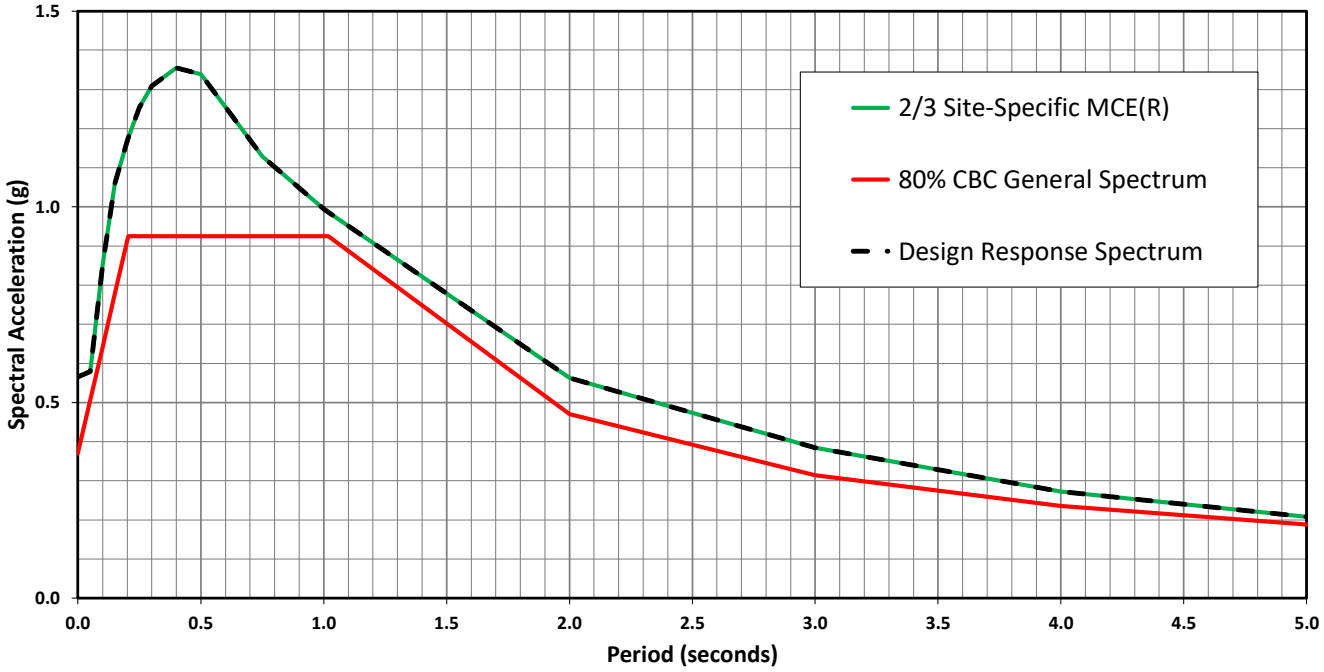
- Deterministic MCE_R – maximum 84th percentile deterministic, or
- Probabilistic MCE_R – defined as the 2,475–year ground motion.

Site-Specific MCE_R	
Period (Seconds)	Spectral Acceleration (g)
0.00	0.848
0.05	0.869
0.10	1.279
0.15	1.590
0.20	1.755
0.20	1.765
0.25	1.882
0.30	1.963
0.40	2.032
0.50	2.008
0.75	1.693
1.00	1.492
1.02	1.480
2.00	0.844
3.00	0.577
4.00	0.408
5.00	0.311

References:

ASCE/SEI 7-16: Minimum Design Loads and Associated Criteria for Buildings and Other Strutures with Supplement No. 1.
2019 California Building Code, Title 24, Part 2, Volume 2

CORNERSTONE EARTH GROUP	MCE_R RESPONSE SPECTRA	FIGURE 5
	Shoreway Road Office Complex Belmont, CA	PROJECT NO. 448-6-3
		April 19, 2022 | SCO



The Site-Specific Design Response Spectrum per Section 21.2, 21.3 and 21.4 of ASCE 7-16 is defined as the greater of the following at all periods:

- 2/3 of the Site-Specific MCE_R, or
- 80% of the CBC General Spectrum.

Design Response Spectra	
Period (Seconds)	Spectral Acceleration (g)
0.00	0.565
0.05	0.579
0.10	0.853
0.15	1.060
0.20	1.170
0.20	1.177
0.25	1.255
0.30	1.309
0.40	1.355
0.50	1.339
0.75	1.129
1.00	0.995
1.02	0.987
2.00	0.562
3.00	0.384
4.00	0.272
5.00	0.207

Site Design	Design Values
Site Class (Per Chapter 20 ASCE 7-16)	D
Shear Wave Velocity, V_{S30} (m/sec)	222
Site Latitude (degrees)	37.524373
Site Longitude (degrees)	-122.265985
Risk Category	II
Building Period (sec)	Unknown
Importance Factor, I_e	1
[1]Site Specific PGA_M (g)	0.77

[1] Lower of Deterministic and Probabilistic, but not less than 80% of mapped value of FM x PGA, determined in accordance with Section 21.5 of ASCE 7-16.

Design Acceleration Parameters[1]	
S_{DS}	1.219
S_{D1}	1.153
S_{MS}	1.829
S_{M1}	1.730

References:

ASCE/SEI 7-16: Minimum Design Loads and Associated Criteria for Buildings and Other Strutures with Supplement No. 1.
2019 California Building Code, Title 24, Part 2, Volume 2

CORNERSTONE EARTH GROUP

DESIGN RESPONSE SPECTRA

Shoreway Road Office Complex
Belmont, CA

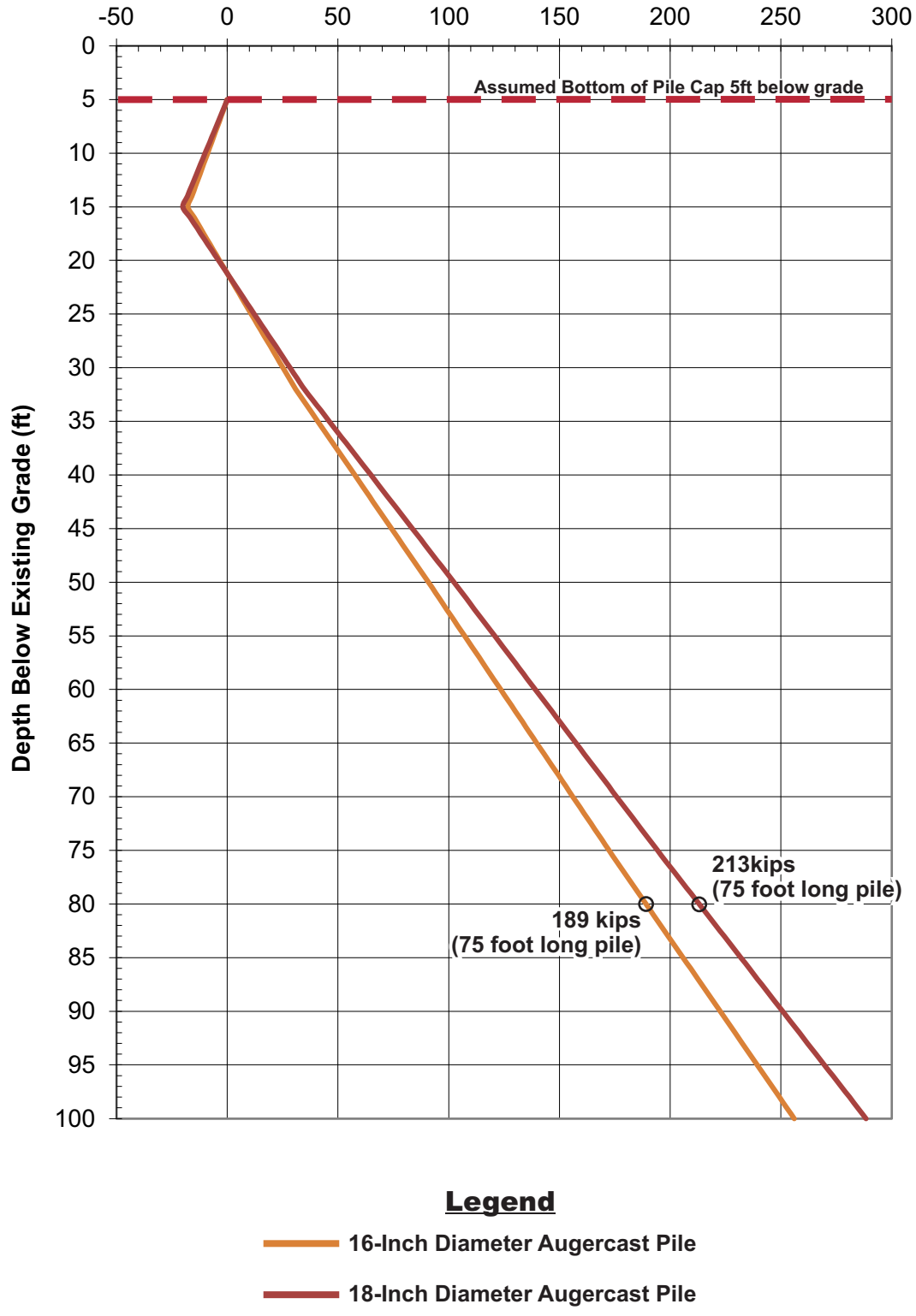
FIGURE 6

PROJECT NO. 448-6-3

April 19, 2022 | SCO

Allowable Downward Vertical Capacity

(Dead plus Live Load) (Kips)



Legend

16-Inch Diameter Augercast Pile

18-Inch Diameter Augercast Pile

CORNERSTONE EARTH GROUP

Vertical Pile Capacity	
Shoreway Road Office Complex Belmont, CA	Project Number: 448-6-3
	Figure Number: Figure 7
	Date: April 2022
	Drawn By: RRN

APPENDIX A: FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using truck-mounted, hollow-stem auger drilling equipment and 25-ton truck-mounted Cone Penetration Test equipment. Seven 8-inch-diameter exploratory borings were drilled on February 22, 23, and 24, 2022 to depths of approximately 5½ to 80 feet. Ten CPT soundings were also performed in accordance with ASTM D 5778-95 (revised, 2002) on February 14, 16, and 17, 2022, to depths ranging from about 75 to 100 feet. The approximate locations of exploratory borings and CPTs are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). Boring logs, as well as a key to the classification of the soil, are included as part of this appendix.

Boring and CPT locations were approximated using existing site boundaries, a hand held GPS unit, and other site features as references. Boring and CPT elevations were not determined. The locations of the borings and CPTs should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Relatively undisturbed samples were also obtained with 2.875-inch I.D. Shelby Tube sampler which were hydraulically pushed. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs.

The CPT involved advancing an instrumented cone-tipped probe into the ground while simultaneously recording the resistance at the cone tip (q_c) and along the friction sleeve (f_s) at approximately 5-centimeter intervals. Based on the tip resistance and tip to sleeve ratio (R_f), the CPT classified the soil behavior type and estimated engineering properties of the soil, such as equivalent Standard Penetration Test (SPT) blow count, internal friction angle within sand layers, and undrained shear strength in silts and clays. A pressure transducer behind the tip of the CPT cone measured pore water pressure (u_2). Graphical logs of the CPT data is included as part of this appendix.

Field tests included an evaluation of the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

Attached boring and CPT logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring and CPT locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition,

any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-10)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

OTHER MATERIAL SYMBOLS

- Poorly-Graded Sand with Clay
- Clayey Sand
- Sandy Silt
- Artificial/Undocumented Fill
- Poorly-Graded Gravelly Sand
- Topsoil
- Well-Graded Gravel with Clay
- Well-Graded Gravel with Silt
- Sand
- Silt
- Well Graded Gravelly Sand
- Gravelly Silt
- Asphalt
- Boulders and Cobble

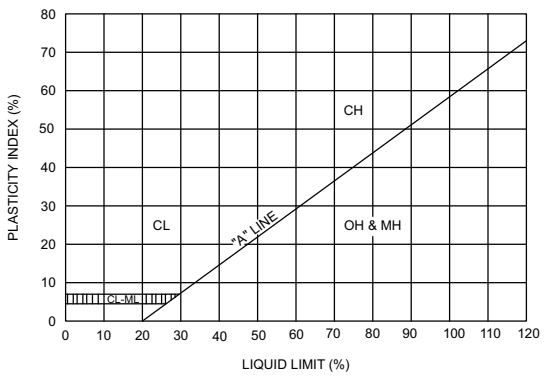
SAMPLER TYPES

- SPT
- Modified California (2.5" I.D.)
- Rock Core
- Shelby Tube
- No Recovery
- Grab Sample

ADDITIONAL TESTS

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	PI	-	PLASTICITY INDEX
CD	-	CONSOLIDATED DRAINED TRIAXIAL	SW	-	SWELL TEST
CN	-	CONSOLIDATION	TC	-	CYCLIC TRIAXIAL
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TV	-	TORVANE SHEAR
DS	-	DIRECT SHEAR	UC	-	UNCONFINED COMPRESSION
PP	-	POCKET PENETROMETER (TSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)			
RV	-	R-VALUE	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE			
▼	-	WATER LEVEL			

PLASTICITY CHART



PENETRATION RESISTANCE
(RECORDED AS BLOWS / FOOT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	STRENGTH** (KSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 2	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 4	0.25 - 0.5
MEDIUM DENSE	10 - 30	MEDIUM STIFF	4 - 8	0.5-1.0
DENSE	30 - 50	STIFF	8 - 15	1.0 - 2.0
VERY DENSE	OVER 50	VERY STIFF	15 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

** UNDRAINED SHEAR STRENGTH IN KIPS/SQ. FT. AS DETERMINED BY LABORATORY TESTING OR APPROXIMATED BY THE STANDARD PENETRATION TEST, POCKET PENETROMETER, TORVANE, OR VISUAL OBSERVATION.

CORNERSTONE EARTH GROUP

LEGEND TO SOIL DESCRIPTIONS

Figure Number A-1

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/22/22 **DATE COMPLETED** 2/22/22
GROUND ELEVATION _____ **BORING DEPTH** 80 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.525390° **LONGITUDE** -122.265612°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 5 ft.
NOTES _____
▼ **AT END OF DRILLING** 5 ft.

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
	0		4 inches asphalt concrete over 4 inches aggregate base						
			Sandy Lean Clay (CL) [Fill] very stiff, moist, gray, fine to coarse sand, some fine subangular gravel, moderate plasticity	41	1A MC 1B	105 113	19 13	25	
			Liquid Limit = 43, Plastic Limit = 18						
			Silty Sand with Gravel (SM) [Fill] medium dense to loose, moist, gray and brown, fine to coarse sand, fine to coarse subangular gravel, some metal debris, some tar	21	MC-2B	88	19		
	5			9	MC-3B		48		
			Fat Clay (CH) [Bay Mud Crust] medium stiff, moist, gray, trace fine sand, high plasticity	9	MC-4C	60	62		
	10		**Fat Clay (CH) [Bay Mud]** soft, moist, gray, trace fine sand, high plasticity		ST				
	15		**Lean Clay with Sand (CL)** stiff, moist, gray, fine sand, low to moderate plasticity	17	MC-6B	107	19		
			becomes very stiff color changes to brown	54	MC-7A	110	22		
	20		**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to medium sand, fine subangular to subrounded gravel						
			Lean Clay with Sand (CL) medium stiff, moist, brown, fine to medium sand, moderate plasticity		ST				
	25								

Continued Next Page

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 5/2/22 10:58 - P:\DRAFTING\GINT FILES\448-6-3 SHOREWAY.GPJ

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL; 1.0 2.0 3.0 4.0)
			Lean Clay with Sand (CL) stiff, moist, brown, fine to medium sand, moderate plasticity							
	30			21	MC-9B	107	21			○
			becomes very stiff color changes to gray with brown mottles	30	MC-10B	99	28			○
	35									
			becomes stiff		ST					○
	40									
				26	MC-12B	113	20			○
	45									
			Lean Clay (CL) very stiff, moist, brown, some fine sand, moderate plasticity	34	MC-13B	107	20			○
	50									
				25	MC-14B	116	15			○
	55									

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BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
			Lean Clay (CL) very stiff, moist, brown, some fine sand, moderate plasticity						
	60		**Sandy Lean Clay (CL)** stiff, moist, reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel, low plasticity		ST				
	65		**Clayey Sand with Gravel (SC)** dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	64	MC-16B	120	16		13
	70		becomes medium dense	46	MC				
	75		**Sandy Lean Clay (CL)** very stiff, moist, brown, fine to medium sand, low plasticity	76	MC-18B	113	19		
	80		Bottom of Boring at 80.0 feet.						
	85								

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 5/2/22 10:58 - P:\DRAFTING\GINT FILES\448-6-3 SHOREWAY.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/24/22 **DATE COMPLETED** 2/24/22
GROUND ELEVATION _____ **BORING DEPTH** 60 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.524727° **LONGITUDE** -122.266307°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 16 ft.
NOTES _____
▼ **AT END OF DRILLING** 14 ft.

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
	0		2 inches asphalt concrete over 2 inches aggregate base							
			Clayey Sand with Gravel (SC) [Fill] medium dense, moist, gray and brown, fine to coarse sand, fine to coarse subangular gravel Liquid Limit = 31, Plastic Limit = 15	50	MC-1B	110	14	16		
				83	MC					>4.5
	5		**Sandy Lean Clay (CL) [Fill]** hard, moist, dark gray and gray mottled, fine sand, moderate plasticity becomes stiff	21	MC-3B	74	37			
			Fat Clay (CH) [Bay Mud Crust] medium stiff, moist, gray, trace fine sand, some organics, high plasticity	7	MC					
	10		**Fat Clay (CH) [Bay Mud]** medium stiff, moist, gray, trace fine sand, high plasticity abundant organics at 9.5 feet	6	MC-5B	30	147			
	15		**Lean Clay with Sand (CL)** very stiff, moist, gray with brown mottles, fine to medium sand, low plasticity	22	MC-6C	108	20			
				27	MC					
	20									
			Lean Clay (CL) medium stiff, moist, gray with brown mottles, some fine sand, moderate plasticity	18	MC-8B	104	22			
	25				ST					

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UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

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BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL; 1.0 2.0 3.0 4.0)
	30		**Lean Clay (CL)** medium stiff, moist, gray with brown mottles, some fine sand, moderate plasticity	25	MC-10B	98	26			○
	35		**Lean Clay with Sand (CL)** stiff, moist, gray with brown mottles, fine to medium sand, low plasticity	33	MC					○
	40		**Sandy Lean Clay (CL)** stiff, moist, gray with brown mottles, fine to medium sand, low plasticity	29	MC-12B	112	19			○
	45		**Lean Clay (CL)** very stiff, moist, gray with brown mottles, fine to medium sand, low plasticity	40	MC					○
	50		becomes very stiff	36	MC-14B	106	22			○
	55			75	MC-15B	115	17			○
	60		**Clayey Sand (SC)** dense, moist, reddish brown, fine to medium sand, some fine subangular to subrounded gravel	70	MC-16		14			
			Bottom of Boring at 60.0 feet.							

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BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/23/22 **DATE COMPLETED** 2/23/22
GROUND ELEVATION _____ **BORING DEPTH** 55 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.524014° **LONGITUDE** -122.266544°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 12 ft.
NOTES _____
▼ **AT END OF DRILLING** 10 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
	0	2 inches asphalt concrete over 4 inches aggregate base						
		Sandy Lean Clay (CL) [Fill] stiff, moist, dark gray, fine to coarse sand, some fine subangular gravel, some glass fragments, low to moderate plasticity	12	MC-1B	101	17		
			11	MC-2B	73	44		
	5	**Fat Clay (CH) [Bay Mud Crust]** medium stiff, moist, dark gray, trace fine sand, some organics, high plasticity	4	MC-3B	76	40		
		Fat Clay (CH) [Bay Mud] soft, moist, gray, trace fine sand, high plasticity						
		Lean Clay (CL) medium stiff, moist, dark gray, some fine to medium sand, moderate plasticity	7	MC-4B	91	31		
	10	**Sandy Lean Clay (CL)** stiff, moist, gray with brown mottles, fine to medium sand, some fine subangular to subrounded gravel, low plasticity						
		Clayey Sand (SC) dense, moist, gray, fine to medium sand, some fine subangular to subrounded gravel	34	SPT-5B		18		
	15	**Sandy Lean Clay (CL)** very stiff, moist, brown, fine to medium sand, some fine subangular to subrounded gravel, low plasticity						
			19	MC-6B	115	17		
	20	becomes stiff		ST				
	25							

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UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

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BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL; 1.0 2.0 3.0 4.0)
			Lean Clay with Sand (CL) very stiff, moist, brown with gray mottles, fine to medium sand, low to moderate plasticity							
	30			25	MC-8B	103	24			○
			Sandy Lean Clay (CL) stiff, moist, gray, fine to medium sand, low plasticity							
				31	MC-9B	117	17			○
	35									
			Lean Clay with Sand (CL) very stiff, moist, brown with gray mottles, fine to medium sand, low to moderate plasticity							
				46	MC-10B	111	18			○
	40									
	45		becomes stiff		ST					○
	50									
			Sandy Lean Clay (CL) very stiff, moist, reddish brown with gray mottles, fine to medium sand, low plasticity							
				56	MC-12B	109	18			○
	55		Bottom of Boring at 55.0 feet.							

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BORING NUMBER EB-4

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/22/22 **DATE COMPLETED** 2/22/22
GROUND ELEVATION _____ **BORING DEPTH** 58.5 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.523507° **LONGITUDE** -122.265927°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 10 ft.
NOTES _____
▼ **AT END OF DRILLING** 10 ft.

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL; 1.0 2.0 3.0 4.0)
	0		4 inches asphalt concrete over 4 inches aggregate base							
			Clayey Sand with Gravel (SC) [Fill] medium dense to loose, moist, brown, fine to coarse sand, fine to coarse subangular gravel	54	MC-1B		3			
				13	MC-2B	96	28			○
			Lean Clay with Sand (CL) [Fill] medium stiff, moist, dark gray and gray mottled, fine sand, moderate plasticity							
	5			7	MC					○
			Fat Clay (CH) [Bay Mud Crust] soft, moist, dark gray, trace fine sand, high plasticity	4	MC-4B	90	29			○
▼	10		**Lean Clay (CL)** soft, moist, dark gray, some fine to medium sand, moderate plasticity							
			Clayey Sand (SC) dense, moist, brown, fine to medium sand, some fine subangular to subrounded gravel	35	SPT-5		18		36	
	15			35	SPT					○
			Sandy Lean Clay (CL) very stiff, moist, brown, fine to medium sand, some fine subangular to subrounded gravel, low plasticity	42	MC-7B	123	14			
	20		**Clayey Sand (SC)** medium dense, moist, brown, fine to medium sand, some fine subangular to subrounded gravel							
			Lean Clay with Sand (CL) very stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	19	MC-8B	109	21			○
	25									

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BORING NUMBER EB-4

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
	30		**Lean Clay with Sand (CL)** stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	24	MC-9B	90	31		
	35				ST				
			Sandy Lean Clay (CL) medium stiff, moist, brown, fine to medium sand, low plasticity	56	MC-11B	115	16		
	40								
			Lean Clay with Sand (CL) stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity		ST-12	112	19		
	45								
			Clayey Sand with Gravel (SC) very dense, moist, brown, fine to medium sand, fine subangular to subrounded gravel	50/6"	MC-13B	127	11		
	50								
				50/6"	MC				
	55				ST				
			Bottom of Boring at 58.5 feet.						

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 5/2/22 10:58 - P:\DRAFTING\GINT FILES\448-6-3 SHOREWAY.GPJ

BORING NUMBER EB-5

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/23/22 **DATE COMPLETED** 2/23/22
GROUND ELEVATION _____ **BORING DEPTH** 80 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.524269° **LONGITUDE** -122.265063°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 11 ft.
NOTES _____
▼ **AT END OF DRILLING** 10 ft.

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
	0		2 inches asphalt concrete over 4 inches aggregate base						
			Silty Sand with Gravel (SM) [Fill] dense, moist, brown, fine to coarse sand, fine to coarse subangular gravel Liquid Limit = 32, Plastic Limit = 28	52	MC-1B	108	19	4	
			Sandy Fat Clay (CH) [Fill] stiff, moist, dark gray, fine to coarse sand, some fine subangular gravel, high plasticity	10	MC-2C	59	64		
	5		**Clayey Gravel with Sand (GC) [Fill]** medium dense, moist, brown, fine to coarse subangular gravel, fine to coarse sand	26	MC-3C	96	8		
			Fat Clay (CH) [Bay Mud Crust] soft, moist, gray, trace fine sand, high plasticity	5	MC				
			Fat Clay (CH) [Bay Mud] soft, moist, gray, trace fine sand, high plasticity	4	MC-5B	45	95		
	10								
	15		**Lean Clay with Sand (CL)** medium stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	11	MC				
	20		**Clayey Sand (SC)** medium dense, moist, brown, fine to medium sand, some fine subangular to subrounded gravel	33	MC-7B	119	16		33
			Lean Clay with Sand (CL) medium stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	13	MC				
	25								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

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BORING NUMBER EB-5

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
		Lean Clay with Sand (CL) medium stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	17	MC-9B	105	22		
	30	**Sandy Lean Clay (CL)** stiff, moist, brown, fine to medium sand, some fine subangular to subrounded gravel, low plasticity	15	SPT				
		Lean Clay with Sand (CL) very stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity	28	MC-11B	100	26		
	35			ST-12	100	26		
		Clayey Sand with Gravel (SC) dense, moist, brown, fine to medium sand, fine subangular to subrounded gravel	61	MC				
	40							
			27	MC-14B	120	16		
	45	**Sandy Lean Clay (CL)** stiff, moist, brown, fine to medium sand, some fine subangular to subrounded gravel, low plasticity	17	SPT				
		becomes very stiff	70	MC				
	50							
			54	MC-17B	115	18		
	55							

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

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BORING NUMBER EB-5

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex

PROJECT NUMBER 448-6-3

PROJECT LOCATION Belmont, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
			Lean Clay with Sand (CL) very stiff, moist, gray with brown mottles, fine to medium sand, moderate plasticity						
	60			79	SPT				
				35	MC-19B	108	19		
	65								
				56	MC-20B	106	21		
	70								
			Sandy Lean Clay (CL) very stiff, moist, brown, fine to medium sand, some fine subangular to subrounded gravel, low plasticity	60	MC-21B	113	18		
	75								
			thin seam of fine to coarse sand	42	SPT-22B		17		
	80		Bottom of Boring at 80.0 feet.						
	85								

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

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BORING NUMBER EB-6

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/24/22 **DATE COMPLETED** 2/24/22
GROUND ELEVATION _____ **BORING DEPTH** 5.5 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.525035° **LONGITUDE** -122.265337°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
AT TIME OF DRILLING Not Encountered
NOTES _____
AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
	0		2 inches asphalt concrete over 4 inches aggregate base						
			Clayey Sand with Gravel (SC) [Fill] medium dense, moist, gray and brown, fine to coarse sand, fine to coarse subangular gravel, some glass fragments	31	MC-1B	106	18		
				13	MC				
			Fat Clay (CH) [Bay Mud Crust] medium stiff to soft, moist, dark gray, trace fine sand, high plasticity	6	SPT-3B		80		
	5		Bottom of Boring at 5.5 feet.						
	10								
	15								
	20								
	25								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 5/2/22 10:58 - P:\DRAFTING\GINT FILES\448-6-3 SHOREWAY.GPJ

BORING NUMBER EB-7

CORNERSTONE EARTH GROUP

PROJECT NAME Shoreway Road Office Complex
PROJECT NUMBER 448-6-3
PROJECT LOCATION Belmont, CA

DATE STARTED 2/24/22 **DATE COMPLETED** 2/24/22
GROUND ELEVATION _____ **BORING DEPTH** 7 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc.
LATITUDE 37.524433° **LONGITUDE** -122.265192°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY EA
▽ **AT TIME OF DRILLING** 4 ft.
NOTES _____
▼ **AT END OF DRILLING** 4 ft.

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
	0		2 inches asphalt concrete over 4 inches aggregate base							○ HAND PENETROMETER △ TORVANE ● UNCONFINED COMPRESSION ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL 1.0 2.0 3.0 4.0
			Clayey Sand with Gravel (SC) [Fill] medium dense to loose, moist, reddish brown, fine to coarse sand, fine to coarse subangular gravel, some glass fragments	33	MC-1B	106	17			
				35	MC					
	5			7	SPT-3B		48			
			Fat Clay (CH) [Bay Mud Crust] medium stiff, moist, dark gray, trace fine sand, high plasticity	3	SPT					○
			Bottom of Boring at 7.0 feet.							
	10									
	15									
	20									
	25									

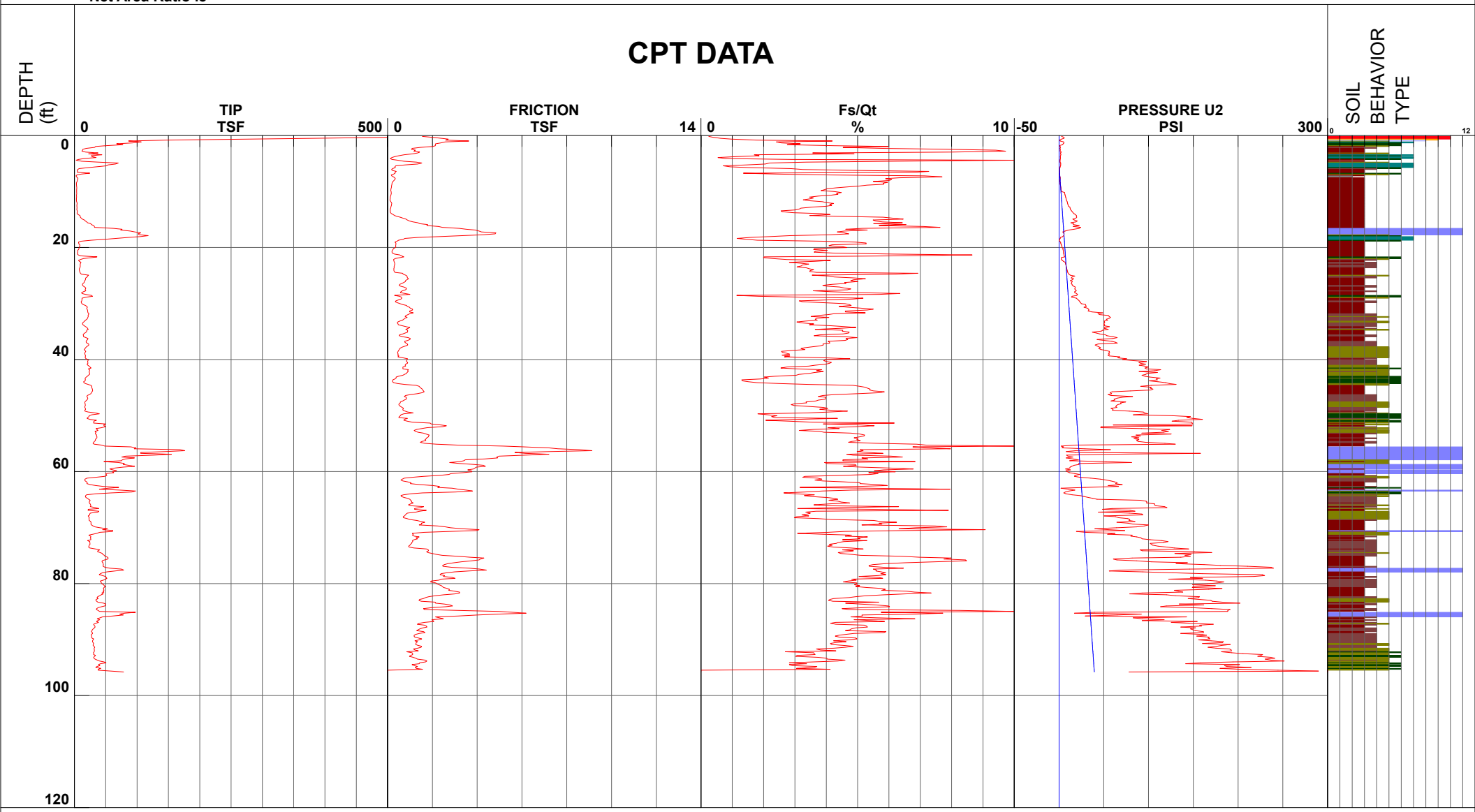
CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 5/2/22 10:58 - P:\DRAFTING\GINT FILES\448-6-3 SHOREWAY.GPJ

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	AJ-GM-BH	Filename	SDF(504).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-01	Date and Time	2/16/2022 12:53:52 PM	Maximum Depth	95.80 ft
EST GW Depth During Test		5.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

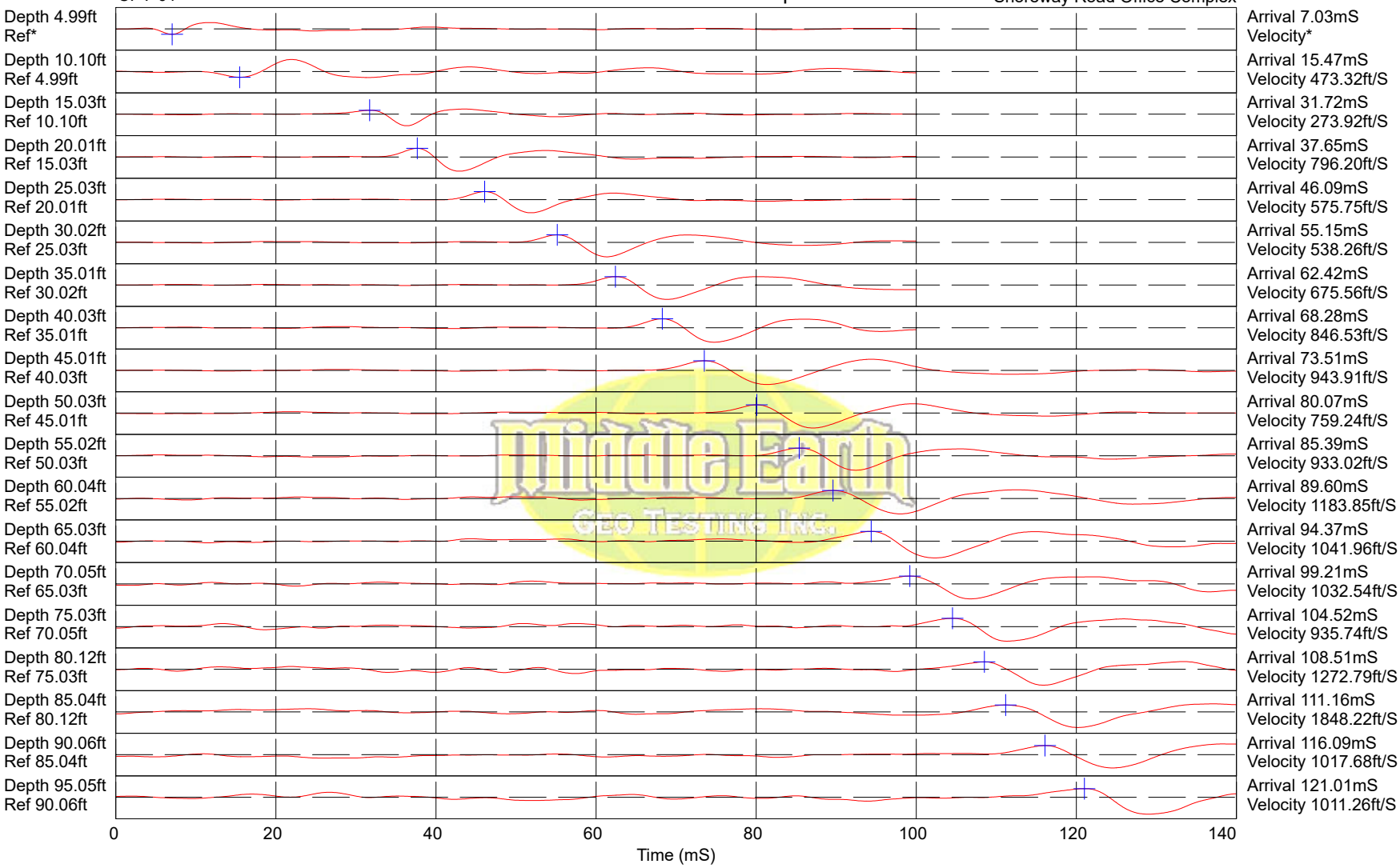
Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1983

CPT-01

Cornerstone Earth Group

Shoreway Road Office Complex



Hammer to Rod String Distance (ft): 5.83

* = Not Determined

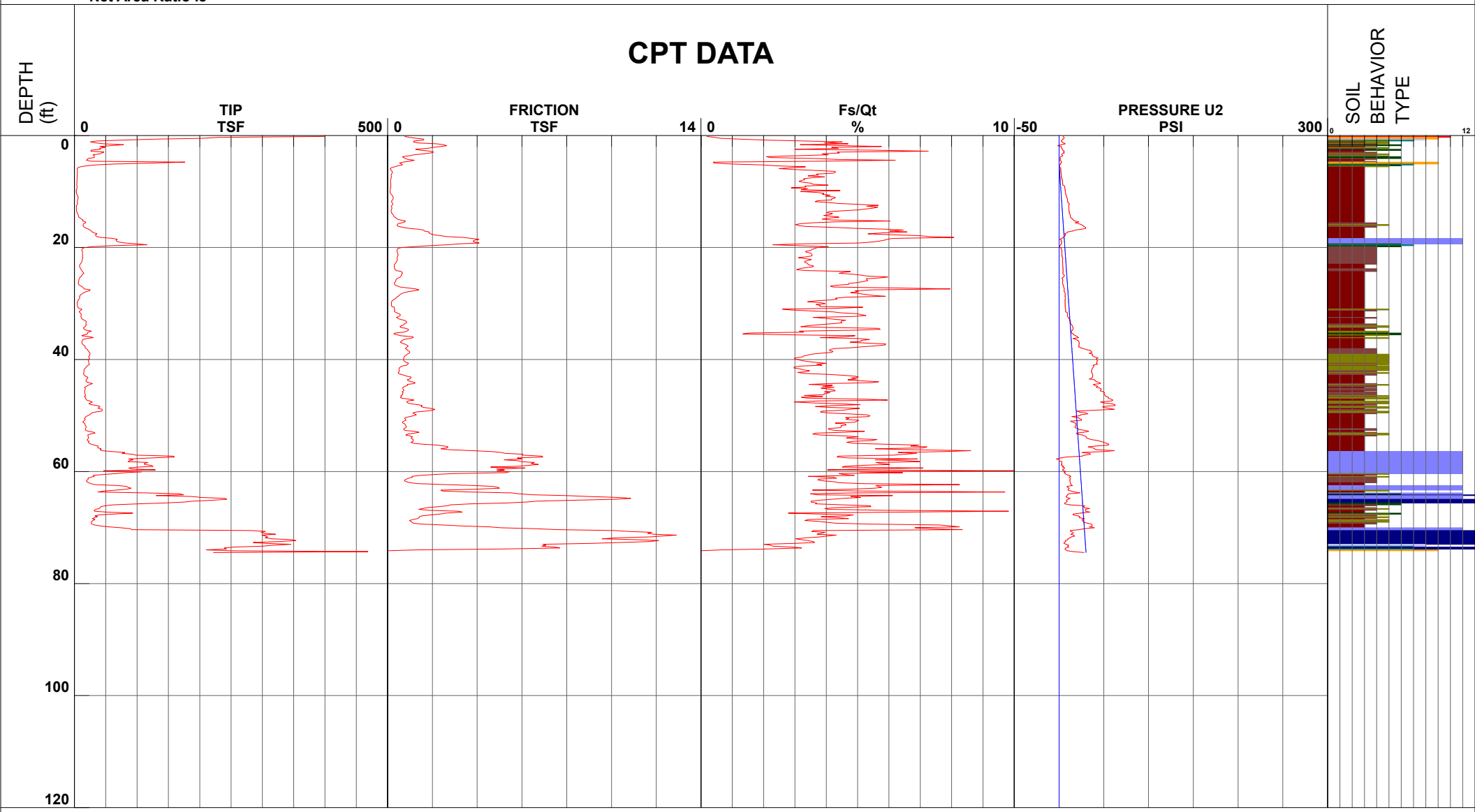
COMMENT:

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	GM-BH	Filename	SDF(510).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-02	Date and Time	2/17/2022 12:07:12 PM	Maximum Depth	74.47 ft
EST GW Depth During Test		5.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

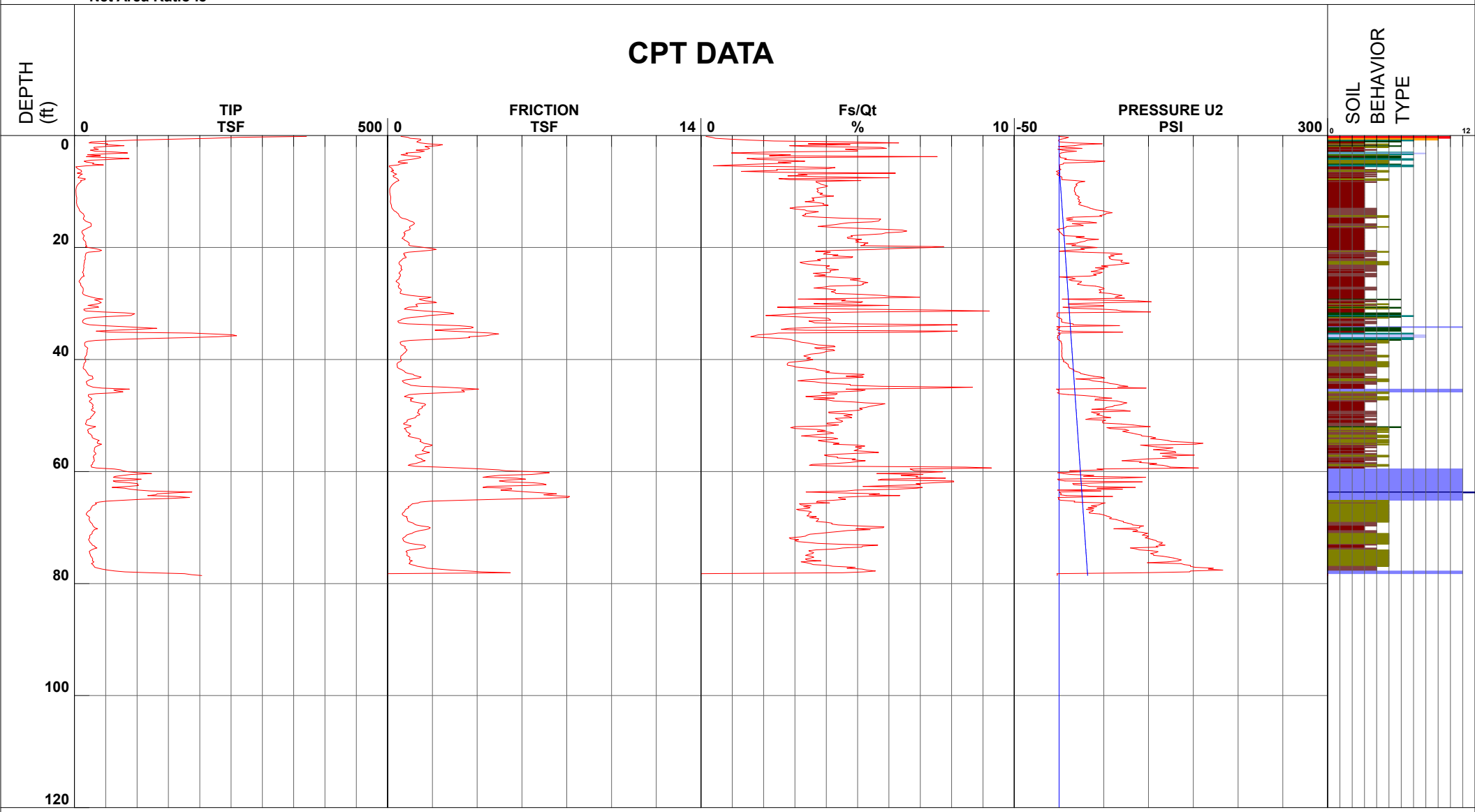
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	AJ-GM-BH	Filename	SDF(506).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-03	Date and Time	2/16/2022 3:08:55 PM	Maximum Depth	78.58 ft
EST GW Depth During Test	5.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

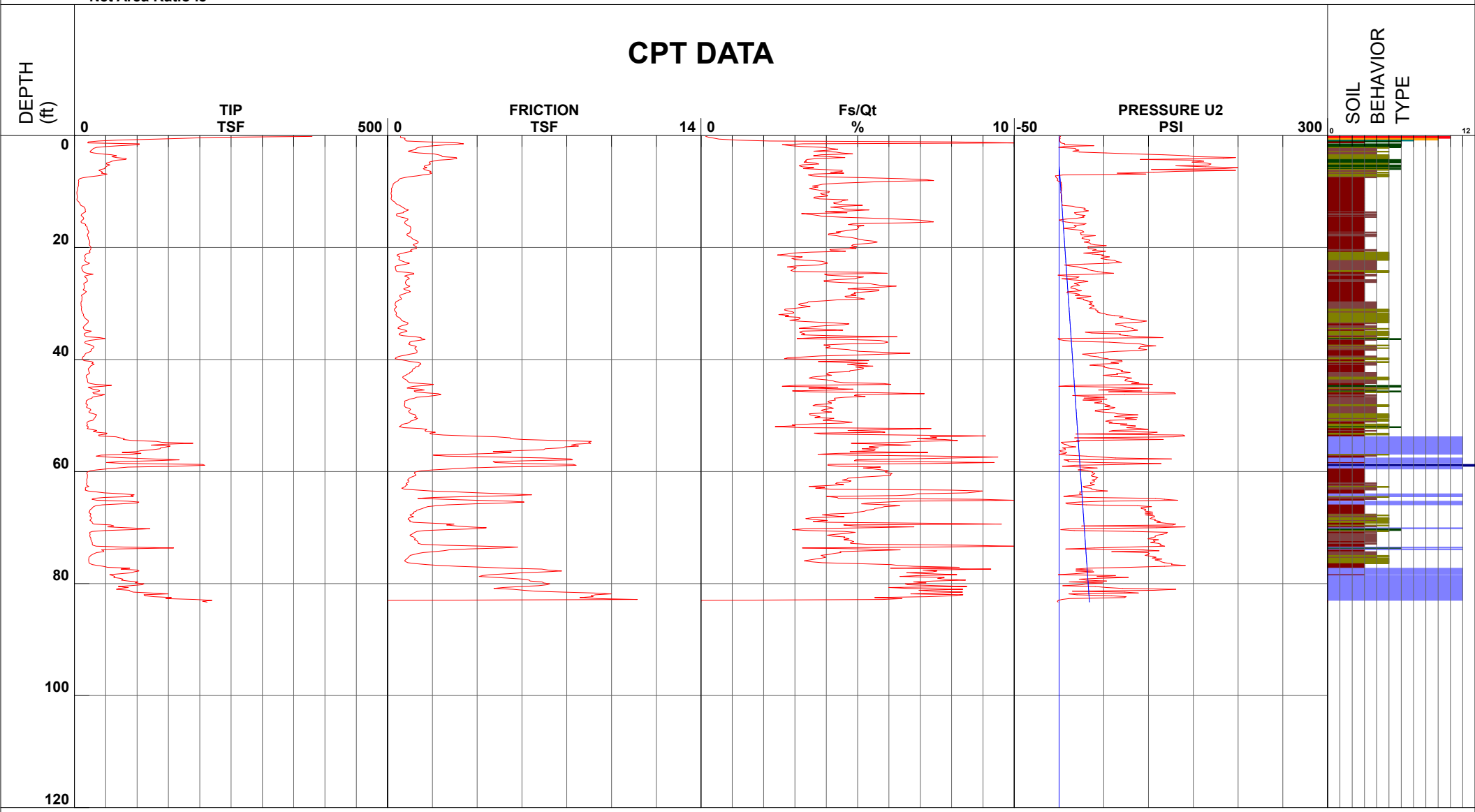
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	GM-BH	Filename	SDF(507).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-04	Date and Time	2/17/2022 6:51:22 AM	Maximum Depth	83.33 ft
EST GW Depth During Test		5.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

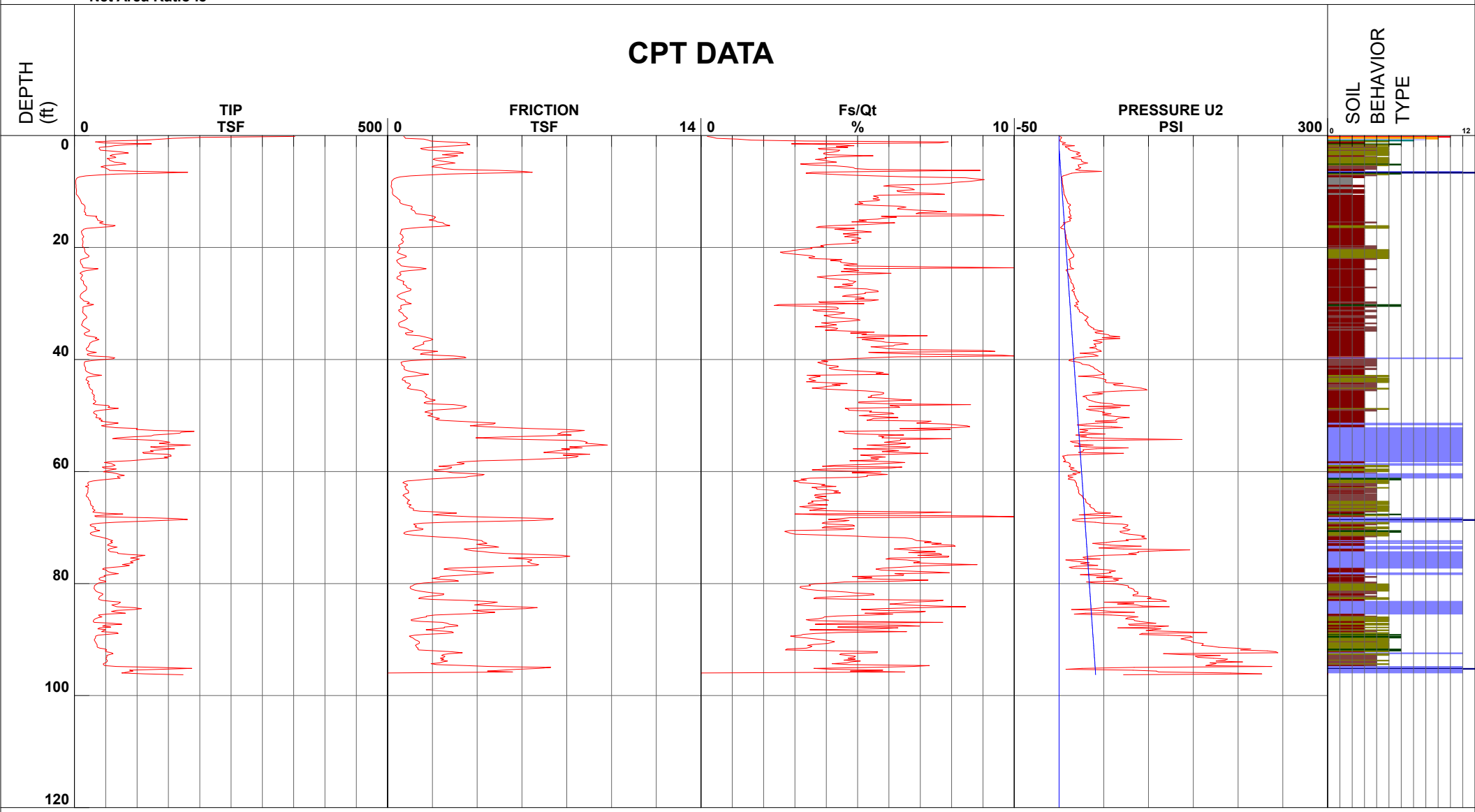
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	GM-BH	Filename	SDF(508).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-05	Date and Time	2/17/2022 8:25:25 AM	Maximum Depth	96.29 ft
EST GW Depth During Test	2.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared DDG1596

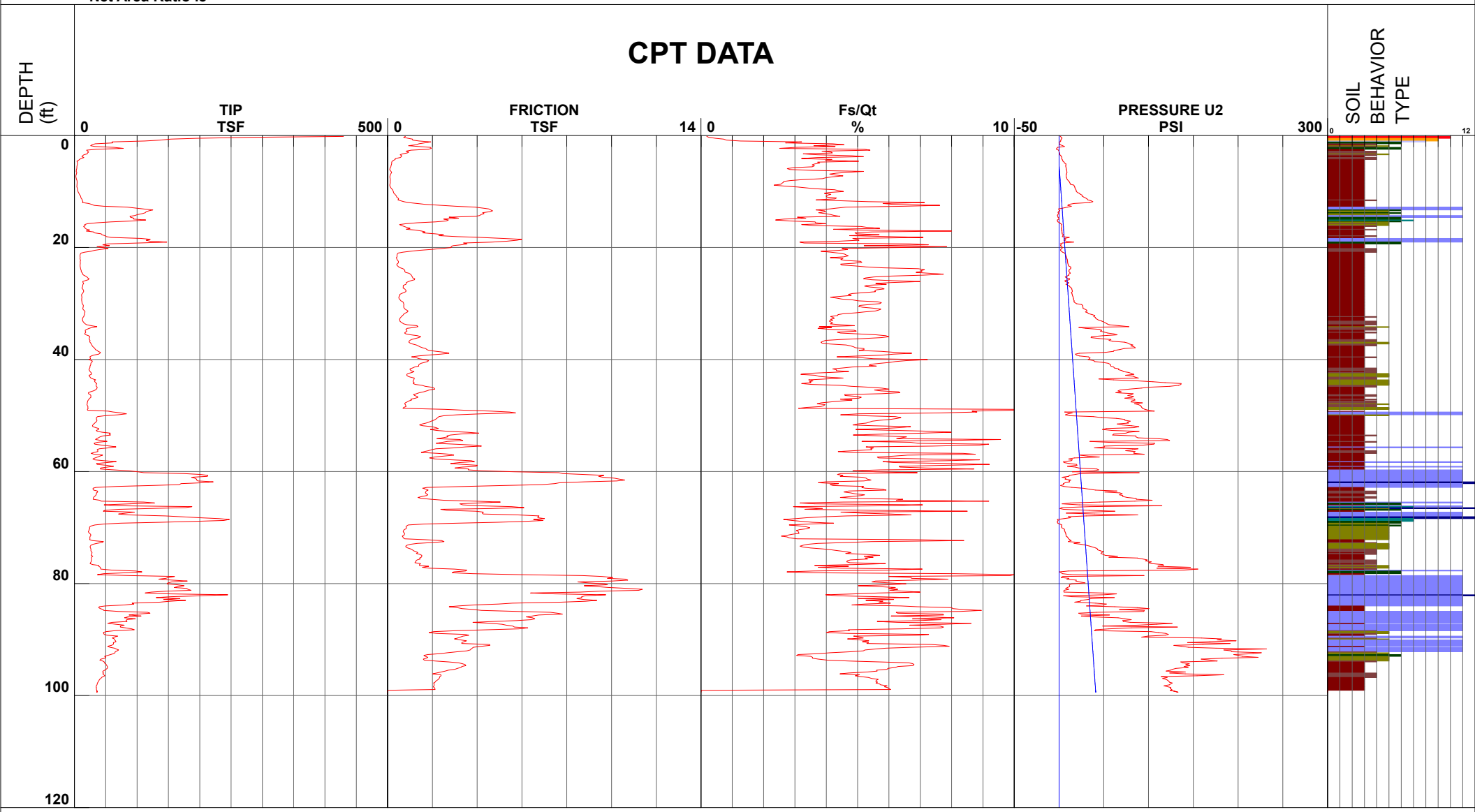
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	AJ-GM-BH	Filename	SDF(503).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-06	Date and Time	2/16/2022 10:32:40 AM	Maximum Depth	99.41 ft
EST GW Depth During Test	5.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

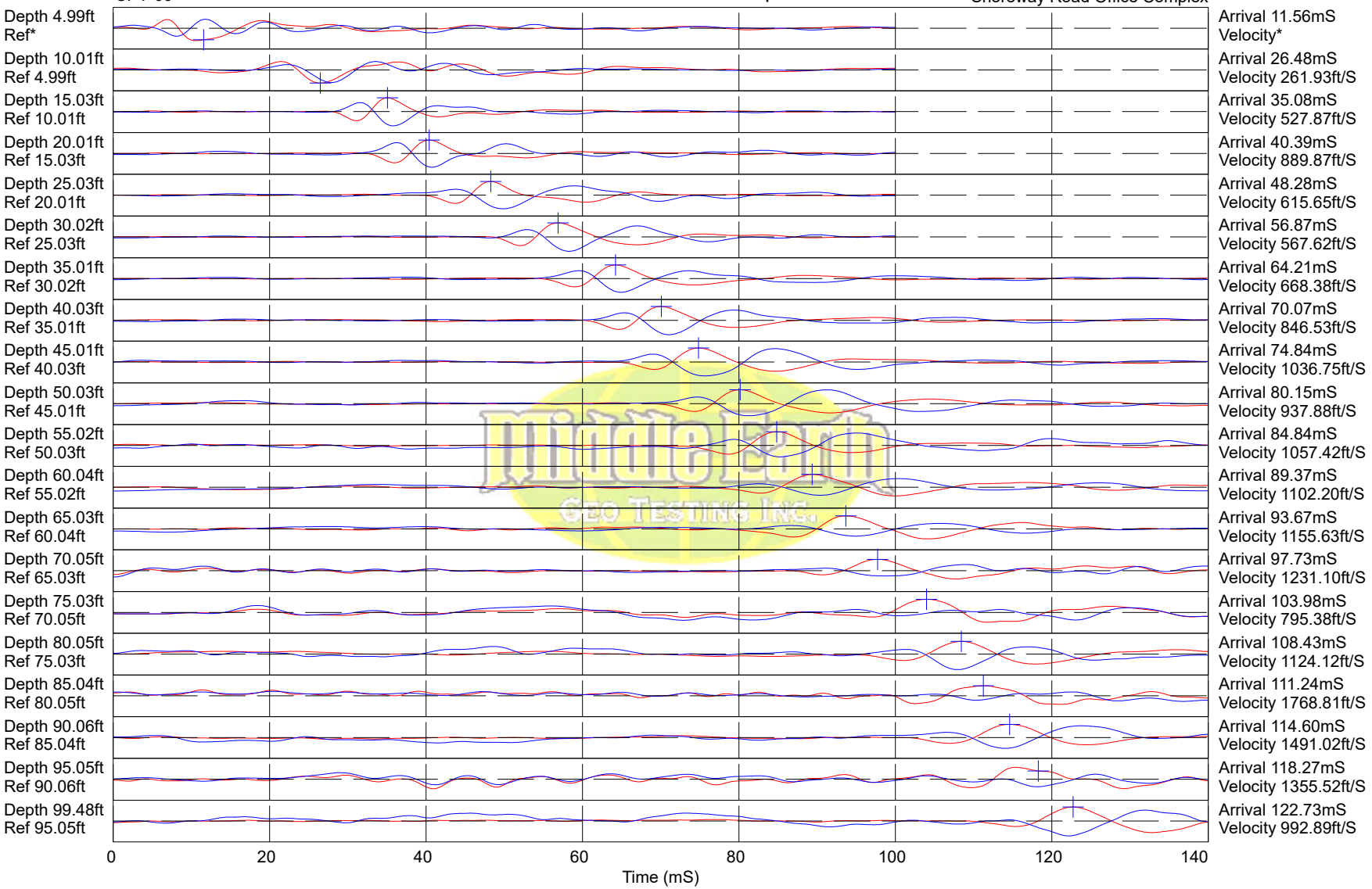
Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1983

CPT-06

Cornerstone Earth Group

Shoreway Road Office Complex



Hammer to Rod String Distance (ft): 5.83

* = Not Determined

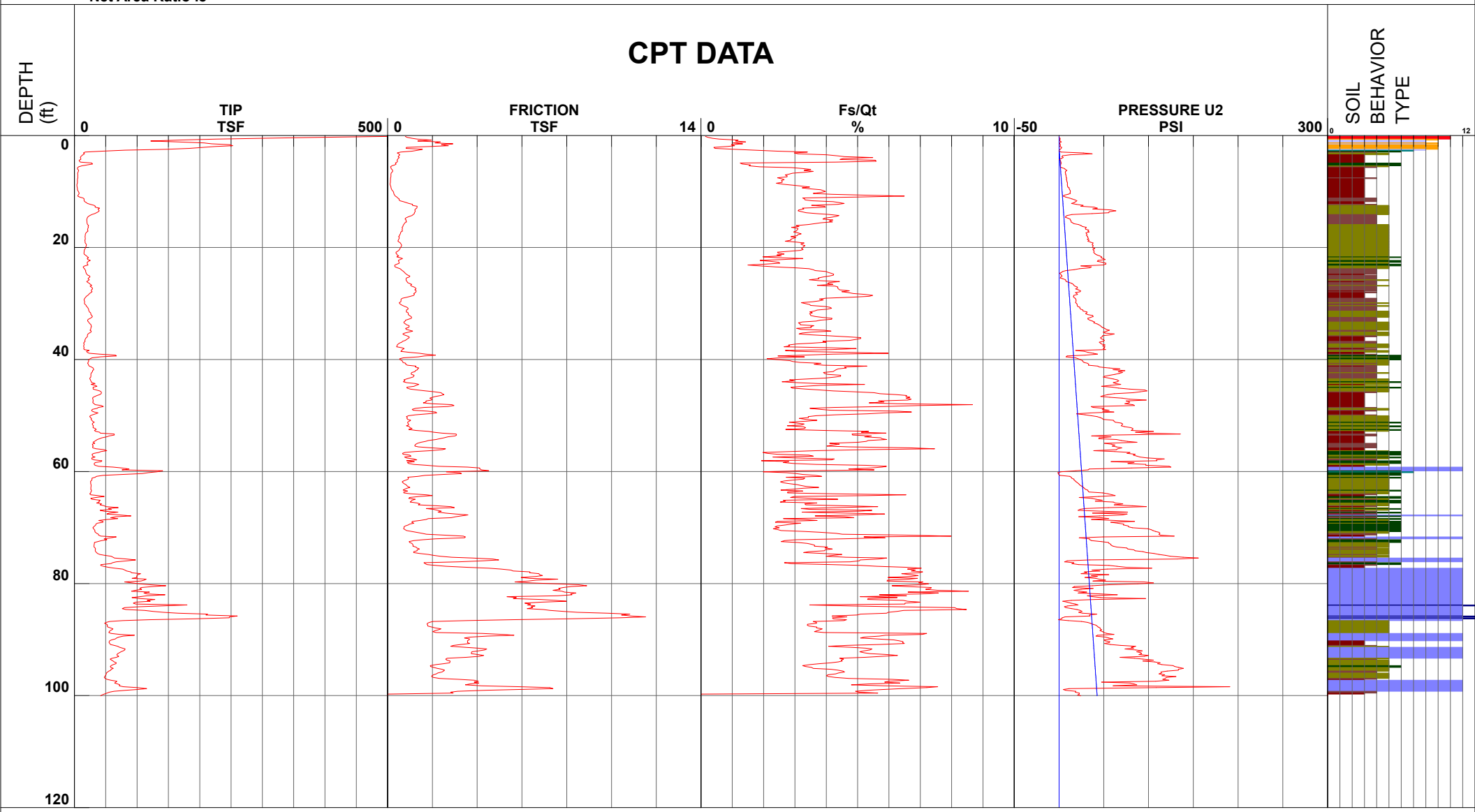
COMMENT:

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	BH-GM	Filename	SDF(495).cpt
Job Number	448-6-3	Cone Number	DDG1587	GPS	
Hole Number	CPT-07	Date and Time	2/14/2022 7:22:40 AM	Maximum Depth	100.06 ft
EST GW Depth During Test	2.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

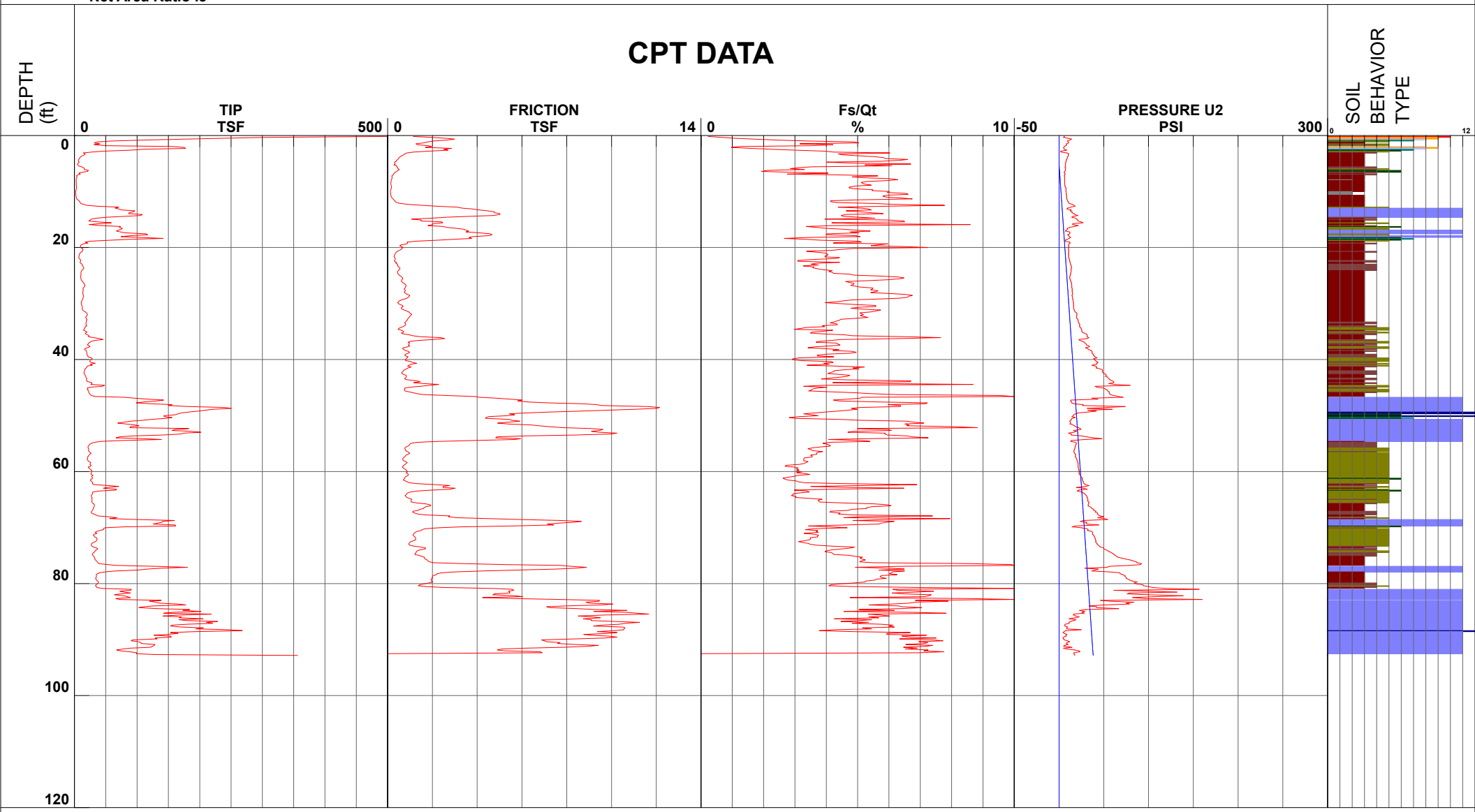
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	BH-GM	Filename	SDF(496).cpt
Job Number	448-6-3	Cone Number	DDG1587	GPS	
Hole Number	CPT-08	Date and Time	2/14/2022 9:29:57 AM	Maximum Depth	92.85 ft
EST GW Depth During Test		5.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

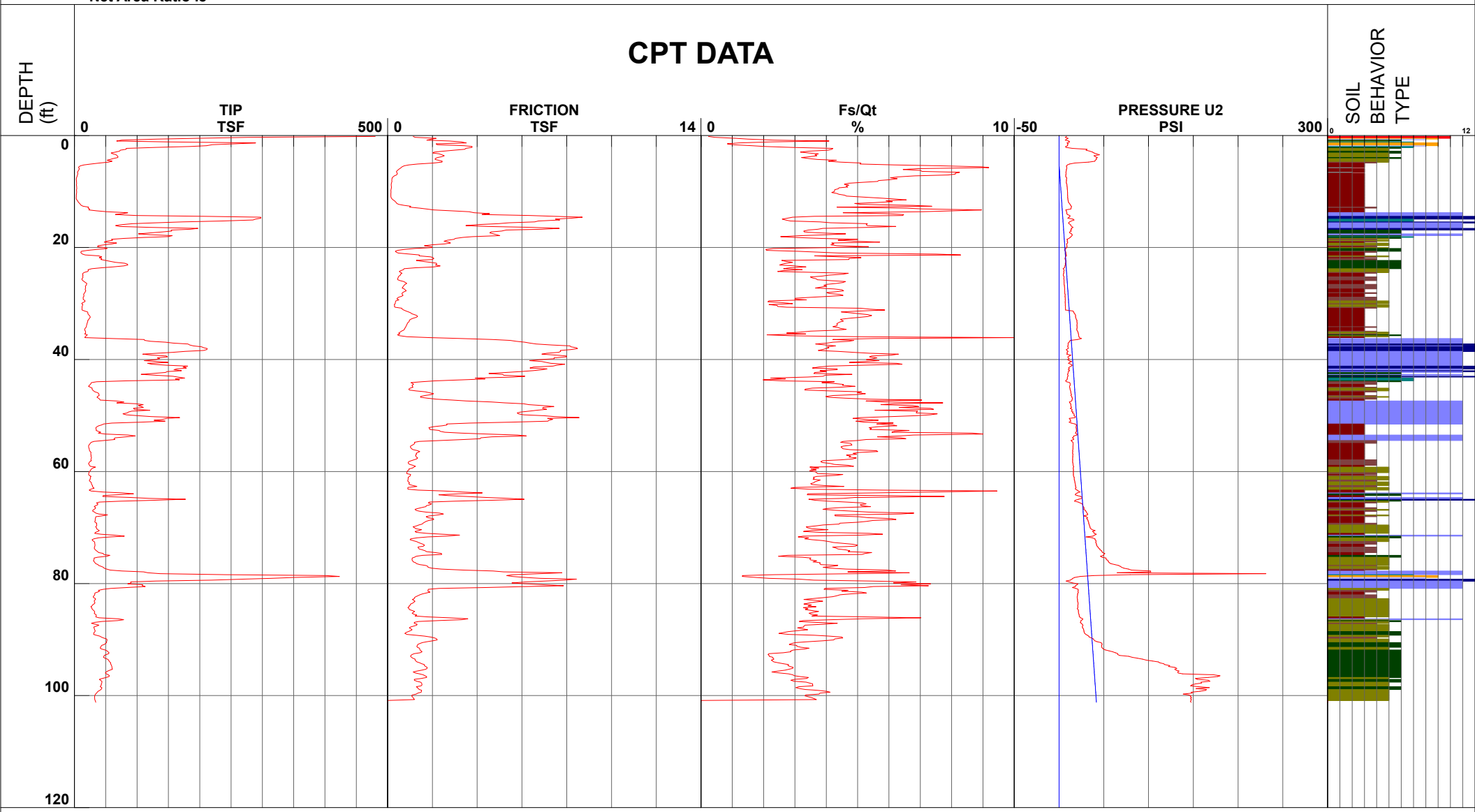
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	BH-GM	Filename	SDF(497).cpt
Job Number	448-6-3	Cone Number	DDG1587	GPS	
Hole Number	CPT-09	Date and Time	2/14/2022 11:07:42 AM	Maximum Depth	101.21 ft
EST GW Depth During Test		5.00 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

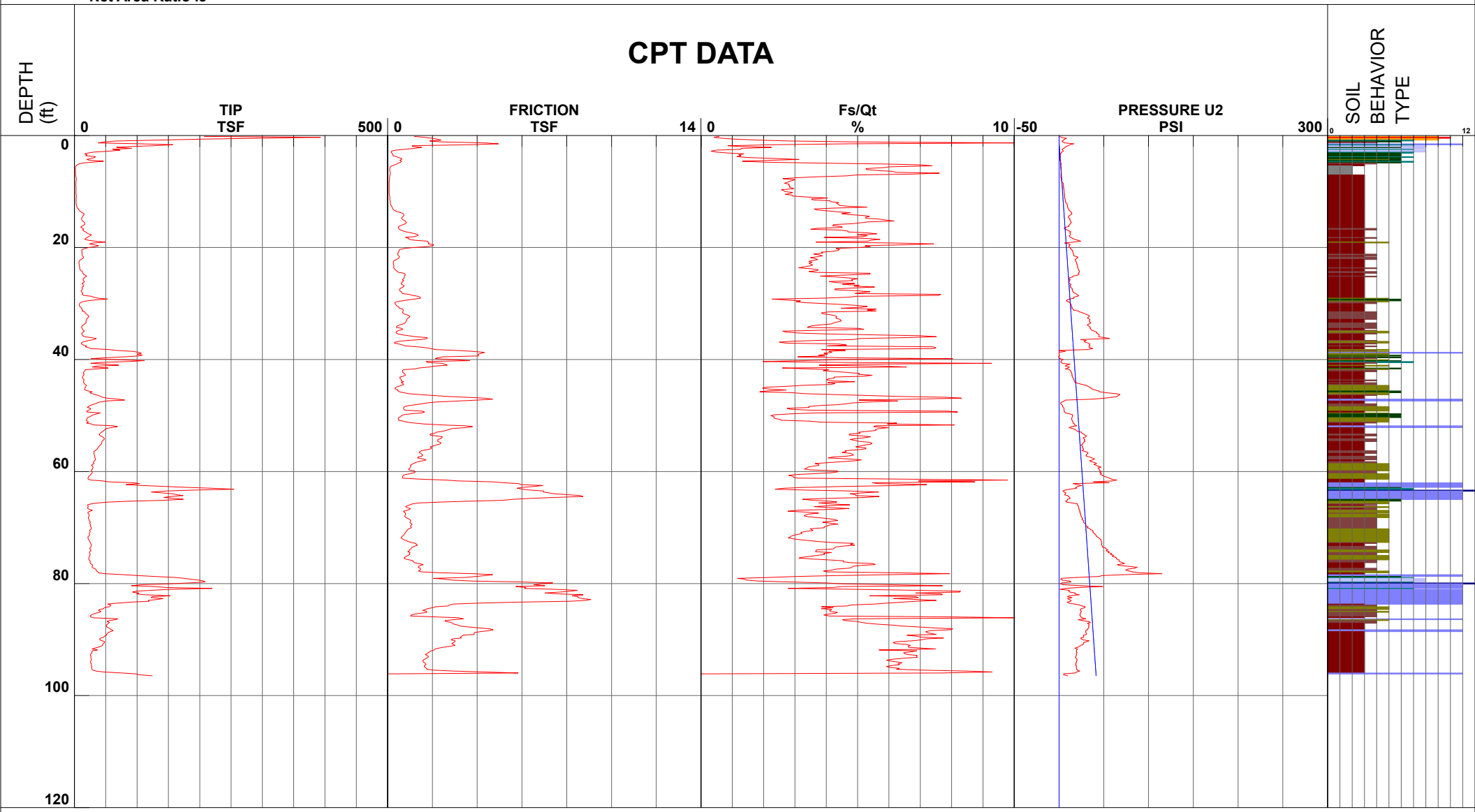
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Shoreway Road Office Complex	Operator	GM-BH	Filename	SDF(509).cpt
Job Number	448-6-3	Cone Number	DDG1596	GPS	
Hole Number	CPT-10	Date and Time	2/17/2022 9:56:50 AM	Maximum Depth	96.46 ft
EST GW Depth During Test	1.00 ft				

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1983

APPENDIX B: LABORATORY TEST PROGRAM

The laboratory testing program was performed to evaluate the physical and mechanical properties of the soils retrieved from the site to aid in verifying soil classification.

Moisture Content: The natural water content was determined (ASTM D2216) on 61 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

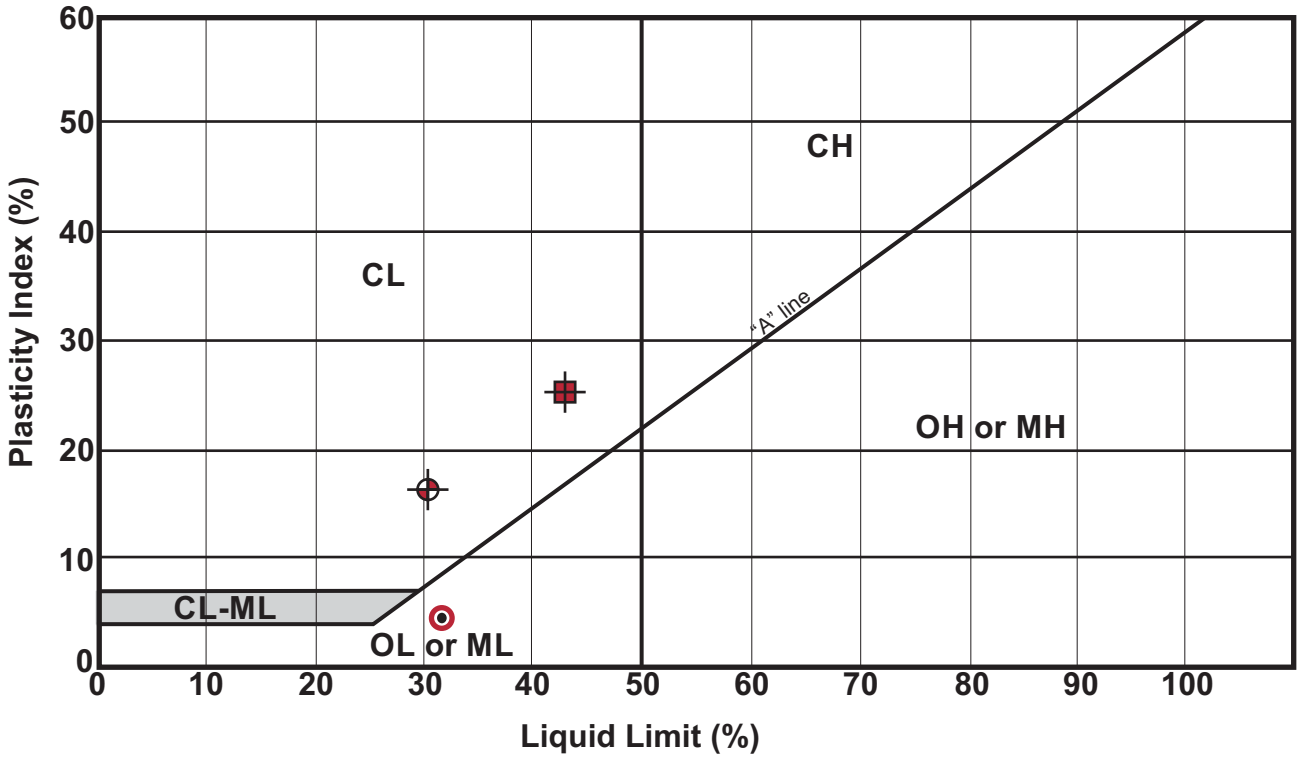
Dry Densities: In place dry density determinations (ASTM D2937) were performed on 53 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Washed Sieve Analyses: The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on three samples of the subsurface soils to aid in the classification of these soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Plasticity Index: Three Plasticity Index determinations (ASTM D4318) were performed on samples of the subsurface soils to measure the range of water contents over which this material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are shown on the boring logs at the appropriate sample depths.

Consolidation: Two consolidation tests (ASTM D2435) were performed on relatively undisturbed samples of the subsurface clayey soils to assist in evaluating the compressibility property of this soil. Results of the consolidation tests are presented graphically in this appendix.

Plasticity Index (ASTM D4318) Testing Summary



Symbol	Boring No.	Depth (ft)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Passing No. 200 (%)	Group Name (USCS - ASTM D2487)
■	EB-1	1.5	19	43	18	25	—	Sandy Lean Clay (CL) [Fill]
⊕	EB-2	2.0	14	31	15	16	—	Clayey Sand (SC) (CL fines) [Fill]
◎	EB-5	2.0	19	32	28	4	—	Silty Sand (SM) (ML fines) [Fill]

CORNERSTONE EARTH GROUP

Plasticity Index Testing Summary

Shoreway Road Office Complex
Belmont, CA

Project Number: 448-6-3

Figure Number: Figure B1

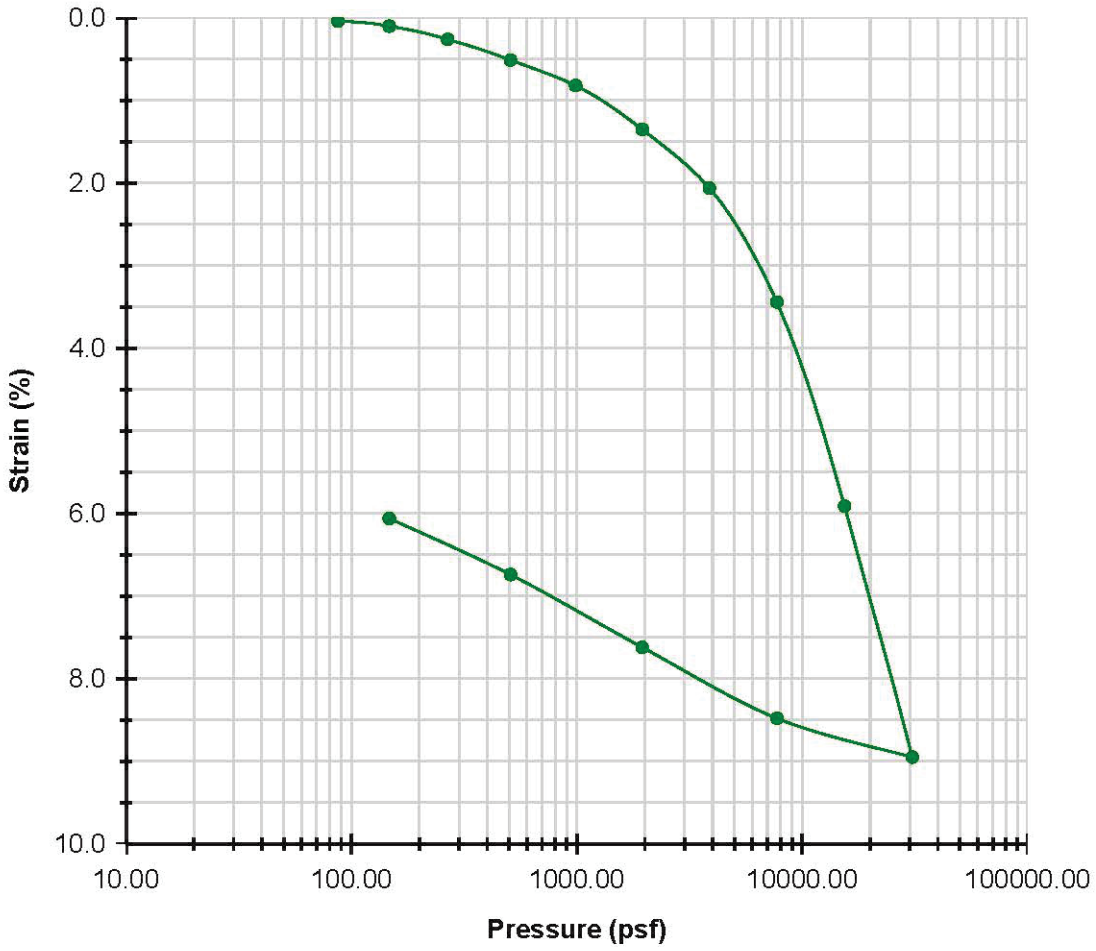
Date: March 2022

Drawn By: FLL

Consolidation Test ASTM D2435

Boring: EB-4 Sample: 12 Depth: 43.8'

Desription: Lean Clay with Sand (CL)



	BEFORE	AFTER
Moisture (%)	18.5	17.5
Dry Density (pcf)	111.6	115.0
Saturation (%)	96.3	100.0
Void Ratio	0.52	0.48

(A) Stress Strain Curve

CORNERSTONE EARTH GROUP

Strain-Log Curve - EB-4 @ 43.8'

Shoreway Road Office Complex
Belmont, CA

Project Number 448-6-3

Figure Number Figure B2

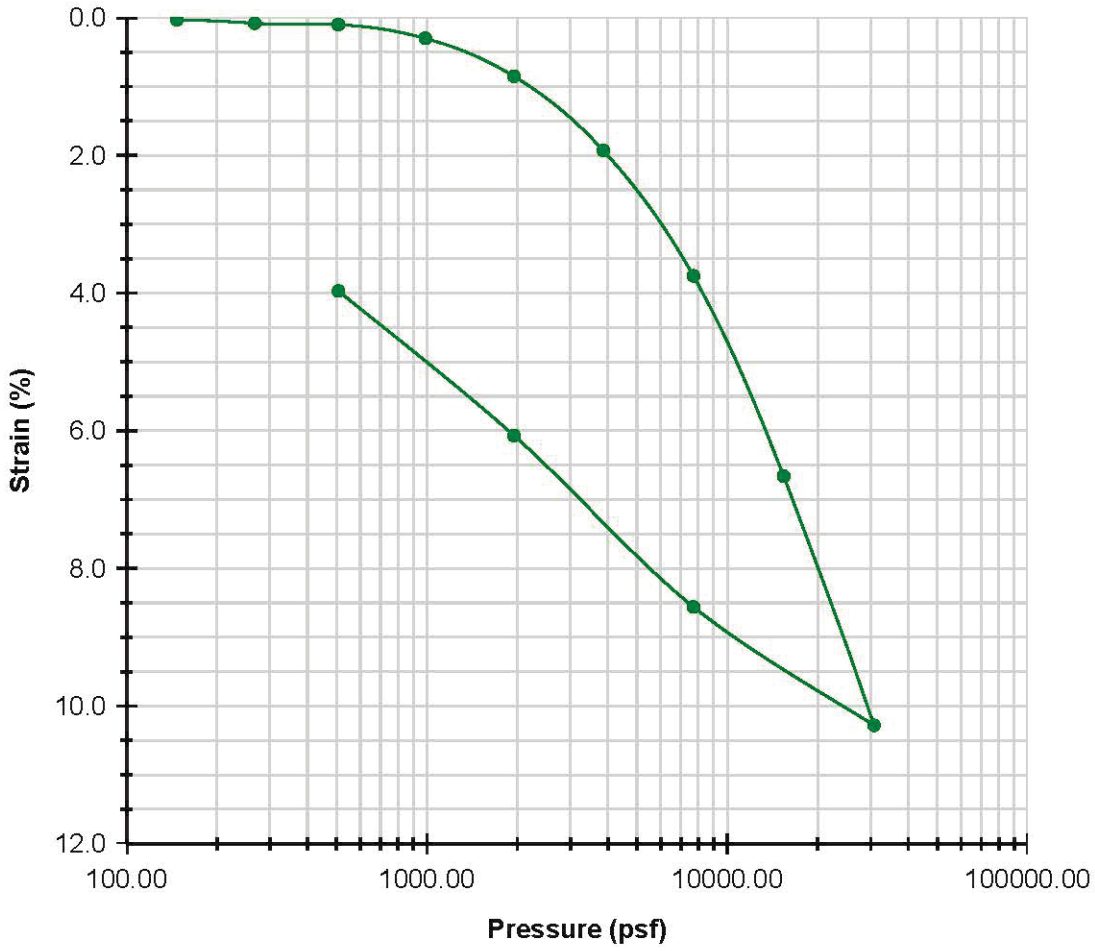
Date March 2022

Drawn By FLL

Consolidation Test ASTM D2435

Boring: EB-5 Sample: 12 Depth: 37.3'

Desription: Lean Clay with Sand (CL)



	BEFORE	AFTER
Moisture (%)	26.2	25.1
Dry Density (pcf)	100.0	100.9
Saturation (%)	101.9	100.0
Void Ratio	0.70	0.68

(A) Stress Strain Curve

CORNERSTONE EARTH GROUP

Strain-Log Curve - EB-5 @ 37.3'

Shoreway Road Office Complex
Belmont, CA

Project Number 448-6-3

Figure Number Figure B3

Date March 2022

Drawn By FLL

APPENDIX C: CONSTRUCTION GUIDELINES ON BAY MUD

Constructing improvements on the Bay Margin presents difficulties throughout the Bay Area. These general guidelines are meant to provide a general understanding of some of the difficulties working in such an environment, where conditions likely include fill material, soft, saturated, weak clays, and shallow groundwater. These general guidelines should be used as a supplement to the construction plans and specifications for the project.

GENERAL SOIL AND GROUNDWATER CONDITIONS

As discussed in the geotechnical report, the entire site area was once a tidal marsh of the San Francisco Bay with possible meandering sloughs running through the site. Historically, the area was diked and cleared, and fills were placed across the site area at different times. The fill in the site area is generally about 3 to 8½ feet in thickness and generally consists of stiff to hard sandy lean clay and loose to medium dense clayey and silty sand with variable amounts of gravel.

The fill is underlain by soft, marine clays, known locally as Bay Mud. In general, the upper 1½ to 2½ feet is somewhat desiccated, and therefore stiffer than the underlying mud, and is often referred to as Bay Mud crust. Below the crust, the clays are saturated, soft, weak, and highly compressible. Moisture contents of the Bay Mud are generally in the 80 to 95 for the soft clay beneath the crust. One of our samples encountered abundant organics and had a moisture content of 147 percent.

The soft, compressible Bay Mud is generally underlain by older bay clays that are generally stiff to hard and of lower compressibility.

Groundwater is generally assumed to be near the top of Bay Mud; however, groundwater does not typically appear quickly as free water, but does seep out of the mud slowly – often from more highly permeable seams of silts or fine sands. Since Bay Mud was deposited in a marine environment the groundwater will often be brackish. Groundwater is seasonally also found to perch in the upper fill materials above the top of Bay Mud.

UNSTABLE SOIL CONDITIONS

During construction on Bay Mud sites, often due to regular construction traffic or compaction during grading, the surface soils or exposed subgrade become unstable. Bay Mud sites are particularly susceptible to instability because of the perched water frequently encountered at these sites, and the soft underlying clays. Instability is typically observed as significant deflection under loading, or rutting due to wheel or track loading. Often unstable soil conditions can be avoided by properly preparing the site for construction activities and/or winter conditions. These preparations often include the following items.

1. The site should be rough graded prior to inclement weather to drain surface water to retention or detention areas, or approved storm water treatment facilities. These approved areas for storm water disposal should be constructed in accordance with the

project Storm Water Pollution Prevention Plan (SWPPP), if applicable to the project. Positive surface grades should direct water to these facilities, and ponding on the site should be avoided.

2. Construction entrances and construction traffic areas should be prepared for the expected traffic with a sufficient construction roadway or aggregate base section to support the traffic without instability. Chemical treatment, stabilization fabric and rock, and temporary paving could potentially be used in these areas.

3. Unstable areas can be difficult to stabilize on Bay Mud sites, and likely required crushed rock and stabilization fabric or geogrid, or other approved methods.

HEAVY EQUIPMENT LIMITATIONS

As discussed, soft clays generally underlie the entire site. For this reason, construction equipment should be limited to medium to lightweight equipment to reduce the potential for instability, damage to shallow utilities, or slope failures. Instability is a significant issue on Bay Mud sites, and often leads to extra efforts to stabilize materials, dry out wet materials, and achieve compaction. The use of heavy equipment will greatly exacerbate this issue. We have the following general guidelines to aid in choosing the appropriate equipment for the site. Where lighter equipment can not be used, such as during pile installation, then extra care and support efforts will be required to traffic the heavy equipment across the site.

1. Avoid the use of heavy equipment on the site. This includes heavy vehicles – we generally recommend vehicles less than 15 tons – and vehicles with heavy point loads, such as forklifts or other types of lifts.

2. Where fill materials have been partially removed, the exposed soils will be even more susceptible to instability, and we recommend that lighter weight equipment be used in these situations. We do not recommend direct vehicles loads of any kind on exposed Bay Mud.

3. Moderate to heavy equipment should not come close to any excavation in Bay Mud, and should generally stay at least 3 to 4 times the height of the excavation from the edge of the excavation.

4. Traffic routes should be well-prepared and smooth to avoid bouncing of vehicles. Traffic speed should be kept low.

5. Shallow utilities should be located and protected from vehicle loading.

UTILITY CONSIDERATIONS

Bay Mud sites present several significant risks to shallow utilities. The most significant risk to shallow utilities on Bay Mud site is typically damage due to vehicle loading. Traffic loading can cause deflections and rutting, and can also significantly load a utility where shallow cover exists,

damaging the utility. In addition, construction means, methods and materials that are not appropriate for Bay Mud sites, and do not take into account the site conditions, can also distress utilities. We suggest the follow guidelines be considered.

1. Shallow utilities should be protected from traffic loading and properly marked during construction. Protection might include slurry or lean concrete cover, trench plates, soil mounding, or other approved methods.

2. Construction equipment should not be allowed to traverse utilities where deflections or rutting is occurring, or subgrade soils are unstable. Properly designed access roads and utility protection should be implemented.

3. Distress to utilities can often not be discovered until much later; therefore, precautionary steps should be taken prior to allowing traffic to cross shallow utilities.

4. The backfill of utilities extending into Bay Mud may need to include lightweight backfill materials to limit backfill weights relative to the weight of material removed. Otherwise, settlement of the underlying Bay Mud may be induced causing sags in the utility.

5. Excavations in Bay Mud for utilities require shoring in most cases. We recommend against the use of trench shields unless special precautions are used during installation and extraction to limit deflections and deformation of the underlying Bay Mud. For example, dragging a trench shield along the trench would not be allowed. In addition, voids between excavation sidewalls and trench shields could allow lateral creep or sloughing of native soils.

OPEN EXCAVATIONS AND TRENCHES

Open excavations and trenches in Bay Mud require special precautions to prevent failures and potentially distress other improvements or cause significant delays and cost to the project. Contractors should carefully review the site conditions and preferably have experience in working on Bay Mud. We suggest the following guidelines be considered.

1. Trench excavations in Bay Mud or in fills overlying Bay Mud may be subject to failure and/or collapse due to the weak strength of Bay Mud. Equipment or stockpiles near excavations can also cause failures. All excavations and trenches should be properly shored or sloped back at an appropriate inclination.

2. Even shored excavations should be checked for potential failure mechanisms such as bottom heave prior to excavation and installation of shoring. The stability of all excavations and shoring should be the contractor's responsibility.

3. Glory hole excavations and large v-trenching should not be backfilled with heavy import materials as detrimental settlement is likely to occur. Backfill materials should be similar in weight to the weight of materials removed.

4. Excavations extending into Bay Mud should have fill materials and Bay Mud segregated during excavation. Most contractors accomplish this by putting fill material on one side of the trench and Bay Mud on the other. Bay Mud is typically removed from the site because re-use would require a considerable amount of processing and drying to reach optimum moisture content for re-use as engineered fill.

5. Shallow trenches that extend into Bay Mud crust may remain open temporarily during utility installation – at the contractor's risk. However, trenches that extend into Bay Mud should be backfilled as soon as possible to prevent failures or instability of the sidewalls.

6. The contractor should completely review the geotechnical report and these guidelines in addition to the project plans and specifications to understand the difficulties of working on a Bay Mud site.

SOIL AND AGGREGATE STOCKPILES

Stockpiling soil and crushed concrete and asphalt can cause non-uniform compression or bearing failure of the underlying Bay Mud. Stockpiles should be 5 feet or less in height. In addition, stockpiles should not be left in place for long periods (weeks) at a time. The Geotechnical Engineer should review and approve the proposed location and lateral extent of soil stockpiles greater than 5 feet high prior to construction.

Appendix G

Phase I Environmental Site Assessment

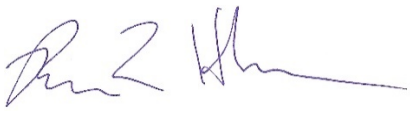
CORNERSTONE EARTH GROUP

TYPE OF SERVICES	Phase I Environmental Site Assessment
LOCATION	1301 Shoreway Road Belmont, California
CLIENT	Four Corners Properties II, LLC
PROJECT NUMBER	448-6-1
DATE	October 9, 2021



CORNERSTONE EARTH GROUP

Type of Services	**Phase I Environmental Site Assessment**
Location	**1301 Shoreway Road** **Belmont, California**
Client	**Four Corners Properties II, LLC**
Client Address	**339 South San Antonio Road, Suite 2B** **Los Altos, California 94022**
Project Number	**448-6-1**
Date	**October 9, 2021**



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CORNERSTONE EARTH GROUP

Type of Services	**Phase I Environmental Site Assessment**
Location	**1301 Shoreway Road** **Belmont, California**

SECTION 1: INTRODUCTION

This report presents the results of the Phase I Environmental Site Assessment (ESA) performed at 1301 Shoreway Road in Belmont, California (Site) as shown on Figures 1 and 2. This work was performed for Four Corners Properties II, LLC in accordance with our August 27, 2021 Agreement (Agreement).

1.1 PURPOSE

The scope of work presented in the Agreement was prepared in general accordance with ASTM E 1527-13 titled, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM Standard). The ASTM Standard is in general compliance with the Environmental Protection Agency (EPA) rule titled, "Standards and Practices for All Appropriate Inquiries; Final Rule" (AAI Rule). The purpose of this Phase I ESA is to strive to identify, to the extent feasible pursuant to the scope of work presented in the Agreement, Recognized Environmental Conditions at the property.

As defined by ASTM E 1527-13, the term Recognized Environmental Condition means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not Recognized Environmental Conditions.

Cornerstone Earth Group, Inc. (Cornerstone) understands that Four Corners Properties II, LLC intends to purchase the Site for commercial redevelopment. We performed this Phase I ESA to support Four Corners Properties II, LLC in evaluation of Recognized Environmental Conditions at the Site. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for Recognized Environmental Conditions at the Site.

1.2 SCOPE OF WORK

As presented in our Agreement, the scope of work performed for this Phase I ESA included the following:

- A reconnaissance of the Site to note readily observable indications of significant hazardous materials releases to structures, soil or groundwater.
- Drive-by observation of adjoining properties to note readily apparent hazardous materials activities that have or could significantly impact the Site.

- Acquisition and review of a regulatory agency database report of public records for the general area of the Site to evaluate potential impacts to the Site from reported contamination incidents at nearby facilities.
- Review of readily available information on file at selected governmental agencies to help evaluate past and current Site use and hazardous materials management practices.
- Review of readily available maps and aerial photographs to help evaluate past and current Site uses.
- Interviews with persons reportedly knowledgeable of existing and prior Site uses.
- Preparation of a written report summarizing our findings and recommendations.

The limitations for the Phase I ESA are presented in Section 10; the terms and conditions of our Agreement are presented in Appendix A.

1.3 ASSUMPTIONS

In preparing this Phase I ESA, Cornerstone assumed that all information received from interviewed parties is true and accurate. In addition, we assumed that all records obtained by other parties, such as regulatory agency databases, maps, related documents and environmental reports prepared by others are accurate and complete. We also assumed that the boundaries of the Site, based on information provided by Four Corners Properties II, LLC, are as shown on Figure 2. We have not independently verified the accuracy or completeness of any data received.

1.4 ENVIRONMENTAL PROFESSIONAL

This Phase I ESA was performed by Stason I. Foster, P.E. and Ron L. Helm, C.E.G., Environmental Professionals who meet the qualification requirements described in ASTM E 1527-13 and 40 CFR 312 § 312.10 based on professional licensing, education, training and experience to assess a property of the nature, history and setting of the Site.

SECTION 2: SITE DESCRIPTION

This section describes the Site as of the date of this Phase I ESA. The location of the Site is shown on Figures 1 and 2. Tables 1 through 3 summarize general characteristics of the Site and adjoining properties. The Site is described in more detail in Section 7, based on our on-Site observations.

2.1 LOCATION AND OWNERSHIP

Table 1 describes the physical location, and ownership of the property, based on information provided by Four Corners Properties II, LLC.

Table 1. Location and Ownership

Assessor's Parcel No. (APN)	040-371-110
Reported Address/Location	1301 Shoreway Road, Belmont, California
Owner	Westlake Shoreway, LLC and Westlake Gresham North, LLC
Approximate Lot Size	6.8 acres

2.2 CURRENT/PROPOSED USE OF THE PROPERTY

The current and proposed uses of the property are summarized in Table 2.

Table 2. Current and Proposed Uses

Current Use	Multi-tenant commercial office building
Proposed Use	Commercial buildings and parking structure

2.3 SITE SETTING AND ADJOINING PROPERTY USE

Land use in the general Site vicinity appears to be primarily commercial. Based on our Site vicinity reconnaissance, adjoining Site uses are summarized below in Table 3.

Table 3. Adjoining Property Uses

Northeast	Commercial office buildings (across Belmont Creek)
Northwest	Stay America hotel and City of Belmont Corporation Yard (across Sem Lane)
Southeast	PG&E electrical substation
Southwest	Public right-of-ways for Shoreway Road and Highway 101

SECTION 3: USER PROVIDED INFORMATION

The ASTM standard defines the User as the party seeking to use a Phase I ESA to evaluate the presence of Recognized Environmental Conditions associated with a property. For the purpose of this Phase I ESA, the User is Four Corners Properties II, LLC. The "All Appropriate Inquiries" Final Rule (40 CFR Part 312) requires specific tasks be performed by or on behalf of the party seeking to qualify for Landowner Liability Protection under CERCLA (*i.e.*, the User).

Per the ASTM standard, if the User has information that is material to Recognized Environmental Conditions, such information should be provided to the Environmental Professional. This information includes: 1) specialized knowledge or experience of the User, 2) commonly known or reasonably ascertainable information within the local community, and 3) knowledge that the purchase price of the Site is lower than the fair market value due to contamination. A search of title records for environmental liens and activity and use limitations also is required.

3.1 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

An environmental lien is a financial instrument that may be used to recover past environmental cleanup costs. Activity and use limitations (AULs) include other environmental encumbrances, such as institutional and engineering controls. Institutional controls (ICs) are legal or regulatory

restrictions on a property's use, while engineering controls (ECs) are physical mechanisms that restrict property access or use.

The regulatory agency database report described in Section 4.1 did not identify the Site as being in 1) US EPA databases that list properties subject to land use restrictions (*i.e.*, engineering and institutional controls) or Federal Superfund Liens or 2) lists maintained by the California Department of Toxic Substances Control (DTSC) of properties that are subject to AULs or environmental liens where the DTSC is a lien holder.

ASTM E 1527-13 categorizes the requirement to conduct a search for Environmental Liens and AULs as a User responsibility. A search of land title records for environmental liens and AULs was not within the scope of the current Phase I ESA.

3.2 SPECIALIZED KNOWLEDGE AND/OR COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

Based on information provided by or discussions with Four Corners Properties II, LLC, we understand that Four Corners Properties II, LLC does not have specialized knowledge or experience, commonly known or reasonably ascertainable information regarding the Site, or other information that is material to Recognized Environmental Conditions.

3.3 DOCUMENTS PROVIDED BY FOUR CORNERS PROPERTIES II, LLC

To help evaluate the presence of Recognized Environmental Conditions at the Site, Cornerstone reviewed and relied upon the documents provided by Four Corners Properties II, LLC listed in Table 4. Please note that Cornerstone cannot be liable for the accuracy of the information presented in these documents. ASTM E1527-13 does not require the Environmental Professional to verify independently the information provided; the Environmental Professional may rely on the information unless they have actual knowledge that certain information is incorrect. A summary of the provided documents is provided below; please refer to the original reports for complete details.

Table 4. Documents Provided by Four Corners Properties II, LLC

Date	Author	Title
August 22, 2016	Professional Service Industries (PSI)	Phase I Environmental Site Assessment, Office Building, 1301 Shoreway Road, Belmont, California
May 2, 2016	EMG	Phase I Environmental Site Assessment, 1301 Shoreway Road, Belmont, California
October 2, 2012	Transaction Management Corporation, Inc.	Phase I Environmental Site Assessment, Belmont Shores, 1301 Shoreway Road, Belmont, California
March 8, 2005	Aaron & Wright Technical Services	Phase I Environmental Site Assessment, Belmont Shores Office Building 1301 Shoreway Road, Belmont, California
November 11, 1999	Eckland Consultants, Inc.	Phase I Environmental Site Assessment, Belmont Shores Office Building 1301 Shoreway Road, Belmont, California

Based on the information reviewed, the Site historically consisted of tidal marshland at the perimeter of San Francisco Bay. The Site was developed with the existing four story multi-tenant office building during the early 1980s. Past tenants reportedly have used the building primarily as office space. Medical facilities, a café, a fitness center, and classroom uses also were reported. The Phase I ESA reports listed in Table 4 did not identify Recognized Environmental Conditions associated with the Site.

PSI (2016) noted that the Purex Industries property (Former Baron-Blakeslee Incorporated facility) was listed as an open case on the Water Board's Spills, Leaks, Investigation and Cleanup (SLIC) database. The Purex property is located approximately 0.3 miles southwest of the Site and was used from 1961 to 1974 as solvent distribution and recycling facility. Groundwater impacted with volatile organic compounds (VOCs) originating from the Purex property has migrated towards the Site. One of the groundwater monitoring wells used to evaluate the extent of groundwater contamination (well MW-101) is located on the southern corner of the Site. Based on Semi-Annual Status Report from October 2015 and March 2016, PSI stated that none of the contaminants of concern (COC) were detected in groundwater samples collected from MW-101. The last detected concentration reported in the well was in 2013. PSI concluded that the Purex SLIC case does not represent a Recognized Environmental Condition in connection with the Site. PSI also stated that they do not consider the Purex case to represent a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in subsurface soils at the Site caused by the release of vapors from contaminated soil or groundwater on or near the Site. The Purex case is discussed further in Section 4.1.3.

SECTION 4: RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Cornerstone conducted a review of federal, state and local regulatory agency databases provided by Environmental Data Resources (EDR) to evaluate the likelihood of contamination incidents at and near the Site. The database sources and the search distances are in general accordance with the requirements of ASTM E 1527-13. A list of the database sources reviewed, a description of the sources, and a radius map showing the location of reported facilities relative to the project Site are attached in Appendix B.

The purpose of the records review was to obtain reasonably available information to help identify Recognized Environmental Conditions. Accuracy and completeness of record information varies among information sources, including government sources. Record information is often inaccurate or incomplete. The Environmental Professional is not obligated to identify mistakes or insufficiencies or review every possible record that might exist with the Site. The customary practice is to review information from standard sources that is reasonably available within reasonable time and cost constraints.

4.1.1 On-Site Database Listings

Sequoia Medical Group, Nursing & Rehab at Home, and Agility Health were identified at the Site address on a county database of facilities that generate medical waste.

CHW Medical Foundation DBA Sequoia Medical Group was identified at the Site address on the HAZNET database, which contains data extracted from the copies of hazardous waste manifests received each year by the DTSC. Wastes disposed in 2012 were categorized as

laboratory waste chemicals; off-specification, aged or surplus organics; and unspecified organic liquid mixtures. This facility, along with Chang USA LLC Retirement Inn Series, also were listed on the RCRA NonGen/NLR database, which lists facilities that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. NLR means that the business is no longer registered. No violations were reported.

Dignity Health Medical DBA Sequoia Medical Group and Chang USA LLC Retirement Inn Series were identified on the Hazardous Waste Tracking System (HWTS) database, which is maintained by the DTSC and collects waste manifest copies from the generator and destination facility.

San Mateo 101 Express Lanes Project - North Contract, Norfolk Yard was listed at the Site address on the California Environmental Reporting System (CERS) database as a facility that stores hazardous materials. Based on email correspondence, Kiewit, a tenant that occupies office space within the on-Site building, maintains a construction storage yard located approximately 3 miles north of the Site. This CERs listing reportedly pertains to hazardous materials that are stored within the off-Site storage yard.

4.1.2 Nearby Spill Incidents

Two open SLIC cases were listed in the general Site vicinity including the Brusco property at 248 Harbor Boulevard and the Purex property at 511 O'Neill Road. These facilities are located approximately 750 and 1,750 feet southwest of the Site, and generally up-gradient with respect to the reported groundwater flow direction.

Based on the information presented in the agency database report, no other off-Site spill incidents were reported that appear likely to significantly impact soil, soil vapor or groundwater beneath the Site. The potential for impact was based on our interpretation of the types of incidents, the locations of the reported incidents in relation to the Site and the assumed groundwater flow direction.

4.1.3 Further Review of Database Listings

To obtain additional information regarding the two nearby SLIC cases, a cursory review of readily available documents obtained from the state Geotracker database (http://geotracker.waterboards.ca.gov) was performed. Geotracker is a database and geographic information system (GIS) that provides online access to environmental data. It tracks regulatory data about leaking underground storage tank (LUST), Department of Defense, Site Cleanup Program and Landfill sites. A brief summary of the information reviewed is presented below.

4.1.3.1 Brusco Property, 248 Harbor Boulevard

The Brusco property includes two buildings, 248 and 248A Harbor Boulevard. Building 248 was constructed between 1946 and 1956, and Building 248A was constructed in 1980. Numerous commercial and industrial tenants have occupied the property since 1956, including Baron-Blakeslee Incorporated (BBI) and Cee Bee Chemical Company, among others. Prior industrial activities at the property resulted in chemical contamination of the soil, soil vapor and groundwater. Since the 2000s, investigation and cleanup activities have been conducted under the supervision of the San Mateo County Department of Environmental Health (DEH).

The primary COCs associated with the Brusco property consist of VOCs, mainly trichloroethene (TCE). The groundwater plume of COCs migrates in an east-northeast direction from the property and extends beneath U.S. Highway 101. In 2017, groundwater from four on-Site borings (MIP-4, MIP-5, MIP-6 and MIP-8) was sampled. These borings were located on the southwest and northwest portions of the Site (fronting both Shoreway Road and Sem Lane). TCE was detected in one of the groundwater samples (MIP-6, at 2.2 µg/L). For comparison, the Water Board's residential and commercial Environmental Screening Levels (ESLs[1]) for TCE in groundwater are 1.2 and 7.5 µg/L, respectively. Remediation and monitoring efforts associated with the Brusco property are ongoing and are being conducted under DEH oversight.

4.1.3.2 Purex Property, 511 O'Neill Road

The Purex property was formerly occupied by BBI and used from 1961 to 1974 as solvent distribution and recycling facility. Solvents were reportedly stored in drums and in aboveground storage tanks (ASTs). In 1982, the Purex Corporation, then parent of BBI, dissolved and transferred its assets and liabilities to Purex Industries, Inc. Purex Industries, Inc. formed a new Baron-Blakeslee Corporation, which AlliedSignal, Inc. (now Honeywell) purchased in 1985. In accordance with Site Cleanup Requirement (SCR) Orders Nos. 98-018, 99-015, and R2-2004-0015 issued by the Water Board, numerous investigations have been performed to assess the extent of soil, soil vapor and groundwater contaminated by VOCs that originated from the Purex property. Subsequent remediation activities have included, excavating contaminated soil; in-situ chemical oxidation (ISCO) to mitigate VOCs in soil; enhanced in-situ bioremediation (EISB) to mitigate VOCs is groundwater; and the operation of a soil vapor extraction system. The primary COCs associated with the Purex property consist of TCE; cis-1,2-dichloroethene (cis-1,2-DCE); and vinyl chloride. COCs have been detected in groundwater, surface water, and soil vapor. COCs have also been detected in indoor air at some buildings near the source area. The groundwater plume of COCs migrates in an east-northeast direction from the property and extends beyond U.S. Highway 101 and Belmont Creek toward the Redwood Shores Lagoon. The impacted groundwater plume is approximately 2,100 feet long and 800 feet wide (Jacobs, 2020).

Remediation and monitoring efforts associated with the Purex property are ongoing and are being conducted under Water Board oversight. As previously noted, one of the groundwater monitoring wells used to evaluate the extent of groundwater contamination (well MW-101) is located on the southern corner of the Site. No VOCs have been detected in groundwater from MW-101 since 2013. Historically, low concentrations of TCE and other VOCs were detected in groundwater from MW-101. The greatest reported TCE concentration was 3.6 µg/L, which was detected in 2002 (Jacobs, 2020). The most recent sampling (January 29, 2020) did not reveal TCE at a detection limit of 10 µg/L. The prior sampling event (August 9, 2019) did not reveal TCE at a detection limit of 2.5 µg/L. The RWQCB in February 2021 approved the most recent available semiannual status report for the facility. The report stated that concentrations of primary COCs (TCE and cis-1,2-DCE) in groundwater were generally consistent with historical data or showed a decreasing trend compared to historical data.

[1] Environmental Screening Levels (ESLs) established by the San Francisco Bay, Regional Water Quality Control Board (January, 2019) are used to screen sites for potential human health concerns where releases of hazardous chemicals have occurred. ESLs are risk-based concentrations derived from standardized equations combining exposure information assumptions with toxicity data. Under most circumstances, the presence of a chemical at concentrations below the corresponding screening level can be assumed not to pose a significant health risk.

The most recent available status report (Jacobs, 2020) is attached in Appendix F and contains figures that depict the extent of VOC impacted groundwater in the Site vicinity resulting from releases at the Purex and Brusco properties.

Honeywell and Purex prepared an Institutional Controls Plan (ICP) in 2005 (CH2MHill, 2005) that addresses on-site and off-site conditions. The ICP requires the owner to record a deed restriction that incorporates the ICP's provisions. The ICP identifies certain properties, including the Site, where control measures could apply. ICP states that these properties reportedly are flagged in the City of Belmont and/or San Mateo County Building Department databases, and certain building permits will be held until need for risk management has been determined and addressed in consultation with the Water Board.

Control measures described in the ICP (see Appendix F) include:

- Guidelines on the placement and design of new buildings.
- Construction methods to prevent vapor migration conduits.
- Zoning guidelines.
- Guidelines for groundwater production wells.
- Guidelines for construction dewatering and ground penetrations

The ICP (2005) includes action levels to address vapor intrusion and groundwater consumption at off-site properties, including the Site. The 2005 ICP lists the vapor migration action level at 2,000 µg/L and the groundwater consumption action level at 5 µg/L. The ICP states that the action levels "shall be based on risk assessment guidance provided by the RWQCB (RWQCB 2005a), such as the most recent version of the RWQCB document titled *Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Sail and Groundwater."* The current commercial soil vapor ESL for TCE is 100 µg/m^3; the commercial groundwater ESL associated with vapor intrusion is 7.5 µg/L and the Tier 1 groundwater ESL is 1.2 µg/L. The ICP states that groundwater conditions are expected to decrease below the vapor migration before reaching the groundwater consumption action level as remedial activities are performed. "At that time, certain institutional controls will no longer be needed, and only the controls to prevent the consumption of groundwater will be applied from that point forward." As noted above, TCE has not been detected in MW-101 since 2013.

4.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

The following additional sources of readily ascertainable public information for the Site also were reviewed during this Phase I ESA.

4.2.1 City and County Agency File Review

Cornerstone requested available files pertaining to 1301 Shoreway Road at the County DEH and the Belmont Building Department.

Building Department files contained a 1981 permit for construction of the existing four story office building, along with associated inspection records and correspondence. An occupancy clearance was issued in 1984. Subsequent records included numerous permits and plans for

various tenant improvements, that appeared consistent with use of the building as a multi-tenant office building[2].

DEH files contained a permit for the borings advanced on-Site in 2017 (as discussed in Section 4.1.3.1). The file also contained permits and inspection records pertaining to the off-Site construction storage yard operated by Kiewit Infrastructure West as discussed in Section 4.1.1. We did not observe records relating to the ICP discussed in Section 4.1.3.2 in the files reviewed.

SECTION 5: PHYSICAL SETTING

We reviewed readily available geologic and hydrogeologic information to evaluate the likelihood that chemicals of concern released on a nearby property could pose a significant threat to the Site and/or its intended use.

5.1 RECENT USGS TOPOGRAPHIC MAP

A 1997 USGS 7.5 minute topographic map was reviewed to evaluate the physical setting of the Site. The Site's elevation is approximately 5 feet above mean sea level; topography in the vicinity of the Site slopes downward gently to the northeast towards the San Francisco Bay.

5.2 SUBSURFACE CONDITIONS

The area is mapped as Artificial Fill (Pampeyan, 1994) described as, "Poorly consolidated to well-consolidated gravel, sand, silt, and rock fragments in various combinations used in a variety of applications including riprap, highway-, railroad-, and airport runway-fills, earth fill dams, reservoir embankments, and building-site grades. Thickness and consolidation dependent upon type of application and site. Includes organic and man-made debris in sanitary landfills and spoil from tunneling operations. Many small fills not shown because of map-scale limitations." The State of California, Division of Mines and Geology, maps the fill as being underlain by Bay Mud to depths of roughly 2 to 10 feet (interpolating) in the area of the Site.

We reviewed several borings in Shoreway Road performed by our firm for sanitary sewer improvements. One of those borings (EB-2) was advanced near the Site. In general, the subsurface conditions in that boring can be described as asphalt concrete, aggregate base, and sandy lean clay and clayey sand fills to a depth of 3½ feet below grade. The surficial fills are underlain by 11 feet of Bay Mud. Underlying the Bay Mud are interbedded clayey sands and lean clays, generally medium dense and medium stiff to stiff, to the terminal depth of our boring at 26½ feet. Based on mapped Bay Mud thickness at the Site, and the greater than expected Bay Mud thickness encountered in Shoreway Road, we anticipate likely greater Bay Mud thicknesses across the site than indicated on Bay Mud maps, perhaps on the order of 10 to 20 feet.

5.3 HYDROGEOLOGY

Based on our experience and information presented in the California Geotracker database pertaining to nearby properties, groundwater beneath the Site is likely present at depths of 5 to 10 feet. Groundwater likely flows toward the east-northeast.

[2] Due to the large number of documents, a detailed review of each document was not feasible within the time and budget constraints of this Phase I ESA. A cursory review was conducted.

SECTION 6: HISTORICAL USE INFORMATION

The objective of the review of historical use information is to develop a history of the previous uses of the Site and surrounding area in order to help identify the likelihood of past uses having led to Recognized Environmental Conditions at the property. The ASTM standard requires the identification of all obvious uses of the property from the present back to the property's first developed use, or back to 1940, whichever is earlier, using reasonably ascertainable standard historical sources.

6.1 HISTORICAL SUMMARY OF SITE

The historical sources reviewed are summarized below. The results of our review of these sources are summarized in Table 75.

- **Historical Aerial Photographs:** We reviewed aerial photographs dated between 1943 and 2016 obtained from EDR of Shelton, Connecticut; copies of aerial photographs reviewed are presented in Appendix C.

- **Historical Topographic Maps:** We reviewed USGS 15-minute and 7.5-minute historical topographic maps dated 1896, 1899, 1915, 1939, 1947, 1949, 1956, 1968, 1973, 1980, 1993, 1997 and 2012; copies of historical topographic maps reviewed are presented in Appendix C.

- EDR reported that the Site was not within the coverage area of fire insurance maps.

- **Local Street Directories:** We reviewed city directories obtained from EDR that were researched at approximately 5 year intervals between 1958 and 2017 to obtain information pertaining to past Site occupants. The city directory summary is presented in Appendix D.

Table 5. Summary of Historical Source Information for Site

Date	Source	Comment
1896 to 1939	Topographic maps	No structures are shown on-Site. The Site is shown to consist of tidal marshland associated with San Francisco Bay.
1943 and 1946	Aerial photographs	The Site is shown to be undeveloped. Fill appears to have been placed across most of the Site. Marshlands appear to remain on the northeastern portion of the Site.
1947 to 1980	Topographic maps	The Site is shown to be undeveloped. Fill appears to have been placed on-Site (marshlands are not depicted on-Site).
1956 to 1974	Aerial photographs	The Site is shown to consist of undeveloped land.
1982	Aerial photograph	The existing building is shown to be under construction.
1986 to and 2017	City Directories	Numerous commercial businesses are listed as occupants. These listings appear consistent with use of the building as multi-tenant office space.
1993 to 1997	Topographic map	The Site is shown within the urban developed area of Belmont.
1993 to 2016	Aerial photograph	The existing on-Site commercial building is shown.

6.2 HISTORICAL SUMMARY OF SITE VICINITY

Based on our review of the information described in Section 6.1, the general Site vicinity historically consisted of tidal marshland associated with San Francisco Bay. Highway 101 was constructed to the southwest of the Site by 1939. Fill appears to have been placed on properties in the Site vicinity between the 1940s and 1960s, facilitating subsequent commercial developments. The southeasterly adjacent electrical substation has been present since the 1940s.

SECTION 7: SITE RECONNAISSANCE

We performed a Site reconnaissance to evaluate current Site conditions and to attempt to identify Site Recognized Environmental Conditions. The results of the reconnaissance are discussed below. Additional Site observations are summarized in Table 6. Photographs of the Site are presented in Section 7.2.1.

7.1 METHODOLOGY AND LIMITING CONDITIONS

To observe current Site conditions (readily observable environmental conditions indicative of a significant release of hazardous materials), Cornerstone staff Stason I. Foster, P.E. visited the Site on September 20, 2021. The Site reconnaissance was conducted by walking representative areas of the Site, including the interior of the on-Site structure (common areas and a representative sample of occupant spaces), the periphery of the structure and the Site periphery. Cornerstone staff only observed those areas that were reasonably accessible, safe, and did not require movement of equipment, materials or other objects. Physical obstructions that limited our ability to view the ground surface at the Site included the existing building and associated asphalt paved parking areas and vehicle drives (typical of developed properties).

7.2 OBSERVATIONS

At the time of our visit, the Site was developed with a four story commercial building occupied by multiple tenants that appeared to use the building as general office space, along with outpatient medical services, a café and a fitness center. A basketball court enclosed by fencing was observed on the eastern portion of the Site.

Except for common janitorial cleaning supplies, no hazardous materials or evidence of spills were observed on-Site.

Three electric powered traction passenger elevators were observed within the building. Electricity and/or natural gas fuel sources appeared to be used for building heating/cooling purposes. Potable water appeared to be supplied by the local water service provider. The building presumably is connected to the publicly owned sanitary sewer system; no on-Site septic systems were obvious. On-Site storm water catch basins appeared to discharge via below ground piping to the City's storm water drainage system and/or to a below grade stormwater collection sump located on the northern corner of the Site. Facility maintenance staff indicated that the stormwater sump discharges to Belmont Creek. Electrical transformers and electrical switchgear owned by PG&E were observed on concrete pads on the northwestern portion of the Site. No evidence of transformer oil leaks was observed. Groundwater monitoring well (MW-101) was observed within the asphalt paved parking area on the southern portion of the Site.

Markers for a natural gas transmission pipeline were observed adjacent to the Site. The markers indicate that the pipeline borders the southwest and northwest sides of the Site (*i.e.*, along both Shoreway Road and Sem Lane). Overhead electrical transmission lines also were observed to traverse the southwestern portion of the Site.

Table 6. Summary of Readily Observable Site Features

General Observation	Comments
Aboveground Storage Tanks	Not Observed
Agricultural Wells	Not Observed
Air Emission Control Systems	Not Observed
Boilers	Not Observed
Burning Areas	Not Observed
Chemical Mixing Areas	Not Observed
Chemical Storage Areas	Not Observed
Clean Rooms	Not Observed
Drainage Ditches	Not Observed
Elevators	Observed as described above
Emergency Generators	Not Observed
Equipment Maintenance Areas	Not Observed
Fill Placement	Not Observed
Groundwater Monitoring Wells	Observed as described above
High Power Transmission Lines	Observed as described above
Hoods and Ducting	Not Observed
Hydraulic Lifts	Not Observed
Incinerator	Not Observed
Petroleum Pipelines	Not Observed
Petroleum Wells	Not Observed
Ponds or Streams	Not Observed
Railroad Lines	Not Observed
Row Crops or Orchards	Not Observed
Stockpiles of Soil or Debris	Not Observed
Sumps or Clarifiers	Observed as described above
Transformers	Observed as described above
Underground Storage Tanks	Not Observed
Vehicle Maintenance Areas	Not Observed
Vehicle Wash Areas	Not Observed
Wastewater Neutralization Systems	Not Observed

The comment “Not Observed” does not warrant that these features are not present on-Site; it only indicates that these features were not readily observed during the Site visit.

7.2.1 Site Photographs



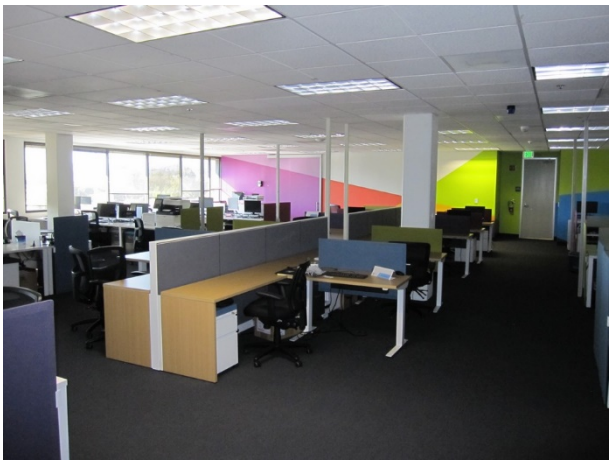
Photograph 1. View of the on-Site building looking northeast.



Photograph 2. View of the on-Site building looking east.



Photograph 3. Interior atrium.



Photograph 4. Interior office space.



Photograph 5. Interior corridor.



Photograph 6. Rooftop elevator equipment room.



Photograph 7. Stormwater collection sump.



Photograph 8. Groundwater monitoring well (MW-101).

SECTION 8: ENVIRONMENTAL QUESTIONNAIRE AND INTERVIEWS

8.1 ENVIRONMENTAL QUESTIONNAIRE / OWNER INTERVIEW

To help obtain information on current and historical Site use and use/storage of hazardous materials on-Site, we provided an environmental questionnaire for completion by the Site owner (Westlake Shoreway, LLC and Westlake Gresham North, LLC). The completed questionnaire is attached in Appendix E. The information provided on the questionnaire appears generally consistent with our on-Site observations and information obtained from other data sources. No information indicative of Recognized Environmental Conditions was reported on the questionnaire.

8.2 INTERVIEWS WITH PREVIOUS OWNERS AND OCCUPANTS

Contact information for previous Site owners and occupants was not provided to us. Therefore, interviews with previous Site owners and occupants could not be performed.

SECTION 9: FINDINGS, OPINIONS AND CONCLUSIONS (WITH RECOMMENDATIONS)

Cornerstone performed this Phase I ESA in general accordance with ASTM E1527-13 to support Four Corners Properties II, LLC in evaluation of Recognized Environmental Conditions. Cornerstone did not identify a Recognized Environmental Condition. Our findings, opinions and conclusions are summarized below.

9.1 HISTORICAL SITE USAGE

Based on the information obtained during this study, the Site historically consisted of tidal marshland at the perimeter of San Francisco Bay. Fill was placed on-Site during the 1940s and 1950s to raise ground surface elevations. The existing four-story office building was constructed during the early 1980s and first occupied in approximately 1984. Past tenants

appear to have used the building primarily as office space. Outpatient medical facilities, a café, a fitness center, and classroom uses also were reported.

9.2 CHEMICAL STORAGE AND USE

No hazardous materials were observed on-Site during our visit. Additionally, the Site does not appear to have historically been occupied by businesses that are typically associated with the use or storage of significant quantities of hazardous materials. Medical wastes were noted to be generated by some occupants and disposed off-Site; the potential for these materials to significantly impact the Site appears low.

9.3 POTENTIAL ENVIRONMENTAL CONCERNS WITHIN THE SITE VICINITY

The Site is located at the perimeter of areas of VOC impacted groundwater originating from the up-gradient Brusco and Purex properties, as discussed in Sections 4.1.3.1 and -2. The Site is identified in the ICP (CH2MHill, 2005) for the Purex property. The ICP identifies various control measures the City or County may require depending on site conditions and consultation with the Water Board before issuing building permits. Grab groundwater samples collected in 2017 revealed TCE in groundwater at 2.2 ug/L at the Site, south of the building. The most recent sampling (on-Site well MW-101, January 29, 2020) did not reveal TCE at a detection limit of 10 µg/L. The prior sampling event (August 9, 2019) did not reveal TCE at a detection limit of 2.5 µg/L. Note that the current commercial groundwater ESL associated with vapor intrusion is 7.5 µg/L and the Tier 1 groundwater ESL is 1.2 µg/L. The County may refer to the ICP before issuing a development permit for the Site. However, in our opinion, due to the successful remediation and monitoring efforts at the Purex and Brusco properties, the above groundwater quality data indicates that vapor intrusion measures likely will not be required at the Site.

9.4 UNDOCUMENTED FILL

Fill was historically imported to the Site to raise low lying land elevations. The source and quality of the fill are unknown. Considering that much of general Site vicinity was similarly filled, the potential for the on-Site fill to significantly impact the planned use of the Site appears low. If a higher degree of confidence in fill quality is desired, soil sampling and analytical testing could be conducted; if this soil is excavated for off-Site disposal during redevelopment activities, soil sampling/profiling will be required by the accepting facility.

9.5 IMPORTED SOIL

If the planned development will require importing soil for Site grading, we recommend documenting the source and quality of imported soil. The DTSC's October 2001 Clean Fill Advisory provides useful guidance on evaluating imported fill.

9.6 ASBESTOS CONTAINING BUILDING MATERIALS (ACBMS)

Due to the age of the on-Site structure, building materials may contain asbestos. If demolition, renovation, or re-roofing of the building is planned, an asbestos survey is required by local authorities and/or National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines. NESHAP guidelines require the removal of potentially friable ACBMs prior to building demolition or renovation that may disturb the ACBM.

9.7 LEAD-BASED PAINT

In 1978, the Consumer Product Safety Commission banned lead-containing paints and coatings sold for consumer use. Some lead-containing products, such as industrial coatings, however, are still allowed. Based on the age of the existing structure, lead-containing paint is not likely to be present.

9.8 DATA GAPS

ASTM Standard Designation E 1527-13 requires the Environmental Professional to comment on significant data gaps that affect our ability to identify Recognized Environmental Conditions. A data gap is a lack of or inability to obtain information required by ASTM Standard Designation E 1527-13 despite good faith efforts by the Environmental Professional to gather such information. A data gap by itself is not inherently significant; it only becomes significant if it raises reasonable concerns. No significant data gaps were identified during this Phase I ESA.

9.9 DATA FAILURES

As described by ASTM Standard Designation E 1527-13, a data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the historical research objectives have not been met. Data failures are not uncommon when attempting to identify the use of a Site at five year intervals back to the first use or to 1940 (whichever is earlier). ASTM Standard Designation E 1527-13 requires the Environmental Professional to comment on the significance of data failures and whether the data failure affects our ability to identify Recognized Environmental Conditions. A data failure by itself is not inherently significant; it only becomes significant if it raises reasonable concerns. No significant data failures were identified during this Phase I ESA.

9.10 RECOGNIZED ENVIRONMENTAL CONDITIONS

Cornerstone has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 of 1301 Shoreway Road, Belmont, California. This assessment did not identify Recognized Environmental Conditions.

SECTION 10: LIMITATIONS

Cornerstone performed this Phase I ESA to support Four Corners Properties II, LLC in evaluation of Recognized Environmental Conditions associated with the Site. Four Corners Properties II, LLC understands that no Phase I ESA can wholly eliminate uncertainty regarding the potential for Recognized Environmental Conditions to be present at the Site. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for Recognized Environmental Conditions. Four Corners Properties II, LLC understands that the extent of information obtained is based on the reasonable limits of time and budgetary constraints.

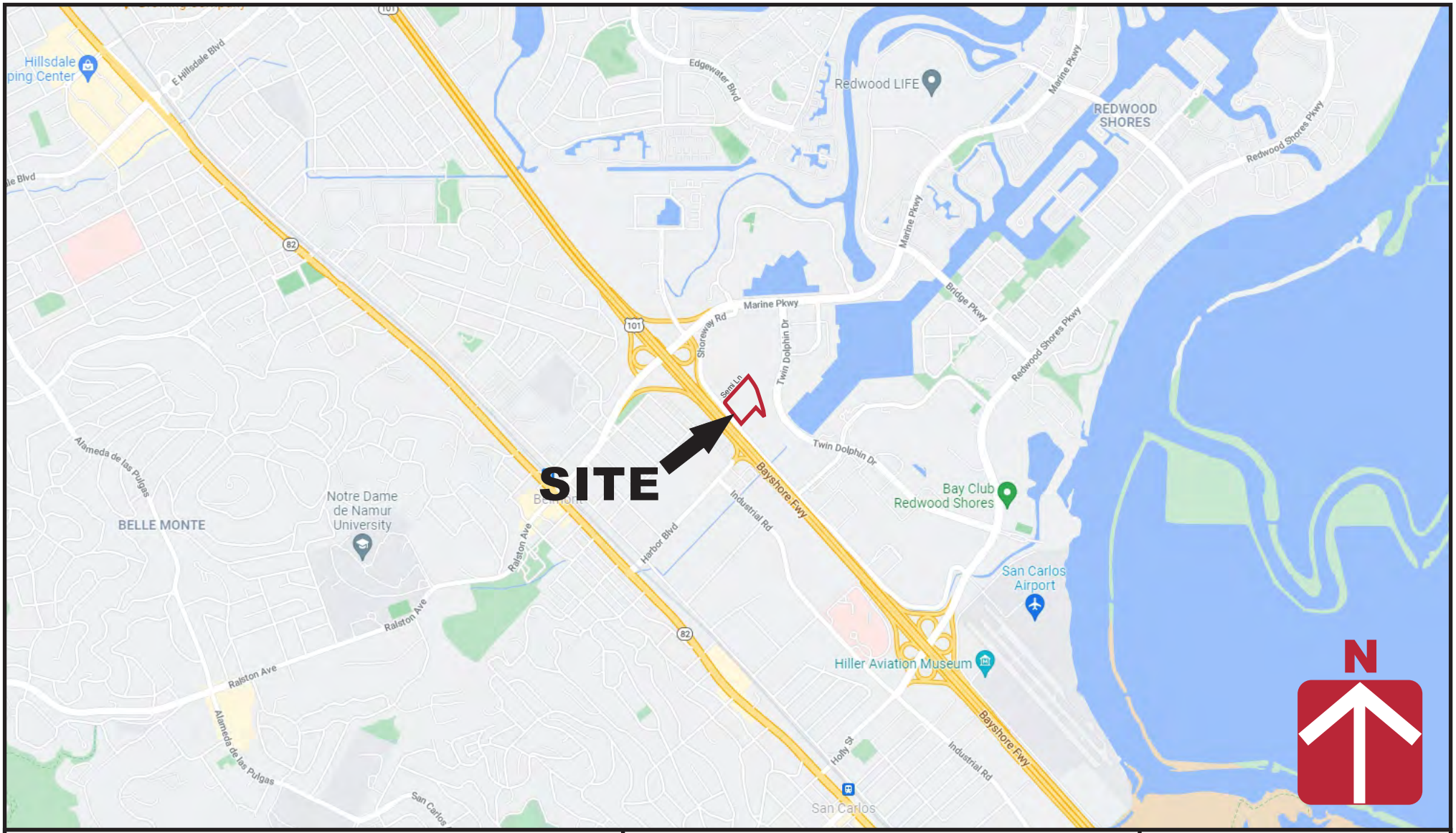
Findings, opinions, conclusions and recommendations presented in this report are based on readily available information, conditions readily observed at the time of the Site visit, and/or information readily identified by the interviews and/or the records review process. Phase I ESAs are inherently limited because findings are developed based on information obtained from a non-intrusive Site evaluation. Cornerstone does not accept liability for deficiencies, errors, or misstatements that have resulted from inaccuracies in the publicly available information or from interviews of persons knowledgeable of Site use. In addition, publicly available information and field observations often cannot affirm the presence of Recognized Environmental Conditions; there is a possibility that such conditions exist. If a greater degree of confidence is desired, soil, groundwater, soil vapor and/or air samples should be collected by Cornerstone and analyzed by a state-certified laboratory to establish a more reliable assessment of environmental conditions.

Cornerstone acquired an environmental database of selected publicly available information for the general area of the Site. Cornerstone cannot verify the accuracy or completeness of the database report, nor is Cornerstone obligated to identify mistakes or insufficiencies in the information provided (ASTM E 1527-13, Section 8.1.3). Due to inadequate address information, the environmental database may have mapped several facilities inaccurately or could not map the facilities. Releases from these facilities, if nearby, could impact the Site.

Four Corners Properties II, LLC may have provided Cornerstone environmental documents prepared by others. Four Corners Properties II, LLC understands that Cornerstone reviewed and relied on the information presented in these reports and cannot be responsible for their accuracy.

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Cornerstone makes no warranty, expressed or implied, except that our services have been performed in accordance with the environmental principles generally accepted at this time and location.

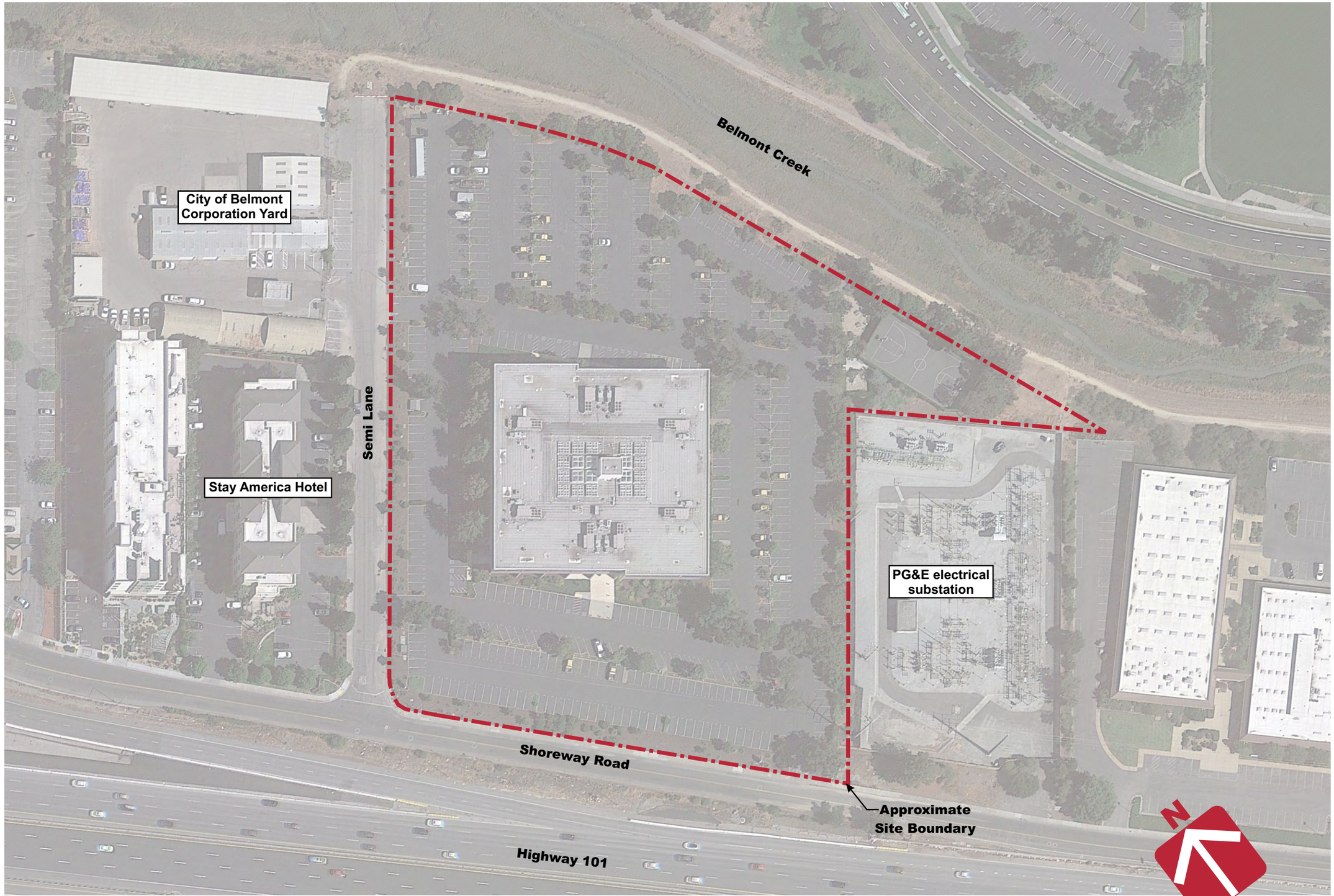


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Vicinity Map

1301 Shoreway Road
Belmont, CA

Project Number	448-6-1
Figure Number	Figure 1
Date	September 2021
Drawn By	RRN



Base by Google Earth, dated 09/26/2020

Project Number 448-6-1

Figure Number Figure 2

Date September 2021

Drawn By RRN

Site Plan

1301 Shoreway Road
Belmont, CA

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APPENDIX A – TERMS AND CONDITIONS

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APPENDIX B – DATABASE SEARCH REPORT

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APPENDIX C – HISTORICAL AERIAL PHOTOGRAPHS AND TOPOGRAPHIC MAPS

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APPENDIX D – LOCAL STREET DIRECTORY SEARCH RESULTS

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APPENDIX E – QUESTIONNAIRE

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APPENDIX F – SELECTED REPORTS FOR NEARBY SLIC CASES

Appendix H

Noise Technical Report

NOISE TECHNICAL REPORT
FOR THE 1301 SHOREWAY ROAD PROJECT

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June 2022

ICF. 2022. *Noise Technical Report for the 1301 Shoreway Road Project*. Draft. (ICF 104476.0.001.01) June. San Francisco, CA. Prepared for Four Corners Properties.

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Acronyms and Abbreviations

µPa	microPascals
Caltrans	California Department of Transportation
CNEL	Community Noise Equivalent Level
CUP	Conditional Use Permit
dB	decibel
dBA	A-weighted decibel
FHWA	Federal Highway Administration
Hz	Hertz
in/sec	inch per second
kHz	kilohertz
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
LT	long-term
L_V	vibration velocity level
L_{xx}	percentile-exceeded sound level
PDF	project design feature
PPV	peak particle velocity
PV	photovoltaic
rms	root-mean-square
SPL	sound pressure level
ST	short-term

Chapter 1
Introduction

The purpose of this Noise Technical Report is to identify noise or vibration impacts that may be associated with the 1301 Shoreway Road Project (proposed project). The analysis provided in this report evaluates the potential for short- and long-term noise and vibration impacts associated with construction and operation of the proposed project. The report includes a description of the environmental setting for the proposed project, including existing noise conditions, and applicable laws and regulations. It also documents the assumptions, methodologies, and findings used to evaluate noise and vibration impacts. The project is subject to environmental review pursuant to the California Environmental Quality Act (CEQA). It is anticipated that the City of Belmont, the lead agency for the project, will use this technical report to inform the project's CEQA analysis.

1.1 Project Location and Description

The proposed project is located at 1301 Shoreway Road in Belmont, California (project site). The approximate 6.9-acre project site is (301,130-square feet) bounded by existing commercial and industrial buildings to the north and south, with Shoreway Road to the west and Twin Dolphin Drive to the east. The assessor parcel number for the project site is 040-37-1110.

The project site includes an existing 148,919 square foot office building, a surface parking lot along the perimeter of the parcel, and a basketball court. The land designation and zoning district for the project site is Regional Commercial which allows for community-serving retail and services; visitor- and retail-serving auto-oriented commercial services, such as lodging, service stations, car dealerships, and commercial office uses. Some light industrial and research and development (R&D) uses may also be permitted. The maximum floor area ratio (FAR) for Regional Commercial is 1.8.

The project would demolish all existing on-site uses and construct an eight story 240,000square foot building, a seven story 305,000 square foot building, and a 469,000 square foot parking garage with 9 levels above grade. The total building footprint would be approximately 1,014,000 gross square feet. The parking garage and surface lots would provide approximately 1,626 parking stalls. No subterranean parking is proposed. The project would have a floor area ratio (FAR) of up to 1.8, consistent with the maximum FAR allowed in the Regional Commercial land use designation and zoning district. Project improvements would occur within the site boundary only. Onsite uses after project construction could include a combination of office and R&D.

Chapter 2
Noise Fundamentals

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is unwanted, disturbing, or annoying.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The following sections provide an explanation of key concepts and acoustical terms used in the analysis of environmental and community noise.

2.1 Frequency, Amplitude, and Decibels

Continuous sound can be described by its *frequency* (pitch) and *amplitude* (loudness). A low-frequency sound is perceived as low in pitch; a high-frequency sound is perceived as high-pitched. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source correlates with the loudness of that source. The amplitude of a sound is typically described in terms of *sound pressure level* (SPL), also referred to simply as the sound level. The SPL refers to the root-mean-square (rms)[1] pressure of a sound wave and is measured in units called microPascals (µPa). One µPa is approximately one hundred-billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to over 100,000,000 µPa. Because of this large range of values, sound is rarely expressed in terms of µPa. Instead, a logarithmic scale is used to describe the SPL in terms of decibels, abbreviated dB. The decibel is a logarithmic unit that describes the ratio of the actual sound pressure to a reference pressure (20 µPa is the standard reference pressure level for acoustical measurements in air). Specifically, an SPL, in dB, is calculated as follows:

$$SPL = 20 \times \log_{10}\left(\frac{X}{20\mu Pa}\right)$$

Where X is the actual sound pressure and 20 µPa is the reference pressure. The threshold of hearing for young people is about 0 dB, which corresponds to 20 µPa.

[1] Root-mean-square (rms) is defined as the square root of the mean (average) value of the squared amplitude of the noise signal.

2.1.1 Decibel Calculations

Because decibels represent noise levels using a logarithmic scale, SPLs cannot be added, subtracted, or averaged through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one bulldozer produces an SPL of 80 dB, two bulldozers would not produce a combined sound level of 160 dB. Rather, they would combine to produce 83 dB. The cumulative sound level of any number of sources, such as excavators, can be determined using decibel addition. The same decibel addition is used for A-weighted decibels described below.

Similarly, the arithmetic mean (average) of a series of noise levels does not accurately represent the overall average noise level. Instead, the values must be averaged using a linear scale before converting the result back into a logarithmic (or dB) noise level. This method is typically referred to as calculating the "energy average" of the noise levels. Table 1 demonstrates the general results of adding noise from multiple sources, noting that the examples summarized in this table are rounded to the nearest whole number.

Table 1. Rules for Combining Sound Levels by Decibel Addition

When two decibel values differ by…	…add the following amount to the higher decibel value	Example
0 to 1 dB	3 dB	60 dB + 61 dB = 64 dB
2 to 3 dB	2 dB	60 dB + 63 dB = 65 dB
4 to 9 dB	1 dB	60 dB + 69 dB = 70 dB
10 dB or more	0 dB	60 dB + 75 dB = 75 dB

Source: California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf, accessed May 5, 2022.
dB = decibel

2.1.2 A-Weighting

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000 to 5,000 Hz and perceive sounds within that range better than sounds of the same amplitude at higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted (i.e., adjusted), depending on human sensitivity to those frequencies. The resulting SPL is expressed in A-weighted decibels, or dBA.

The A-weighting scale approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments regarding the relative loudness or

annoyance of a sound, their judgments correlate well with the A-weighted sound levels of those sounds. Table 2 describes typical A-weighted sound levels for various noise sources.

Table 2. Typical A-Weighted Sound Levels

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* September 2013, *https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf*, accessed May 5, 2022.
dBA = A-weighted decibel

2.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, various descriptors or noise "metrics" have been developed to quantify environmental and community noise. These metrics generally describe either the average character of the noise or the statistical behavior of the variations in the noise level. Some of the most common metrics used to describe environmental noise, including those metrics used in this report, are described below.

- **Equivalent Sound Level (L_{eq})** is the most common metric used to describe short-term average noise levels. Many noise sources produce levels that fluctuate over time; examples include mechanical equipment that cycles on and off or construction work, which can vary sporadically. The L_{eq} describes the average acoustical energy content of noise for an identified period of time,

commonly 1 hour. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustical energy over the duration of the exposure. For many noise sources, the L_{eq} will vary depending on the time of day. A prime example is traffic noise, which rises and falls depending on the amount of traffic on a given street or freeway.

- **Maximum Sound Level (L_{max})** and **Minimum Sound Level (L_{min})** refer to the maximum and minimum sound levels, respectively, that occur during the noise measurement period. More specifically, they describe the rms sound levels that correspond to the loudest and quietest 1-second intervals that occur during the measurement.
- **Percentile-Exceeded Sound Level (L_{xx})** describes the sound level exceeded for a given percentage of a specified period. For example, the L_{50} is the sound level exceeded 50 percent of the time (such as 30 minutes per hour), and L_{25} is the sound level exceeded 25 percent of the time (such as 15 minutes per hour).
- **Community Noise Equivalent Level (CNEL)** is a measure of the 24-hour average A-weighted noise level that is also time-weighted to "penalize" noise that occurs during the evening and nighttime hours when noise is generally recognized to be more disturbing (because people are trying to rest, relax, and sleep during these times). 5 dBA is added to the L_{eq} during the evening hours of 7 p.m. to 10 p.m.; 10 dBA is added to the L_{eq} during the nighttime hours of 10 p.m. to 7 a.m.; and the energy average is then taken for the whole 24-hour day.
- **Day-Night Sound Level (L_{dn})** is very similar to the CNEL described above. L_{dn} is also a time-weighted average of the 24-hour A-weighted noise level. The only difference is that no "penalty" is applied to the evening hours of 7 p.m. to 10 p.m. 10 dBA is added to the L_{eq} during the nighttime hours of 10 p.m. to 7 a.m., and the energy average is then taken for the whole 24-hour day.

It is noted that various federal, state, and local agencies have adopted CNEL or L_{dn} as the measure of community noise. While not identical, CNEL and L_{dn} are normally within 1 dBA of each other when measured in typical community environments, and many noise standards/regulations use the two interchangeably.

2.3 Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors (described below). In general, noise attenuates (decreases) with distance. Roadway noise sources tend to be arranged linearly. Therefore, noise from roadway vehicular traffic attenuates at a rate of approximately 3.0 to 4.5 dB per doubling of distance from the source, depending on the intervening surface (paved or vegetated, respectively).[2] Point sources of noise, such as stationary equipment or construction equipment, typically attenuate at a rate of approximately 6.0 to 7.5 dB per doubling of distance from the source.[3] For example, a sound level of 80 dBA at 50 feet from the noise source will

[2] Ibid.

[3] The 1.5 dB variation in attenuation rate (6 dB versus 7.5 dB) can result from ground-absorption effects, which occur as sound travels over soft surfaces such as earth or vegetation (7.5 dB attenuation rate) versus hard surfaces such as pavement or hard-packed earth (6 dB rate).

be reduced to 74 dBA at 100 feet, 68 dBA at 200 feet, and so on. Noise levels can also be attenuated by shielding the noise source or providing a barrier between the source and the receptor.

- **Geometric Spreading.** Sound from a single source (i.e., a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a general rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a "line" source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level (i.e., attenuation or decrease) from a line source is generally 3 dBA per doubling of distance.

- **Ground Absorption.** The noise path between the source and the observer is usually close to the ground. The excess noise attenuation from ground absorption occurs due to acoustic energy losses on sound wave reflection. For acoustically "hard" sites (i.e., sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receptor), no excess ground attenuation is assumed because the sound wave is reflected without energy losses. For acoustically absorptive or "soft" sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

- **Atmospheric Effects.** Research by the California Department of Transportation (Caltrans) and others has shown that atmospheric conditions can have a major effect on noise levels. Factors include wind, air temperature (including vertical temperature gradients), humidity, and turbulence. Receptors downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas receptors upwind can have lower noise levels. Increased sound levels can also occur over relatively large distances because of temperature inversion conditions (i.e., increasing temperature with elevation).

- **Shielding by Natural or Human-Made Features.** A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor with the specific purpose of reducing noise. In addition to the noise that diffracts over the top of a barrier, noise will also diffract around the ends of the barrier leading to "flanking" noise that can reduce the overall efficacy of the barrier. Assuming it is long enough to minimize the effects of flanking noise, a barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

2.4 Human Response to Noise

Noise can have a range of effects on people including hearing damage, sleep interference, speech interference, performance interference, physiological responses, and annoyance. Each of these is briefly described below.

- **Hearing Damage.** A person exposed to high noise levels can suffer either gradual or traumatic hearing damage. Gradual hearing loss occurs with repeated exposure to excessive noise levels and is most commonly associated with occupational noise exposures in heavy industry or other very noisy work environments. Traumatic hearing loss is caused by sudden exposure to an extremely high noise level, such as a gunshot or explosion at very close range. The potential for noise-induced hearing loss is not generally a concern in typical community noise environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud as to cause hearing loss.

- **Sleep Interference.** Exposure to excessive noise levels at night has been shown to cause sleep disturbance. Sleep disturbance refers not only to awakening from sleep, but also to effects on the quality of sleep such as altering the pattern and stages of sleep. World Health Organization guidelines recommend noise limits of 30 dBA L_{eq} (8-hour average) for continuous noise and 45 dBA L_{max} for single sound events inside bedrooms at night to minimize sleep disturbance (World Health Organization 1999).

- **Speech Interference.** Speech interference can be a problem in any situation where clear communication is desired, but is often of particular concern in learning environments (such as schools) or situations where poor communication could jeopardize safety. Normal conversational speech inside homes is typically in the range of 50 to 65 dBA (EPA 1977) and any noise in this range or louder may interfere with speech. As background noise levels rise, the intelligibility of speech decreases and the listener will fail to recognize an increasing percentage of the words spoken. A speaker may raise his or her voice in an attempt to compensate for higher background noise levels, but this in turn can lead to vocal fatigue for the speaker.

- **Performance Interference.** Excessive noise has been found to have various detrimental effects on human performance, including information processing, concentration, accuracy, reaction times, and academic performance. Intrusive noise from individual events can also cause distraction. These effects are of obvious concern for learning and work environments.

- **Physiological Responses.** Acute noise has been shown to cause measurable physiological responses in humans, including changes in stress hormone levels, pulse rate, and blood pressure. The extent to which these responses cause harm or are signs of harm is not clearly defined, but it has been postulated that they could contribute to stress-related diseases, such as hypertension, anxiety, and heart disease. However, research indicates links between environmental noise and permanent health effects are generally weak and inconsistent. Statistically significant health risks have been found for extended exposure to very high noise levels, such as for workers exposed to high levels of industrial noise for 5 to 30 years (World Health Organization 1999).

- **Annoyance.** The subjective effects of annoyance, nuisance, and dissatisfaction are possibly the most difficult to quantify, and no accurate method exists to measure these effects. This difficulty arises primarily from differences in individual sensitivity and habituation to sound, which can

vary widely from person to person. What one person considers tolerable can be unbearable to another of equal hearing acuity. An important tool in estimating the likelihood of annoyance due to a new sound is by comparing it to the existing baseline or "ambient" environment to which that person has adapted. In general, the more the level or tonal (frequency) variations of a sound exceed the previously existing ambient sound level or tonal quality, the less acceptable the new sound will be.

In most cases, effects from sounds typically found in the natural environment would be limited to annoyance or interference. Physiological effects and hearing loss would be more commonly associated with human-made noise, such as in an industrial or occupational setting.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can detect changes of about 2 dBA; however, it is widely accepted that a doubling of sound energy, which results in a change of 3 dBA in the normal environment, is considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud. Accordingly, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) resulting in a 3 dBA increase in sound would generally be barely detectable.

2.5 Noise-Sensitive Land Uses

The City of Belmont General Plan Noise Element describes residences, schools, places of worship, and hospitals as noise-sensitive land uses. The nearest residential noise-sensitive land use to the project site is a mobile home community approximately 300 feet southwest of the project site, and a single family residential neighborhood starting at 560 feet west of the project site. Both areas are separated from the project site by US-101, and the ambient noise levels are highly influenced by US-101. Additionally, there are several hotels northwest of the project site, with the nearest one located approximately 100 feet . Hotels are not specifically noted in the City of Belmont General Plan Noise Element as being noise-sensitive land uses; however, noise may cause disturbance to people who are temporarily residing in hotels, especially during the nighttime hours. There are commercial and industrial land uses in the project vicinity, including offices, retail stores, and a power station. These uses are less sensitive to noise and vibration.

Chapter 3
Groundborne Vibration Fundamentals

This section describes basic concepts related to groundborne vibration. Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground. The effects of groundborne vibrations are typically limited to causing nuisance or annoyance to people, but at extreme vibration levels damage to buildings may also occur.

In contrast to airborne sound, groundborne vibration is not a phenomenon that most people experience every day. The ambient groundborne vibration level in residential areas is usually much lower than the threshold of human perception. Most perceptible indoor vibration is caused by sources within buildings, such as mechanical equipment while in operation, people moving, or doors slamming. Typical outdoor sources of perceptible groundborne vibration are heavy construction activity (such as blasting, pile driving, or earthmoving), steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible, even in locations close to major roads. The strength of groundborne vibration from typical environmental sources diminishes (or attenuates) fairly rapidly over distance.

For the prediction of groundborne vibration, the fundamental model consists of a vibration source, a receptor, and the propagation path between the two. The power of the vibration source and the characteristics and geology of the intervening ground, which affect the propagation path to the receptor, determine the groundborne vibration level and the characteristics of the vibration perceived by the receptor.

The following sections provide an explanation of key concepts and terms used in the analysis of environmental groundborne vibration.

3.1 Displacement, Velocity, and Acceleration

When a vibration source (blasting, dynamic construction equipment, train, etc.) impacts the ground it imparts energy to the ground, creating vibration waves that propagate away from the source along the surface and downward into the earth. As vibration waves travel outward from a source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The distance that these particles move is referred to as the *displacement* and is typically very small, usually only a few ten-thousandths to a few thousandths of an inch. *Velocity* describes the instantaneous speed of the motion, and *acceleration* is the instantaneous rate of change of the speed. Each of these measures can be further described in terms of *frequency* and *amplitude*, as discussed below.

Although displacement is generally easier to understand than velocity or acceleration, it is rarely used to describe groundborne vibration because most transducers used to measure vibration directly measure velocity or acceleration, not displacement.

3.2 Frequency and Amplitude

The frequency of a vibrating object describes how rapidly it is oscillating. The unit of measurement for the frequency of vibration is Hz (the same as used in the measurement of noise), which describes the number of cycles per second.

The amplitude of displacement describes the distance that a particle moves from its resting (or equilibrium) position as it oscillates and can be measured in inches. The amplitude of vibration velocity (the speed of the movement) can be measured in inches per second (in/sec). The amplitude of vibration acceleration (the rate of change of the speed) can be measured in in/sec per second.

3.3 Vibration Descriptors

As noted above, there are various ways to quantify groundborne vibration based on its fundamental characteristics. Because vibration can vary markedly over a short period of time, various descriptors have been developed to quantify vibration. The two most common descriptors used in the analysis of groundborne vibration are peak particle velocity and vibration velocity level , each of which are described below:

- **Peak Particle Velocity (PPV)** is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement for PPV is in/sec. Unlike many quantities used in the study of environmental acoustics, PPV is typically presented using linear values and does not employ a dB scale. Because it is related to the stresses that are experienced by buildings, PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage (both Federal Transit Administration and Caltrans guidelines recommend using PPV for this purpose). It is also used in many instances to evaluate the human response to groundborne vibration (Caltrans guidelines recommend using PPV for this purpose).
- **Vibration Velocity Level (L_V)** describes the rms vibration velocity. Due to the typically small amplitudes of groundborne vibrations, vibration velocity is often expressed in decibels, calculated as follows.

$$L_V = 20 \times \log_{10}\left(\frac{V}{V_{ref}}\right)$$

where V is the actual rms velocity amplitude and V_{ref} is the reference velocity amplitude. It is important to note that there is no universally accepted value for V_{ref}, but the accepted reference quantity for vibration velocity in the U.S. is 1 micro-inch per second (1×10^{-6} in/sec). The abbreviation VdB is commonly used for vibration decibels to distinguish from noise level decibels. L_V is often used to evaluate human response to vibration levels (Federal Transit Administration guidelines recommend using L_V for this purpose).

3.4 Vibration Propagation

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations reduce much more rapidly than low frequencies so that low frequencies tend to dominate the spectrum at large distances from the source. The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium while groundborne vibrations travel through the earth, which may contain significant geological differences. Geological factors that influence the propagation of groundborne vibration include the following:

- **Soil conditions.** The type of soil is known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil. Hard, dense, and compacted soil; stiff clay soil; and hard rock transmit vibration more efficiently than loose, soft soils; sand; or gravel.
- **Depth to bedrock.** Shallow depth to bedrock has been linked to efficient propagation of groundborne vibration. One possibility is that shallow bedrock acts to concentrate the vibration energy near the surface, reflecting vibration waves back toward the surface that would otherwise continue to propagate farther down into the earth.
- **Soil strata.** Discontinuities in the soil strata (i.e., soil layering) can also cause diffractions or channeling effects that affect the propagation of vibration over long distances.
- **Frost conditions.** Vibration waves typically propagate more efficiently in frozen soils than in unfrozen soils. Propagation also varies depending on the depth of the frost.
- **Water conditions.** The amount of water in the soil can affect vibration propagation. The depth of the water table in the path of the propagation also appears to have substantial effects on groundborne vibration levels.

Specific conditions at the source and receiver locations can also affect the vibration levels. For instance, how the source is connected to the ground (e.g., direct contact, through rails, or via a structure) will affect the amount of energy transmitted into the ground. There are also notable differences when the source is underground (such as in a tunnel) versus on the surface. At the receiver, vibration levels can be affected by variables such as the foundation type, building construction, and acoustical absorption inside the rooms where people are located. When vibration encounters a building, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under certain circumstances, the ground-to-foundation coupling may also amplify the vibration level due to structural resonances of the floors and walls.

3.5 Effects of Groundborne Vibration

Vibration can result in effects that range from annoyance to structural damage. Annoyance or disturbance of people may occur at vibration levels substantially below those that would pose a risk of damage to buildings. Each of these effects is discussed below.

3.5.1 Potential Building Damage

When groundborne vibration encounters a building, vibrational energy is transmitted to the structure, causing it to vibrate. If the vibration levels are high enough, damage to the building may occur. Depending on the type of building and the vibration levels, this damage could range from cosmetic architectural damage (e.g., cracked plaster, stucco, or tile) to more severe structural damage (e.g., cracking of floor slabs, foundations, columns, beams, or wells). Buildings can typically withstand higher levels of vibration from transient sources than from continuous or frequent intermittent sources. Transient sources are those that create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers (impact or vibratory), crack-and-seat equipment, and vibratory compaction equipment. Older, fragile buildings (which may include important historic buildings) are of particular concern. Modern commercial and industrial buildings can generally withstand much higher vibration levels before potential damage occurs.

3.5.2 Human Disturbance or Annoyance

Groundborne vibration can be annoying to people and can cause serious concern for nearby neighbors of vibration sources, even when vibration is well below levels that could cause physical damage to structures. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible but there is less adverse reaction without the effects associated with the shaking of a building. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

When groundborne vibration waves encounter a building, vibrational energy is transmitted to the building foundation and then propagates throughout the remainder of the structure, causing building surfaces (walls, floors, and ceilings) to vibrate. This movement may be felt directly by building occupants and may also generate a low-frequency rumbling noise as sound waves are radiated by the vibrating surfaces. At higher frequencies, building vibration can cause other audible effects, such as rattling of windows, building fixtures, or items on shelves or hanging on walls. These audible effects due to groundborne vibration are referred to as groundborne noise. Groundborne vibration levels that result in groundborne noise are often experienced as a combination of perceptible vibration and low-frequency noise. However, sources that have the potential to generate groundborne noise are likely to produce airborne noise impacts that mask the radiated groundborne noise. Any perceptible effect (vibration or groundborne noise) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is engaged in any type of physical activity. Reoccurring vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential (Caltrans 2020).

Numerous studies have been conducted to characterize the human response to vibration, and, over the years, numerous vibration criteria and standards have been suggested by researchers, organizations, and governmental agencies. These studies suggest that the thresholds for perception and annoyance vary according to duration, frequency, and amplitude of vibration. For continuous or frequent intermittent vibration sources (such as construction activity, including the use of pile

drivers or vibratory compaction equipment), the human response to vibration varies from barely perceptible at a PPV of 0.01 in/sec, to distinctly perceptible at a PPV of 0.04 in/sec, to strongly perceptible at a PPV of 0.1 in/sec, and severe at a PPV of 0.4 in/sec (Caltrans 2020).

3.6 Vibration-Sensitive Land Uses

As noted above, the potential effects of groundborne vibration can be divided into two categories: building damage and potential human annoyance. Because building damage would be considered a permanent negative effect at any building, regardless of land use, any type of building would typically be considered sensitive to this type of impact. Fragile structures, which often include historic buildings, are most susceptible to damage and are of particular concern.

Human annoyance effects from groundborne vibration are typically only considered inside occupied buildings and not at outside areas such as residential yards, parks, or open space. Buildings that would be considered sensitive to human annoyance caused by vibration are generally the same as those that would be sensitive to noise and typically include residences, schools, hospitals, assisted living facilities, mental care facilities, places of worship, libraries, performing arts facilities, and hotels and motels.

Chapter 4
Existing Noise Environment

The existing ambient noise levels in the vicinity of the project site are dominated largely by the traffic on major roadways in the area, such as US-101 and Shoreway Road. For this analysis, ambient noise has been measured to characterize ambient noise levels in the vicinity of the project, which will be used to establish a baseline representation of existing conditions when evaluating the project's noise impacts. To quantify existing ambient noise levels near the project site, short-term (15-minute) and long-term (48-hour) ambient noise measurements were conducted between Wednesday, April 23rd and Friday, April 25th, 2022. The short-term and long-term noise measurements are discussed in more detail in the following sections.

4.1 Short-Term Noise Monitoring

Measurements were conducted using a Larson Davis LxT Type-1 sound level meter, which measured L_{eq} for 15 minute intervals. Weather conditions during the measurements were clear skies, an average wind speed of 2.8 miles-per-hour, and temperatures ranging from 61 to 65.6 degrees Fahrenheit. Monitoring locations were selected to capture noise levels in areas that are sensitive to noise or representative of ambient noise levels near the project site.

Three monitoring locations near the Project site were selected as short-term ambient noise measurement sites (ST-1, ST-2, and ST-3). Refer to Figure 1 for a map showing the noise measurement locations, and Table 3 summarizes the short-term measurement results. As reflected in the data, existing noise levels in the project area vary between measurement locations based on the types of noise sources that are present. Refer to Appendix A for the complete dataset of measured noise.



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Figure 1
Noise Measurement Locations

Table 3. Short-Term Noise Level Measurements Near the Project Site

Site	Site Description	Measurement Start Time	dBA Leq	dBA Lmax	dBA Lmin	Dominant Noise Source
ST-1	10 Twin Dolphin, walking path near SW corner of parking lot	03/23/2022 11:10 a.m.	59.4	75.6	47.7	Small aircraft
ST-2	230 Twin Dolphin Drive	03/23/2022 11:46 a.m.	66.5	87.8	50.6	Small aircraft
ST-3	1399 Shoreway Road	03/23/2022 12:13 p.m.	67.1	75.8	59.1	Small aircraft and US 101 Traffic

Note: See Appendix A for full noise measurement data.
ST = long-term (15-minute) ambient noise measurement.
dBA = A-weighted decibels.

4.2 Long-Term Noise Monitoring

Long-term measurements were conducted using Piccolo II Type 2 sound level meters. Three long-term monitoring locations near the project site were selected for collecting long-term ambient noise data. L_{dn} noise levels from the long-term measurements ranged from 62.5 to 71.2 dBA L_{dn}, with higher noise levels generally at the locations close to major roadways and lower noise levels generally at the areas farther from major roadways. Refer to Figure 1 for a map showing the noise measurement locations, and Table 4 summarizes the long-term measurement results. Refer to Appendix A for the complete dataset of measured noise.

Table 4. Representative Long-Term Ambient Noise Measurements from the Belmont General Plan EIR

Site	Site Description	Day 1 dBA Ldn	Day 2 dBA Ldn	Primary Noise Sources
LT-1	120 Sem Lane	68.1	67.0	Highway traffic and small aircraft
LT-2	1301 Shoreway Road	71.2	69.3	Highway traffic and small aircraft
LT-3	Karen Road, between Oneill Avenue and Harbor Boulevard	64.0	62.5	Highway traffic
LT-4	Southwest corner of Oneill Avenue and Kedith Street	63.8	62.8	Roadway traffic

Note: See Appendix A for full noise measurement data.
Noise measurements were conducted from March 23 to March 25, 2022.
LT- Long-term (24-hour) ambient noise measurement; dBA = A-weighted decibels; L_{dn}= day-night noise levels;

Chapter 5
Regulatory Framework

5.1 Federal

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project.

5.2 State

5.2.1 California Governor's Office of Planning and Research

The *State of California General Plan Guidelines,* published and updated by the Governor's Office of Planning and Research, provides guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These are guidelines for general land use planning that describe noise acceptability categories for different types of land uses considered by the state. California also requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels; the noise element must be used to guide decisions concerning land use. A discussion of relevant noise-related policies in the City of Belmont 2035 General Plan is provided below, noting that the project site will be annexed into the City of Belmont as part of the proposed project.

5.2.2 California Department of Transportation

There are no state noise and vibration standards that directly apply to the proposed project. As noted below, there are also no quantitative local standards that can be used to assess project-related vibration. Therefore, while the proposed project would not be subject to Caltrans oversight, guidance published by the agency nonetheless provides groundborne vibration criteria that are useful in establishing thresholds for impact determinations. Caltrans' widely referenced *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020) provides guidance for two types of potential impact: (1) damage to structures, and (2) annoyance to people. Guideline criteria for each are provided in Tables 5 and 6.

Table 5. Caltrans Guidelines for Vibration-Related Damage

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.
Notes:
Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.
PPV = Peak Particle Velocity (vibration level) in inches per second.

Table 6. Caltrans Guideline for Vibration-Related Annoyance

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation. 2020.
Notes: Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.
PPV = Peak Particle Velocity (vibration level) in inches per second.

5.3 Local

5.3.1 City of Belmont General Plan

The Noise Element of the City of Belmont General Plan, adopted in 2017, includes land use compatibility standards that outline acceptable outdoor noise environment noise levels for various land use categories in the City. In general, the purpose behind land use compatibility standards is to help jurisdictions determine if the existing ambient noise level in a given area would be compatible with a particular developed use.

The following summarizes the compatibility standards for single-family residential land uses included in the General Plan.

- Normally Acceptable: up to 60 dBA L_{dn}
- Conditionally Acceptable: 55–70 dBA L_{dn}
- Normally Unacceptable: 70–75 dBA L_{dn}
- Clearly Unacceptable: 75+ dBA L_{dn}

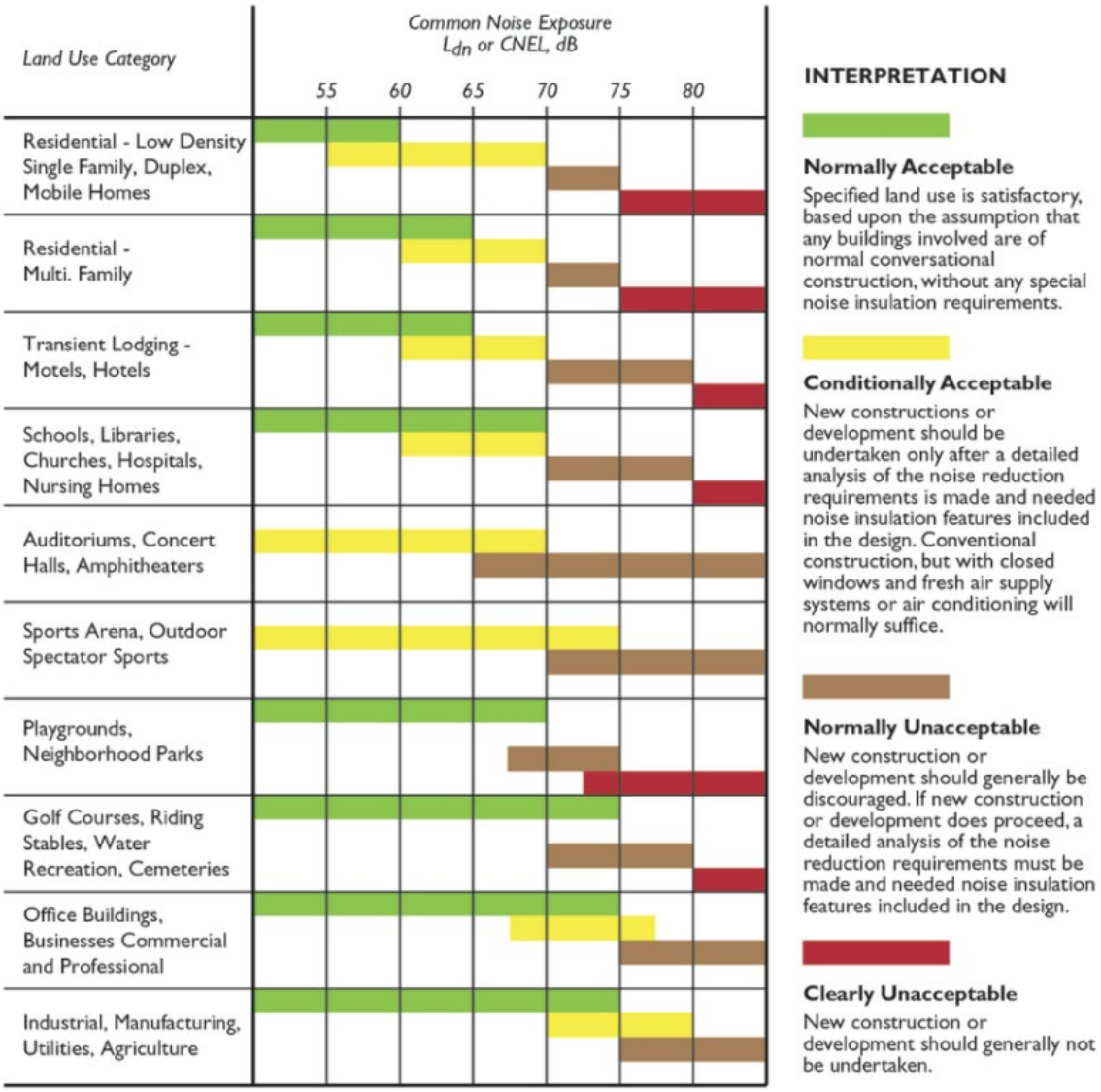
The following summarizes the compatibility standards for multi-family residential land uses included in the General Plan:

- Normally Acceptable: up to 65 dBA L_{dn}
- Conditionally Acceptable: 60–70 dBA L_{dn}
- Normally Unacceptable: 70–75 dBA L_{dn}
- Clearly Unacceptable: 75+ dBA L_{dn}

Refer to Table 7 (Table 7-1 of the General Plan) for land use compatibility guidelines for all land uses in the City of Belmont.[4]

[4] City of Belmont. 2017 (November 14). City of Belmont 2035 General Plan. Final Adopted General Plan. Available: https://www.belmont.gov/departments/community-development/2035-general-plan-update/final-adopted-general-plan. Accessed May 5, 2022.

Table 7. City of Belmont General Plan Community Noise Exposure Standards



Source: Office of Planning and Research, State of California Draft General Plan Guidelines, 2015.

In addition to the land use compatibility standards described above, the City of Belmont General Plan also establishes guidelines for non-aircraft transportation noise sources. Refer to Table 8 for the City noise standards for transportation noise sources at both outdoor activity areas and interior spaces.

Table 8. City of Belmont General Plan Noise Standards for Transportation (non-aircraft) Noise Sources

	Outdoor Activity Areas[a]	Interior Spaces	
Noise-Sensitive Land Use[b]	**L_{dn}/CNEL, dB**	**L_{dn}/CNEL, dB**	**L_{eq}, dB**
Single-Family Residential	60	45	-
Multi-Family Residential	65	45	-
Transient Lodging	65	45	-
Hospitals, Nursing Homes	65	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	65	-	45
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45

Notes:
[a] Outdoor activity areas generally include backyards of single-family residents and outdoor patios, decks, and common recreation areas of multi-family residences. Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.
[b] As determined for a typical worst-case hour during periods of use.
CNEL = Community Noise Equivalent Level. CNEL is a measure of the 24-hour average A weighted noise level that is also time-weighted to "penalize" noise that occurs during the evening and nighttime hours when noise is generally recognized to be more disturbing.
L_{dn} = day night noise level. The 24-hour L_{dn} noise level has a penalty added to the nighttime hours only (not to the evening hours, as is done with the CNEL metric).

Noise criteria and guidelines for stationary sources of noise are also included in the City of Belmont General Plan (General Plan Table 7-3). Daytime noise levels (occurring from 8:00 a.m. to sunset on weekdays, or 10:00 a.m. to sunset on Saturday, Sunday, and holidays) are limited to 50 dBA L_{eq} and 70 dBA L_{max}. Nighttime noise levels are limited to 45 dBA L_{eq} and 65 dBA L_{max}. Refer to Table 9 for the General Plan transportation and stationary noise sources in the City of Belmont.

Table 9. City of Belmont General Plan Noise Standards for Stationary Noise Sources

Sound Level	**Daytime[a,b]**	**Nighttime[a,c]**
Hourly Equivalent Sound Level (L_{eq}), dBA	50	45
Maximum Sound Level (L_{max}), dBA	70	65

Notes:
[a] Sound level measurements shall be made at a point on the receiving property nearest where the sound source at issue generates the highest sound level
[b] Daytime is the period from 8:00 a.m. to sunset, Monday through Friday; and from 10:00 a.m. to sunset, Saturday, Sunday and Holidays.
[c] Nighttime is the period outside of the "daytime" hours above.

5.3.2 City of Belmont General Plan Policies

The General Plan includes goals, policies, and actions related to noise in the City of Belmont (City of Belmont 2017). The following goals, policies and actions are relevant to the proposed project:

- **Goal 7.1** Strive to achieve an acceptable noise environment for the environmental, health, and safety needs of present and future residents of Belmont.
- **Action 7.1-1.a:** Continue to limit hours for certain construction and demolition work to reduce construction-related noises.
- **Action 7.1-1.b:** Address sources of excessive neighborhood noise that can cause nuisances for residents, such as gas leaf blowers, wireless telecommunication facilities, power sources, ventilation, and cooling facilities**.**
- **Policy 7.1-2:** Use the Community Noise Level Exposure Standards, shown in [General Plan] Table 7-1 (Table 7 of this section), as review criteria for new land uses. Require all new development that would be exposed to noise greater than the "normally acceptable" noise level range to reduce interior noise through design, sound insulation, or other measures.
- **Policy 7.1-3:** Require noise-reducing mitigation to meet allowable outdoor and indoor noise exposure standards in [General Plan] Table 7-2 (Table 8 of this section). Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following:
    - Construct façades with substantial weight and insulation;
    - Use sound-rated windows for primary sleeping and activity areas;
    - Use sound-rated doors for all exterior entries at primary sleeping and activity areas;
    - Use minimum setbacks and exterior barriers;
    - Use acoustic baffling of vents for chimneys, attic and gable ends; and,
    - Install a mechanical ventilation system that provides fresh air under closed window conditions.
- **Policy 7.1-4:** Alternative acoustical designs that achieve the prescribed noise level reduction may be approved, provided a qualified Acoustical Consultant submits information demonstrating that the required reductions to meet the specific targets for outdoor activity areas and interior spaces can be achieved and maintained.
- **Policy 7.1-6:** Promote the use of noise attenuation measures to improve the acoustic environment inside residences where existing single-family residential development is located in a noise-impacted environment, such as along an arterial street or adjacent to a noise-producing use.
- **Policy 7.1-8:** Continue to enforce applicable Federal and State Noise Insulation Standards (CCR, Title 24) and noise requirements.
- **Policy 7.1-10**: Require developers of new development anticipated to generate a substantial amount of vibration during construction to implement mitigation practices to reduce vibration,

which can include: operating heavy equipment as far as practical from residential uses; using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and using quiet pile driving technology when feasible.

5.3.3 City of Belmont City Code

The City of Belmont City Code contains noise regulations to protect the community from excessive noise. The code specifies how noise will be measured and regulated. Specifically, the City Code addresses noise issues and protects the community from substantial noise sources such as construction activity, animals, amplified sound. and stationary equipment.

Section 15-102(c) establishes day- and nighttime noise limits for various uses in the City. Daytime noise occurs from 8:00 a.m. to sunset on weekdays and 10:00 a.m. to sunset on Saturday, Sunday, and holidays. Nighttime noise occurs outside the hours of daytime noise. Continuous noise sources should use the average noise level (L_{eq}) while impulse noises should use the peak noise level (L_{max}). The limits by land use that may be relevant for the proposed project are included below:

1. *Residential*. For all sources of sound measured from any residential property:

   A) Nighttime Hours - 55 dBA

   B) Daytime Hours – 65 dBA

3. *Non-Residential.* For all sources of sound measured from any non-residential property:

   C) Nighttime Hours - 55 dBA

   D) Daytime Hours – 65 dBA

Regarding noise from construction and demolition activities, Section 15-102(d) of the City Code states that construction activity is not limited by these aforementioned noise standards and restricts the hours of construction activity to the hours between 8:00 a.m. and 5:00 p.m. Monday through Friday. Saturday is restricted to 10:00 a.m. to 5:00 p.m. No construction activity is permitted on Sunday or holidays without written approval from the City. During these allowable hours, the City Code does not include numerical thresholds that apply to construction noise. However, all gasoline-powered construction equipment must be equipped with an operating muffler or baffling system as originally provided by the manufacturer, and no modification to these systems is permitted. In addition, authorized land uses and construction activity established through the City's discretionary land use permit process may be subject to specific noise conditions of approval that may be more restrictive. Construction occurring outside of the daytime allowable hours for construction must be approved by the Building Official.

Section 15-102(e) of the City Municipal Code pertains to powered equipment used for non-construction activities, and states that noise from powered equipment must meet the previously stated noise thresholds of section 15-102(c) (e.g., 65 dBA during daytime hours and 55 during

nighttime hours). Use of powered equipment is limited to 8:00 a.m. to 7:00 p.m., Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and holidays.

Chapter 6
Methodology and Results

6.1 Methodology

The noise impact analysis evaluates the potential for temporary noise and vibration impacts to result from Project construction activities, and for long-term operational noise impacts to result from project-related sound-generating equipment and on-site activities, or from Project-related changes in traffic patterns (resulting in increased traffic noise). The methodology used for the analysis of each noise or vibration source is included below.

6.1.1 Construction Noise

The analysis of construction noise considers the equipment that would be required for project demolition and construction, as identified by the project applicant (Four Corners Properties) based on available information at this time.

Noise from construction of a given project varies depending on the type of equipment in use, how many pieces of equipment are operating at any one time, the proximity of the equipment to a noise receptor, and the duration of equipment use. Estimates of combined construction and demolition noise levels for the proposed project were based on reference noise levels from the Federal Highway Administration (FHWA) roadway construction noise model,[5] the FTA general assessment construction noise analysis method,[6] and information provided by the project sponsor. The FTA recommends combining noise levels from the two loudest pieces of equipment expected to operate simultaneously in roughly the same location. For this analysis, the three loudest pieces of equipment expected to operate in a given construction phase were evaluated under the assumption they would operate simultaneously and in roughly the same location on the project site. This approach represents a reasonable worst-case scenario.

The FHWA noise source data used in the construction noise analysis include the A-weighted L_{max} noise levels measured at a distance of 50 feet from the construction equipment as well as the utilization factors for the equipment. The utilization factor is the percentage of time each piece of construction equipment is typically operating at full power and used to estimate L_{eq} values from L_{max} values. For example, the L_{eq} value for a piece of equipment that operates at full power over 50 percent of the time is 3 dB less than the L_{max} value.[7]

[5] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

[6] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed April 26, 2022.

[7] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

An initial screening analysis was conducted to determine which subphases of project construction would require the use of the loudest equipment. It was determined that the Structural Concrete phase would use the loudest equipment. Combined L_{eq} noise levels from the three loudest pieces of equipment for this phase (e.g., two laser screeds and a gradall) are assessed to estimate reasonable worst-case combined noise levels from daytime project construction activities. Overall construction noise is analyzed below to determine if it would result in substantial temporary increases in noise that are not in compliance with applicable local regulations (e.g., timing restrictions in the City Code). Note that no nighttime construction is proposed for the project, so the construction noise analysis is focused on the potential for daytime construction noise impacts to occur.

6.1.2 Construction Haul Truck Noise

Construction haul truck noise was also considered in the analysis based on the estimated reasonable worst-case daily construction haul truck trips. According to the project applicant, up to 225 round-trip truck trips (or 450 total one-way truck trips to and from the project site) could occur on a reasonable worst-case construction day. Haul trucks would use US-101, exit at Holly Street, and turn north onto Shoreway Road to access the project site. A total of 450 one-way truck trips were added to the Existing ADT volumes for these roadway segments to create an "Existing plus Haul Truck" traffic scenario. Existing traffic noise levels were then compared to Existing plus Haul Truck traffic noise levels to estimate the potential haul truck-related increase in noise along these segments. Should a 3-dB, or "barely perceptible" increase in noise occur as a result of project haul trucks, haul truck noise impacts would be considered significant along that roadway segment. Due to its proximity to US 101, the haul truck discussion is also informed by actual noise levels using collected measurement data, to provide a more accurate representation of how haul truck noise would impact nearby noise-sensitive land uses.

6.1.3 Operational Noise

Operational Traffic Noise

Traffic noise levels were modeled for the following scenarios to determine if direct and cumulative noise impacts associated with Project-related increases in traffic would occur.

- Baseline (existing) conditions,
- Baseline (existing) plus-Project conditions,
- Cumulative no-Project conditions, and
- Cumulative plus-Project condition.

Traffic noise modeling was conducted using a spreadsheet based on the FHWA Traffic Noise Model, version 2.5. This spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway, based on the traffic volume, roadway speed, and vehicle mix for each roadway segment. Average daily traffic volumes, roadway speeds, and vehicle mix percentages (i.e., the proportion of automobiles, trucks, buses, and other vehicles) provided by Hexagon Transportation Consultants, Inc. (included in Appendix A) were used to model traffic noise levels with and without project implementation along the roadways in the vicinity of the project site. Traffic noise was evaluated in terms of how project-related traffic noise increases could affect existing noise-sensitive land uses in the project vicinity.

Stationary Equipment

Mechanical Heating, Cooling and Ventilation Equipment

The primary operational noise sources associated with the project would be mechanical equipment, such as ventilation fans and heating and cooling equipment on the roof, and equipment located in equipment rooms of the project buildings.

To evaluate the noise levels that would be generated by these noise sources, acoustical data (i.e., noise levels) for these items were derived from published literature and expert agencies, and general equipment information provided by the project applicant. Modeling was conducted to estimate noise from individual and combined equipment, based on estimated locations of project equipment as provided by the project applicant. Estimated noise levels are compared to the allowable noise levels in the City of Belmont.

The project also includes the installation of five diesel emergency generators (four 1,250 kW generators and one 500 kW generator). Although generator noise is typically considered exempt in the event of an actual emergency, noise during the testing of a potential emergency generator is evaluated. Estimated noise levels from the proposed project generators were compared to the allowable noise levels in the City of Belmont.

6.1.4 Construction Vibration

Building/Structure Damage

The operation of heavy-duty construction equipment can generate localized ground-borne vibration at buildings adjacent to the construction areas. Ground-borne vibration rarely causes damage to normal buildings. However, a structure's susceptibility to vibration-induced damage depends on its age, condition, distance from the vibration source, and the vibration level.

Construction-related vibration resulting from the proposed project was analyzed using data and modeling methodologies provided by Caltrans' *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). This guidance manual provides typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance. Table 10 provides the PPV levels of construction equipment expected to be used for the proposed project; the levels are provided for a reference distance of 25 feet. All of the analyzed equipment is classified as continuous/frequent intermittent vibration sources. The PPV vibration levels for analyzed equipment were calculated using methods provided in Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2020).

Table 10. Construction Equipment Vibration Levels

Equipment Item	Reference PPV at 25 feet, in/sec [a]
Vibratory roller	0.210
Auger Drill	0.089
Large bulldozer [b]	0.089
Loaded trucks [c]	0.076
Small bulldozer [d]	0.003

Source: California Department of Transportation. 2020. Transportation and Construction Vibration Guidance Manual. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.
[a] Obtained from Caltrans 2020.
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of a dump truck and water truck.
[d] Considered representative of smaller equipment such as small a backhoe and front-end loader.

The following equation from the guidance manual was used to estimate the change in PPV levels over distance:

$$PPV_{rec} = PPV_{ref} \times (25/D)^{n}$$

where PPV_{rec} is the PPV at a receptor; PPV_{ref} is the reference PPV at 25 feet from the equipment; D is the distance from the equipment to the receiver, in feet; and n is a value related to the vibration attenuation rate through ground (the default recommended value for n is 1.5). This equation was used to estimate the PPV at each of the closest vibration-sensitive receivers based on an estimated worst-case (closest) distance between sources and receivers.

Annoyance/Sleep Disturbance

Regarding the potential for annoyance-related vibration impacts to occur, residential land uses are considered to be most sensitive to vibration during nighttime hours when people generally sleep. School land uses are considered to be somewhat sensitive during daytime hours, as well. Should strongly perceptible vibration levels (PPV of 0.1 inch per second [in/sec], per the Caltrans Guidelines for Vibration Annoyance Potential) occur at nearby residential land uses during nighttime hours, sleep disturbance could occur. Should strongly perceptible vibration levels occur at a school land use during daytime hours, annoyance-related vibration impacts could also occur. As shown in Table 6, vibration generated by continuous or frequent intermittent sources, such as construction activities, is considered to be strongly perceptible if the PPV vibration level is in excess of 0.1 in/sec.

6.2 Results

6.2.1 Construction Noise

The proposed project would consist of the following construction phases: 1) Demolition, site clearing, shoring, and mass excavation; 2) Structural concrete; 3) Building construction; 4) Building exterior; 5) Building interior and elevators; 6) On-site improvements, and; 7) Off-site improvements. Section

15.102(d) of Article VIII (Noise Control) of the City Code states construction activities may occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except holidays, and 10:00 a.m. to 5:00 p.m. on Saturdays. The project applicant has confirmed that construction activities would occur only during these daytime hours, during which time there are no applicable quantitative noise criteria in the City.

Typical equipment that would be used during project construction includes concrete pumps, cranes, excavators, backhoes, etc. Reasonable worst-case construction noise levels were estimated by combining the three loudest pieces of equipment most likely to be used during the construction phases. Combining the noise level from the three loudest pieces of equipment, and assuming all three are all operating in close proximity near the closest off-site sensitive receptor, results in a reasonably representative worst-case noise level for project construction activities. This is the general approach recommended by the Federal Transit Administration, with a slight modification to make the analysis methodology more conservative (e.g., using the three loudest pieces of equipment rather than two).

At the nearest land use that could be conceivably considered sensitive to noise (i.e. a hotel 100 feet northwest of the Project site), modeled noise levels from project construction phases range from 78 to 83 dBA L_{eq} using the analysis method described above. Based on the equipment list provided by the project applicant, the Structural Concrete construction phase is expected to be the loudest. The three loudest equipment expected to be used during this phase include two laser screeds and a gradall. At a distance of 100 feet from the project site, where the hotel is located, noise during the Structural Concrete phase could result in noise levels of 83 dBA L_{max} and 80 dBA L_{eq}. At the nearest residential land uses 560 feet away from the Project site, noise levels would be 68 dBA L_{max} and 65 dBA L_{eq}; however, as noted above, the residential area is adjacent to US-101 and thus the project construction noise would likely be less noticeable due to the freeway noise. Modeled noise level results for the Structural Concrete construction phase are presented in Table 11, below.

Table 11. Reasonable Worst-Case Construction Noise, Demolition/Site Clearing/Shoring/Mass Excavation(L_{max} and L_{eq})

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	L_{eq} Sound Level (dBA)
Construction Condition: Structural Concrete			
Source 1: Laser Screed - Sound level (dBA) at 50 feet =	85	50%	82
Source 2: Laser Screed - Sound level (dBA) at 50 feet =	85	50%	82
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79
Calculated Data			
All Sources Combined – L_{max} sound level (dBA) at 50 feet =			89 L_{max}
All Sources Combined – L_{eq} sound level (dBA) at 50 feet =			86 L_{eq}

Distance between Source and Receiver (feet)	Geometric Attenuation (dB)	Calculated L_{max} Sound Level (dBA)	Calculated L_{eq} Sound Level (dBA)
25	6	95	92
50	0	89	86
100	**-6**	**83**	**80**
200	-12	77	74

Source Data:		Maximum Sound Level (dBA)	Utilization Factor	L_{eq} Sound Level (dBA)
300	-16	74	70	
400	-18	71	68	
500	-20	69	66	
560	**-21**	**68**	**65**	
700	-23	66	63	
800	-24	65	62	
900	-25	64	61	
1000	-26	63	60	

Source: Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.
Notes:

- Geometric attenuation based on a 6 dB per doubling of distance.
- This calculation does not include the effects, if any, of local shielding or ground attenuation from walls, topography, or other barriers that may reduce sound levels further.
- Noise levels are based on source noise levels from the FHWA Roadway Construction Noise Model.
- **Bold** denotes distance and sound levels from the project site to nearest sensitive receivers. 100 foot distance = nearest hotel; 560 foot distance = nearest residential land uses.

Although temporary noise increases during daytime hours would occur during all phases of project construction, construction noise would be limited to the daytime hours when no numerical City noise criteria apply. Therefore, construction for the project would comply with local applicable construction criteria set forth in the City Code.

Based on the values in Table 11, the combined noise level could be 83 dBA L_{eq} and 86 dBA L_{max} at the hotel. Noise at the nearest residences would be 65 dBA L_{dn} and 68 dBA L_{max} At the hotel, noise levels range from 67 to 71 dBA L_{dn}, based on the data shown in Table 4; consequently, construction noise levels of 83 to 86 dBA would be more than 10 dB greater than the existing noise levels. Such an increase could be considered a substantial increase to people temporarily residing at the hotel. ICF recommends the project implement the following measure to reduce short term construction noise.

Prepare and Implement a Construction Noise Control Plan. The applicant shall develop a set of site-specific noise attenuation measures. Prior to commencement of construction activities, the applicant shall submit the construction noise control plan to the City for review and approval. Noise attenuation measures shall be identified in the plan and implemented to reduce noise levels to the greatest extent feasible. Noise measures may include, but are not limited to, the following:

- Using smaller equipment with lower horsepower or reducing the hourly utilization rate of equipment on the site to reduce noise levels at 50 feet to the allowable level.
- Locating construction equipment as far as feasible from noise-sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Prohibiting gasoline or diesel engines from having unmuffled exhaust systems.

- Not idling inactive construction equipment for prolonged periods (i.e., more than 5 minutes).
- Constructing a solid plywood barrier around the construction site and adjacent to operational businesses, residences, or other noise-sensitive land uses.
- Using temporary noise control blanket barriers.
- Monitoring the effectiveness of noise attenuation measures by taking noise measurements.
- Using "quiet" gasoline-powered compressors or electrically powered compressors and electric rather than gasoline- or diesel-powered forklifts for small lifting.

Construction Haul Truck Noise

Project construction would involve up to 450 one-way haul and vendor truck trips on a worst-case day. Note that during many construction days, there would be fewer than 450 truck trips. However, haul truck noise from a reasonable worst-case day is analyzed to provide a conservative assessment. Based on information from the project applicant, haul trucks would exist US-101 at Holly Street and turn north on Shoreway Road to access the project site. Trucks are also expected to use the same route in reverse when leaving the project site. The temporary addition of up to 450 haul truck trips per day on this route has been analyzed to determine if hauling activity would result in substantial increases to the ambient noise levels at nearby noise-sensitive uses. The City Code does not include a specific threshold pertaining to construction haul truck noise. Therefore, anticipated daily haul truck noise was assessed to determine if a 3-dB increase (considered to be a "barely perceptible" increase) over existing traffic noise levels would occur.

Modeling was conducted to estimate average daily traffic noise levels with and without the addition of haul truck trips (e.g., a comparison noise from "baseline" to the "baseline plus haul rucks" conditions). Table 12 shows estimated traffic noise levels along the roadway segments under "Baseline" and "Baseline plus Haul Truck Noise" conditions based on the assumptions described above.

Table 12. Existing and Existing plus Haul Truck Noise Levels

Roadway	Segment	Truck Trips on Segment (per day)	Modeled 2021 Baseline Traffic Noise (dBA L_{dn})	2021 Baseline + Haul Truck Noise (dBA L_{dn})	Delta (dBA L_{dn})[1]
Shoreway Road	South of Marine Parkway	450	61.2	65.2	4.0
Shoreway Road	North of Cormorant Drive	450	60.8	64.2	3.4
Shoreway Road	South of Cormorant Drive	450	61.0	64.3	3.3
Shoreway Road	North of Holly Street	450	61.3	65.3	4.0

[1] This table only includes traffic on Shoreway Road and does not account for the influence from US-101. The actual noise levels on Shoreway Road, based on LT-2 from Table 4, are greater than both the baseline and baseline + haul truck noise levels. The discussion below provides additional context on this assessment.

As shown in Table 12, the temporary increases in haul truck activity would cause noise increases on Shoreway Road that would be greater than 3-dB, or "barely perceptible," increase in traffic noise. Additional context needs to be included, however, because Shoreway Road is directly adjacent to US-101 and is heavily influenced by noise from that roadway. The baseline noise levels modeled above (60.8 – 61.3 dBA L_{dn}) only account for vehicles on Shoreway Road. Actual noise levels are higher, because US-101 noise is an adjacent major freeway. Noise levels from US-101 along Shoreway Road can be partially informed by referring to the data for long-term measurement site LT-2 from Table 4, which are 69 – 71 dBA L_{dn}. The measurement for LT-2 was conducted approximately 200 feet away from Shoreway Road; consequently, the noise levels adjacent or in close proximity to Shoreway Road (i.e., 50 feet) would be higher than 69 – 71 dBA L_{dn}, because the noise from US-101 would be even more predominant.

As such, noise levels along Shoreway Road are louder than 69 – 71 dBA L_{dn} due to the influence of US-101, even though the modeled noise level that only accounts for Shoreway Road traffic show values of 60.8 – 61.3 dBA L_{dn}. Thus, the increases shown above in Table 12 do not account for US-101 noise, and those increases would not likely be noticeable to land uses along Shoreway Road. The actual measured noise levels at LT-2 are louder than the modeled haul truck noise level shown in Table 12, which indicates that there would not be a noticeable increase on Shoreway Road. Therefore, noise effects from construction haul truck activity would not be considered substantial.

6.2.2 Operational Noise

Operational Traffic Noise

Once operational, the project would result in an increase in traffic in the vicinity of the project. Project-specific traffic data, including average daily traffic volumes, roadway speeds, and vehicle mix percentages (i.e., the proportion of automobiles, trucks, buses, and other vehicles) were provided by Hexagon. Modeling was conducted for Existing and Existing plus Project conditions to estimate

traffic noise increases resulting from project operation along roadway segments in the project vicinity. Cumulative No Project and Cumulative plus Project scenarios were also modeled for informational purposes (although a cumulative analysis is not included in this report); the full modeling results are presented in Appendix A.

When assessing traffic noise impacts, the following thresholds are applied to determine the significance of project-related traffic noise increases:

1. An increase of more than 5 dBA is considered a significant traffic noise increase, regardless of the existing ambient noise level; and
2. In places where the existing or resulting noise environment is "conditionally acceptable," "normally unacceptable," or "clearly unacceptable," based on the City Land Use Compatibility Guidelines, any noise increase greater than 3 dBA is considered a significant traffic noise increase.

According to the General Plan Noise Element, a noise level of up to 65 dBA L_{dn} is considered normally acceptable for multi-family residential land uses, and 60 dBA L_{dn} is considered normally acceptable for single-family residential land uses.

Traffic noise modeling was conducted using a spreadsheet based on the FHWA Traffic Noise Model, version 2.5. This spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway, based on the traffic volume, roadway speed, and vehicle mix that is predicted to occur under each condition. Traffic noise was evaluated in terms of how project-related traffic noise increases could affect existing noise-sensitive land uses in the project vicinity. Refer to Table 13 for the traffic noise modeling results.

Table 13. Modeled Traffic Noise Levels

Roadway	Segment Location	2021 Baseline dBA L_{dn}	2021 Baseline plus Project dBA L_{dn}	Change (dB)
Shoreway Road	North of Marine Parkway	59.3	59.3	0.0
Shoreway Road	South of Marine Parkway	61.2	63.6	2.3
Shoreway Road	North of Cormorant Drive	60.8	61.5	0.7
Shoreway Road	South of Cormorant Drive	61.0	61.5	0.6
Shoreway Road	North of Holly Street	61.3	61.9	0.5
Shoreway Road	South of Holly Street	58.7	58.8	0.1
Marine Parkway	East of Shoreway Road	67.4	67.5	0.0
Marine Parkway	West of Shoreway Road	68.4	68.8	0.4
Cormorant Drive	East of Shoreway Road	55.7	57.6	1.8
Holly Street	East of Shoreway Road	68.6	68.6	0.0
Holly Street	West of Shoreway Road	69.6	69.7	0.1

Refer to Appendix A for the complete traffic noise modeling results, including modeling results for the Cumulative no Project and Cumulative Plus Project condition (which are not used in this analysis).
Note: Modeled noise levels at a fixed distance of 50-feet from the roadway centerline.

As shown in Table 13, modeling demonstrated that noise levels at roadway segments near the project site would increase by a maximum of 2.3 dB as a result of project operation. As described previously, a 3-dB increase is considered barely noticeable and would not constitute a significant increase in noise. An increase of 2.3 dB would not be considered substantial based on the thresholds defined previously. Therefore, project-related traffic noise increases would not be considered substantial.

Stationary Noise Sources

Heating, Cooling and Ventilation Equipment Noise

The proposed project would involve the use of HVAC systems and equipment. Although project equipment is not yet finalized, some equipment is expected to be located on the roofs of both buildings, while HVAC equipment for the parking garage will be located in internal equipment rooms. All equipment will be designed, selected and operated such that all property line noise ordinance requirements will be complied with.

On the two buildings, the roof area of the buildings are expected to consist of four direct outside air supply air handling units, two quad-sets of exhaust fans, a general exhaust air fan, and a stairwell pressurization fan. Additionally, there will be a central electric chilled water plant, consisting of two centrifugal chillers, one multi-cell cooling tower, and chilled and condenser water pumps; and a central natural gas-fired condensing boiler plant, consisting of eight heating hot water boilers, and heating hot water pumps.

All of the roof-mounted equipment noted above would be located behind a screen. Noise from equipment located behind a screened enclosure may be reduced slightly by the screen, but is typically not substantially reduced unless the screen is solid with no holes or gaps. Since details of the screen are not known at this time (and because it may be perforated), a reduction is not applied to noise sources located on the roof behind the screened enclosure.

Section 15-102(c) of the Belmont City Code establishes daytime and nighttime noise limits that apply to stationary sources of noise. Daytime hours are considered to be 8:00 a.m. to sunset on weekdays and 10:00 a.m. to sunset on Saturday, Sunday, and holidays. Nighttime hours are considered to be hours outside of the daytime hours defined above. When measuring noise from the receiving sensitive property, daytime noise is limited to 65 dBA and nighttime noise is limited to 55 dBA. Section 15-102(e) states that noise from powered equipment must meet the previously stated noise thresholds of section 15-102(c). Use of powered equipment is limited to 8:00 a.m. to 7:00 p.m., Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and holidays. Additionally, Table 7-3 in the City of Belmont General Plan (Table 9 in this report) provides standards for noise from stationary, non-transportation noise sources. During daytime hours, stationary source noise is limited to 50 dBA L_{eq} and 70 dBA L_{max} at the nearest noise-sensitive property. During nighttime hours, stationary source noise is limited to 45 dBA L_{eq} and 65 dBA L_{max}.

Air handling units and standard HVAC package units, such as the air handlers proposed for the Project, can produce sound levels in the range of about 70 to 75 dBA at 50 feet[8], depending on the size of the unit. A typical 100-horsepower propeller-driven cooling tower generates noise levels of

[8] Hoover and Keith. 2000. *Noise Control for Buildings, Manufacturing Plants, Equipment, and Products*. Houston, TX.

approximately 74 dBA at 50 feet.[9] Pumps can generate noise levels at 50 feet of approximately 81 dBA, while exhaust and ventilation fans can generate noise levels of approximately 79 dBA at 50 feet.[10] Boilers, such as the condensing boiler that is included in the project plans, can produce noise levels of approximately 67 dBA at 50 feet, and, lastly, a heat pump chiller can produce noise levels of up to 71 dBA at 50 feet[11].

If all of the equipment listed above were to operate simultaneously, which is unlikely to occur frequently or at all, the combined noise level would be 84 dBA, assuming the upper end of the noise levels listed above. This estimate of 84 dBA is an approximation, and the actual noise level could be higher or lower depending on the actual equipment models used, the type of screen and/or shielding present, intervening structures or barriers, and the individual quantities of equipment (i.e. multiple pumps).

The nearest noise-sensitive land use is located approximately 100 feet from the roofs of the buildings 1 and 2.[12] At this distance, would would attenuate by 8 dB from geometric attenuation alone, resulting in an approximate noise level of 78 dBA. The roof screen would likely cause additional attenuation to occur. Although there are many unknown variables, it is conservatively assumed that equipment noise levels could exceed the City's allowable levels at the nearest sensitive uses, because an estimated level of 78 dBA would exceed the City code limits and General Plan criteria. ICF recommends the project implement the following measure to reduce operational noise, which would ensure that noise from HVAC equipment [redacted] compliance with all applicable limits.

Reduce Noise from Project Mechanical Equipment

To reduce potential noise effects resulting from project heating, cooling, and ventilation equipment as well as project emergency generators at the proposed project, a noise analysis shall be prepared to estimate the actual noise levels of project-specific equipment once the equipment models and design features to attenuate noise have been selected. The analysis shall be conducted prior to the issuance of building permits and shall be prepared by persons qualified in acoustical analysis and/or engineering, demonstrating with reasonable certainty that the mechanical equipment selected for the project and the attenuation features incorporated into project design would not result in an exceedance of the applicable City noise standards of 45 dBA L_{eq} and 65 dBA L_{max} during the nighttime and 55 dBA L_{eq} and 70 dBA L_{max} during the daytime.

Options to reduce noise from heating and cooling equipment include enclosing equipment in mechanical equipment rooms, shielding equipment with mechanical screens at least as tall as the equipment, and selecting quieter equipment models.

All recommendations from the acoustical analysis necessary to ensure that noise sources meet the above standards shall be incorporated into the building design and operations.

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[9] Ibid

[10] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

[11] Hoover and Keith. 2000. *Noise Control for Buildings, Manufacturing Plants, Equipment, and Products*. Houston, TX.

[12] The hotel is located approximately 100 feet from the boundary of the project site; however, the buildings roofs are set-back within the project site.

Emergency Generator Noise

Emergency generators included in the project could result in the generation of audible noise during testing. Noise from the operation of emergency generators during an emergency is typically exempt from local ordinances. However, even though the testing of emergency generators is a short-term (e.g., 30 minutes) and intermittent process (usually once per month), noise resulting from generator testing must comply with local noise limits for operational equipment noise. The project would include five emergency generators, all of which would be located outdoors. Two emergency generators would be located at the southern façade of Building 1 (between Building 1 and the proposed parking garage), while two other emergency generators would be in the northern corner of the project site, between Building 2 and Sem Lane. The fifth emergency generator would be between the proposed parking garage and US-101.. The generator testing for the project would be conducted monthly for 30 minutes. In the event of an emergency, generator noise would be considered except from the local noise standards. However, monthly testing activities would need to comply with the applicable local noise criteria.

At the location of the generators, the nearest sensitive land uses would be approximately 400 feet from the Building 1 generators, 150 feet from the Building 2 generators, and 350 feet from the garage generator. Any noise from the generator testing would be attenuated, by about 10 (over 150 feet) to 18 dB (over 400 feet),[13] to the nearest sensitive land uses. Furthermore, there is no direct line of site between the generators and the existing sensitive land uses, because the generators would be located within a walled-generator yard, and there are numerous intervening buildings that would cause additional noise attenuation. Additionally, the hotel and residences are located adjacent to US-101 and are predominantly influenced by the roadway noise. As such, the temporary use of a generator for 30 minutes per generator per month is unlikely to be noticeable at a distance of 150 to 400 feet in areas next to a major freeway with multiple intervening buildings.

Other Operational Noise Sources

The project would also include loading docks that would be located at the southwest corner of building 1 and the northeast corner of building 2. At building 2, the loading dock would be approximately 250 feet from the existing hotel, while, at building 1, the loading dock would be approximately 350 feet from the existing hotel and also 350 feet from the nearest residential land uses. Although some loading and unloading activities of larger trucks may occur, most deliveries are expected to be FedEx and UPS deliveries. The daily activities from UPS and FedEx deliveries would generate noise that would be similar to noise that is currently existing at the site and at the adjacent commercial and industrial land uses. Because loading and unloading noise is typical in the project area, and there are no sensitive receptors in the immediate vicinity of the loading docks, noise effects from this source of noise would not be substantial.

[13] This attenuation value is based on geometric attenuation of 6 dB per doubling of distance for point sources.

6.2.3 Construction Vibration

Damage to Structures

Construction of the proposed project would involve the use of construction equipment that could generate ground-borne vibration. Typical vibration levels associated with heavy-duty construction equipment at a reference distance of 25 feet are shown in Table 10. PPV vibration levels for project-specific equipment at a distance of 25 feet, and at other project-specific distances, are included in Table 14. Note that project construction would not involve the use of pile drivers.

Table 14. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Auger drill	0.089	0.0315	0.0171	0.0111	0.0048
Large bulldozer[a]	0.089	0.0315	0.0171	0.0111	0.0048
Loaded trucks[b]	0.076	0.0269	0.0146	0.0095	0.0041
Small bulldozer[c]	0.003	0.0011	0.0006	0.0004	0.0002

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed April 26, 2022.
[a] Representative of an excavator.
[b] Representative of a dump truck and water truck.
[c] Representative of a backhoe and front-end loader.

The most vibration-intensive types of construction equipment expected to be used for the project are an auger drill, and an excavator (which can generate a vibration level similar to that produced by a large bulldozer). Water trucks, dump trucks, backhoes, and front-end loaders would also be used, but these generate lower vibration levels than a vibratory roller, an auger drill and an excavator.

The potential for structural damage to occur at adjacent or nearby buildings can be evaluated by estimated vibration levels from construction equipment at nearby uses and comparing to appropriate damage criteria. As noted above, construction equipment for the project would operate at distances of 100 feet from the nearest noise-sensitive land use. However, the City of Belmont Corporation Yard is approximately 60 feet from the project site, which is the nearest neighboring building. The buildings at the City's corporation yard are likely best categorized as "Modern industrial/commercial buildings" under the Caltrans Guidelines for vibration-related damage, presented in Table 5 of this report.

Based on an attenuation equation published by Caltrans, and as shown in Table 14, estimated vibration level at a distance of 60 feet from the most vibration-intensive equipment proposed for the project (e.g., an excavator or drill rig) would be approximately 0.02 PPV in/sec. This level of vibration is less than the 0.5 PPV in/sec Caltrans criterion for modern industrial/commercial

buildings.[14] Therefore, vibration-related damage effects would not occur at the corporation yard structures.

Although corporation yard is the closest group of buildings to the project site, other nearby buildings are located further away and would not experience structural damage from vibration. The nearby hotels are also likely best categorized as modern industrial/commercial buildings. The nearest residential buildings are approximately 300 feet away, and, at that distance, vibration from the excavator or drill rig would attenuate to 0.002 PPV in/sec, which is substantially below the damage thresholds for all categories of buildings.

General Plan Policy 7.1-10 requires developers of new development anticipated to generate a substantial amount of vibration during construction to implement mitigation practices to reduce vibration, which can include the following: operating heavy equipment as far as practical from residential uses; using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and using quiet pile driving technology when feasible. These measures may not be applicable to project construction, given that residential uses are located approximately 300 feet from the project site.

Vibration-Related Annoyance

Typically, vibration-related annoyance is considered to be substantial if it is expected to result in sleep disturbance at nearby residences. Should vibration from project construction exceed the Caltrans "strongly perceptible" criterion at residential land uses during nighttime hours, impacts are often considered to be significant. The Caltrans "strongly perceptible" vibration-annoyance criterion is 0.1 PPV in/sec, as indicated in Table 6.

Note that construction activities for the proposed project would only occur during the daytime hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, with no construction proposed for nighttime hours. Therefore, no vibration-related annoyance impacts during nighttime hours, when people typically sleep, would occur. However, this analysis conservatively uses this "strongly perceptible" criterion to assess disturbance during daytime hours at the nearest educational land use. Temporary vibration-related annoyance effects to non-sensitive land uses, such as the corporation yard, are not generally considered to be substantial. Vibration-related annoyance at the hotel that is 100 feet from the project site could be considered substantial if vibration levels exceed the "strongly perceptible" threshold.

Although construction activities are not proposed for nighttime hours, when residential land uses are considered to be most sensitive to vibration-related annoyance, vibration levels at the hotel are estimated. The vibration level generated by an excavator or drill rig at 100 feet would be approximately 0.01 PPV in/sec. This vibration level is below the Caltrans "Strongly perceptible" criterion for vibration-related annoyance of 0.1 PPV in/sec.[15] The vibration level at the nearest residences, located approximately 300 feet from the project site, would be even lower. Therefore,

[14] California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.

[15] California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022

daytime construction vibration levels would be below the strongly perceptible criterion at the nearest residential land uses, and the project would not cause expose people to substantial groundborne vibration during construction.

Noise From Public Airport or Private Airstrip Uses

The closest public airport to the project site is the San Carlos Airport, which is located approximately 0.8 miles north of the project site. This airport is within a 2-mile radius of the project site, and the 2015 Airport Land Use Compatibility Plan for the San Carlos Airport has been reviewed.[16] The project site is not located within the 60 CNEL contour for this airport based on the existing conditions from 2013 in the Compatibility Plan. Regardless of the project site's locations to the existing airport contours, based on the Compatibility Plan, commercial land uses are considered compatible with all noise levels. Additionally, there are no private airstrips near the project site. Therefore, the proposed project would not expose people working or residing in the project area to excessive noise levels resulting from either a public or public use airport or private airstrip.

[16] City/County Association of Governments of San Mateo County. Redwood City, California, *Comprehensive Airport Land Use Compatibility Plan For the Environs of San Carlos Airport*. Exhibit 4-1. Available: https://ccag.ca.gov/wp-content/uploads/2015/06/Draft-Final-ALUCP-San-Carlos-Airport-062515.pdf. Accessed: May 5, 2022.

Appendix A

Noise Measurements, Data, and Modeling Results

Appendix A. Noise Measurements, Data, and Modeling Results

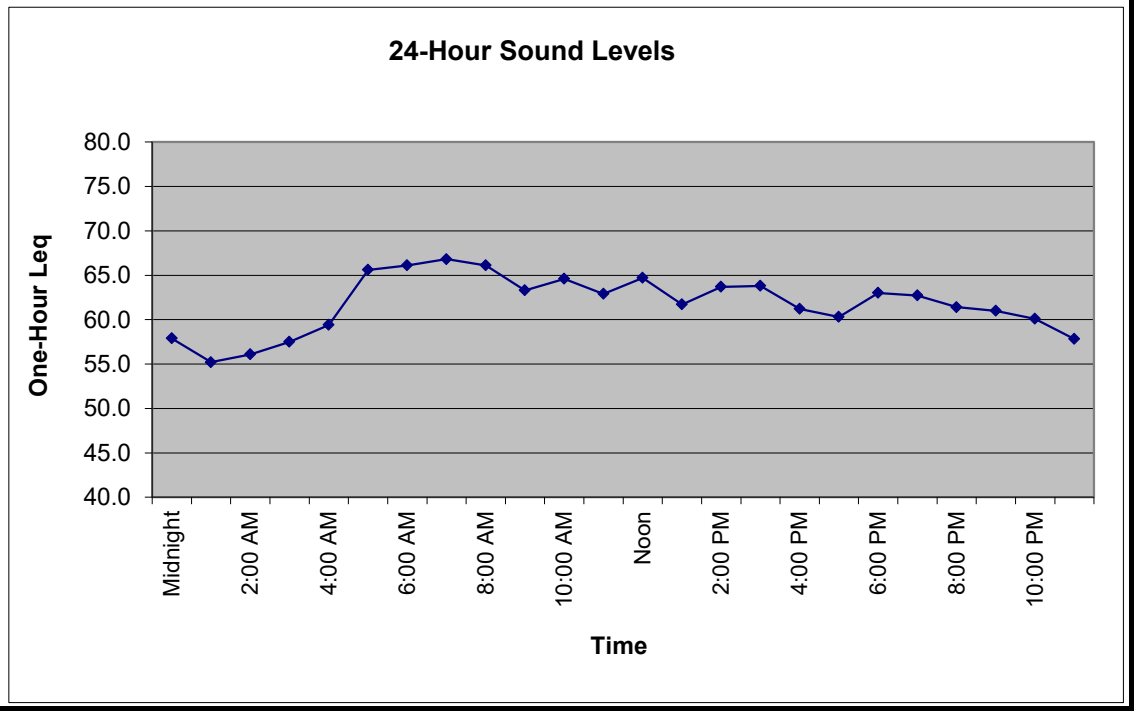
Noise Measurement Data

Noise Appendix

Long Term Measurement Data

Ldn/CNEL Calculation Spreadsheet

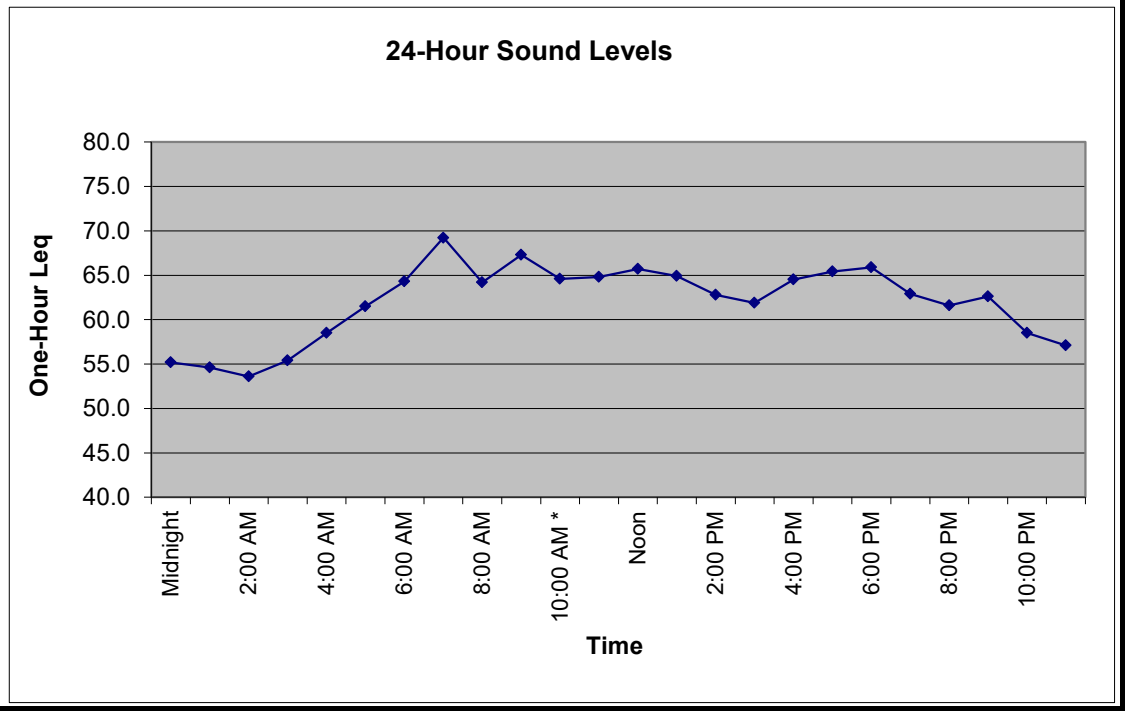
Project:	1301 Shoreway Road		Date:	3/23/2022	Analyst:	Schumaker, N		
Location:	LT-1							
	Wednesday				Worst Hour	Ldn minus	CNEL minus	
Time	3/23/2022	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	57.9	62.8	68.1	68.4	66.8	1.3	0.3	Evening
1:00 AM	55.2		1.3	1.6				Night
2:00 AM	56.1							
3:00 AM	57.5							
4:00 AM	59.4							
5:00 AM	65.6							
6:00 AM	66.1							
7:00 AM	66.8							
8:00 AM	66.1							
9:00 AM	63.3							
10:00 AM	64.6							
11:00 AM	62.9							
Noon	64.7							
1:00 PM	61.7							
2:00 PM	63.7							
3:00 PM	63.8							
4:00 PM	61.2							
5:00 PM	60.3							
6:00 PM	63.0							
7:00 PM	62.7							
8:00 PM	61.4							
9:00 PM	61.0							
10:00 PM	60.1							
11:00 PM	57.8							



Ldn	68.1
Worst Hour Leq	66.8
Lowest Hour LEQ	55.2
12-hour Leq	63.9

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N		
Location:	LT-1							
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	55.2	63.6	67.0	67.4	69.2	-2.2	0.4	Evening
1:00 AM	54.6		-2.2	-1.8				Night
2:00 AM	53.6							
3:00 AM	55.4							
4:00 AM	58.5							
5:00 AM	61.5							
6:00 AM	64.3							
7:00 AM	69.2							
8:00 AM	64.2							
9:00 AM	67.3							
10:00 AM *	64.6							
11:00 AM	64.8							
Noon	65.7							
1:00 PM	64.9							
2:00 PM	62.8							
3:00 PM	61.9							
4:00 PM	64.5							
5:00 PM	65.4							
6:00 PM	65.9							
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11:00 PM	57.1							

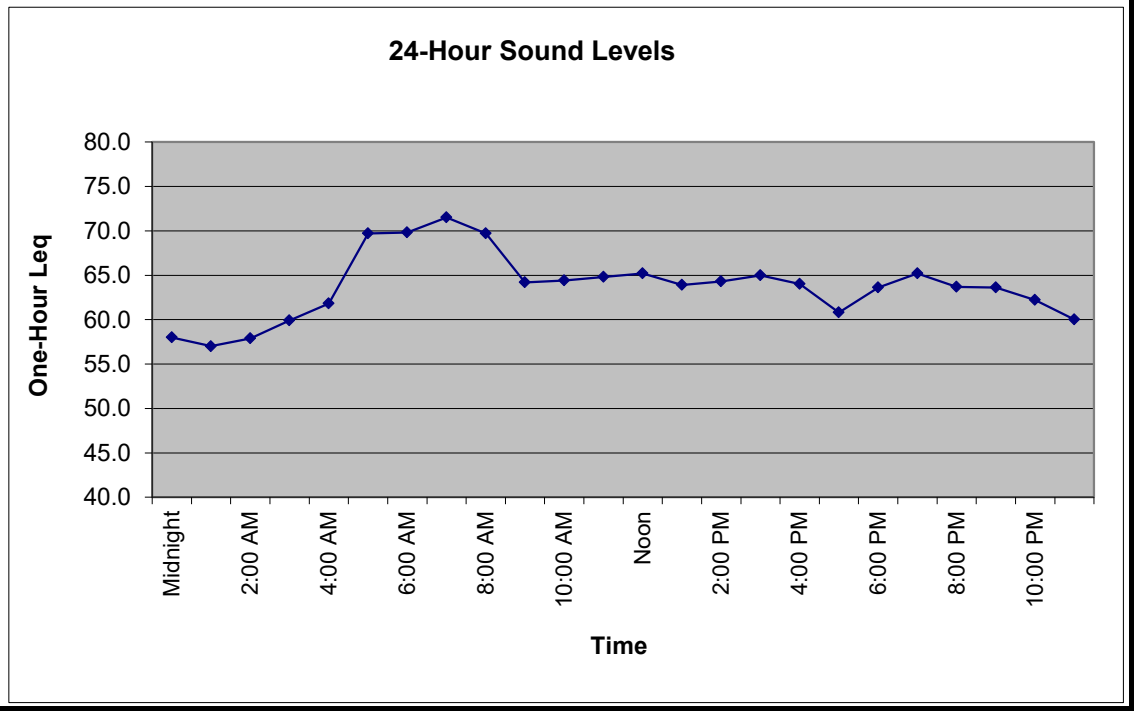


Ldn	67.0
Worst Hour Leq	69.2
Lowest Hour LEQ	53.6
12-hour Leq	65.5

*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

Ldn/CNEL Calculation Spreadsheet

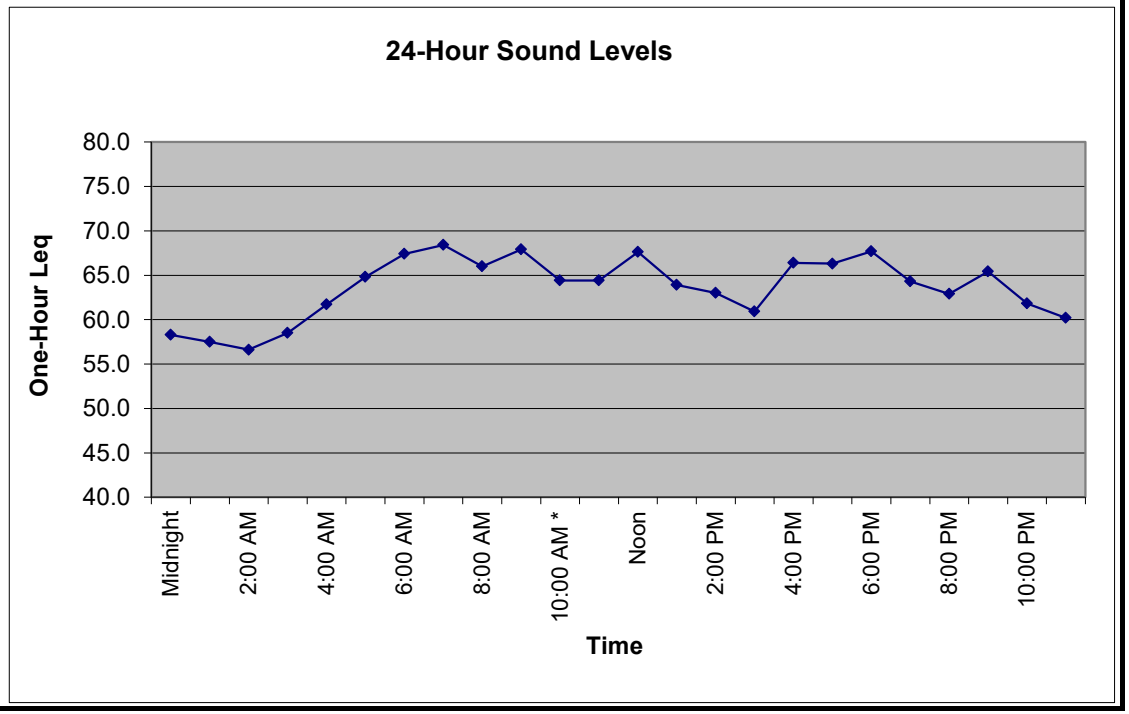
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Location:	LT-2							
	Wednesday				Worst Hour	Ldn minus	CNEL minus	
Time	9/23/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	58.0	65.4	71.2	71.4	71.5	-0.3	0.2	Evening
1:00 AM	57.0		-0.3	-0.1				Night
2:00 AM	57.9							
3:00 AM	59.9							
4:00 AM	61.8							
5:00 AM	69.7							
6:00 AM	69.8							
7:00 AM	71.5							
8:00 AM	69.7							
9:00 AM	64.2							
10:00 AM	64.4							
11:00 AM	64.8							
Noon	65.2							
1:00 PM	63.9							
2:00 PM	64.3							
3:00 PM	65.0							
4:00 PM	64.0							
5:00 PM	60.8							
6:00 PM	63.6							
7:00 PM	65.2							
8:00 PM	63.7							
9:00 PM	63.6							
10:00 PM	62.2							
11:00 PM	60.0							



Ldn	71.2
Worst Hour Leq	71.5
Lowest Hour LEQ	57.0
12-hour Leq	66.2

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N		
Location:	LT-2							
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	58.3	64.7	69.3	69.7	68.4	0.9	0.4	Evening
1:00 AM	57.5		0.9	1.3				Night
2:00 AM	56.6							
3:00 AM	58.5							
4:00 AM	61.7							
5:00 AM	64.8							
6:00 AM	67.4							
7:00 AM	68.4							
8:00 AM	66.0							
9:00 AM	67.9							
10:00 AM *	64.4							
11:00 AM	64.4							
Noon	67.6							
1:00 PM	63.9							
2:00 PM	63.0							
3:00 PM	60.9							
4:00 PM	66.4							
5:00 PM	66.3							
6:00 PM	67.7							
7:00 PM	64.3							
8:00 PM	62.9							
9:00 PM	65.4							
10:00 PM	61.8							
11:00 PM	60.2							

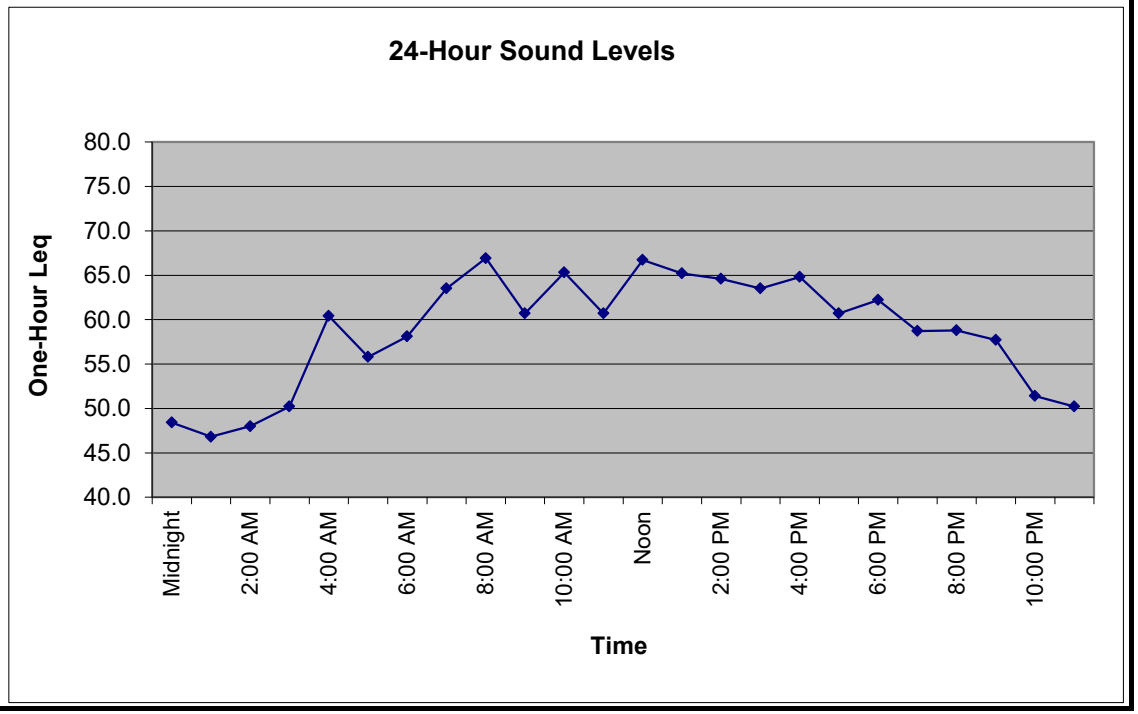


Ldn	69.3
Worst Hour Leq	68.4
Lowest Hour LEQ	56.6
12-hour Leq	66.1

*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

Ldn/CNEL Calculation Spreadsheet

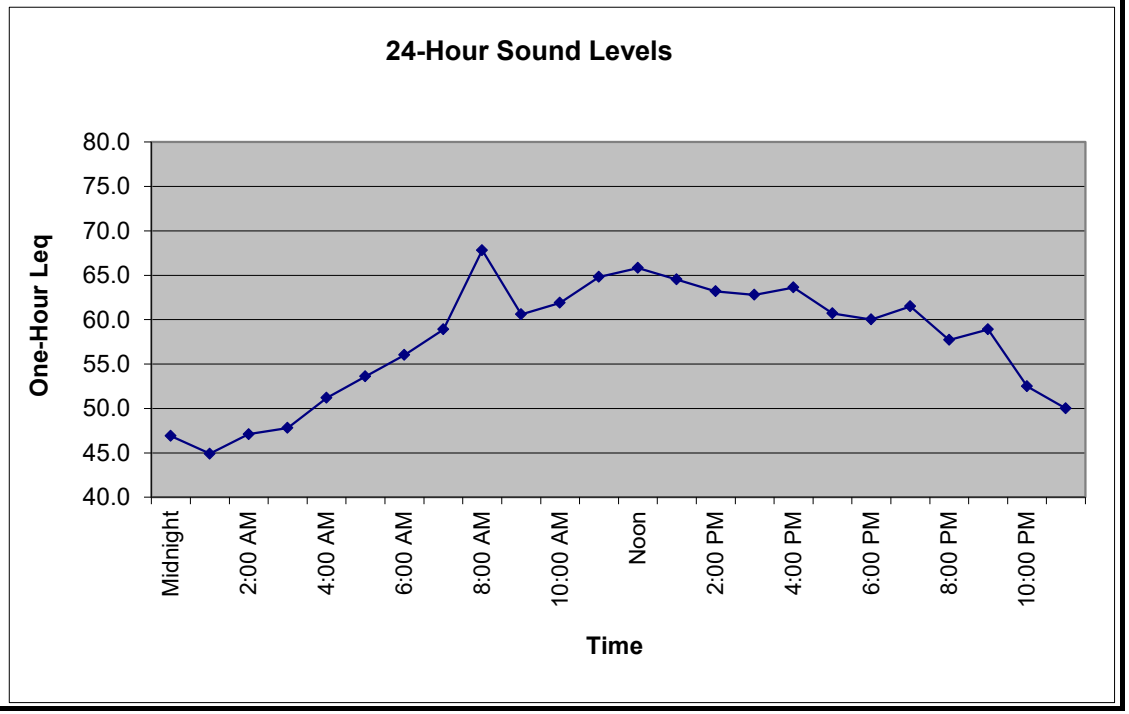
Project:	1301 Shoreway Road		Date:	3/23/2022	Analyst:	Schumaker, N		
Location:	LT-3							
	Wednesday				Worst Hour	Ldn minus	CNEL minus	
Time	3/23/2022	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	48.4	61.8	64.0	64.3	66.9	-2.9	0.3	Evening
1:00 AM	46.8		0.5	0.8				Night
2:00 AM	48.0							
3:00 AM	50.2							
4:00 AM	60.4							
5:00 AM	55.8							
6:00 AM	58.1							
7:00 AM	63.5							
8:00 AM	66.9							
9:00 AM	60.7							
10:00 AM	65.3							
11:00 AM	60.7							
Noon	66.7							
1:00 PM	65.2							
2:00 PM	64.6							
3:00 PM	63.5							
4:00 PM	64.8							
5:00 PM	60.7							
6:00 PM	62.2							
7:00 PM	58.7							
8:00 PM	58.8							
9:00 PM	57.7							
10:00 PM	51.4							
11:00 PM	50.2							



Ldn	64.0
Worst Hour Leq	66.9
Lowest Hour LEQ	46.8
12-hour Leq	64.2

Ldn/CNEL Calculation Spreadsheet

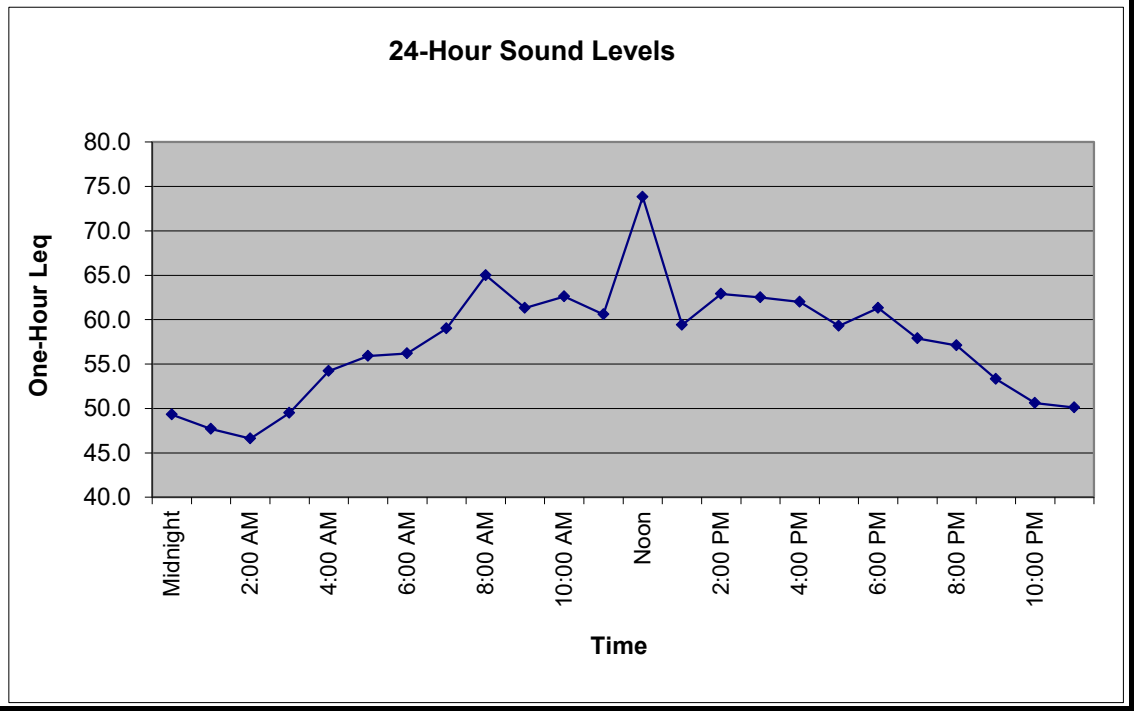
Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N		
Location:	LT-3							
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	46.9	61.2	62.5	63.1	67.8	-5.3	0.6	Evening
1:00 AM	44.9		3.6	4.2				Night
2:00 AM	47.1							
3:00 AM	47.8							
4:00 AM	51.2							
5:00 AM	53.6							
6:00 AM	56.0							
7:00 AM	58.9							
8:00 AM	67.8							
9:00 AM	60.6							
10:00 AM	61.9							
11:00 AM	64.8							
Noon	65.8							
1:00 PM	64.5							
2:00 PM	63.2							
3:00 PM	62.8							
4:00 PM	63.6							
5:00 PM	60.7							
6:00 PM	60.0							
7:00 PM	61.5							
8:00 PM	57.7							
9:00 PM	58.9							
10:00 PM	52.5							
11:00 PM	50.0							



Ldn	62.5
Worst Hour Leq	67.8
Lowest Hour LEQ	44.9
12-hour Leq	63.6

Ldn/CNEL Calculation Spreadsheet

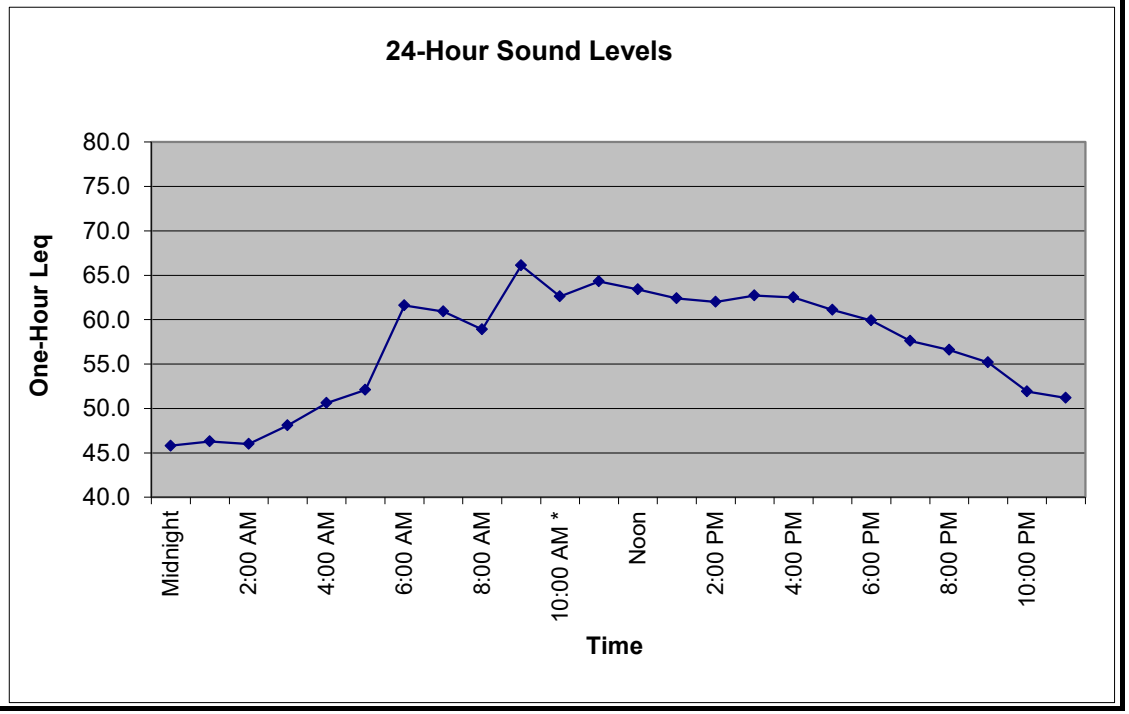
Project:	1301 Shoreway Road		Date:	3/23/2022	Analyst:	Schumaker, N		
Location:	LT-4							
	Wednesday				Worst Hour	Ldn minus	CNEL minus	
Time	3/23/2022	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	49.3	62.6	63.8	64.0	73.8	-10.0	0.2	Evening
1:00 AM	47.7		4.8	5.0				Night
2:00 AM	46.6							
3:00 AM	49.5							
4:00 AM	54.2							
5:00 AM	55.9							
6:00 AM	56.2							
7:00 AM	59.0							
8:00 AM	65.0							
9:00 AM	61.3							
10:00 AM	62.6							
11:00 AM	60.6							
Noon	73.8							
1:00 PM	59.4							
2:00 PM	62.9							
3:00 PM	62.5							
4:00 PM	62.0							
5:00 PM	59.3							
6:00 PM	61.3							
7:00 PM	57.9							
8:00 PM	57.1							
9:00 PM	53.3							
10:00 PM	50.6							
11:00 PM	50.1							



Ldn	63.8
Worst Hour Leq	73.8
Lowest Hour LEQ	46.6
12-hour Leq	65.3

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N		
Location:	LT-4							
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	45.8	60.3	62.8	63.0	66.1	-3.3	0.3	Evening
1:00 AM	46.3		1.9	2.1				Night
2:00 AM	46.0							
3:00 AM	48.1							
4:00 AM	50.6							
5:00 AM	52.1							
6:00 AM	61.6							
7:00 AM	60.9							
8:00 AM	58.9							
9:00 AM	66.1							
10:00 AM *	62.6							
11:00 AM	64.3							
Noon	63.4							
1:00 PM	62.4							
2:00 PM	62.0							
3:00 PM	62.7							
4:00 PM	62.5							
5:00 PM	61.1							
6:00 PM	59.9							
7:00 PM	57.6							
8:00 PM	56.6							
9:00 PM	55.2							
10:00 PM	51.9							
11:00 PM	51.2							



Ldn	62.8
Worst Hour Leq	66.1
Lowest Hour LEQ	45.8
12-hour Leq	62.6

*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

LT-1 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:08:20 AM	11:00:00 AM	0:51:40	Auto	High	Mic	13.36mV/Pa	65.6
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.9
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.7
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.7
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.7
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.8
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.2
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	60.3
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.7
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.4
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	60.1
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.8
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.9
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.2
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	56.1
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.5
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	59.4
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.6
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.1
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.8
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.1
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.3
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.6
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.8
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.7
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.9
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.8
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.9
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.5
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.4
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.9
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.9
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.6
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.6
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	58.5
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.1
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.2
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	54.6
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	53.6
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.4
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	58.5
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.5
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.3
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	69.2
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.2
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	67.3
49	3/25/2022	10:00:01 AM	10:50:55 AM	0:50:54	Auto	High	Mic	13.36mV/Pa	69.2
50	3/25/2022	10:50:59 AM	10:51:03 AM	0:00:04	Auto	High	Mic	13.36mV/Pa	70.2

LT-2 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:16:02 AM	11:00:00 AM	0:43:58	Auto	High	Mic	16.82mV/Pa	67.5
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.8
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.2
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.9
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.3
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.8
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.6
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.2
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.7
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.6
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	62.2
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	60
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57.9
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	59.9
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.8
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.7
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.8
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	71.5
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.7
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.2
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.4
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.4
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.6
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.9
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.9
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	66.4
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	66.3
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.7
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.3
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	62.9
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.4
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.8
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.2
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58.3
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57.5
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	56.6
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58.5
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.7
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.8
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.4
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	68.4
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	66
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.9
49	3/25/2022	10:00:02 AM	10:56:26 AM	0:56:24	Auto	High	Mic	16.82mV/Pa	69.4

LT-3 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:39:39 AM	11:00:00 AM	0:20:21	Auto	High	Mic	16.63mV/Pa	70.4
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	66.7
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.2
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.6
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.5
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.8
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	62.2
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.7
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.8
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	57.7
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	51.4
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50.2
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	48.4
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	46.8
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	48
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50.2
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.4
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	55.8
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.1
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.5
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	66.9
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.3
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.8
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.8
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.5
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.2
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	62.8
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.6
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	61.5
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	57.7
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.9
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	52.5
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	46.9
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	44.9
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	47.1
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	47.8
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	51.2
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	53.6
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	56
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.9
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	67.8
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.6
49	3/25/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	61.9
50	3/25/2022	11:00:00 AM	11:16:55 AM	0:16:55	Auto	High	Mic	16.63mV/Pa	67.7

LT-4 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:32:15 AM	11:00:00 AM	0:27:45	Auto	High	Mic	17.41mV/Pa	70.6
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	60.6
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	73.8
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.4
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.9
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.5
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.3
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.3
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.9
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.1
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	53.3
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.6
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.1
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	49.3
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	47.7
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46.6
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	49.5
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	54.2
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	55.9
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	56.2
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	59
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	65
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.3
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.6
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	64.3
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	63.4
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.4
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.7
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.5
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.1
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.9
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.6
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	56.6
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	55.2
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	51.9
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	51.2
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	45.8
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46.3
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	48.1
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.6
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	52.1
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.6
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	60.9
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	58.9
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	66.1
49	3/25/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	73.7
50	3/25/2022	11:00:01 AM	11:10:25 AM	0:10:24	Auto	High	Mic	17.41mV/Pa	67.1
51	3/25/2022	11:11:38 AM	11:11:59 AM	0:00:21	Auto	High	Mic	17.41mV/Pa	66

Noise Appendix

Short Term Measurement Data

ST-1 Summary

File Name on Meter	831_Data.026.s
File Name on PC	831_0003785-20220323 101000-831_Data.026.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 10:10:00
Stop	2022-03-23 10:25:00
Duration	00:15:00.4
Run Time	00:15:00.4
Pause	00:00:00.0
Pre-Calibration	2022-03-23 10:01:32
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	20.0 dB
Overload	125.1 dB

	A	C	Z
Under Range Peak	**57.6**	54.6	59.6 dB
Under Range Limit	**24.8**	25.6	33.6 dB
Noise Floor	15.7	16.5	21.9 dB

Results

L_{Aeq}	59.4	
LAE	89.0	
EA	88.073 µPa²h	
$L_{Apeak\ (max)}$	2022-03-23 10:13:11	91.3 dB
L_{ASmax}	2022-03-23 10:20:01	75.6 dB
L_{ASmin}	2022-03-23 10:11:21	47.7 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	3	53.4 s
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Apeak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Apeak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Apeak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	59.4	59.4	-99.9	59.4	59.4	-99.9

L_{Ceq}	69.7 dB	
L_{Aeq}	59.4 dB	
L_{Ceq} - L_{Aeq}	10.3 dB	
L_{ALeq}	60.9 dB	
L_{Aeq}	59.4 dB	
L_{ALeq} - L_{Aeq}	1.4 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	59.4		69.7		74.6	
$L_{S(max)}$	75.6	2022/03/23 10:20:01	87.3	2022/03/23 10:20:01	87.7	2022/03/23 10:20:02
$L_{F(max)}$	77.2	2022/03/23 10:19:59	88.7	2022/03/23 10:20:01	88.8	2022/03/23 10:20:01
$L_{I(max)}$	78.4	2022/03/23 10:13:11	89.1	2022/03/23 10:20:01	90.4	2022/03/23 10:16:11
$L_{S(min)}$	47.7	2022/03/23 10:11:21	63.6	2022/03/23 10:11:25	66.9	2022/03/23 10:12:37
$L_{F(min)}$	46.9	2022/03/23 10:11:25	61.8	2022/03/23 10:11:20	65.1	2022/03/23 10:12:37
$L_{I(min)}$	47.3	2022/03/23 10:11:20	64.5	2022/03/23 10:12:36	68.5	2022/03/23 10:12:38
$L_{Peak(max)}$	91.3	2022/03/23 10:13:11	95.2	2022/03/23 10:20:00	95.3	2022/03/23 10:20:01

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	73.3 dB
LA10.00	57.5 dB
LA33.00	50.8 dB
LA50.00	50.1 dB
LA90.00	48.5 dB
LA99.00	47.9 dB

ST-2 Summary

File Name on Meter	831_Data.027.s
File Name on PC	831_0003785-20220323 114600-831_Data.027.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 11:46:00
Stop	2022-03-23 12:01:00
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2022-03-23 10:35:36
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	20.0 dB
Overload	125.3 dB

	A	C	Z
Under Range Peak	**57.9**	54.9	59.9 dB
Under Range Limit	**24.9**	25.7	33.9 dB
Noise Floor	15.7	16.6	22.0 dB

Results

L_{Aeq}	66.5	
LAE	96.0	
EA	447.448	µPa²h
$L_{Apeak\ (max)}$	2022-03-23 11:55:01	101.0 dB
L_{ASmax}	2022-03-23 11:55:01	87.8 dB
L_{ASmin}	2022-03-23 11:54:28	50.6 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	7	112.0 s
LAS > 85.0 dB (Exceedance Counts / Duration)	1	3.5 s
L_{Apeak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Apeak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Apeak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	66.5	66.5	-99.9	66.5	66.5	-99.9

L_{Ceq}	74.8 dB	
L_{Aeq}	66.5 dB	
L_{Ceq} - L_{Aeq}	8.3 dB	
L_{AIeq}	68.1 dB	
L_{Aeq}	66.5 dB	
L_{AIeq} - L_{Aeq}	1.6 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	66.5		74.8		77.6	
$L_{S(max)}$	87.8	2022/03/23 11:55:01	92.8	2022/03/23 11:55:01	93.0	2022/03/23 11:55:01
$L_{F(max)}$	89.4	2022/03/23 11:55:01	94.4	2022/03/23 11:55:01	94.6	2022/03/23 11:55:01
$L_{I(max)}$	90.0	2022/03/23 11:55:00	95.0	2022/03/23 11:55:01	95.1	2022/03/23 11:55:01
$L_{S(min)}$	50.6	2022/03/23 11:54:28	65.4	2022/03/23 11:54:18	69.3	2022/03/23 11:49:58
$L_{F(min)}$	49.9	2022/03/23 11:54:24	63.5	2022/03/23 11:54:18	67.4	2022/03/23 11:48:37
$L_{I(min)}$	50.5	2022/03/23 11:54:24	66.4	2022/03/23 11:54:17	70.5	2022/03/23 11:49:58
$L_{Peak(max)}$	101.0	2022/03/23 11:55:01	105.7	2022/03/23 11:55:01	105.0	2022/03/23 11:55:01

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	78.5 dB
LA10.00	66.0 dB
LA33.00	58.1 dB
LA50.00	55.0 dB
LA90.00	51.7 dB
LA99.00	50.9 dB

ST-3 Summary

File Name on Meter	831_Data.028.s
File Name on PC	831_0003785-20220323 121301-831_Data.028.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 12:13:01
Stop	2022-03-23 12:28:01
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2022-03-23 12:09:51
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	20.0 dB
Overload	125.1 dB

	A	C	Z
Under Range Peak	**57.7**	54.7	59.7 dB
Under Range Limit	**24.8**	25.7	33.7 dB
Noise Floor	15.7	16.5	21.9 dB

Results

LAeq	67.1		
LAE	96.6		
EA	511.241 µPa²h		
LApeak (max)	2022-03-23 12:27:18	90.4 dB	
LASmax	2022-03-23 12:21:39	75.8 dB	
LASmin	2022-03-23 12:17:22	59.1 dB	
SEA	-99.9 dB		
LAS > 65.0 dB (Exceedance Counts / Duration)	11	793.0 s	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LApeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LApeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LApeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	67.1	67.1	-99.9	67.1	67.1	-99.9

LCeq	76.7 dB	
LAeq	67.1 dB	
LCeq - LAeq	9.6 dB	
LAleq	68.0 dB	
LAeq	67.1 dB	
LAleq - LAeq	0.9 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	67.1		76.7		79.0	
Ls(max)	75.8	2022/03/23 12:21:39	89.6	2022/03/23 12:25:54	90.8	2022/03/23 12:25:53
LF(max)	78.4	2022/03/23 12:15:29	90.8	2022/03/23 12:25:53	93.6	2022/03/23 12:25:48
Ll(max)	80.1	2022/03/23 12:15:29	91.7	2022/03/23 12:25:53	96.3	2022/03/23 12:25:48
Ls(min)	59.1	2022/03/23 12:17:22	71.1	2022/03/23 12:17:20	73.4	2022/03/23 12:14:59
LF(min)	58.5	2022/03/23 12:17:21	69.6	2022/03/23 12:17:19	71.1	2022/03/23 12:25:21
Ll(min)	58.8	2022/03/23 12:17:21	71.5	2022/03/23 12:17:19	74.0	2022/03/23 12:14:59
LPeak(max)	90.4	2022/03/23 12:27:18	96.2	2022/03/23 12:25:53	99.1	2022/03/23 12:25:48

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	73.6 dB
LA10.00	69.8 dB
LA33.00	66.8 dB
LA50.00	65.9 dB
LA90.00	63.5 dB
LA99.00	62.0 dB

ST-1 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	10:10:00				
2		2022-03-23	10:10:00	49.0	61.3	54.9	52.2
3		2022-03-23	10:10:01	48.8	60.4	52.2	50.4
4		2022-03-23	10:10:02	49.1	63.3	50.4	49.6
5		2022-03-23	10:10:03	49.0	63.9	49.7	49.2
6		2022-03-23	10:10:04	48.8	61.8	49.3	48.9
7		2022-03-23	10:10:05	49.3	62.4	49.2	49.0
8		2022-03-23	10:10:06	48.9	62.1	49.1	49.0
9		2022-03-23	10:10:07	48.8	61.8	49.0	48.8
10		2022-03-23	10:10:08	48.7	60.8	48.9	48.7
11		2022-03-23	10:10:09	49.7	74.1	49.6	48.7
12		2022-03-23	10:10:10	48.8	61.6	49.3	49.0
13		2022-03-23	10:10:11	49.2	66.6	49.3	48.9
14		2022-03-23	10:10:12	49.4	61.3	49.4	49.2
15		2022-03-23	10:10:13	48.7	60.8	49.3	48.9
16		2022-03-23	10:10:14	49.3	66.7	49.2	48.8
17		2022-03-23	10:10:15	49.3	66.3	49.3	49.1
18		2022-03-23	10:10:16	49.4	69.8	49.5	49.2
19		2022-03-23	10:10:17	49.1	60.9	49.4	49.2
20		2022-03-23	10:10:18	49.1	60.7	49.3	49.1
21		2022-03-23	10:10:19	48.7	63.3	49.2	48.9
22		2022-03-23	10:10:20	48.7	61.4	48.9	48.7
23		2022-03-23	10:10:21	48.9	60.8	48.9	48.7
24		2022-03-23	10:10:22	48.9	60.2	48.9	48.8
25		2022-03-23	10:10:23	49.0	60.7	49.0	48.8
26		2022-03-23	10:10:24	49.4	61.2	49.4	49.0
27		2022-03-23	10:10:25	48.8	60.6	49.2	48.9
28		2022-03-23	10:10:26	48.7	60.9	49.1	48.7
29		2022-03-23	10:10:27	48.2	60.2	48.7	48.4
30		2022-03-23	10:10:28	48.5	60.4	48.5	48.4
31		2022-03-23	10:10:29	48.5	60.6	48.5	48.4
32		2022-03-23	10:10:30	48.5	63.0	48.6	48.4
33		2022-03-23	10:10:31	48.6	61.9	48.6	48.3
34		2022-03-23	10:10:32	48.6	59.9	48.6	48.5
35		2022-03-23	10:10:33	48.7	61.0	48.8	48.6
36		2022-03-23	10:10:34	48.5	60.7	48.7	48.6
37		2022-03-23	10:10:35	48.4	60.6	48.6	48.4
38		2022-03-23	10:10:36	48.3	61.8	48.4	48.3
39		2022-03-23	10:10:37	48.3	60.3	48.4	48.2
40		2022-03-23	10:10:38	48.8	60.6	48.6	48.3
41		2022-03-23	10:10:39	48.9	59.9	48.8	48.6
42		2022-03-23	10:10:40	48.8	60.6	48.9	48.7
43		2022-03-23	10:10:41	48.7	61.8	48.9	48.7
44		2022-03-23	10:10:42	48.6	60.4	48.7	48.5
45		2022-03-23	10:10:43	48.8	61.5	48.9	48.6
46		2022-03-23	10:10:44	48.2	62.9	48.7	48.4
47		2022-03-23	10:10:45	48.7	73.4	48.8	48.3
48		2022-03-23	10:10:46	53.4	85.7	53.4	48.7
49		2022-03-23	10:10:47	48.1	61.0	51.0	49.5
50		2022-03-23	10:10:48	48.5	60.5	49.5	48.9
51		2022-03-23	10:10:49	48.6	59.8	48.9	48.7
52		2022-03-23	10:10:50	48.7	65.0	48.8	48.6
53		2022-03-23	10:10:51	49.0	61.9	48.9	48.7
54		2022-03-23	10:10:52	48.3	59.7	48.9	48.5
55		2022-03-23	10:10:53	48.2	59.7	48.5	48.3
56		2022-03-23	10:10:54	49.0	73.8	49.4	48.5
57		2022-03-23	10:10:55	47.8	59.5	48.5	48.1
58		2022-03-23	10:10:56	47.8	59.9	48.1	47.8
59		2022-03-23	10:10:57	47.8	59.5	48.0	47.8

60	2022-03-23	10:10:58	48.1	60.0	48.0	47.8
61	2022-03-23	10:10:59	48.1	59.3	48.1	48.0
62	2022-03-23	10:11:00	48.2	62.7	48.2	48.0
63	2022-03-23	10:11:01	48.2	60.4	48.3	48.1
64	2022-03-23	10:11:02	48.8	61.8	48.7	48.3
65	2022-03-23	10:11:03	48.8	60.5	48.9	48.7
66	2022-03-23	10:11:04	48.5	65.2	48.7	48.5
67	2022-03-23	10:11:05	49.0	61.7	48.9	48.5
68	2022-03-23	10:11:06	50.0	74.5	49.8	48.9
69	2022-03-23	10:11:07	48.5	69.5	49.3	48.8
70	2022-03-23	10:11:08	48.1	62.6	48.8	48.4
71	2022-03-23	10:11:09	48.5	67.3	48.5	48.3
72	2022-03-23	10:11:10	48.0	59.8	48.5	48.1
73	2022-03-23	10:11:11	48.7	63.6	48.5	48.2
74	2022-03-23	10:11:12	49.0	60.7	48.8	48.4
75	2022-03-23	10:11:13	48.4	61.8	48.9	48.5
76	2022-03-23	10:11:14	48.4	60.4	48.6	48.4
77	2022-03-23	10:11:15	48.4	61.5	48.5	48.4
78	2022-03-23	10:11:16	48.2	59.7	48.4	48.2
79	2022-03-23	10:11:17	48.7	61.0	48.6	48.2
80	2022-03-23	10:11:18	48.9	61.3	49.0	48.6
81	2022-03-23	10:11:19	47.8	60.9	48.6	48.1
82	2022-03-23	10:11:20	47.5	61.2	48.1	47.7
83	2022-03-23	10:11:21	47.8	59.4	47.8	47.7
84	2022-03-23	10:11:22	47.8	64.2	47.9	47.7
85	2022-03-23	10:11:23	47.9	60.3	47.9	47.7
86	2022-03-23	10:11:24	48.1	60.3	48.0	47.8
87	2022-03-23	10:11:25	47.8	59.8	48.0	47.7
88	2022-03-23	10:11:26	48.0	60.2	48.0	47.8
89	2022-03-23	10:11:27	48.4	60.7	48.3	48.0
90	2022-03-23	10:11:28	48.0	60.0	48.3	48.1
91	2022-03-23	10:11:29	48.4	62.6	48.3	48.1
92	2022-03-23	10:11:30	47.8	59.5	48.3	48.0
93	2022-03-23	10:11:31	48.1	60.5	48.1	48.0
94	2022-03-23	10:11:32	48.2	60.4	48.2	48.0
95	2022-03-23	10:11:33	48.1	59.6	48.3	48.1
96	2022-03-23	10:11:34	47.9	60.1	48.2	47.9
97	2022-03-23	10:11:35	48.5	60.7	48.4	48.0
98	2022-03-23	10:11:36	48.0	59.8	48.4	48.2
99	2022-03-23	10:11:37	48.1	60.8	48.2	48.1
100	2022-03-23	10:11:38	48.1	60.2	48.2	48.0
101	2022-03-23	10:11:39	48.8	59.7	48.5	48.2
102	2022-03-23	10:11:40	48.9	60.5	48.8	48.6
103	2022-03-23	10:11:41	48.6	60.9	48.7	48.6
104	2022-03-23	10:11:42	48.6	61.4	48.7	48.6
105	2022-03-23	10:11:43	48.4	60.5	48.6	48.4
106	2022-03-23	10:11:44	48.5	60.2	48.6	48.5
107	2022-03-23	10:11:45	48.2	61.3	48.5	48.3
108	2022-03-23	10:11:46	48.3	60.1	48.4	48.2
109	2022-03-23	10:11:47	48.0	61.2	48.3	48.1
110	2022-03-23	10:11:48	47.9	62.2	48.1	48.0
111	2022-03-23	10:11:49	48.2	59.9	48.2	48.0
112	2022-03-23	10:11:50	48.5	60.3	48.4	48.2
113	2022-03-23	10:11:51	48.9	60.8	48.7	48.4
114	2022-03-23	10:11:52	48.7	60.6	48.8	48.6
115	2022-03-23	10:11:53	48.8	66.3	48.9	48.7
116	2022-03-23	10:11:54	48.8	61.0	48.9	48.7
117	2022-03-23	10:11:55	48.6	60.4	48.8	48.6
118	2022-03-23	10:11:56	48.8	61.3	48.9	48.7
119	2022-03-23	10:11:57	49.4	61.8	49.2	48.8
120	2022-03-23	10:11:58	49.4	60.6	49.3	49.2

121	2022-03-23	10:11:59	49.1	66.5	49.5	49.1
122	2022-03-23	10:12:00	48.5	61.4	49.1	48.8
123	2022-03-23	10:12:01	49.0	59.9	48.9	48.8
124	2022-03-23	10:12:02	49.0	61.6	49.0	48.8
125	2022-03-23	10:12:03	49.1	60.7	49.1	48.9
126	2022-03-23	10:12:04	49.2	61.2	49.2	49.0
127	2022-03-23	10:12:05	49.3	60.8	49.3	49.1
128	2022-03-23	10:12:06	49.5	61.8	49.4	49.2
129	2022-03-23	10:12:07	49.3	61.9	49.5	49.3
130	2022-03-23	10:12:08	49.0	61.6	49.3	49.1
131	2022-03-23	10:12:09	49.1	60.6	49.3	49.1
132	2022-03-23	10:12:10	49.3	61.1	49.3	49.0
133	2022-03-23	10:12:11	49.5	60.8	49.5	49.3
134	2022-03-23	10:12:12	49.0	61.7	49.4	49.1
135	2022-03-23	10:12:13	49.1	61.7	49.2	49.1
136	2022-03-23	10:12:14	49.1	61.0	49.2	49.0
137	2022-03-23	10:12:15	49.4	61.3	49.4	49.0
138	2022-03-23	10:12:16	48.6	60.0	49.3	48.9
139	2022-03-23	10:12:17	51.8	80.8	51.7	48.8
140	2022-03-23	10:12:18	49.0	62.7	50.8	49.8
141	2022-03-23	10:12:19	49.6	64.4	49.8	49.6
142	2022-03-23	10:12:20	51.1	70.0	50.6	49.8
143	2022-03-23	10:12:21	50.3	72.9	51.0	50.2
144	2022-03-23	10:12:22	49.4	61.5	50.2	49.7
145	2022-03-23	10:12:23	49.0	63.2	49.7	49.2
146	2022-03-23	10:12:24	48.2	61.0	49.4	48.6
147	2022-03-23	10:12:25	48.3	59.8	48.7	48.4
148	2022-03-23	10:12:26	48.2	60.5	48.5	48.3
149	2022-03-23	10:12:27	48.2	60.6	48.3	48.2
150	2022-03-23	10:12:28	48.1	60.7	48.2	48.1
151	2022-03-23	10:12:29	49.1	61.3	48.8	48.1
152	2022-03-23	10:12:30	51.0	62.8	50.3	48.8
153	2022-03-23	10:12:31	50.4	62.9	50.5	50.3
154	2022-03-23	10:12:32	50.2	61.9	50.4	50.2
155	2022-03-23	10:12:33	50.5	68.9	50.5	50.3
156	2022-03-23	10:12:34	49.9	60.6	50.4	50.1
157	2022-03-23	10:12:35	49.9	61.5	50.0	49.9
158	2022-03-23	10:12:36	49.7	61.8	50.0	49.8
159	2022-03-23	10:12:37	49.5	62.5	49.8	49.6
160	2022-03-23	10:12:38	49.9	61.9	49.8	49.6
161	2022-03-23	10:12:39	51.1	73.6	51.0	49.8
162	2022-03-23	10:12:40	50.1	69.4	50.9	50.4
163	2022-03-23	10:12:41	49.7	66.8	50.5	49.9
164	2022-03-23	10:12:42	50.1	61.5	50.1	49.9
165	2022-03-23	10:12:43	50.4	64.3	50.3	50.1
166	2022-03-23	10:12:44	50.2	67.1	50.3	50.1
167	2022-03-23	10:12:45	50.6	62.1	50.5	50.3
168	2022-03-23	10:12:46	50.5	63.2	50.5	50.4
169	2022-03-23	10:12:47	51.6	64.1	51.3	50.5
170	2022-03-23	10:12:48	52.2	64.7	51.8	51.3
171	2022-03-23	10:12:49	53.1	69.4	52.7	51.8
172	2022-03-23	10:12:50	53.9	74.4	53.6	52.7
173	2022-03-23	10:12:51	53.3	65.8	53.6	53.3
174	2022-03-23	10:12:52	55.3	78.2	54.9	53.3
175	2022-03-23	10:12:53	54.8	73.9	54.9	54.6
176	2022-03-23	10:12:54	56.7	73.5	56.3	54.8
177	2022-03-23	10:12:55	58.5	71.4	57.9	56.3
178	2022-03-23	10:12:56	56.3	68.6	57.5	56.8
179	2022-03-23	10:12:57	57.1	73.3	57.3	56.4
180	2022-03-23	10:12:58	57.5	68.9	57.6	57.3
181	2022-03-23	10:12:59	58.0	73.1	57.9	57.3

182	2022-03-23	10:13:00	61.7	75.3	60.7	57.9
183	2022-03-23	10:13:01	61.2	88.4	61.1	60.4
184	2022-03-23	10:13:02	63.1	76.9	62.6	61.1
185	2022-03-23	10:13:03	63.9	77.3	63.4	62.5
186	2022-03-23	10:13:04	65.5	80.5	64.9	63.4
187	2022-03-23	10:13:05	69.2	84.2	68.6	64.8
188	2022-03-23	10:13:06	71.1	82.8	70.3	68.6
189	2022-03-23	10:13:07	72.1	85.9	71.6	70.2
190	2022-03-23	10:13:08	71.8	83.9	71.8	71.5
191	2022-03-23	10:13:09	74.2	89.3	73.7	71.7
192	2022-03-23	10:13:10	74.5	91.3	74.4	73.4
193	2022-03-23	10:13:11	73.7	87.5	74.1	73.6
194	2022-03-23	10:13:12	72.7	86.6	74.1	73.1
195	2022-03-23	10:13:13	72.8	88.2	73.3	72.8
196	2022-03-23	10:13:14	70.8	86.4	72.8	71.7
197	2022-03-23	10:13:15	69.8	85.6	71.7	70.5
198	2022-03-23	10:13:16	67.7	82.2	70.5	69.0
199	2022-03-23	10:13:17	66.7	81.6	68.9	67.6
200	2022-03-23	10:13:18	65.5	80.0	67.6	66.3
201	2022-03-23	10:13:19	65.7	81.1	66.2	65.7
202	2022-03-23	10:13:20	66.4	83.7	66.5	65.6
203	2022-03-23	10:13:21	66.1	82.4	66.8	65.9
204	2022-03-23	10:13:22	64.7	82.5	66.5	65.2
205	2022-03-23	10:13:23	61.0	78.4	65.3	63.0
206	2022-03-23	10:13:24	59.5	73.4	63.0	61.0
207	2022-03-23	10:13:25	60.1	74.7	61.0	60.4
208	2022-03-23	10:13:26	62.5	77.1	61.9	60.5
209	2022-03-23	10:13:27	62.1	78.2	63.0	61.6
210	2022-03-23	10:13:28	57.1	71.3	61.6	59.3
211	2022-03-23	10:13:29	58.0	74.7	59.3	58.4
212	2022-03-23	10:13:30	56.5	74.3	58.5	57.1
213	2022-03-23	10:13:31	52.9	65.4	57.1	55.0
214	2022-03-23	10:13:32	54.3	70.1	55.0	54.4
215	2022-03-23	10:13:33	53.6	66.8	54.6	54.1
216	2022-03-23	10:13:34	54.6	70.6	54.6	53.9
217	2022-03-23	10:13:35	55.0	70.0	54.9	54.5
218	2022-03-23	10:13:36	54.0	68.3	54.8	54.3
219	2022-03-23	10:13:37	51.9	63.8	54.3	53.0
220	2022-03-23	10:13:38	52.4	65.5	53.0	52.6
221	2022-03-23	10:13:39	52.9	65.1	52.9	52.6
222	2022-03-23	10:13:40	52.3	64.3	52.9	52.5
223	2022-03-23	10:13:41	51.9	64.7	52.5	52.1
224	2022-03-23	10:13:42	52.4	66.1	52.5	52.2
225	2022-03-23	10:13:43	52.5	65.1	52.5	52.3
226	2022-03-23	10:13:44	54.3	66.9	53.8	52.3
227	2022-03-23	10:13:45	53.9	68.2	54.0	53.8
228	2022-03-23	10:13:46	53.9	66.6	53.9	53.8
229	2022-03-23	10:13:47	51.8	64.9	53.8	52.7
230	2022-03-23	10:13:48	53.0	66.2	53.0	52.6
231	2022-03-23	10:13:49	53.4	65.7	53.3	52.9
232	2022-03-23	10:13:50	52.1	65.5	53.2	52.5
233	2022-03-23	10:13:51	52.4	69.8	52.5	52.3
234	2022-03-23	10:13:52	53.5	66.8	53.2	52.4
235	2022-03-23	10:13:53	55.7	69.1	55.2	53.1
236	2022-03-23	10:13:54	53.1	65.2	55.2	53.8
237	2022-03-23	10:13:55	52.5	64.0	53.8	53.0
238	2022-03-23	10:13:56	55.8	70.6	55.1	53.0
239	2022-03-23	10:13:57	51.9	64.1	54.7	53.2
240	2022-03-23	10:13:58	53.3	66.7	53.5	52.8
241	2022-03-23	10:13:59	53.6	66.5	53.9	53.4
242	2022-03-23	10:14:00	53.1	81.0	53.6	52.9

243	2022-03-23	10:14:01	52.1	63.3	53.3	52.6
244	2022-03-23	10:14:02	53.2	64.7	53.0	52.4
245	2022-03-23	10:14:03	52.0	63.3	53.0	52.4
246	2022-03-23	10:14:04	52.9	65.6	52.8	52.2
247	2022-03-23	10:14:05	51.5	62.9	52.8	51.8
248	2022-03-23	10:14:06	50.5	62.8	51.8	51.1
249	2022-03-23	10:14:07	51.1	63.8	51.2	51.0
250	2022-03-23	10:14:08	53.8	68.8	53.2	51.1
251	2022-03-23	10:14:09	52.7	67.9	53.3	52.8
252	2022-03-23	10:14:10	53.1	77.0	53.4	52.7
253	2022-03-23	10:14:11	52.5	78.9	53.3	52.6
254	2022-03-23	10:14:12	52.0	64.1	52.7	52.2
255	2022-03-23	10:14:13	52.7	64.4	52.6	52.1
256	2022-03-23	10:14:14	53.5	67.1	53.4	52.4
257	2022-03-23	10:14:15	51.5	63.6	53.3	52.2
258	2022-03-23	10:14:16	51.3	63.9	52.2	51.7
259	2022-03-23	10:14:17	51.5	64.0	51.8	51.5
260	2022-03-23	10:14:18	50.9	63.6	51.5	51.1
261	2022-03-23	10:14:19	51.0	63.3	51.1	51.0
262	2022-03-23	10:14:20	50.9	62.7	51.2	50.9
263	2022-03-23	10:14:21	50.9	63.3	51.0	50.9
264	2022-03-23	10:14:22	51.1	64.7	51.1	50.9
265	2022-03-23	10:14:23	51.8	63.7	51.6	51.0
266	2022-03-23	10:14:24	51.9	65.3	51.9	51.6
267	2022-03-23	10:14:25	51.1	67.3	51.7	51.2
268	2022-03-23	10:14:26	51.7	76.1	51.8	51.0
269	2022-03-23	10:14:27	51.5	67.4	51.8	51.6
270	2022-03-23	10:14:28	51.7	66.8	51.7	51.5
271	2022-03-23	10:14:29	51.2	69.3	51.8	51.3
272	2022-03-23	10:14:30	52.0	77.5	52.1	51.3
273	2022-03-23	10:14:31	50.8	64.1	51.6	51.1
274	2022-03-23	10:14:32	50.2	62.7	51.1	50.6
275	2022-03-23	10:14:33	50.6	62.0	50.7	50.5
276	2022-03-23	10:14:34	51.4	62.6	51.1	50.7
277	2022-03-23	10:14:35	50.8	62.9	51.1	50.9
278	2022-03-23	10:14:36	50.8	62.8	51.1	50.8
279	2022-03-23	10:14:37	51.0	63.2	51.0	50.7
280	2022-03-23	10:14:38	51.5	63.9	51.3	50.9
281	2022-03-23	10:14:39	50.5	63.0	51.2	50.7
282	2022-03-23	10:14:40	50.6	62.5	50.8	50.6
283	2022-03-23	10:14:41	50.4	62.0	50.6	50.4
284	2022-03-23	10:14:42	50.7	65.2	50.7	50.5
285	2022-03-23	10:14:43	50.4	61.6	50.6	50.4
286	2022-03-23	10:14:44	50.9	70.8	50.9	50.4
287	2022-03-23	10:14:45	50.6	64.3	50.9	50.7
288	2022-03-23	10:14:46	50.1	62.5	50.7	50.3
289	2022-03-23	10:14:47	50.8	74.9	50.7	50.3
290	2022-03-23	10:14:48	50.5	62.2	50.6	50.5
291	2022-03-23	10:14:49	50.9	62.5	50.8	50.5
292	2022-03-23	10:14:50	50.3	62.9	50.8	50.5
293	2022-03-23	10:14:51	50.3	62.4	50.5	50.4
294	2022-03-23	10:14:52	50.5	63.2	50.5	50.4
295	2022-03-23	10:14:53	50.5	62.9	50.6	50.4
296	2022-03-23	10:14:54	50.5	63.7	50.6	50.4
297	2022-03-23	10:14:55	50.2	61.9	50.5	50.3
298	2022-03-23	10:14:56	50.5	62.1	50.5	50.3
299	2022-03-23	10:14:57	50.1	66.0	50.3	50.1
300	2022-03-23	10:14:58	50.5	65.3	50.5	50.2
301	2022-03-23	10:14:59	49.9	63.0	50.4	50.1
302	2022-03-23	10:15:00	50.1	67.9	50.2	50.0
303	2022-03-23	10:15:01	50.1	65.0	50.2	50.0

304	2022-03-23	10:15:02	50.7	66.7	50.5	50.2
305	2022-03-23	10:15:03	50.2	63.7	50.5	50.3
306	2022-03-23	10:15:04	49.8	61.9	50.3	50.0
307	2022-03-23	10:15:05	49.6	61.7	50.0	49.7
308	2022-03-23	10:15:06	50.0	62.6	49.9	49.8
309	2022-03-23	10:15:07	50.2	62.6	50.1	50.0
310	2022-03-23	10:15:08	50.0	62.2	50.1	50.1
311	2022-03-23	10:15:09	50.1	62.1	50.1	50.0
312	2022-03-23	10:15:10	50.4	62.1	50.4	50.0
313	2022-03-23	10:15:11	50.9	63.8	50.7	50.4
314	2022-03-23	10:15:12	50.5	62.9	50.7	50.5
315	2022-03-23	10:15:13	50.3	62.2	50.5	50.3
316	2022-03-23	10:15:14	50.4	63.3	50.5	50.3
317	2022-03-23	10:15:15	50.1	62.2	50.4	50.1
318	2022-03-23	10:15:16	50.4	63.5	50.4	50.1
319	2022-03-23	10:15:17	50.4	61.8	50.5	50.3
320	2022-03-23	10:15:18	50.3	62.5	50.4	50.3
321	2022-03-23	10:15:19	50.5	62.5	50.5	50.3
322	2022-03-23	10:15:20	50.3	61.7	50.5	50.4
323	2022-03-23	10:15:21	50.3	61.7	50.4	50.3
324	2022-03-23	10:15:22	50.8	62.6	50.7	50.3
325	2022-03-23	10:15:23	50.7	63.1	50.8	50.6
326	2022-03-23	10:15:24	50.8	62.9	50.8	50.6
327	2022-03-23	10:15:25	50.7	62.7	50.7	50.7
328	2022-03-23	10:15:26	50.8	62.7	50.8	50.5
329	2022-03-23	10:15:27	51.0	62.5	50.9	50.8
330	2022-03-23	10:15:28	51.6	64.4	51.4	50.9
331	2022-03-23	10:15:29	50.8	62.5	51.3	51.0
332	2022-03-23	10:15:30	51.0	64.7	51.2	50.9
333	2022-03-23	10:15:31	50.6	62.3	50.9	50.7
334	2022-03-23	10:15:32	51.1	62.6	51.1	50.6
335	2022-03-23	10:15:33	51.3	63.6	51.4	51.1
336	2022-03-23	10:15:34	50.1	62.1	51.1	50.5
337	2022-03-23	10:15:35	50.2	62.2	50.5	50.3
338	2022-03-23	10:15:36	50.0	61.1	50.3	50.1
339	2022-03-23	10:15:37	50.6	64.2	50.5	50.1
340	2022-03-23	10:15:38	52.1	64.4	51.6	50.5
341	2022-03-23	10:15:39	51.4	64.4	51.7	51.4
342	2022-03-23	10:15:40	51.0	62.6	51.4	51.1
343	2022-03-23	10:15:41	50.9	63.5	51.1	50.8
344	2022-03-23	10:15:42	51.2	63.3	51.2	51.1
345	2022-03-23	10:15:43	51.7	63.6	51.5	51.1
346	2022-03-23	10:15:44	53.7	65.5	53.2	51.5
347	2022-03-23	10:15:45	54.6	67.2	54.2	53.2
348	2022-03-23	10:15:46	52.4	64.9	54.0	53.0
349	2022-03-23	10:15:47	54.0	66.3	53.7	52.9
350	2022-03-23	10:15:48	53.7	65.0	53.8	53.6
351	2022-03-23	10:15:49	53.5	72.4	53.7	53.4
352	2022-03-23	10:15:50	53.8	65.5	53.7	53.5
353	2022-03-23	10:15:51	53.0	66.7	53.7	53.3
354	2022-03-23	10:15:52	53.3	65.0	53.3	53.2
355	2022-03-23	10:15:53	53.8	68.6	53.7	53.3
356	2022-03-23	10:15:54	53.1	65.9	53.6	53.2
357	2022-03-23	10:15:55	52.3	64.7	53.2	52.7
358	2022-03-23	10:15:56	51.5	64.6	52.7	51.9
359	2022-03-23	10:15:57	49.9	62.0	51.9	50.8
360	2022-03-23	10:15:58	50.1	62.0	50.8	50.3
361	2022-03-23	10:15:59	50.5	62.7	50.5	50.3
362	2022-03-23	10:16:00	49.9	62.3	50.5	50.1
363	2022-03-23	10:16:01	49.6	61.3	50.1	49.8
364	2022-03-23	10:16:02	50.1	62.4	50.1	49.6

365	2022-03-23	10:16:03	49.8	62.3	50.1	49.8
366	2022-03-23	10:16:04	50.0	62.6	50.0	49.6
367	2022-03-23	10:16:05	50.1	61.8	50.1	50.0
368	2022-03-23	10:16:06	50.5	61.9	50.4	50.0
369	2022-03-23	10:16:07	50.7	62.3	50.6	50.4
370	2022-03-23	10:16:08	51.0	63.5	50.9	50.6
371	2022-03-23	10:16:09	51.1	62.8	51.0	50.8
372	2022-03-23	10:16:10	52.1	63.4	51.8	51.0
373	2022-03-23	10:16:11	51.0	63.2	51.8	51.3
374	2022-03-23	10:16:12	51.1	64.0	51.3	51.1
375	2022-03-23	10:16:13	52.9	64.7	52.5	51.2
376	2022-03-23	10:16:14	53.8	65.6	53.4	52.5
377	2022-03-23	10:16:15	53.8	65.1	53.7	53.4
378	2022-03-23	10:16:16	52.8	64.7	53.6	53.0
379	2022-03-23	10:16:17	54.4	65.7	54.1	53.3
380	2022-03-23	10:16:18	54.0	66.6	54.0	53.9
381	2022-03-23	10:16:19	52.5	65.9	54.0	53.0
382	2022-03-23	10:16:20	52.6	66.7	53.1	52.2
383	2022-03-23	10:16:21	52.0	63.9	53.0	52.4
384	2022-03-23	10:16:22	50.8	63.5	52.4	51.4
385	2022-03-23	10:16:23	50.1	61.9	51.4	50.6
386	2022-03-23	10:16:24	50.1	61.7	50.7	50.2
387	2022-03-23	10:16:25	50.4	61.5	50.4	50.3
388	2022-03-23	10:16:26	50.8	65.4	50.7	50.4
389	2022-03-23	10:16:27	50.7	62.3	50.8	50.6
390	2022-03-23	10:16:28	50.2	63.6	50.8	50.4
391	2022-03-23	10:16:29	49.8	62.4	50.4	50.0
392	2022-03-23	10:16:30	50.5	62.1	50.4	50.0
393	2022-03-23	10:16:31	49.8	63.0	50.4	49.9
394	2022-03-23	10:16:32	49.7	61.9	50.0	49.7
395	2022-03-23	10:16:33	50.4	68.1	50.2	49.7
396	2022-03-23	10:16:34	50.5	64.2	50.6	50.2
397	2022-03-23	10:16:35	49.9	61.9	50.3	50.0
398	2022-03-23	10:16:36	49.4	61.1	50.0	49.6
399	2022-03-23	10:16:37	50.1	62.5	50.0	49.6
400	2022-03-23	10:16:38	50.8	64.1	50.5	49.9
401	2022-03-23	10:16:39	50.5	61.6	50.6	50.4
402	2022-03-23	10:16:40	51.1	68.4	51.0	50.5
403	2022-03-23	10:16:41	50.0	67.3	50.9	50.3
404	2022-03-23	10:16:42	50.0	61.7	50.4	50.1
405	2022-03-23	10:16:43	49.8	66.5	50.2	49.8
406	2022-03-23	10:16:44	49.1	60.8	49.8	49.4
407	2022-03-23	10:16:45	49.2	60.9	49.4	49.2
408	2022-03-23	10:16:46	49.6	65.1	49.6	49.3
409	2022-03-23	10:16:47	49.6	67.6	49.6	49.5
410	2022-03-23	10:16:48	49.6	66.0	49.7	49.5
411	2022-03-23	10:16:49	49.4	62.3	49.6	49.4
412	2022-03-23	10:16:50	50.0	66.0	49.9	49.4
413	2022-03-23	10:16:51	50.5	62.7	50.4	49.9
414	2022-03-23	10:16:52	50.4	65.1	50.4	50.1
415	2022-03-23	10:16:53	50.3	64.7	50.5	50.3
416	2022-03-23	10:16:54	49.3	60.6	50.3	49.7
417	2022-03-23	10:16:55	49.6	61.3	49.8	49.6
418	2022-03-23	10:16:56	49.7	69.0	49.8	49.5
419	2022-03-23	10:16:57	49.5	62.1	49.7	49.5
420	2022-03-23	10:16:58	49.7	64.1	49.8	49.6
421	2022-03-23	10:16:59	50.0	62.1	49.9	49.7
422	2022-03-23	10:17:00	49.8	61.0	49.9	49.8
423	2022-03-23	10:17:01	49.4	60.7	49.8	49.5
424	2022-03-23	10:17:02	49.4	62.4	49.6	49.4
425	2022-03-23	10:17:03	49.3	62.8	49.5	49.3

426	2022-03-23	10:17:04	49.2	62.0	49.3	49.2
427	2022-03-23	10:17:05	49.1	60.8	49.3	49.1
428	2022-03-23	10:17:06	49.0	60.8	49.2	49.0
429	2022-03-23	10:17:07	49.2	68.3	49.2	48.9
430	2022-03-23	10:17:08	48.8	64.3	49.2	49.0
431	2022-03-23	10:17:09	49.1	68.0	49.2	48.9
432	2022-03-23	10:17:10	48.9	61.2	49.1	48.9
433	2022-03-23	10:17:11	49.0	61.6	49.1	49.0
434	2022-03-23	10:17:12	49.0	61.2	49.0	48.9
435	2022-03-23	10:17:13	48.9	61.7	49.1	48.9
436	2022-03-23	10:17:14	48.9	61.5	48.9	48.8
437	2022-03-23	10:17:15	49.1	60.8	49.0	48.8
438	2022-03-23	10:17:16	49.2	60.9	49.1	49.0
439	2022-03-23	10:17:17	49.0	60.8	49.1	48.9
440	2022-03-23	10:17:18	48.8	61.3	49.1	48.9
441	2022-03-23	10:17:19	49.0	62.0	49.0	48.8
442	2022-03-23	10:17:20	49.4	60.7	49.4	49.0
443	2022-03-23	10:17:21	50.1	62.5	49.9	49.4
444	2022-03-23	10:17:22	49.5	61.5	50.1	49.6
445	2022-03-23	10:17:23	48.4	60.0	49.6	48.9
446	2022-03-23	10:17:24	48.8	60.6	48.9	48.7
447	2022-03-23	10:17:25	48.9	61.6	48.9	48.8
448	2022-03-23	10:17:26	49.5	65.3	49.4	48.8
449	2022-03-23	10:17:27	50.1	61.9	49.8	49.4
450	2022-03-23	10:17:28	51.1	63.7	50.6	49.8
451	2022-03-23	10:17:29	50.9	64.0	51.1	50.5
452	2022-03-23	10:17:30	51.0	69.4	51.1	50.6
453	2022-03-23	10:17:31	49.5	61.2	50.8	50.0
454	2022-03-23	10:17:32	49.5	62.3	50.0	49.7
455	2022-03-23	10:17:33	49.3	66.6	49.8	49.4
456	2022-03-23	10:17:34	49.2	65.8	49.4	49.2
457	2022-03-23	10:17:35	49.4	61.0	49.4	49.3
458	2022-03-23	10:17:36	49.4	68.8	49.5	49.3
459	2022-03-23	10:17:37	49.9	64.9	49.8	49.3
460	2022-03-23	10:17:38	51.1	68.2	50.8	49.8
461	2022-03-23	10:17:39	49.0	62.2	50.8	49.7
462	2022-03-23	10:17:40	49.1	65.6	49.7	49.3
463	2022-03-23	10:17:41	49.1	62.5	49.3	49.2
464	2022-03-23	10:17:42	49.2	62.8	49.3	49.1
465	2022-03-23	10:17:43	49.0	62.6	49.2	49.1
466	2022-03-23	10:17:44	49.0	60.6	49.2	48.9
467	2022-03-23	10:17:45	49.4	60.5	49.3	49.0
468	2022-03-23	10:17:46	50.0	63.0	49.9	49.2
469	2022-03-23	10:17:47	49.2	60.6	49.7	49.4
470	2022-03-23	10:17:48	49.5	61.4	49.5	49.4
471	2022-03-23	10:17:49	49.6	60.7	49.6	49.5
472	2022-03-23	10:17:50	49.5	61.9	49.7	49.5
473	2022-03-23	10:17:51	49.5	60.9	49.5	49.4
474	2022-03-23	10:17:52	49.6	61.3	49.6	49.5
475	2022-03-23	10:17:53	49.8	61.2	49.7	49.5
476	2022-03-23	10:17:54	50.0	64.0	49.9	49.7
477	2022-03-23	10:17:55	49.8	61.1	50.0	49.8
478	2022-03-23	10:17:56	49.6	61.7	49.8	49.6
479	2022-03-23	10:17:57	49.8	61.8	49.8	49.6
480	2022-03-23	10:17:58	50.0	61.7	49.9	49.7
481	2022-03-23	10:17:59	50.2	73.0	50.2	49.9
482	2022-03-23	10:18:00	50.7	71.8	50.5	50.0
483	2022-03-23	10:18:01	51.8	79.9	51.7	50.3
484	2022-03-23	10:18:02	49.6	63.0	51.5	50.4
485	2022-03-23	10:18:03	50.0	64.7	50.4	50.1
486	2022-03-23	10:18:04	51.2	75.9	51.2	50.2

487	2022-03-23	10:18:05	51.7	76.8	51.8	50.5
488	2022-03-23	10:18:06	50.7	74.3	51.9	51.0
489	2022-03-23	10:18:07	50.7	74.1	51.1	50.6
490	2022-03-23	10:18:08	50.1	61.5	50.9	50.4
491	2022-03-23	10:18:09	50.4	62.2	50.7	50.3
492	2022-03-23	10:18:10	49.9	61.7	50.3	50.1
493	2022-03-23	10:18:11	50.0	61.6	50.1	49.9
494	2022-03-23	10:18:12	50.5	62.7	50.4	50.0
495	2022-03-23	10:18:13	51.1	63.4	50.9	50.3
496	2022-03-23	10:18:14	51.3	63.6	51.2	50.9
497	2022-03-23	10:18:15	51.9	64.6	51.6	51.1
498	2022-03-23	10:18:16	52.1	65.4	51.9	51.6
499	2022-03-23	10:18:17	51.3	63.1	52.0	51.5
500	2022-03-23	10:18:18	51.0	63.5	51.5	51.1
501	2022-03-23	10:18:19	50.7	62.9	51.1	50.9
502	2022-03-23	10:18:20	52.7	65.1	52.2	50.9
503	2022-03-23	10:18:21	52.7	65.6	52.5	52.2
504	2022-03-23	10:18:22	52.6	64.2	52.6	52.4
505	2022-03-23	10:18:23	52.7	65.2	52.8	52.6
506	2022-03-23	10:18:24	52.7	65.1	52.7	52.5
507	2022-03-23	10:18:25	55.0	66.9	54.4	52.7
508	2022-03-23	10:18:26	55.1	66.0	54.9	54.4
509	2022-03-23	10:18:27	56.7	69.1	56.2	54.9
510	2022-03-23	10:18:28	54.8	67.4	56.2	55.2
511	2022-03-23	10:18:29	54.4	65.9	55.2	54.6
512	2022-03-23	10:18:30	56.6	69.2	56.2	54.8
513	2022-03-23	10:18:31	59.5	70.2	58.6	56.3
514	2022-03-23	10:18:32	62.6	73.4	61.7	58.7
515	2022-03-23	10:18:33	64.6	76.7	64.0	61.7
516	2022-03-23	10:18:34	65.3	79.5	65.0	64.0
517	2022-03-23	10:18:35	67.5	78.9	66.8	64.7
518	2022-03-23	10:18:36	68.4	81.3	68.0	66.8
519	2022-03-23	10:18:37	70.5	83.6	69.9	67.8
520	2022-03-23	10:18:38	73.8	87.4	72.7	69.9
521	2022-03-23	10:18:39	73.5	86.2	73.4	72.7
522	2022-03-23	10:18:40	72.9	85.8	73.4	72.8
523	2022-03-23	10:18:41	70.7	82.8	72.8	71.7
524	2022-03-23	10:18:42	69.4	82.8	71.6	70.5
525	2022-03-23	10:18:43	70.0	84.0	70.7	70.0
526	2022-03-23	10:18:44	69.6	82.8	70.0	69.7
527	2022-03-23	10:18:45	70.2	85.7	70.2	69.8
528	2022-03-23	10:18:46	67.7	83.2	70.1	68.6
529	2022-03-23	10:18:47	67.0	86.8	68.6	67.5
530	2022-03-23	10:18:48	70.2	88.6	69.4	68.0
531	2022-03-23	10:18:49	72.2	88.4	71.3	69.6
532	2022-03-23	10:18:50	68.6	87.8	71.1	69.3
533	2022-03-23	10:18:51	63.7	79.8	69.3	66.7
534	2022-03-23	10:18:52	60.8	75.2	66.6	63.8
535	2022-03-23	10:18:53	57.0	68.0	63.8	60.9
536	2022-03-23	10:18:54	57.2	68.6	60.8	59.0
537	2022-03-23	10:18:55	58.9	69.3	59.0	58.8
538	2022-03-23	10:18:56	58.4	69.2	59.1	58.5
539	2022-03-23	10:18:57	55.2	67.7	58.5	56.7
540	2022-03-23	10:18:58	55.0	67.8	56.7	55.6
541	2022-03-23	10:18:59	53.9	66.1	55.6	54.6
542	2022-03-23	10:19:00	52.8	63.6	54.6	53.5
543	2022-03-23	10:19:01	53.0	64.5	53.5	53.2
544	2022-03-23	10:19:02	53.5	67.8	53.5	53.1
545	2022-03-23	10:19:03	55.8	71.5	55.2	53.6
546	2022-03-23	10:19:04	53.5	68.7	55.1	54.2
547	2022-03-23	10:19:05	54.6	68.4	54.5	54.1

548	2022-03-23	10:19:06	54.7	68.7	54.8	54.5
549	2022-03-23	10:19:07	53.5	67.1	54.5	53.9
550	2022-03-23	10:19:08	58.0	74.3	57.3	54.1
551	2022-03-23	10:19:09	56.9	72.8	57.7	56.8
552	2022-03-23	10:19:10	55.3	70.4	56.9	55.7
553	2022-03-23	10:19:11	52.1	65.1	55.6	53.8
554	2022-03-23	10:19:12	52.2	66.1	53.8	52.9
555	2022-03-23	10:19:13	52.1	64.5	52.9	52.4
556	2022-03-23	10:19:14	52.0	64.5	52.4	51.9
557	2022-03-23	10:19:15	52.5	67.1	52.6	52.2
558	2022-03-23	10:19:16	52.3	64.5	52.5	52.2
559	2022-03-23	10:19:17	52.1	63.5	52.2	52.1
560	2022-03-23	10:19:18	52.6	63.9	52.5	52.2
561	2022-03-23	10:19:19	51.9	63.4	52.4	52.0
562	2022-03-23	10:19:20	51.9	66.3	52.0	51.8
563	2022-03-23	10:19:21	51.7	64.3	52.3	51.7
564	2022-03-23	10:19:22	50.7	63.3	51.7	51.0
565	2022-03-23	10:19:23	50.4	64.9	51.0	50.6
566	2022-03-23	10:19:24	50.5	63.6	50.6	50.5
567	2022-03-23	10:19:25	51.9	65.1	51.7	50.5
568	2022-03-23	10:19:26	52.7	66.8	52.5	51.7
569	2022-03-23	10:19:27	51.2	63.8	52.1	51.4
570	2022-03-23	10:19:28	49.8	61.7	51.4	50.5
571	2022-03-23	10:19:29	49.7	63.2	50.5	50.0
572	2022-03-23	10:19:30	49.5	60.8	50.0	49.7
573	2022-03-23	10:19:31	49.5	60.6	49.7	49.6
574	2022-03-23	10:19:32	49.6	61.9	49.7	49.5
575	2022-03-23	10:19:33	49.9	63.1	49.8	49.6
576	2022-03-23	10:19:34	50.2	62.2	50.1	49.8
577	2022-03-23	10:19:35	51.0	72.9	50.8	50.1
578	2022-03-23	10:19:36	51.6	71.9	51.3	50.7
579	2022-03-23	10:19:37	52.4	66.3	52.1	51.3
580	2022-03-23	10:19:38	52.8	64.9	52.6	52.0
581	2022-03-23	10:19:39	53.0	64.6	52.9	52.5
582	2022-03-23	10:19:40	55.7	74.0	55.0	52.9
583	2022-03-23	10:19:41	58.1	70.2	57.4	55.0
584	2022-03-23	10:19:42	58.8	71.8	58.3	57.4
585	2022-03-23	10:19:43	57.4	69.6	58.2	57.7
586	2022-03-23	10:19:44	60.4	73.4	59.9	57.7
587	2022-03-23	10:19:45	59.5	71.3	60.0	59.5
588	2022-03-23	10:19:46	58.5	70.2	59.5	58.9
589	2022-03-23	10:19:47	59.0	71.4	59.1	58.8
590	2022-03-23	10:19:48	62.2	74.3	61.5	58.9
591	2022-03-23	10:19:49	62.0	74.3	61.9	61.5
592	2022-03-23	10:19:50	63.9	75.9	63.2	61.9
593	2022-03-23	10:19:51	65.7	76.2	65.0	63.3
594	2022-03-23	10:19:52	67.0	76.9	66.3	65.1
595	2022-03-23	10:19:53	66.1	77.9	66.7	65.9
596	2022-03-23	10:19:54	67.4	78.2	67.1	65.9
597	2022-03-23	10:19:55	69.6	84.5	69.1	67.1
598	2022-03-23	10:19:56	69.5	86.3	69.6	68.8
599	2022-03-23	10:19:57	71.1	85.2	71.0	69.2
600	2022-03-23	10:19:58	76.1	88.7	74.8	71.0
601	2022-03-23	10:19:59	75.1	87.7	75.1	74.8
602	2022-03-23	10:20:00	76.0	87.6	75.6	75.0
603	2022-03-23	10:20:01	74.2	85.0	75.6	74.7
604	2022-03-23	10:20:02	73.9	87.9	74.7	74.2
605	2022-03-23	10:20:03	71.7	85.9	74.3	72.7
606	2022-03-23	10:20:04	68.5	82.8	72.7	70.6
607	2022-03-23	10:20:05	66.0	84.6	70.5	68.1
608	2022-03-23	10:20:06	63.8	76.8	68.0	66.0

609	2022-03-23	10:20:07	63.1	78.4	66.0	64.5
610	2022-03-23	10:20:08	60.2	72.6	64.5	62.2
611	2022-03-23	10:20:09	58.8	71.7	62.2	60.5
612	2022-03-23	10:20:10	61.3	76.0	61.4	59.9
613	2022-03-23	10:20:11	59.4	74.4	61.5	60.0
614	2022-03-23	10:20:12	59.1	70.9	60.0	59.4
615	2022-03-23	10:20:13	55.9	68.5	59.4	57.5
616	2022-03-23	10:20:14	56.8	84.7	57.5	56.7
617	2022-03-23	10:20:15	56.2	84.2	58.1	56.1
618	2022-03-23	10:20:16	54.9	69.7	56.1	55.4
619	2022-03-23	10:20:17	55.1	79.1	55.6	55.1
620	2022-03-23	10:20:18	52.6	69.1	55.3	53.8
621	2022-03-23	10:20:19	52.6	68.8	53.8	53.0
622	2022-03-23	10:20:20	52.6	65.9	53.7	52.5
623	2022-03-23	10:20:21	52.0	64.3	52.6	52.2
624	2022-03-23	10:20:22	50.7	72.5	52.4	51.2
625	2022-03-23	10:20:23	50.9	63.7	51.2	51.0
626	2022-03-23	10:20:24	50.0	70.1	51.0	50.3
627	2022-03-23	10:20:25	51.2	64.4	51.0	50.4
628	2022-03-23	10:20:26	51.1	64.5	51.1	50.7
629	2022-03-23	10:20:27	49.8	60.8	51.0	50.3
630	2022-03-23	10:20:28	49.3	62.7	50.3	49.7
631	2022-03-23	10:20:29	49.8	62.1	49.8	49.7
632	2022-03-23	10:20:30	50.9	63.0	50.6	49.7
633	2022-03-23	10:20:31	50.7	63.3	50.7	50.6
634	2022-03-23	10:20:32	52.0	65.6	51.6	50.7
635	2022-03-23	10:20:33	51.6	63.8	51.6	51.3
636	2022-03-23	10:20:34	50.5	62.5	51.6	50.8
637	2022-03-23	10:20:35	51.8	63.3	51.5	50.9
638	2022-03-23	10:20:36	50.5	64.6	51.5	50.8
639	2022-03-23	10:20:37	50.1	66.0	50.8	50.4
640	2022-03-23	10:20:38	51.2	71.0	51.0	50.3
641	2022-03-23	10:20:39	50.2	62.7	51.0	50.5
642	2022-03-23	10:20:40	50.5	71.3	50.8	50.4
643	2022-03-23	10:20:41	51.2	72.1	51.0	50.3
644	2022-03-23	10:20:42	50.9	63.0	51.0	50.9
645	2022-03-23	10:20:43	49.6	60.9	50.9	50.1
646	2022-03-23	10:20:44	49.7	60.9	50.1	49.8
647	2022-03-23	10:20:45	50.1	61.8	50.0	49.9
648	2022-03-23	10:20:46	50.2	61.8	50.1	49.9
649	2022-03-23	10:20:47	50.1	63.7	50.3	50.0
650	2022-03-23	10:20:48	50.1	65.6	50.2	50.0
651	2022-03-23	10:20:49	50.4	66.2	50.5	50.0
652	2022-03-23	10:20:50	49.8	62.5	50.2	49.9
653	2022-03-23	10:20:51	49.4	61.3	49.9	49.6
654	2022-03-23	10:20:52	49.5	60.7	49.6	49.5
655	2022-03-23	10:20:53	50.3	64.2	50.1	49.6
656	2022-03-23	10:20:54	50.5	65.6	50.4	50.0
657	2022-03-23	10:20:55	50.4	62.7	50.4	50.3
658	2022-03-23	10:20:56	50.1	63.1	50.5	50.1
659	2022-03-23	10:20:57	49.9	67.9	50.1	49.9
660	2022-03-23	10:20:58	49.9	69.1	50.1	49.9
661	2022-03-23	10:20:59	49.3	60.8	49.9	49.6
662	2022-03-23	10:21:00	49.8	63.0	49.8	49.5
663	2022-03-23	10:21:01	49.5	63.4	49.8	49.6
664	2022-03-23	10:21:02	49.4	61.5	49.6	49.4
665	2022-03-23	10:21:03	48.7	60.3	49.4	49.0
666	2022-03-23	10:21:04	48.4	61.3	48.9	48.6
667	2022-03-23	10:21:05	48.9	67.3	48.9	48.6
668	2022-03-23	10:21:06	48.8	68.5	48.9	48.6
669	2022-03-23	10:21:07	48.6	60.6	48.9	48.7

670	2022-03-23	10:21:08	48.3	60.3	48.7	48.4
671	2022-03-23	10:21:09	49.0	64.0	49.1	48.4
672	2022-03-23	10:21:10	48.6	59.6	48.9	48.7
673	2022-03-23	10:21:11	49.1	61.6	49.0	48.7
674	2022-03-23	10:21:12	48.7	61.5	49.0	48.8
675	2022-03-23	10:21:13	48.8	60.9	48.9	48.7
676	2022-03-23	10:21:14	48.7	60.8	48.8	48.7
677	2022-03-23	10:21:15	48.6	61.4	48.8	48.6
678	2022-03-23	10:21:16	48.5	61.3	48.6	48.5
679	2022-03-23	10:21:17	48.7	60.8	48.7	48.6
680	2022-03-23	10:21:18	49.3	61.1	49.1	48.7
681	2022-03-23	10:21:19	48.8	61.8	49.1	48.9
682	2022-03-23	10:21:20	48.3	60.0	48.9	48.5
683	2022-03-23	10:21:21	48.6	60.9	48.7	48.5
684	2022-03-23	10:21:22	48.9	60.7	48.8	48.6
685	2022-03-23	10:21:23	49.1	61.2	49.0	48.7
686	2022-03-23	10:21:24	48.9	61.3	49.1	48.9
687	2022-03-23	10:21:25	49.0	61.7	49.0	48.9
688	2022-03-23	10:21:26	48.4	60.0	48.9	48.5
689	2022-03-23	10:21:27	48.3	59.9	48.6	48.3
690	2022-03-23	10:21:28	48.5	59.9	48.6	48.4
691	2022-03-23	10:21:29	48.7	62.2	48.7	48.5
692	2022-03-23	10:21:30	48.5	61.7	48.7	48.5
693	2022-03-23	10:21:31	48.4	60.2	48.5	48.4
694	2022-03-23	10:21:32	48.4	59.7	48.5	48.4
695	2022-03-23	10:21:33	49.1	67.2	48.9	48.4
696	2022-03-23	10:21:34	48.6	61.0	48.9	48.6
697	2022-03-23	10:21:35	48.5	60.8	48.7	48.5
698	2022-03-23	10:21:36	48.2	64.6	48.5	48.3
699	2022-03-23	10:21:37	48.4	59.8	48.4	48.2
700	2022-03-23	10:21:38	48.6	61.2	48.5	48.4
701	2022-03-23	10:21:39	48.8	59.9	48.7	48.4
702	2022-03-23	10:21:40	48.9	70.4	49.0	48.5
703	2022-03-23	10:21:41	48.9	63.7	49.0	48.9
704	2022-03-23	10:21:42	48.8	60.6	49.0	48.8
705	2022-03-23	10:21:43	48.7	64.9	48.9	48.7
706	2022-03-23	10:21:44	48.5	61.1	48.8	48.6
707	2022-03-23	10:21:45	49.6	72.5	49.4	48.5
708	2022-03-23	10:21:46	49.7	66.4	49.6	49.3
709	2022-03-23	10:21:47	49.4	62.5	49.7	49.4
710	2022-03-23	10:21:48	49.6	69.6	49.7	49.4
711	2022-03-23	10:21:49	49.6	63.7	49.7	49.5
712	2022-03-23	10:21:50	50.5	76.3	50.6	49.5
713	2022-03-23	10:21:51	49.3	67.8	50.0	49.5
714	2022-03-23	10:21:52	49.2	61.1	49.6	49.3
715	2022-03-23	10:21:53	49.0	61.7	49.3	49.1
716	2022-03-23	10:21:54	49.4	61.1	49.4	49.2
717	2022-03-23	10:21:55	49.5	69.7	49.5	49.3
718	2022-03-23	10:21:56	52.1	83.7	51.8	49.3
719	2022-03-23	10:21:57	48.9	60.9	51.0	49.8
720	2022-03-23	10:21:58	49.0	65.4	49.8	49.3
721	2022-03-23	10:21:59	49.7	68.3	49.8	49.1
722	2022-03-23	10:22:00	50.1	70.7	50.1	49.4
723	2022-03-23	10:22:01	50.1	70.4	50.2	49.8
724	2022-03-23	10:22:02	49.4	62.2	50.2	49.7
725	2022-03-23	10:22:03	49.8	63.0	49.8	49.7
726	2022-03-23	10:22:04	49.9	62.7	49.9	49.7
727	2022-03-23	10:22:05	50.3	63.7	50.2	49.9
728	2022-03-23	10:22:06	49.9	61.2	50.3	49.9
729	2022-03-23	10:22:07	49.6	61.1	50.0	49.7
730	2022-03-23	10:22:08	49.8	65.4	49.8	49.7

731	2022-03-23	10:22:09	49.7	61.7	49.8	49.7
732	2022-03-23	10:22:10	49.5	61.5	49.7	49.5
733	2022-03-23	10:22:11	49.6	62.5	49.8	49.5
734	2022-03-23	10:22:12	49.6	60.4	49.6	49.5
735	2022-03-23	10:22:13	49.7	63.0	49.7	49.6
736	2022-03-23	10:22:14	51.5	72.5	51.0	49.6
737	2022-03-23	10:22:15	50.2	67.0	50.8	50.4
738	2022-03-23	10:22:16	51.5	72.5	51.1	50.4
739	2022-03-23	10:22:17	50.4	62.6	51.1	50.7
740	2022-03-23	10:22:18	50.1	62.4	50.7	50.3
741	2022-03-23	10:22:19	50.1	68.3	50.3	50.1
742	2022-03-23	10:22:20	50.0	65.5	50.2	50.0
743	2022-03-23	10:22:21	50.1	63.5	50.2	50.0
744	2022-03-23	10:22:22	51.8	78.4	51.8	50.0
745	2022-03-23	10:22:23	49.6	61.0	51.2	50.3
746	2022-03-23	10:22:24	49.6	61.0	50.3	49.9
747	2022-03-23	10:22:25	49.7	61.7	49.9	49.8
748	2022-03-23	10:22:26	50.4	62.2	50.2	49.8
749	2022-03-23	10:22:27	50.2	62.7	50.2	50.0
750	2022-03-23	10:22:28	50.2	62.4	50.3	50.2
751	2022-03-23	10:22:29	51.8	76.3	51.5	50.1
752	2022-03-23	10:22:30	50.9	63.0	51.4	51.0
753	2022-03-23	10:22:31	50.4	63.5	51.0	50.7
754	2022-03-23	10:22:32	50.8	70.9	50.9	50.6
755	2022-03-23	10:22:33	50.3	66.7	50.8	50.4
756	2022-03-23	10:22:34	52.4	77.9	52.3	50.3
757	2022-03-23	10:22:35	50.8	76.4	51.7	51.0
758	2022-03-23	10:22:36	50.1	61.7	51.2	50.5
759	2022-03-23	10:22:37	50.0	62.1	50.5	50.2
760	2022-03-23	10:22:38	49.7	62.1	50.2	49.9
761	2022-03-23	10:22:39	49.7	68.0	49.9	49.6
762	2022-03-23	10:22:40	50.0	64.5	50.1	49.7
763	2022-03-23	10:22:41	50.8	65.2	50.6	49.9
764	2022-03-23	10:22:42	50.2	71.7	50.7	50.2
765	2022-03-23	10:22:43	49.8	67.9	50.3	49.8
766	2022-03-23	10:22:44	50.2	62.9	50.3	50.0
767	2022-03-23	10:22:45	50.6	64.4	50.6	50.2
768	2022-03-23	10:22:46	50.0	61.7	50.4	50.2
769	2022-03-23	10:22:47	50.3	66.6	50.4	49.9
770	2022-03-23	10:22:48	49.5	65.6	50.3	49.8
771	2022-03-23	10:22:49	50.6	73.7	50.4	49.8
772	2022-03-23	10:22:50	49.5	64.5	50.3	49.8
773	2022-03-23	10:22:51	49.7	66.7	49.9	49.7
774	2022-03-23	10:22:52	49.4	63.8	49.8	49.5
775	2022-03-23	10:22:53	49.1	62.0	49.5	49.2
776	2022-03-23	10:22:54	49.0	66.1	49.3	49.0
777	2022-03-23	10:22:55	48.9	60.3	49.2	48.9
778	2022-03-23	10:22:56	48.8	60.6	48.9	48.8
779	2022-03-23	10:22:57	49.3	61.1	49.2	48.9
780	2022-03-23	10:22:58	49.4	64.1	49.4	49.1
781	2022-03-23	10:22:59	49.7	65.8	49.7	49.4
782	2022-03-23	10:23:00	49.6	62.5	49.7	49.5
783	2022-03-23	10:23:01	49.6	61.8	49.7	49.6
784	2022-03-23	10:23:02	49.7	66.3	49.7	49.6
785	2022-03-23	10:23:03	49.7	63.6	49.7	49.5
786	2022-03-23	10:23:04	49.8	60.9	49.8	49.7
787	2022-03-23	10:23:05	49.9	62.6	49.9	49.8
788	2022-03-23	10:23:06	49.7	61.7	49.8	49.7
789	2022-03-23	10:23:07	49.8	61.6	49.8	49.6
790	2022-03-23	10:23:08	50.5	65.1	50.3	49.8
791	2022-03-23	10:23:09	50.4	62.2	50.4	50.3

792	2022-03-23	10:23:10	50.3	68.3	50.4	50.2
793	2022-03-23	10:23:11	50.2	66.6	50.4	50.2
794	2022-03-23	10:23:12	50.0	71.3	50.5	50.0
795	2022-03-23	10:23:13	49.9	66.8	50.1	49.8
796	2022-03-23	10:23:14	52.1	81.0	52.2	49.9
797	2022-03-23	10:23:15	49.5	62.5	51.4	50.3
798	2022-03-23	10:23:16	49.5	63.4	50.3	49.8
799	2022-03-23	10:23:17	50.1	64.7	50.1	49.9
800	2022-03-23	10:23:18	50.1	66.3	50.1	49.9
801	2022-03-23	10:23:19	49.7	62.8	50.1	49.8
802	2022-03-23	10:23:20	50.3	73.4	50.3	49.7
803	2022-03-23	10:23:21	49.8	66.9	50.4	49.9
804	2022-03-23	10:23:22	49.4	61.5	49.9	49.6
805	2022-03-23	10:23:23	49.5	66.0	49.7	49.4
806	2022-03-23	10:23:24	49.9	71.1	49.9	49.3
807	2022-03-23	10:23:25	49.3	62.7	49.9	49.5
808	2022-03-23	10:23:26	50.1	73.6	50.1	49.5
809	2022-03-23	10:23:27	49.3	60.8	49.9	49.5
810	2022-03-23	10:23:28	49.8	71.5	49.9	49.4
811	2022-03-23	10:23:29	50.1	71.7	50.1	49.5
812	2022-03-23	10:23:30	50.0	67.9	50.1	50.0
813	2022-03-23	10:23:31	49.8	62.5	50.1	49.8
814	2022-03-23	10:23:32	49.1	60.4	49.8	49.4
815	2022-03-23	10:23:33	49.3	62.0	49.6	49.3
816	2022-03-23	10:23:34	50.5	76.6	50.4	49.3
817	2022-03-23	10:23:35	52.8	85.5	53.1	49.7
818	2022-03-23	10:23:36	49.8	73.2	53.1	51.1
819	2022-03-23	10:23:37	49.5	61.3	51.2	50.1
820	2022-03-23	10:23:38	50.2	74.0	50.4	49.9
821	2022-03-23	10:23:39	49.4	65.0	50.4	49.7
822	2022-03-23	10:23:40	49.0	61.1	49.7	49.2
823	2022-03-23	10:23:41	49.3	60.7	49.3	49.2
824	2022-03-23	10:23:42	49.5	60.9	49.4	49.3
825	2022-03-23	10:23:43	49.3	60.5	49.4	49.3
826	2022-03-23	10:23:44	49.5	61.7	49.5	49.4
827	2022-03-23	10:23:45	49.5	61.5	49.5	49.3
828	2022-03-23	10:23:46	49.6	61.1	49.6	49.5
829	2022-03-23	10:23:47	49.4	62.1	49.5	49.4
830	2022-03-23	10:23:48	50.0	70.5	49.9	49.5
831	2022-03-23	10:23:49	48.9	62.1	49.9	49.3
832	2022-03-23	10:23:50	49.4	61.0	49.5	49.3
833	2022-03-23	10:23:51	49.2	61.3	49.4	49.2
834	2022-03-23	10:23:52	49.3	60.8	49.4	49.2
835	2022-03-23	10:23:53	49.9	62.3	49.7	49.2
836	2022-03-23	10:23:54	49.4	61.5	49.7	49.5
837	2022-03-23	10:23:55	49.8	62.7	49.8	49.5
838	2022-03-23	10:23:56	50.1	65.8	50.0	49.7
839	2022-03-23	10:23:57	50.9	71.6	50.7	50.0
840	2022-03-23	10:23:58	50.8	63.4	50.8	50.7
841	2022-03-23	10:23:59	50.3	63.5	50.7	50.4
842	2022-03-23	10:24:00	52.1	78.2	52.0	50.6
843	2022-03-23	10:24:01	50.5	63.5	51.2	50.7
844	2022-03-23	10:24:02	50.0	64.8	50.7	50.2
845	2022-03-23	10:24:03	50.8	75.5	50.8	50.1
846	2022-03-23	10:24:04	49.8	62.0	50.6	50.0
847	2022-03-23	10:24:05	49.5	62.2	50.0	49.7
848	2022-03-23	10:24:06	50.3	80.3	50.4	49.6
849	2022-03-23	10:24:07	49.0	61.2	50.1	49.4
850	2022-03-23	10:24:08	49.3	60.7	49.4	49.3
851	2022-03-23	10:24:09	49.1	66.4	49.4	49.2
852	2022-03-23	10:24:10	48.9	60.0	49.2	49.0

853		2022-03-23	10:24:11	49.2	60.7	49.2	49.0
854		2022-03-23	10:24:12	49.1	61.6	49.3	49.0
855		2022-03-23	10:24:13	49.0	61.0	49.1	49.0
856		2022-03-23	10:24:14	49.2	61.2	49.2	48.9
857		2022-03-23	10:24:15	49.5	61.2	49.4	49.1
858		2022-03-23	10:24:16	49.7	62.2	49.6	49.3
859		2022-03-23	10:24:17	49.5	60.9	49.7	49.5
860		2022-03-23	10:24:18	49.2	61.1	49.5	49.2
861		2022-03-23	10:24:19	49.4	61.8	49.4	49.2
862		2022-03-23	10:24:20	50.3	62.2	50.0	49.4
863		2022-03-23	10:24:21	49.2	60.8	49.9	49.4
864		2022-03-23	10:24:22	48.8	60.7	49.4	49.0
865		2022-03-23	10:24:23	48.6	60.3	49.0	48.8
866		2022-03-23	10:24:24	48.8	61.8	48.9	48.7
867		2022-03-23	10:24:25	48.4	63.2	48.8	48.5
868		2022-03-23	10:24:26	48.4	60.8	48.7	48.4
869		2022-03-23	10:24:27	49.0	62.5	48.9	48.4
870		2022-03-23	10:24:28	50.3	62.6	49.8	48.9
871		2022-03-23	10:24:29	49.3	60.7	49.8	49.4
872		2022-03-23	10:24:30	48.6	61.8	49.4	48.9
873		2022-03-23	10:24:31	48.8	72.6	49.1	48.6
874		2022-03-23	10:24:32	47.9	61.6	48.9	48.3
875		2022-03-23	10:24:33	48.2	69.5	48.6	48.1
876		2022-03-23	10:24:34	48.3	70.2	48.4	48.0
877		2022-03-23	10:24:35	48.0	60.2	48.3	48.1
878		2022-03-23	10:24:36	48.1	60.3	48.1	48.0
879		2022-03-23	10:24:37	48.5	60.9	48.4	48.1
880		2022-03-23	10:24:38	48.2	60.0	48.3	48.2
881		2022-03-23	10:24:39	47.9	59.7	48.3	48.0
882		2022-03-23	10:24:40	48.0	59.2	48.1	48.0
883		2022-03-23	10:24:41	47.9	59.2	48.1	47.9
884		2022-03-23	10:24:42	47.9	59.9	48.0	47.9
885		2022-03-23	10:24:43	48.2	59.4	48.1	48.0
886		2022-03-23	10:24:44	48.1	60.1	48.2	48.0
887		2022-03-23	10:24:45	48.2	61.6	48.2	48.0
888		2022-03-23	10:24:46	48.5	60.1	48.5	48.1
889		2022-03-23	10:24:47	48.8	62.0	48.9	48.5
890		2022-03-23	10:24:48	48.4	60.6	48.6	48.4
891		2022-03-23	10:24:49	48.7	60.3	48.6	48.5
892		2022-03-23	10:24:50	48.9	60.6	48.9	48.5
893		2022-03-23	10:24:51	48.3	61.2	48.8	48.5
894		2022-03-23	10:24:52	48.3	60.8	48.5	48.4
895		2022-03-23	10:24:53	48.6	60.5	48.6	48.4
896		2022-03-23	10:24:54	48.3	67.3	48.6	48.4
897		2022-03-23	10:24:55	48.6	60.3	48.5	48.3
898		2022-03-23	10:24:56	50.5	77.1	50.3	48.5
899		2022-03-23	10:24:57	48.9	61.5	50.0	49.4
900		2022-03-23	10:24:58	48.9	60.8	49.4	49.1
901		2022-03-23	10:24:59	49.0	64.5	49.2	49.0
902		2022-03-23	10:25:00	50.5	68.4	49.6	49.0
903	Stop	2022-03-23	10:25:01				

ST-2 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	11:46:00				
2		2022-03-23	11:46:00	58.8	70.5	62.6	60.6
3		2022-03-23	11:46:01	56.6	68.5	60.6	58.5
4		2022-03-23	11:46:02	55.4	67.5	58.4	56.8
5		2022-03-23	11:46:03	54.5	66.7	56.8	55.5
6		2022-03-23	11:46:04	56.8	76.7	56.8	55.4
7		2022-03-23	11:46:05	54.0	66.3	56.3	55.0
8		2022-03-23	11:46:06	55.0	66.5	55.1	54.9
9		2022-03-23	11:46:07	54.6	66.6	55.1	54.7
10		2022-03-23	11:46:08	55.1	67.3	55.1	54.6
11		2022-03-23	11:46:09	56.2	67.8	55.8	55.1
12		2022-03-23	11:46:10	54.5	67.9	55.8	55.0
13		2022-03-23	11:46:11	54.8	68.2	55.0	54.8
14		2022-03-23	11:46:12	55.4	68.0	55.2	54.9
15		2022-03-23	11:46:13	54.8	67.6	55.2	54.9
16		2022-03-23	11:46:14	54.7	66.9	55.0	54.7
17		2022-03-23	11:46:15	54.6	66.1	54.8	54.6
18		2022-03-23	11:46:16	54.7	66.2	54.8	54.6
19		2022-03-23	11:46:17	55.5	67.4	55.3	54.7
20		2022-03-23	11:46:18	55.6	67.4	55.5	55.3
21		2022-03-23	11:46:19	55.7	67.0	55.7	55.5
22		2022-03-23	11:46:20	55.8	68.4	55.7	55.6
23		2022-03-23	11:46:21	55.7	67.1	55.8	55.6
24		2022-03-23	11:46:22	54.5	65.6	55.7	55.0
25		2022-03-23	11:46:23	54.7	66.1	55.1	54.8
26		2022-03-23	11:46:24	54.2	66.3	54.8	54.4
27		2022-03-23	11:46:25	54.6	67.5	54.5	54.3
28		2022-03-23	11:46:26	54.0	64.6	54.6	54.2
29		2022-03-23	11:46:27	54.1	66.2	54.3	54.1
30		2022-03-23	11:46:28	53.5	65.4	54.1	53.7
31		2022-03-23	11:46:29	54.0	65.5	53.9	53.7
32		2022-03-23	11:46:30	53.7	65.9	53.9	53.7
33		2022-03-23	11:46:31	54.1	65.6	54.2	53.8
34		2022-03-23	11:46:32	53.7	65.2	54.0	53.7
35		2022-03-23	11:46:33	52.7	63.7	53.7	53.2
36		2022-03-23	11:46:34	52.6	64.3	53.2	52.8
37		2022-03-23	11:46:35	52.1	63.8	52.8	52.4
38		2022-03-23	11:46:36	52.1	64.7	52.5	52.2
39		2022-03-23	11:46:37	52.5	65.4	52.5	52.2
40		2022-03-23	11:46:38	52.3	65.1	52.4	52.2
41		2022-03-23	11:46:39	52.4	64.0	52.5	52.3
42		2022-03-23	11:46:40	52.4	63.3	52.5	52.3
43		2022-03-23	11:46:41	52.2	63.9	52.4	52.3
44		2022-03-23	11:46:42	52.1	70.9	52.3	52.0
45		2022-03-23	11:46:43	52.7	64.3	52.5	52.3
46		2022-03-23	11:46:44	52.9	65.8	52.8	52.5
47		2022-03-23	11:46:45	53.3	64.8	53.2	52.7
48		2022-03-23	11:46:46	55.0	68.1	54.5	53.2
49		2022-03-23	11:46:47	56.3	71.0	55.8	54.5
50		2022-03-23	11:46:48	58.1	70.2	57.4	55.8
51		2022-03-23	11:46:49	57.6	69.9	57.6	57.3
52		2022-03-23	11:46:50	56.9	68.2	57.5	57.1
53		2022-03-23	11:46:51	56.2	68.7	57.1	56.5
54		2022-03-23	11:46:52	56.0	67.8	56.6	56.2
55		2022-03-23	11:46:53	55.2	67.3	56.3	55.5
56		2022-03-23	11:46:54	54.5	67.3	55.5	54.9
57		2022-03-23	11:46:55	55.0	68.1	55.1	54.9
58		2022-03-23	11:46:56	55.4	67.2	55.2	55.0
59		2022-03-23	11:46:57	54.0	65.6	55.2	54.4

60	2022-03-23	11:46:58	54.0	65.9	54.7	54.0
61	2022-03-23	11:46:59	53.0	66.6	54.0	53.4
62	2022-03-23	11:47:00	52.5	64.5	53.4	52.8
63	2022-03-23	11:47:01	52.6	64.3	52.8	52.6
64	2022-03-23	11:47:02	52.1	64.7	52.7	52.3
65	2022-03-23	11:47:03	52.3	65.2	52.4	52.3
66	2022-03-23	11:47:04	52.2	64.9	52.3	52.2
67	2022-03-23	11:47:05	52.0	63.9	52.2	52.1
68	2022-03-23	11:47:06	52.0	63.3	52.2	52.0
69	2022-03-23	11:47:07	51.6	63.1	52.0	51.7
70	2022-03-23	11:47:08	51.6	62.9	51.8	51.6
71	2022-03-23	11:47:09	51.6	62.9	51.7	51.5
72	2022-03-23	11:47:10	51.9	64.1	51.9	51.6
73	2022-03-23	11:47:11	52.0	64.2	51.9	51.8
74	2022-03-23	11:47:12	51.7	63.4	51.9	51.8
75	2022-03-23	11:47:13	51.7	62.9	51.8	51.7
76	2022-03-23	11:47:14	51.9	63.6	51.9	51.8
77	2022-03-23	11:47:15	52.0	64.3	52.0	51.7
78	2022-03-23	11:47:16	52.4	64.5	52.3	51.9
79	2022-03-23	11:47:17	52.9	64.7	52.7	52.2
80	2022-03-23	11:47:18	53.0	64.8	52.9	52.6
81	2022-03-23	11:47:19	54.1	66.4	53.7	52.9
82	2022-03-23	11:47:20	55.2	67.5	54.7	53.7
83	2022-03-23	11:47:21	57.5	71.1	56.9	54.7
84	2022-03-23	11:47:22	60.4	72.7	59.5	56.9
85	2022-03-23	11:47:23	59.6	72.2	59.8	59.5
86	2022-03-23	11:47:24	58.7	71.0	59.5	58.9
87	2022-03-23	11:47:25	57.7	70.8	58.9	58.1
88	2022-03-23	11:47:26	56.7	68.3	58.1	57.2
89	2022-03-23	11:47:27	56.7	69.8	57.2	56.9
90	2022-03-23	11:47:28	55.4	68.1	56.9	55.9
91	2022-03-23	11:47:29	54.5	65.8	55.9	55.1
92	2022-03-23	11:47:30	54.7	67.3	55.1	54.8
93	2022-03-23	11:47:31	54.3	66.5	54.8	54.5
94	2022-03-23	11:47:32	53.6	65.9	54.5	53.9
95	2022-03-23	11:47:33	52.8	64.1	53.9	53.2
96	2022-03-23	11:47:34	52.4	64.6	53.2	52.7
97	2022-03-23	11:47:35	52.5	64.6	52.7	52.6
98	2022-03-23	11:47:36	52.3	65.6	52.6	52.4
99	2022-03-23	11:47:37	52.7	67.0	52.7	52.4
100	2022-03-23	11:47:38	53.3	65.4	53.1	52.7
101	2022-03-23	11:47:39	52.7	65.3	53.1	52.8
102	2022-03-23	11:47:40	52.4	64.8	52.8	52.5
103	2022-03-23	11:47:41	52.5	64.7	52.6	52.5
104	2022-03-23	11:47:42	52.5	65.0	52.6	52.5
105	2022-03-23	11:47:43	52.3	63.8	52.6	52.3
106	2022-03-23	11:47:44	51.9	62.9	52.4	52.1
107	2022-03-23	11:47:45	51.9	63.3	52.1	51.9
108	2022-03-23	11:47:46	51.7	63.7	52.0	51.7
109	2022-03-23	11:47:47	52.3	63.7	52.1	51.9
110	2022-03-23	11:47:48	52.1	63.6	52.2	51.9
111	2022-03-23	11:47:49	52.4	64.7	52.4	52.1
112	2022-03-23	11:47:50	53.9	64.2	53.4	52.4
113	2022-03-23	11:47:51	54.8	66.5	54.4	53.4
114	2022-03-23	11:47:52	56.4	71.2	55.9	54.4
115	2022-03-23	11:47:53	58.7	70.8	58.0	55.9
116	2022-03-23	11:47:54	56.6	68.3	58.0	57.1
117	2022-03-23	11:47:55	55.5	67.5	57.2	56.1
118	2022-03-23	11:47:56	54.0	66.4	56.1	54.9
119	2022-03-23	11:47:57	54.1	72.7	55.0	54.3
120	2022-03-23	11:47:58	53.9	66.1	54.4	54.0

121	2022-03-23	11:47:59	53.4	66.7	54.0	53.5
122	2022-03-23	11:48:00	53.4	67.0	53.7	53.3
123	2022-03-23	11:48:01	54.0	67.4	53.9	53.7
124	2022-03-23	11:48:02	54.4	65.7	54.3	53.6
125	2022-03-23	11:48:03	54.7	67.6	54.6	54.4
126	2022-03-23	11:48:04	53.6	66.5	54.5	53.9
127	2022-03-23	11:48:05	54.3	66.7	54.3	53.8
128	2022-03-23	11:48:06	54.2	66.1	54.4	53.9
129	2022-03-23	11:48:07	56.0	68.7	55.6	54.4
130	2022-03-23	11:48:08	55.3	69.0	55.6	55.4
131	2022-03-23	11:48:09	57.1	69.0	56.6	55.4
132	2022-03-23	11:48:10	56.0	69.2	56.6	55.9
133	2022-03-23	11:48:11	58.0	70.5	57.4	56.3
134	2022-03-23	11:48:12	62.0	74.1	61.1	57.4
135	2022-03-23	11:48:13	62.7	75.2	62.1	61.1
136	2022-03-23	11:48:14	62.8	74.8	62.9	62.1
137	2022-03-23	11:48:15	63.0	76.0	63.0	62.2
138	2022-03-23	11:48:16	63.5	75.1	63.5	63.1
139	2022-03-23	11:48:17	62.5	74.0	63.3	62.7
140	2022-03-23	11:48:18	59.9	72.2	62.7	61.1
141	2022-03-23	11:48:19	62.3	75.1	62.1	60.9
142	2022-03-23	11:48:20	60.4	73.7	62.1	61.1
143	2022-03-23	11:48:21	58.3	70.8	61.0	59.5
144	2022-03-23	11:48:22	57.7	69.7	59.5	58.4
145	2022-03-23	11:48:23	57.4	69.2	58.4	57.7
146	2022-03-23	11:48:24	55.5	67.8	57.8	56.5
147	2022-03-23	11:48:25	55.3	69.7	56.8	55.7
148	2022-03-23	11:48:26	55.1	67.7	55.7	55.3
149	2022-03-23	11:48:27	54.3	65.4	55.3	54.7
150	2022-03-23	11:48:28	54.3	66.5	54.8	54.3
151	2022-03-23	11:48:29	54.1	67.8	54.4	54.2
152	2022-03-23	11:48:30	54.0	66.0	54.2	53.9
153	2022-03-23	11:48:31	54.2	67.2	54.3	54.1
154	2022-03-23	11:48:32	53.4	64.0	54.2	53.6
155	2022-03-23	11:48:33	53.3	65.4	53.7	53.4
156	2022-03-23	11:48:34	53.0	64.8	53.4	53.1
157	2022-03-23	11:48:35	52.8	65.4	53.2	52.9
158	2022-03-23	11:48:36	52.7	74.6	52.9	52.7
159	2022-03-23	11:48:37	52.1	64.0	52.8	52.4
160	2022-03-23	11:48:38	52.7	64.6	52.7	52.3
161	2022-03-23	11:48:39	54.8	68.1	54.1	52.7
162	2022-03-23	11:48:40	53.3	65.1	54.1	53.6
163	2022-03-23	11:48:41	53.9	67.4	54.0	53.6
164	2022-03-23	11:48:42	52.6	65.0	53.8	53.0
165	2022-03-23	11:48:43	52.4	65.1	53.0	52.6
166	2022-03-23	11:48:44	52.6	63.7	52.7	52.6
167	2022-03-23	11:48:45	52.4	64.5	52.6	52.4
168	2022-03-23	11:48:46	53.3	66.5	53.1	52.4
169	2022-03-23	11:48:47	52.7	64.9	53.1	52.8
170	2022-03-23	11:48:48	52.2	64.9	52.8	52.4
171	2022-03-23	11:48:49	53.3	65.4	53.0	52.4
172	2022-03-23	11:48:50	53.9	66.6	53.6	53.0
173	2022-03-23	11:48:51	56.6	69.5	55.9	53.7
174	2022-03-23	11:48:52	61.0	74.4	59.9	56.0
175	2022-03-23	11:48:53	58.7	72.0	60.0	59.1
176	2022-03-23	11:48:54	58.1	70.5	59.0	58.5
177	2022-03-23	11:48:55	56.3	69.3	58.5	57.2
178	2022-03-23	11:48:56	55.0	68.1	57.2	55.9
179	2022-03-23	11:48:57	53.2	65.7	55.9	54.3
180	2022-03-23	11:48:58	52.3	64.0	54.3	53.1
181	2022-03-23	11:48:59	51.7	65.1	53.1	52.3

182	2022-03-23	11:49:00	52.0	65.3	52.4	52.0
183	2022-03-23	11:49:01	51.5	63.3	52.0	51.7
184	2022-03-23	11:49:02	52.0	64.5	52.0	51.7
185	2022-03-23	11:49:03	51.9	64.5	52.0	51.9
186	2022-03-23	11:49:04	52.5	65.3	52.3	51.9
187	2022-03-23	11:49:05	53.1	66.6	52.8	52.3
188	2022-03-23	11:49:06	53.4	66.5	53.2	52.8
189	2022-03-23	11:49:07	53.7	65.9	53.6	53.2
190	2022-03-23	11:49:08	53.3	65.2	53.5	53.4
191	2022-03-23	11:49:09	53.8	65.6	53.7	53.3
192	2022-03-23	11:49:10	56.4	68.7	55.8	53.8
193	2022-03-23	11:49:11	60.4	73.6	59.4	55.8
194	2022-03-23	11:49:12	59.3	72.6	59.9	59.2
195	2022-03-23	11:49:13	56.2	72.7	59.2	57.4
196	2022-03-23	11:49:14	53.4	68.1	57.4	55.3
197	2022-03-23	11:49:15	52.5	65.8	55.3	53.7
198	2022-03-23	11:49:16	52.5	64.0	53.7	53.0
199	2022-03-23	11:49:17	53.1	64.7	53.1	52.8
200	2022-03-23	11:49:18	53.1	65.8	53.2	53.0
201	2022-03-23	11:49:19	54.1	65.6	53.7	53.2
202	2022-03-23	11:49:20	54.6	66.8	54.3	53.7
203	2022-03-23	11:49:21	55.3	69.5	55.1	54.3
204	2022-03-23	11:49:22	57.9	70.7	57.0	55.1
205	2022-03-23	11:49:23	59.0	75.0	58.6	57.0
206	2022-03-23	11:49:24	59.1	71.6	59.1	58.4
207	2022-03-23	11:49:25	62.1	74.3	61.4	59.1
208	2022-03-23	11:49:26	62.3	74.9	62.1	61.4
209	2022-03-23	11:49:27	58.9	69.6	61.8	60.2
210	2022-03-23	11:49:28	60.9	73.9	60.9	59.8
211	2022-03-23	11:49:29	63.2	75.1	62.5	60.9
212	2022-03-23	11:49:30	64.7	76.0	64.0	62.5
213	2022-03-23	11:49:31	66.1	77.5	65.5	63.9
214	2022-03-23	11:49:32	67.3	80.7	66.8	65.5
215	2022-03-23	11:49:33	67.0	79.0	67.2	66.6
216	2022-03-23	11:49:34	65.6	77.6	66.8	66.1
217	2022-03-23	11:49:35	69.3	83.3	68.4	66.0
218	2022-03-23	11:49:36	69.2	82.3	69.1	68.2
219	2022-03-23	11:49:37	72.0	86.6	71.3	69.1
220	2022-03-23	11:49:38	73.6	87.3	73.0	71.3
221	2022-03-23	11:49:39	75.5	89.6	74.8	73.0
222	2022-03-23	11:49:40	79.5	93.3	78.5	74.8
223	2022-03-23	11:49:41	78.3	91.6	78.7	78.2
224	2022-03-23	11:49:42	75.5	89.5	78.2	76.6
225	2022-03-23	11:49:43	72.9	86.4	76.6	74.6
226	2022-03-23	11:49:44	71.7	84.6	74.5	72.9
227	2022-03-23	11:49:45	68.0	82.5	72.9	70.3
228	2022-03-23	11:49:46	64.8	78.5	70.3	67.7
229	2022-03-23	11:49:47	63.0	78.1	67.7	65.4
230	2022-03-23	11:49:48	61.1	77.6	65.4	63.1
231	2022-03-23	11:49:49	58.1	71.4	63.1	60.6
232	2022-03-23	11:49:50	59.8	76.2	60.6	60.0
233	2022-03-23	11:49:51	59.5	74.3	60.2	59.7
234	2022-03-23	11:49:52	54.3	66.6	59.7	57.1
235	2022-03-23	11:49:53	55.1	68.6	57.1	55.8
236	2022-03-23	11:49:54	54.7	66.6	55.9	55.1
237	2022-03-23	11:49:55	53.4	67.0	55.2	54.1
238	2022-03-23	11:49:56	52.8	65.2	54.1	53.3
239	2022-03-23	11:49:57	52.8	65.4	53.3	52.8
240	2022-03-23	11:49:58	53.3	66.2	53.3	52.9
241	2022-03-23	11:49:59	53.5	65.8	53.5	53.1
242	2022-03-23	11:50:00	55.3	68.1	54.9	53.5

243	2022-03-23	11:50:01	58.7	70.9	57.7	54.9
244	2022-03-23	11:50:02	60.3	72.8	59.5	57.7
245	2022-03-23	11:50:03	57.1	70.4	59.6	58.1
246	2022-03-23	11:50:04	55.2	66.4	58.0	56.5
247	2022-03-23	11:50:05	53.8	65.7	56.5	55.0
248	2022-03-23	11:50:06	53.0	66.3	55.0	53.8
249	2022-03-23	11:50:07	52.5	64.6	53.8	53.0
250	2022-03-23	11:50:08	52.1	66.6	53.0	52.4
251	2022-03-23	11:50:09	51.5	63.0	52.4	51.8
252	2022-03-23	11:50:10	52.2	65.6	52.1	51.8
253	2022-03-23	11:50:11	51.8	63.4	52.1	51.9
254	2022-03-23	11:50:12	51.4	63.4	51.9	51.6
255	2022-03-23	11:50:13	51.4	63.9	51.7	51.5
256	2022-03-23	11:50:14	51.2	62.5	51.5	51.3
257	2022-03-23	11:50:15	51.8	64.8	51.7	51.3
258	2022-03-23	11:50:16	52.1	64.2	52.0	51.6
259	2022-03-23	11:50:17	52.7	65.5	52.5	52.0
260	2022-03-23	11:50:18	52.5	64.6	52.5	52.4
261	2022-03-23	11:50:19	52.9	64.9	52.8	52.5
262	2022-03-23	11:50:20	53.1	65.1	53.0	52.8
263	2022-03-23	11:50:21	53.9	65.6	53.6	53.0
264	2022-03-23	11:50:22	53.6	65.3	53.8	53.5
265	2022-03-23	11:50:23	53.9	67.0	53.7	53.5
266	2022-03-23	11:50:24	53.3	65.1	53.7	53.5
267	2022-03-23	11:50:25	53.2	67.6	53.5	53.3
268	2022-03-23	11:50:26	53.0	65.9	53.3	53.1
269	2022-03-23	11:50:27	52.3	64.4	53.1	52.6
270	2022-03-23	11:50:28	52.2	64.0	52.6	52.3
271	2022-03-23	11:50:29	52.4	64.2	52.4	52.2
272	2022-03-23	11:50:30	53.3	64.8	53.1	52.4
273	2022-03-23	11:50:31	55.6	68.8	55.0	53.1
274	2022-03-23	11:50:32	60.6	75.8	59.6	55.0
275	2022-03-23	11:50:33	60.2	74.1	60.5	59.6
276	2022-03-23	11:50:34	56.2	71.2	59.6	57.7
277	2022-03-23	11:50:35	53.5	66.6	57.7	55.6
278	2022-03-23	11:50:36	52.5	63.6	55.6	53.9
279	2022-03-23	11:50:37	52.3	63.5	53.9	52.9
280	2022-03-23	11:50:38	52.2	64.7	52.9	52.4
281	2022-03-23	11:50:39	52.3	64.8	52.5	52.3
282	2022-03-23	11:50:40	52.9	68.2	52.7	52.4
283	2022-03-23	11:50:41	52.4	64.5	52.8	52.5
284	2022-03-23	11:50:42	52.3	65.1	52.5	52.3
285	2022-03-23	11:50:43	52.5	65.8	52.5	52.4
286	2022-03-23	11:50:44	52.5	63.7	52.5	52.4
287	2022-03-23	11:50:45	53.2	76.7	53.0	52.5
288	2022-03-23	11:50:46	53.4	66.2	53.3	53.0
289	2022-03-23	11:50:47	52.7	64.9	53.3	52.9
290	2022-03-23	11:50:48	53.6	72.8	53.6	52.9
291	2022-03-23	11:50:49	52.9	64.2	53.3	53.0
292	2022-03-23	11:50:50	53.6	66.7	53.6	53.2
293	2022-03-23	11:50:51	52.6	64.8	53.4	52.9
294	2022-03-23	11:50:52	52.6	64.9	52.9	52.7
295	2022-03-23	11:50:53	52.9	65.3	52.9	52.7
296	2022-03-23	11:50:54	53.7	73.6	53.5	52.8
297	2022-03-23	11:50:55	53.0	64.8	53.4	53.2
298	2022-03-23	11:50:56	52.7	64.6	53.2	52.8
299	2022-03-23	11:50:57	53.2	65.3	53.2	52.8
300	2022-03-23	11:50:58	53.2	65.7	53.3	53.1
301	2022-03-23	11:50:59	52.6	64.2	53.1	52.8
302	2022-03-23	11:51:00	52.8	66.0	52.9	52.7
303	2022-03-23	11:51:01	52.8	65.3	52.9	52.7

304	2022-03-23	11:51:02	52.9	64.0	52.9	52.7
305	2022-03-23	11:51:03	53.0	66.1	53.1	52.8
306	2022-03-23	11:51:04	53.9	74.5	53.9	53.0
307	2022-03-23	11:51:05	52.6	64.6	53.5	52.9
308	2022-03-23	11:51:06	52.6	64.1	53.0	52.7
309	2022-03-23	11:51:07	52.2	64.2	52.7	52.4
310	2022-03-23	11:51:08	52.4	65.0	52.4	52.4
311	2022-03-23	11:51:09	52.7	63.5	52.6	52.4
312	2022-03-23	11:51:10	52.5	67.0	52.6	52.5
313	2022-03-23	11:51:11	53.0	66.1	52.8	52.6
314	2022-03-23	11:51:12	54.0	66.7	53.7	52.8
315	2022-03-23	11:51:13	58.4	71.5	57.6	53.7
316	2022-03-23	11:51:14	63.9	79.4	62.7	57.7
317	2022-03-23	11:51:15	60.7	73.9	62.7	61.5
318	2022-03-23	11:51:16	56.7	69.7	61.5	59.0
319	2022-03-23	11:51:17	54.5	72.5	59.0	56.7
320	2022-03-23	11:51:18	53.7	65.9	56.7	55.1
321	2022-03-23	11:51:19	53.8	65.8	55.1	54.3
322	2022-03-23	11:51:20	52.9	69.3	54.3	53.5
323	2022-03-23	11:51:21	53.2	65.3	53.6	53.3
324	2022-03-23	11:51:22	52.9	64.1	53.3	53.0
325	2022-03-23	11:51:23	53.2	66.8	53.1	52.9
326	2022-03-23	11:51:24	54.8	67.9	54.4	53.2
327	2022-03-23	11:51:25	57.9	69.7	57.1	54.4
328	2022-03-23	11:51:26	60.5	74.5	59.7	57.1
329	2022-03-23	11:51:27	57.9	70.2	59.7	58.6
330	2022-03-23	11:51:28	56.4	70.6	58.6	57.3
331	2022-03-23	11:51:29	53.4	64.8	57.3	55.2
332	2022-03-23	11:51:30	52.8	66.4	55.2	53.9
333	2022-03-23	11:51:31	53.5	66.2	53.9	53.5
334	2022-03-23	11:51:32	53.7	66.9	53.8	53.6
335	2022-03-23	11:51:33	52.7	64.6	53.7	53.1
336	2022-03-23	11:51:34	53.1	64.4	53.1	53.0
337	2022-03-23	11:51:35	54.2	67.4	53.8	53.1
338	2022-03-23	11:51:36	54.6	66.1	54.3	53.8
339	2022-03-23	11:51:37	54.7	67.7	54.6	54.2
340	2022-03-23	11:51:38	55.0	66.6	54.9	54.7
341	2022-03-23	11:51:39	56.4	69.0	56.0	54.9
342	2022-03-23	11:51:40	58.6	70.4	58.0	56.0
343	2022-03-23	11:51:41	63.0	75.0	62.1	58.1
344	2022-03-23	11:51:42	70.6	84.2	69.2	62.2
345	2022-03-23	11:51:43	73.0	84.3	72.0	69.2
346	2022-03-23	11:51:44	75.6	88.2	75.2	72.0
347	2022-03-23	11:51:45	64.9	77.8	74.1	70.5
348	2022-03-23	11:51:46	60.7	72.3	70.5	67.0
349	2022-03-23	11:51:47	61.0	73.5	66.9	64.2
350	2022-03-23	11:51:48	61.3	73.3	64.2	62.6
351	2022-03-23	11:51:49	62.9	76.0	62.8	62.5
352	2022-03-23	11:51:50	62.5	74.1	62.9	62.5
353	2022-03-23	11:51:51	62.0	73.8	62.7	62.1
354	2022-03-23	11:51:52	61.1	78.5	62.2	61.4
355	2022-03-23	11:51:53	60.0	71.2	61.4	60.5
356	2022-03-23	11:51:54	58.1	69.8	60.5	59.1
357	2022-03-23	11:51:55	57.4	69.8	59.1	58.1
358	2022-03-23	11:51:56	56.9	68.4	58.1	57.4
359	2022-03-23	11:51:57	56.7	68.4	57.4	56.9
360	2022-03-23	11:51:58	57.5	84.1	57.8	56.4
361	2022-03-23	11:51:59	55.1	67.0	57.5	56.1
362	2022-03-23	11:52:00	56.0	68.2	56.3	56.0
363	2022-03-23	11:52:01	53.9	67.1	56.0	54.8
364	2022-03-23	11:52:02	52.5	64.6	54.8	53.5

365	2022-03-23	11:52:03	51.9	63.0	53.5	52.5
366	2022-03-23	11:52:04	51.5	62.6	52.5	51.8
367	2022-03-23	11:52:05	51.4	64.2	52.0	51.5
368	2022-03-23	11:52:06	52.0	64.8	51.9	51.5
369	2022-03-23	11:52:07	52.3	64.3	52.1	51.9
370	2022-03-23	11:52:08	52.2	63.8	52.2	52.1
371	2022-03-23	11:52:09	52.0	64.6	52.2	52.0
372	2022-03-23	11:52:10	52.0	64.9	52.1	52.0
373	2022-03-23	11:52:11	52.4	64.3	52.3	52.0
374	2022-03-23	11:52:12	52.6	65.3	52.6	52.3
375	2022-03-23	11:52:13	53.2	65.3	52.9	52.4
376	2022-03-23	11:52:14	53.1	65.0	53.1	52.8
377	2022-03-23	11:52:15	51.8	65.1	53.0	52.2
378	2022-03-23	11:52:16	51.3	63.7	52.3	51.7
379	2022-03-23	11:52:17	51.3	62.6	51.7	51.4
380	2022-03-23	11:52:18	51.0	63.5	51.4	51.1
381	2022-03-23	11:52:19	51.4	64.3	51.3	51.2
382	2022-03-23	11:52:20	51.3	64.1	51.4	51.3
383	2022-03-23	11:52:21	51.7	63.9	51.6	51.3
384	2022-03-23	11:52:22	52.5	65.4	52.3	51.5
385	2022-03-23	11:52:23	52.9	66.8	52.7	52.2
386	2022-03-23	11:52:24	51.7	62.9	52.6	52.1
387	2022-03-23	11:52:25	51.6	63.6	52.1	51.8
388	2022-03-23	11:52:26	52.9	78.1	52.9	51.7
389	2022-03-23	11:52:27	52.0	64.3	52.3	52.1
390	2022-03-23	11:52:28	52.4	64.3	52.4	52.2
391	2022-03-23	11:52:29	52.2	65.4	52.5	52.2
392	2022-03-23	11:52:30	51.9	63.5	52.2	51.9
393	2022-03-23	11:52:31	51.9	65.1	52.0	51.9
394	2022-03-23	11:52:32	52.1	64.0	52.2	51.8
395	2022-03-23	11:52:33	51.5	62.9	51.9	51.6
396	2022-03-23	11:52:34	51.7	63.0	51.8	51.6
397	2022-03-23	11:52:35	51.4	63.8	51.7	51.5
398	2022-03-23	11:52:36	51.1	62.6	51.5	51.2
399	2022-03-23	11:52:37	51.2	63.2	51.3	51.2
400	2022-03-23	11:52:38	51.4	64.4	51.4	51.2
401	2022-03-23	11:52:39	51.5	63.1	51.4	51.3
402	2022-03-23	11:52:40	51.2	62.9	51.5	51.2
403	2022-03-23	11:52:41	51.6	64.2	51.5	51.2
404	2022-03-23	11:52:42	50.8	61.8	51.5	51.1
405	2022-03-23	11:52:43	51.2	62.8	51.2	51.1
406	2022-03-23	11:52:44	51.4	63.2	51.3	51.2
407	2022-03-23	11:52:45	51.7	64.6	51.6	51.3
408	2022-03-23	11:52:46	52.3	64.6	52.1	51.6
409	2022-03-23	11:52:47	52.5	64.1	52.4	52.0
410	2022-03-23	11:52:48	53.3	65.0	53.0	52.4
411	2022-03-23	11:52:49	53.7	65.7	53.5	53.0
412	2022-03-23	11:52:50	54.3	71.3	54.1	53.4
413	2022-03-23	11:52:51	54.6	66.7	54.6	54.2
414	2022-03-23	11:52:52	53.8	65.3	54.4	54.0
415	2022-03-23	11:52:53	53.2	65.5	54.0	53.5
416	2022-03-23	11:52:54	52.9	64.1	53.5	53.1
417	2022-03-23	11:52:55	52.6	64.9	53.1	52.8
418	2022-03-23	11:52:56	52.4	64.4	52.8	52.5
419	2022-03-23	11:52:57	52.1	66.5	52.7	52.2
420	2022-03-23	11:52:58	51.7	63.3	52.2	51.9
421	2022-03-23	11:52:59	51.4	62.9	51.9	51.6
422	2022-03-23	11:53:00	51.6	63.3	51.7	51.6
423	2022-03-23	11:53:01	51.2	63.2	51.7	51.4
424	2022-03-23	11:53:02	51.4	64.9	51.5	51.2
425	2022-03-23	11:53:03	51.5	65.3	51.8	51.4

426	2022-03-23	11:53:04	54.9	84.4	54.6	51.4
427	2022-03-23	11:53:05	52.8	66.1	53.5	53.0
428	2022-03-23	11:53:06	52.1	65.7	53.2	52.4
429	2022-03-23	11:53:07	51.7	64.6	52.4	52.0
430	2022-03-23	11:53:08	51.2	63.8	52.0	51.5
431	2022-03-23	11:53:09	52.1	72.1	52.1	51.3
432	2022-03-23	11:53:10	51.3	65.0	52.1	51.6
433	2022-03-23	11:53:11	51.7	63.5	51.7	51.5
434	2022-03-23	11:53:12	51.8	66.0	51.8	51.6
435	2022-03-23	11:53:13	51.4	64.7	51.7	51.5
436	2022-03-23	11:53:14	51.9	63.0	51.9	51.5
437	2022-03-23	11:53:15	52.7	68.3	52.5	51.8
438	2022-03-23	11:53:16	54.2	67.1	53.8	52.5
439	2022-03-23	11:53:17	54.9	66.9	54.4	53.8
440	2022-03-23	11:53:18	54.6	67.8	54.6	54.4
441	2022-03-23	11:53:19	54.7	65.9	54.7	54.5
442	2022-03-23	11:53:20	56.3	68.5	55.9	54.7
443	2022-03-23	11:53:21	61.9	75.9	60.9	55.9
444	2022-03-23	11:53:22	62.7	75.0	62.5	61.0
445	2022-03-23	11:53:23	58.2	70.9	61.7	59.7
446	2022-03-23	11:53:24	53.5	66.7	59.7	56.9
447	2022-03-23	11:53:25	53.2	64.9	56.9	55.0
448	2022-03-23	11:53:26	53.5	65.9	55.0	54.1
449	2022-03-23	11:53:27	54.7	67.5	54.6	53.9
450	2022-03-23	11:53:28	57.7	69.8	57.1	54.6
451	2022-03-23	11:53:29	61.4	73.0	60.2	57.1
452	2022-03-23	11:53:30	59.9	72.8	60.2	60.0
453	2022-03-23	11:53:31	58.3	69.6	60.1	59.0
454	2022-03-23	11:53:32	54.8	70.6	59.0	56.8
455	2022-03-23	11:53:33	52.8	65.8	56.8	54.8
456	2022-03-23	11:53:34	52.5	64.9	54.7	53.6
457	2022-03-23	11:53:35	52.7	65.2	53.6	53.1
458	2022-03-23	11:53:36	53.7	67.3	53.6	53.1
459	2022-03-23	11:53:37	53.7	65.4	53.7	53.5
460	2022-03-23	11:53:38	55.0	67.0	54.7	53.7
461	2022-03-23	11:53:39	57.8	70.3	57.1	54.7
462	2022-03-23	11:53:40	61.7	74.4	60.7	57.1
463	2022-03-23	11:53:41	66.2	79.4	65.1	60.8
464	2022-03-23	11:53:42	67.2	79.4	66.4	65.1
465	2022-03-23	11:53:43	65.9	78.3	66.7	66.0
466	2022-03-23	11:53:44	65.1	76.5	66.0	65.4
467	2022-03-23	11:53:45	60.6	73.4	65.5	63.0
468	2022-03-23	11:53:46	56.0	69.6	63.0	59.9
469	2022-03-23	11:53:47	53.9	65.7	59.9	57.1
470	2022-03-23	11:53:48	53.4	65.4	57.1	55.2
471	2022-03-23	11:53:49	56.0	70.5	55.8	55.1
472	2022-03-23	11:53:50	57.7	70.5	57.3	55.8
473	2022-03-23	11:53:51	56.9	68.1	57.4	57.0
474	2022-03-23	11:53:52	55.9	69.6	57.0	56.3
475	2022-03-23	11:53:53	54.1	67.0	56.3	55.0
476	2022-03-23	11:53:54	53.2	66.7	55.0	53.9
477	2022-03-23	11:53:55	52.9	65.7	53.9	53.3
478	2022-03-23	11:53:56	51.6	62.8	53.3	52.3
479	2022-03-23	11:53:57	51.4	64.4	52.3	51.7
480	2022-03-23	11:53:58	52.8	66.7	52.6	51.8
481	2022-03-23	11:53:59	51.5	63.8	52.4	51.8
482	2022-03-23	11:54:00	51.6	64.0	51.9	51.7
483	2022-03-23	11:54:01	51.5	67.3	51.7	51.5
484	2022-03-23	11:54:02	51.0	62.9	51.5	51.2
485	2022-03-23	11:54:03	50.8	61.9	51.2	51.0
486	2022-03-23	11:54:04	51.1	62.9	51.1	50.9

487	2022-03-23	11:54:05	51.6	67.6	51.4	51.0
488	2022-03-23	11:54:06	51.3	63.0	51.4	51.2
489	2022-03-23	11:54:07	51.2	64.1	51.5	51.2
490	2022-03-23	11:54:08	51.0	62.6	51.3	51.0
491	2022-03-23	11:54:09	50.9	64.0	51.1	50.9
492	2022-03-23	11:54:10	51.1	63.0	51.1	51.0
493	2022-03-23	11:54:11	51.3	62.9	51.2	51.0
494	2022-03-23	11:54:12	51.4	62.8	51.3	51.1
495	2022-03-23	11:54:13	51.4	64.5	51.5	51.3
496	2022-03-23	11:54:14	50.8	62.4	51.4	51.0
497	2022-03-23	11:54:15	51.6	63.4	51.5	51.0
498	2022-03-23	11:54:16	51.8	65.7	51.9	51.4
499	2022-03-23	11:54:17	50.7	62.5	51.5	51.0
500	2022-03-23	11:54:18	51.0	63.2	51.1	50.9
501	2022-03-23	11:54:19	51.0	63.5	51.1	50.9
502	2022-03-23	11:54:20	52.5	66.9	52.1	51.0
503	2022-03-23	11:54:21	52.4	65.7	52.5	51.8
504	2022-03-23	11:54:22	50.9	63.5	52.3	51.5
505	2022-03-23	11:54:23	50.7	62.6	51.5	50.9
506	2022-03-23	11:54:24	50.8	62.4	50.9	50.8
507	2022-03-23	11:54:25	50.8	63.5	50.9	50.7
508	2022-03-23	11:54:26	51.0	63.0	51.0	50.8
509	2022-03-23	11:54:27	50.5	63.1	50.9	50.6
510	2022-03-23	11:54:28	50.8	64.3	50.8	50.7
511	2022-03-23	11:54:29	51.0	64.1	50.9	50.7
512	2022-03-23	11:54:30	51.1	63.3	51.1	50.9
513	2022-03-23	11:54:31	51.5	63.1	51.4	51.1
514	2022-03-23	11:54:32	51.6	63.1	51.5	51.3
515	2022-03-23	11:54:33	51.9	63.5	51.8	51.5
516	2022-03-23	11:54:34	52.0	63.7	52.0	51.6
517	2022-03-23	11:54:35	52.0	65.1	52.1	51.9
518	2022-03-23	11:54:36	52.1	64.0	52.1	52.0
519	2022-03-23	11:54:37	52.3	65.4	52.3	52.0
520	2022-03-23	11:54:38	52.9	66.1	52.7	52.3
521	2022-03-23	11:54:39	53.8	66.0	53.6	52.6
522	2022-03-23	11:54:40	56.2	66.9	55.4	53.6
523	2022-03-23	11:54:41	58.0	71.3	57.2	55.5
524	2022-03-23	11:54:42	56.5	68.2	57.3	56.8
525	2022-03-23	11:54:43	58.6	72.5	58.1	56.7
526	2022-03-23	11:54:44	60.0	73.6	59.6	58.0
527	2022-03-23	11:54:45	62.5	74.9	61.6	59.7
528	2022-03-23	11:54:46	62.5	75.3	62.3	61.6
529	2022-03-23	11:54:47	63.7	77.1	63.4	62.0
530	2022-03-23	11:54:48	66.2	77.9	65.3	63.4
531	2022-03-23	11:54:49	67.9	80.4	67.4	65.3
532	2022-03-23	11:54:50	71.5	82.9	70.4	67.5
533	2022-03-23	11:54:51	68.8	81.2	70.4	69.2
534	2022-03-23	11:54:52	68.8	82.2	69.2	68.9
535	2022-03-23	11:54:53	69.3	82.8	69.3	69.0
536	2022-03-23	11:54:54	73.3	87.2	72.4	69.2
537	2022-03-23	11:54:55	74.3	86.0	73.8	72.5
538	2022-03-23	11:54:56	75.2	86.3	74.9	73.8
539	2022-03-23	11:54:57	77.5	91.3	76.8	75.0
540	2022-03-23	11:54:58	83.1	97.0	82.1	76.8
541	2022-03-23	11:54:59	85.5	100.3	84.8	82.1
542	2022-03-23	11:55:00	88.7	101.0	87.5	84.8
543	2022-03-23	11:55:01	86.3	99.3	87.8	86.5
544	2022-03-23	11:55:02	81.3	94.2	86.4	83.9
545	2022-03-23	11:55:03	78.1	89.4	83.9	81.1
546	2022-03-23	11:55:04	72.8	83.0	81.1	77.8
547	2022-03-23	11:55:05	71.4	81.7	77.8	74.9

548	2022-03-23	11:55:06	68.4	79.6	74.9	71.9
549	2022-03-23	11:55:07	64.4	76.8	71.9	68.8
550	2022-03-23	11:55:08	61.7	74.9	68.8	65.7
551	2022-03-23	11:55:09	60.6	72.9	65.7	63.3
552	2022-03-23	11:55:10	60.0	71.8	63.3	61.5
553	2022-03-23	11:55:11	60.9	72.8	61.5	60.9
554	2022-03-23	11:55:12	61.3	73.8	61.6	61.2
555	2022-03-23	11:55:13	59.5	71.4	61.2	60.1
556	2022-03-23	11:55:14	60.0	72.9	60.2	59.6
557	2022-03-23	11:55:15	60.2	70.3	60.3	60.1
558	2022-03-23	11:55:16	58.5	70.2	60.2	59.1
559	2022-03-23	11:55:17	58.5	70.2	59.1	58.7
560	2022-03-23	11:55:18	58.9	70.4	59.3	58.6
561	2022-03-23	11:55:19	55.4	67.8	58.6	56.8
562	2022-03-23	11:55:20	55.9	67.8	56.8	56.2
563	2022-03-23	11:55:21	55.5	67.4	56.4	55.9
564	2022-03-23	11:55:22	56.1	67.0	56.1	55.7
565	2022-03-23	11:55:23	56.7	68.4	56.7	56.1
566	2022-03-23	11:55:24	55.0	66.5	56.3	55.6
567	2022-03-23	11:55:25	56.1	67.6	56.0	55.5
568	2022-03-23	11:55:26	56.9	69.1	56.8	55.8
569	2022-03-23	11:55:27	57.6	70.0	57.6	56.8
570	2022-03-23	11:55:28	56.2	68.3	57.1	56.6
571	2022-03-23	11:55:29	56.7	68.5	56.7	56.5
572	2022-03-23	11:55:30	56.9	69.4	56.9	56.6
573	2022-03-23	11:55:31	57.9	69.2	57.6	56.9
574	2022-03-23	11:55:32	59.8	71.7	59.0	57.6
575	2022-03-23	11:55:33	59.2	71.1	59.2	58.9
576	2022-03-23	11:55:34	59.5	71.0	59.5	59.2
577	2022-03-23	11:55:35	59.5	71.3	59.5	59.2
578	2022-03-23	11:55:36	62.3	75.3	61.7	59.4
579	2022-03-23	11:55:37	63.0	75.5	62.5	61.7
580	2022-03-23	11:55:38	63.2	75.8	63.1	62.5
581	2022-03-23	11:55:39	62.8	74.9	63.0	62.7
582	2022-03-23	11:55:40	59.7	71.7	62.7	61.1
583	2022-03-23	11:55:41	61.8	74.7	61.8	60.7
584	2022-03-23	11:55:42	63.4	76.3	62.9	61.7
585	2022-03-23	11:55:43	62.0	74.7	62.8	62.0
586	2022-03-23	11:55:44	64.8	76.0	63.9	62.4
587	2022-03-23	11:55:45	64.3	77.8	64.4	63.8
588	2022-03-23	11:55:46	60.2	73.8	64.2	62.0
589	2022-03-23	11:55:47	59.0	72.9	61.9	60.3
590	2022-03-23	11:55:48	59.4	74.8	60.3	59.5
591	2022-03-23	11:55:49	64.3	80.0	63.1	60.1
592	2022-03-23	11:55:50	59.4	71.2	62.9	61.1
593	2022-03-23	11:55:51	61.4	74.1	61.4	61.1
594	2022-03-23	11:55:52	57.5	70.5	61.1	59.1
595	2022-03-23	11:55:53	56.7	68.9	59.1	57.6
596	2022-03-23	11:55:54	57.0	71.0	57.6	57.1
597	2022-03-23	11:55:55	58.9	71.3	58.6	57.4
598	2022-03-23	11:55:56	60.9	73.3	60.1	58.6
599	2022-03-23	11:55:57	56.8	69.3	60.0	58.2
600	2022-03-23	11:55:58	55.7	67.3	58.2	56.8
601	2022-03-23	11:55:59	56.1	67.9	56.8	56.4
602	2022-03-23	11:56:00	56.3	69.1	56.5	56.2
603	2022-03-23	11:56:01	57.4	70.0	57.2	56.3
604	2022-03-23	11:56:02	59.5	71.9	58.9	57.2
605	2022-03-23	11:56:03	57.7	69.3	58.9	58.1
606	2022-03-23	11:56:04	58.4	69.6	58.4	58.2
607	2022-03-23	11:56:05	59.8	71.3	59.3	58.3
608	2022-03-23	11:56:06	60.4	73.3	60.2	59.3

609	2022-03-23	11:56:07	62.6	74.0	61.7	60.2
610	2022-03-23	11:56:08	64.9	77.3	64.3	61.7
611	2022-03-23	11:56:09	68.1	81.9	67.0	64.3
612	2022-03-23	11:56:10	67.2	78.8	67.3	67.0
613	2022-03-23	11:56:11	65.8	77.9	67.1	66.2
614	2022-03-23	11:56:12	68.1	81.7	67.8	66.5
615	2022-03-23	11:56:13	67.3	81.0	67.8	67.3
616	2022-03-23	11:56:14	70.2	83.0	69.3	67.6
617	2022-03-23	11:56:15	70.9	83.3	70.2	69.3
618	2022-03-23	11:56:16	72.6	86.7	72.0	70.2
619	2022-03-23	11:56:17	73.1	87.1	73.0	71.9
620	2022-03-23	11:56:18	75.0	87.2	74.4	73.0
621	2022-03-23	11:56:19	76.3	91.0	75.8	74.4
622	2022-03-23	11:56:20	76.1	90.7	76.5	75.6
623	2022-03-23	11:56:21	66.7	82.9	75.6	72.1
624	2022-03-23	11:56:22	61.5	73.0	72.0	68.4
625	2022-03-23	11:56:23	59.7	72.9	68.4	65.0
626	2022-03-23	11:56:24	59.1	72.0	65.0	62.3
627	2022-03-23	11:56:25	57.5	70.2	62.2	60.0
628	2022-03-23	11:56:26	57.2	71.4	59.9	58.4
629	2022-03-23	11:56:27	57.0	68.3	58.4	57.5
630	2022-03-23	11:56:28	56.8	68.5	57.5	56.9
631	2022-03-23	11:56:29	56.3	69.0	57.2	56.6
632	2022-03-23	11:56:30	55.7	66.3	56.7	56.0
633	2022-03-23	11:56:31	55.7	72.1	56.0	55.7
634	2022-03-23	11:56:32	54.4	66.8	55.7	54.9
635	2022-03-23	11:56:33	53.6	65.7	54.9	54.2
636	2022-03-23	11:56:34	53.8	67.3	54.3	53.9
637	2022-03-23	11:56:35	52.7	65.2	54.0	53.2
638	2022-03-23	11:56:36	52.6	65.0	53.2	52.8
639	2022-03-23	11:56:37	52.3	64.3	52.8	52.5
640	2022-03-23	11:56:38	52.4	67.5	52.7	52.4
641	2022-03-23	11:56:39	51.4	62.7	52.4	51.8
642	2022-03-23	11:56:40	51.7	63.1	51.8	51.7
643	2022-03-23	11:56:41	51.5	67.8	51.7	51.6
644	2022-03-23	11:56:42	51.3	63.0	51.5	51.4
645	2022-03-23	11:56:43	51.6	65.0	51.6	51.3
646	2022-03-23	11:56:44	52.3	66.1	52.1	51.6
647	2022-03-23	11:56:45	52.2	65.3	52.3	52.0
648	2022-03-23	11:56:46	51.6	63.3	52.0	51.7
649	2022-03-23	11:56:47	52.4	66.1	52.2	51.6
650	2022-03-23	11:56:48	53.0	65.7	52.7	52.2
651	2022-03-23	11:56:49	53.1	65.9	53.0	52.7
652	2022-03-23	11:56:50	54.7	68.9	54.3	53.0
653	2022-03-23	11:56:51	61.6	75.6	60.5	54.4
654	2022-03-23	11:56:52	62.9	75.8	62.4	60.5
655	2022-03-23	11:56:53	58.1	71.0	61.8	59.8
656	2022-03-23	11:56:54	58.1	71.1	59.8	58.7
657	2022-03-23	11:56:55	59.8	72.2	59.7	59.0
658	2022-03-23	11:56:56	57.0	69.3	59.4	58.0
659	2022-03-23	11:56:57	55.4	67.3	58.0	56.5
660	2022-03-23	11:56:58	53.8	66.1	56.4	55.0
661	2022-03-23	11:56:59	53.1	64.3	54.9	53.9
662	2022-03-23	11:57:00	52.4	63.7	53.9	53.1
663	2022-03-23	11:57:01	53.0	64.9	53.1	53.0
664	2022-03-23	11:57:02	52.7	65.6	53.0	52.8
665	2022-03-23	11:57:03	51.8	63.2	52.8	52.1
666	2022-03-23	11:57:04	51.0	62.2	52.1	51.5
667	2022-03-23	11:57:05	51.1	64.6	51.5	51.3
668	2022-03-23	11:57:06	51.3	64.1	51.4	51.2
669	2022-03-23	11:57:07	51.8	70.2	51.7	51.3

670	2022-03-23	11:57:08	52.3	70.5	52.0	51.7
671	2022-03-23	11:57:09	53.1	64.6	52.8	52.0
672	2022-03-23	11:57:10	53.8	66.1	53.5	52.8
673	2022-03-23	11:57:11	54.9	66.8	54.5	53.5
674	2022-03-23	11:57:12	54.3	66.2	54.6	54.3
675	2022-03-23	11:57:13	54.3	65.6	54.4	54.2
676	2022-03-23	11:57:14	54.2	68.4	54.3	54.2
677	2022-03-23	11:57:15	54.0	65.6	54.2	54.0
678	2022-03-23	11:57:16	54.4	67.2	54.3	54.1
679	2022-03-23	11:57:17	54.5	66.8	54.5	54.3
680	2022-03-23	11:57:18	54.1	67.0	54.7	54.1
681	2022-03-23	11:57:19	53.7	66.0	54.1	53.8
682	2022-03-23	11:57:20	56.8	70.1	56.2	53.8
683	2022-03-23	11:57:21	59.4	71.0	58.5	56.2
684	2022-03-23	11:57:22	60.1	73.7	59.6	58.5
685	2022-03-23	11:57:23	54.6	67.2	59.4	57.0
686	2022-03-23	11:57:24	58.4	70.8	58.1	56.8
687	2022-03-23	11:57:25	61.8	74.0	60.7	58.1
688	2022-03-23	11:57:26	58.9	71.1	60.6	59.6
689	2022-03-23	11:57:27	56.7	69.2	59.6	57.9
690	2022-03-23	11:57:28	53.8	65.5	57.9	55.7
691	2022-03-23	11:57:29	52.5	64.6	55.7	54.0
692	2022-03-23	11:57:30	53.5	66.1	54.0	53.7
693	2022-03-23	11:57:31	55.1	66.9	54.8	53.8
694	2022-03-23	11:57:32	56.1	67.6	55.7	54.8
695	2022-03-23	11:57:33	56.5	67.6	56.2	55.7
696	2022-03-23	11:57:34	56.3	68.5	56.4	56.2
697	2022-03-23	11:57:35	55.4	67.6	56.2	55.8
698	2022-03-23	11:57:36	55.3	67.9	55.8	55.5
699	2022-03-23	11:57:37	55.6	68.0	55.6	55.4
700	2022-03-23	11:57:38	57.1	69.7	56.7	55.7
701	2022-03-23	11:57:39	59.7	72.1	59.0	56.7
702	2022-03-23	11:57:40	64.2	75.8	63.1	59.1
703	2022-03-23	11:57:41	65.0	78.8	64.6	63.1
704	2022-03-23	11:57:42	62.3	74.1	64.1	62.9
705	2022-03-23	11:57:43	61.1	73.2	62.9	61.9
706	2022-03-23	11:57:44	61.5	73.0	62.1	61.6
707	2022-03-23	11:57:45	60.7	72.2	61.6	61.0
708	2022-03-23	11:57:46	60.1	72.1	61.0	60.4
709	2022-03-23	11:57:47	63.2	75.3	62.6	60.4
710	2022-03-23	11:57:48	63.7	75.2	63.3	62.6
711	2022-03-23	11:57:49	66.7	77.2	65.8	63.3
712	2022-03-23	11:57:50	67.3	78.5	66.9	65.9
713	2022-03-23	11:57:51	69.6	80.5	68.7	66.9
714	2022-03-23	11:57:52	69.7	81.6	69.6	68.7
715	2022-03-23	11:57:53	68.0	80.5	69.0	68.4
716	2022-03-23	11:57:54	68.7	81.5	68.7	68.4
717	2022-03-23	11:57:55	72.0	86.8	71.4	68.7
718	2022-03-23	11:57:56	73.8	86.4	73.1	71.5
719	2022-03-23	11:57:57	75.2	87.8	74.6	73.2
720	2022-03-23	11:57:58	75.4	87.9	75.2	74.7
721	2022-03-23	11:57:59	76.7	90.6	76.5	75.0
722	2022-03-23	11:58:00	76.9	91.3	77.0	76.5
723	2022-03-23	11:58:01	75.1	88.7	76.6	75.7
724	2022-03-23	11:58:02	73.0	87.8	75.7	74.2
725	2022-03-23	11:58:03	69.9	83.5	74.2	72.1
726	2022-03-23	11:58:04	70.0	84.6	72.1	70.9
727	2022-03-23	11:58:05	68.8	84.8	70.9	69.7
728	2022-03-23	11:58:06	67.0	83.9	69.7	68.1
729	2022-03-23	11:58:07	64.5	77.8	68.1	66.2
730	2022-03-23	11:58:08	64.3	77.9	66.1	65.1

731	2022-03-23	11:58:09	63.5	77.9	65.3	64.0
732	2022-03-23	11:58:10	63.0	76.6	63.9	63.4
733	2022-03-23	11:58:11	64.1	79.6	64.1	63.3
734	2022-03-23	11:58:12	65.6	81.3	65.0	64.1
735	2022-03-23	11:58:13	63.0	77.0	65.0	63.7
736	2022-03-23	11:58:14	60.1	71.5	63.7	61.8
737	2022-03-23	11:58:15	61.6	77.6	61.9	61.2
738	2022-03-23	11:58:16	63.2	76.5	62.8	61.9
739	2022-03-23	11:58:17	59.5	72.0	62.8	60.9
740	2022-03-23	11:58:18	57.6	70.2	60.9	59.1
741	2022-03-23	11:58:19	59.5	73.8	59.5	59.0
742	2022-03-23	11:58:20	62.0	74.0	61.3	59.6
743	2022-03-23	11:58:21	59.7	73.8	61.1	60.3
744	2022-03-23	11:58:22	57.9	71.8	60.3	58.8
745	2022-03-23	11:58:23	62.2	78.3	61.6	59.1
746	2022-03-23	11:58:24	60.6	74.7	62.0	60.7
747	2022-03-23	11:58:25	57.6	71.4	60.7	58.8
748	2022-03-23	11:58:26	55.7	69.9	58.8	57.3
749	2022-03-23	11:58:27	54.9	67.4	57.3	55.9
750	2022-03-23	11:58:28	54.5	66.7	55.9	55.0
751	2022-03-23	11:58:29	55.1	69.7	55.6	54.9
752	2022-03-23	11:58:30	52.3	64.2	54.9	53.5
753	2022-03-23	11:58:31	54.7	67.9	54.4	53.4
754	2022-03-23	11:58:32	52.4	64.5	54.4	53.2
755	2022-03-23	11:58:33	51.6	62.7	53.2	52.3
756	2022-03-23	11:58:34	52.6	67.0	52.6	52.3
757	2022-03-23	11:58:35	55.6	69.2	54.8	52.6
758	2022-03-23	11:58:36	52.3	64.6	54.8	53.3
759	2022-03-23	11:58:37	51.8	63.9	53.3	52.4
760	2022-03-23	11:58:38	51.9	63.7	52.4	52.0
761	2022-03-23	11:58:39	51.6	63.3	52.2	51.8
762	2022-03-23	11:58:40	51.5	65.8	51.8	51.5
763	2022-03-23	11:58:41	51.5	65.9	51.7	51.4
764	2022-03-23	11:58:42	51.1	62.9	51.5	51.2
765	2022-03-23	11:58:43	51.5	63.4	51.5	51.3
766	2022-03-23	11:58:44	52.0	64.5	51.9	51.4
767	2022-03-23	11:58:45	51.6	63.3	51.9	51.7
768	2022-03-23	11:58:46	51.4	63.6	51.7	51.5
769	2022-03-23	11:58:47	51.4	64.9	51.6	51.4
770	2022-03-23	11:58:48	51.8	62.7	51.7	51.5
771	2022-03-23	11:58:49	51.8	65.8	51.8	51.6
772	2022-03-23	11:58:50	52.0	64.1	51.9	51.8
773	2022-03-23	11:58:51	51.9	63.3	51.9	51.8
774	2022-03-23	11:58:52	52.6	64.2	52.4	52.0
775	2022-03-23	11:58:53	53.2	67.3	53.0	52.4
776	2022-03-23	11:58:54	53.5	66.2	53.3	53.0
777	2022-03-23	11:58:55	54.7	66.5	54.3	53.3
778	2022-03-23	11:58:56	55.2	66.9	54.9	54.4
779	2022-03-23	11:58:57	57.0	68.6	56.4	54.8
780	2022-03-23	11:58:58	60.3	72.7	59.4	56.4
781	2022-03-23	11:58:59	62.3	76.8	61.5	59.4
782	2022-03-23	11:59:00	62.1	73.0	62.0	61.4
783	2022-03-23	11:59:01	63.6	76.1	63.3	62.0
784	2022-03-23	11:59:02	65.6	77.5	64.9	63.3
785	2022-03-23	11:59:03	62.9	75.3	64.9	63.7
786	2022-03-23	11:59:04	64.3	76.3	64.3	63.6
787	2022-03-23	11:59:05	64.9	76.8	64.8	63.9
788	2022-03-23	11:59:06	67.8	80.7	67.1	64.8
789	2022-03-23	11:59:07	68.7	82.2	68.2	67.2
790	2022-03-23	11:59:08	71.2	83.1	70.5	68.1
791	2022-03-23	11:59:09	71.2	82.8	71.0	70.5

792	2022-03-23	11:59:10	73.2	85.9	72.5	70.9
793	2022-03-23	11:59:11	73.9	89.1	73.6	72.5
794	2022-03-23	11:59:12	77.0	93.5	76.2	73.6
795	2022-03-23	11:59:13	78.9	92.6	78.1	76.2
796	2022-03-23	11:59:14	80.1	93.6	79.5	78.2
797	2022-03-23	11:59:15	78.6	91.8	79.5	79.0
798	2022-03-23	11:59:16	75.9	89.5	79.0	77.1
799	2022-03-23	11:59:17	73.2	85.0	77.1	75.1
800	2022-03-23	11:59:18	70.5	83.4	75.0	72.7
801	2022-03-23	11:59:19	67.5	81.2	72.7	70.2
802	2022-03-23	11:59:20	65.7	81.0	70.2	67.9
803	2022-03-23	11:59:21	64.9	77.0	67.9	66.4
804	2022-03-23	11:59:22	66.1	80.7	66.4	65.9
805	2022-03-23	11:59:23	64.2	78.2	66.3	65.0
806	2022-03-23	11:59:24	62.9	75.4	65.0	63.8
807	2022-03-23	11:59:25	65.4	78.6	64.9	63.8
808	2022-03-23	11:59:26	64.7	79.4	64.8	64.4
809	2022-03-23	11:59:27	60.9	73.9	64.7	62.7
810	2022-03-23	11:59:28	59.8	73.9	62.7	61.1
811	2022-03-23	11:59:29	62.6	78.1	62.5	60.7
812	2022-03-23	11:59:30	62.6	77.5	62.8	62.2
813	2022-03-23	11:59:31	59.5	72.4	62.6	60.8
814	2022-03-23	11:59:32	60.4	72.8	60.8	60.3
815	2022-03-23	11:59:33	59.6	72.8	60.9	59.9
816	2022-03-23	11:59:34	62.4	75.2	61.6	59.9
817	2022-03-23	11:59:35	63.0	79.1	63.1	61.6
818	2022-03-23	11:59:36	58.2	70.8	62.1	60.1
819	2022-03-23	11:59:37	56.1	69.3	60.0	58.0
820	2022-03-23	11:59:38	59.0	71.9	58.8	58.0
821	2022-03-23	11:59:39	57.7	70.2	58.8	58.1
822	2022-03-23	11:59:40	58.0	71.3	58.3	57.9
823	2022-03-23	11:59:41	59.8	72.7	59.4	58.0
824	2022-03-23	11:59:42	58.7	73.3	59.5	58.6
825	2022-03-23	11:59:43	61.4	76.2	60.6	58.6
826	2022-03-23	11:59:44	60.8	75.5	61.1	60.5
827	2022-03-23	11:59:45	59.4	73.8	60.7	59.7
828	2022-03-23	11:59:46	56.3	70.3	59.7	57.9
829	2022-03-23	11:59:47	59.5	76.4	59.2	57.6
830	2022-03-23	11:59:48	60.6	74.6	60.2	59.2
831	2022-03-23	11:59:49	65.0	78.4	64.1	60.2
832	2022-03-23	11:59:50	63.6	77.8	64.7	63.5
833	2022-03-23	11:59:51	59.7	72.7	63.5	61.4
834	2022-03-23	11:59:52	58.4	70.7	61.4	59.9
835	2022-03-23	11:59:53	59.0	75.0	59.9	58.9
836	2022-03-23	11:59:54	59.8	74.2	59.9	59.6
837	2022-03-23	11:59:55	59.2	75.0	60.0	59.2
838	2022-03-23	11:59:56	55.7	68.7	59.2	57.4
839	2022-03-23	11:59:57	57.8	70.2	57.7	57.4
840	2022-03-23	11:59:58	59.4	72.2	58.8	57.7
841	2022-03-23	11:59:59	57.6	72.5	58.7	58.0
842	2022-03-23	12:00:00	56.4	71.2	58.0	56.7
843	2022-03-23	12:00:01	57.9	70.8	57.7	57.3
844	2022-03-23	12:00:02	58.8	73.7	58.5	57.6
845	2022-03-23	12:00:03	56.3	68.9	58.4	57.3
846	2022-03-23	12:00:04	55.8	67.7	57.2	56.4
847	2022-03-23	12:00:05	56.2	67.4	56.4	56.2
848	2022-03-23	12:00:06	57.9	69.1	57.5	56.3
849	2022-03-23	12:00:07	62.3	75.2	61.3	57.5
850	2022-03-23	12:00:08	62.1	74.7	62.1	61.4
851	2022-03-23	12:00:09	62.5	73.7	62.3	61.6
852	2022-03-23	12:00:10	64.8	76.5	64.1	62.3

853		2022-03-23	12:00:11	62.5	75.0	63.9	63.0
854		2022-03-23	12:00:12	57.9	71.2	63.0	60.4
855		2022-03-23	12:00:13	54.1	66.1	60.4	57.6
856		2022-03-23	12:00:14	53.3	65.0	57.6	55.4
857		2022-03-23	12:00:15	53.0	64.9	55.4	54.1
858		2022-03-23	12:00:16	52.8	65.1	54.0	53.3
859		2022-03-23	12:00:17	52.8	64.6	53.3	52.9
860		2022-03-23	12:00:18	52.7	63.5	53.0	52.8
861		2022-03-23	12:00:19	52.6	64.0	52.8	52.6
862		2022-03-23	12:00:20	52.8	65.4	52.8	52.7
863		2022-03-23	12:00:21	52.8	64.7	52.9	52.7
864		2022-03-23	12:00:22	52.2	63.3	52.7	52.4
865		2022-03-23	12:00:23	52.4	64.0	52.4	52.3
866		2022-03-23	12:00:24	52.4	65.0	52.5	52.3
867		2022-03-23	12:00:25	52.1	65.3	52.4	52.2
868		2022-03-23	12:00:26	52.2	66.6	52.3	52.2
869		2022-03-23	12:00:27	52.1	63.7	52.2	52.1
870		2022-03-23	12:00:28	52.6	64.2	52.4	52.1
871		2022-03-23	12:00:29	52.5	64.3	52.5	52.4
872		2022-03-23	12:00:30	52.5	65.8	52.5	52.5
873		2022-03-23	12:00:31	52.5	65.0	52.6	52.5
874		2022-03-23	12:00:32	53.1	65.0	52.9	52.5
875		2022-03-23	12:00:33	54.0	65.6	53.7	52.9
876		2022-03-23	12:00:34	55.4	68.4	54.9	53.7
877		2022-03-23	12:00:35	55.0	67.2	55.0	54.8
878		2022-03-23	12:00:36	55.0	67.2	55.1	54.9
879		2022-03-23	12:00:37	55.6	67.9	55.4	54.9
880		2022-03-23	12:00:38	57.1	73.2	56.6	55.4
881		2022-03-23	12:00:39	59.7	73.5	58.9	56.6
882		2022-03-23	12:00:40	58.3	72.1	59.2	58.4
883		2022-03-23	12:00:41	57.5	69.2	58.4	57.8
884		2022-03-23	12:00:42	55.4	68.6	57.8	56.3
885		2022-03-23	12:00:43	53.8	65.6	56.3	54.9
886		2022-03-23	12:00:44	53.5	66.0	54.9	54.1
887		2022-03-23	12:00:45	55.6	68.9	55.3	54.0
888		2022-03-23	12:00:46	59.9	73.9	59.0	55.4
889		2022-03-23	12:00:47	61.4	75.0	60.9	59.1
890		2022-03-23	12:00:48	58.9	71.9	60.3	59.4
891		2022-03-23	12:00:49	55.6	68.8	59.3	57.3
892		2022-03-23	12:00:50	52.8	64.2	57.3	55.0
893		2022-03-23	12:00:51	52.3	64.4	55.0	53.5
894		2022-03-23	12:00:52	51.6	64.1	53.5	52.4
895		2022-03-23	12:00:53	51.3	64.5	52.4	51.8
896		2022-03-23	12:00:54	51.2	63.0	51.8	51.4
897		2022-03-23	12:00:55	50.7	62.4	51.5	51.0
898		2022-03-23	12:00:56	50.8	63.1	51.0	50.8
899		2022-03-23	12:00:57	50.8	62.4	50.9	50.8
900		2022-03-23	12:00:58	51.1	63.6	51.1	50.9
901		2022-03-23	12:00:59	51.1	66.3	51.1	50.8
902	Stop	2022-03-23	12:01:00				

ST-3 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	12:13:01				
2		2022-03-23	12:13:01	74.7	88.0	75.4	74.9
3		2022-03-23	12:13:02	74.0	88.0	75.3	74.2
4		2022-03-23	12:13:03	72.5	85.2	74.2	73.2
5		2022-03-23	12:13:04	72.5	86.3	73.3	72.6
6		2022-03-23	12:13:05	69.3	81.4	72.6	70.8
7		2022-03-23	12:13:06	69.0	82.5	70.7	69.8
8		2022-03-23	12:13:07	68.7	82.3	69.8	69.1
9		2022-03-23	12:13:08	69.1	82.4	69.3	68.9
10		2022-03-23	12:13:09	67.5	81.3	69.2	68.2
11		2022-03-23	12:13:10	67.6	80.8	68.1	67.8
12		2022-03-23	12:13:11	68.7	80.4	68.5	67.9
13		2022-03-23	12:13:12	68.1	79.9	68.5	68.2
14		2022-03-23	12:13:13	67.4	80.0	68.2	67.6
15		2022-03-23	12:13:14	66.8	77.9	67.6	67.1
16		2022-03-23	12:13:15	66.3	78.6	67.1	66.6
17		2022-03-23	12:13:16	66.2	80.0	66.7	66.2
18		2022-03-23	12:13:17	65.7	77.8	66.3	65.9
19		2022-03-23	12:13:18	65.4	76.7	65.9	65.6
20		2022-03-23	12:13:19	66.3	78.6	66.0	65.5
21		2022-03-23	12:13:20	66.7	78.6	66.6	66.0
22		2022-03-23	12:13:21	65.7	77.5	66.4	65.9
23		2022-03-23	12:13:22	65.6	77.5	66.0	65.7
24		2022-03-23	12:13:23	65.9	80.0	66.0	65.6
25		2022-03-23	12:13:24	66.1	78.5	66.1	65.9
26		2022-03-23	12:13:25	65.5	77.2	66.0	65.7
27		2022-03-23	12:13:26	65.1	77.8	65.7	65.3
28		2022-03-23	12:13:27	65.4	77.0	65.5	65.3
29		2022-03-23	12:13:28	64.9	76.9	65.4	65.0
30		2022-03-23	12:13:29	64.1	75.7	65.0	64.5
31		2022-03-23	12:13:30	64.0	76.8	64.5	64.2
32		2022-03-23	12:13:31	64.0	76.1	64.2	64.1
33		2022-03-23	12:13:32	63.1	74.9	64.1	63.5
34		2022-03-23	12:13:33	63.6	76.4	63.6	63.4
35		2022-03-23	12:13:34	64.3	75.2	64.1	63.6
36		2022-03-23	12:13:35	64.6	76.9	64.5	64.0
37		2022-03-23	12:13:36	65.6	76.6	65.3	64.5
38		2022-03-23	12:13:37	64.7	76.7	65.5	64.8
39		2022-03-23	12:13:38	64.8	76.0	64.9	64.6
40		2022-03-23	12:13:39	65.0	76.7	65.0	64.8
41		2022-03-23	12:13:40	64.5	77.1	64.9	64.6
42		2022-03-23	12:13:41	65.2	77.0	65.1	64.7
43		2022-03-23	12:13:42	65.7	78.3	65.5	65.0
44		2022-03-23	12:13:43	66.4	79.5	66.1	65.5
45		2022-03-23	12:13:44	69.4	81.4	68.6	66.2
46		2022-03-23	12:13:45	67.2	79.2	68.6	67.6
47		2022-03-23	12:13:46	67.0	79.3	67.6	67.2
48		2022-03-23	12:13:47	66.9	79.3	67.4	67.0
49		2022-03-23	12:13:48	65.5	77.4	67.0	66.2
50		2022-03-23	12:13:49	65.9	78.6	66.3	66.0
51		2022-03-23	12:13:50	65.3	77.3	66.0	65.5
52		2022-03-23	12:13:51	64.2	78.5	65.5	64.7
53		2022-03-23	12:13:52	64.3	76.2	64.7	64.4
54		2022-03-23	12:13:53	63.5	75.0	64.3	63.8
55		2022-03-23	12:13:54	64.2	76.6	64.1	63.9
56		2022-03-23	12:13:55	63.3	74.2	64.1	63.6
57		2022-03-23	12:13:56	63.9	79.9	63.9	63.6
58		2022-03-23	12:13:57	64.7	78.9	64.5	63.8
59		2022-03-23	12:13:58	63.5	75.7	64.3	63.8

60	2022-03-23	12:13:59	63.8	75.8	63.9	63.6
61	2022-03-23	12:14:00	64.5	76.2	64.3	63.9
62	2022-03-23	12:14:01	64.6	76.8	64.5	64.3
63	2022-03-23	12:14:02	63.8	75.3	64.5	64.0
64	2022-03-23	12:14:03	64.0	76.1	64.1	63.9
65	2022-03-23	12:14:04	63.8	75.4	64.1	63.8
66	2022-03-23	12:14:05	63.9	78.4	64.0	63.9
67	2022-03-23	12:14:06	64.2	76.9	64.1	63.8
68	2022-03-23	12:14:07	63.7	75.8	64.2	63.7
69	2022-03-23	12:14:08	63.1	74.7	63.7	63.3
70	2022-03-23	12:14:09	62.8	74.9	63.4	63.0
71	2022-03-23	12:14:10	62.5	74.4	63.0	62.6
72	2022-03-23	12:14:11	64.2	76.4	63.8	62.8
73	2022-03-23	12:14:12	63.1	74.6	63.8	63.3
74	2022-03-23	12:14:13	62.6	74.7	63.3	62.8
75	2022-03-23	12:14:14	63.0	75.4	63.0	62.8
76	2022-03-23	12:14:15	65.4	80.1	64.9	63.0
77	2022-03-23	12:14:16	67.9	79.5	67.0	64.9
78	2022-03-23	12:14:17	66.0	80.4	67.0	66.2
79	2022-03-23	12:14:18	64.7	76.8	66.2	65.4
80	2022-03-23	12:14:19	64.8	77.5	65.4	64.9
81	2022-03-23	12:14:20	64.0	76.5	64.9	64.4
82	2022-03-23	12:14:21	66.1	78.3	65.7	64.4
83	2022-03-23	12:14:22	65.9	79.1	66.1	65.7
84	2022-03-23	12:14:23	63.6	78.0	65.7	64.5
85	2022-03-23	12:14:24	64.2	76.7	64.5	64.2
86	2022-03-23	12:14:25	63.7	74.6	64.2	63.9
87	2022-03-23	12:14:26	64.1	77.4	64.1	63.9
88	2022-03-23	12:14:27	63.9	75.8	64.2	63.9
89	2022-03-23	12:14:28	64.4	76.8	64.3	63.9
90	2022-03-23	12:14:29	63.7	75.7	64.4	63.8
91	2022-03-23	12:14:30	62.3	74.4	63.8	62.9
92	2022-03-23	12:14:31	64.3	78.4	64.0	62.9
93	2022-03-23	12:14:32	63.6	75.8	64.0	63.7
94	2022-03-23	12:14:33	64.5	76.4	64.3	63.8
95	2022-03-23	12:14:34	64.4	78.1	64.4	64.0
96	2022-03-23	12:14:35	65.0	77.5	64.8	64.4
97	2022-03-23	12:14:36	64.6	76.5	64.7	64.6
98	2022-03-23	12:14:37	68.0	79.5	67.1	64.7
99	2022-03-23	12:14:38	69.2	81.8	68.7	67.1
100	2022-03-23	12:14:39	70.2	82.6	69.7	68.7
101	2022-03-23	12:14:40	72.2	84.1	71.6	69.8
102	2022-03-23	12:14:41	72.1	84.7	72.0	71.6
103	2022-03-23	12:14:42	73.0	86.8	72.8	71.7
104	2022-03-23	12:14:43	73.6	86.7	73.6	72.8
105	2022-03-23	12:14:44	71.2	83.1	73.1	72.0
106	2022-03-23	12:14:45	69.4	81.3	72.0	70.5
107	2022-03-23	12:14:46	68.5	79.9	70.5	69.3
108	2022-03-23	12:14:47	66.2	77.8	69.3	67.6
109	2022-03-23	12:14:48	65.2	78.1	67.6	66.2
110	2022-03-23	12:14:49	65.0	77.0	66.2	65.5
111	2022-03-23	12:14:50	65.2	81.4	65.8	65.3
112	2022-03-23	12:14:51	64.7	77.4	65.3	64.9
113	2022-03-23	12:14:52	64.7	77.0	64.9	64.7
114	2022-03-23	12:14:53	65.7	79.0	65.5	64.7
115	2022-03-23	12:14:54	67.0	78.4	66.5	65.6
116	2022-03-23	12:14:55	65.6	76.8	66.5	65.9
117	2022-03-23	12:14:56	64.5	76.9	65.9	65.0
118	2022-03-23	12:14:57	64.7	76.8	65.0	64.8
119	2022-03-23	12:14:58	64.2	76.9	64.9	64.4
120	2022-03-23	12:14:59	64.2	76.5	64.5	64.2

121	2022-03-23	12:15:00	65.1	77.2	64.9	64.4
122	2022-03-23	12:15:01	64.9	78.0	65.2	64.7
123	2022-03-23	12:15:02	65.0	76.5	65.0	64.8
124	2022-03-23	12:15:03	65.5	77.6	65.3	64.9
125	2022-03-23	12:15:04	66.1	77.6	65.8	65.2
126	2022-03-23	12:15:05	66.7	79.0	66.5	65.8
127	2022-03-23	12:15:06	66.5	78.1	66.6	66.4
128	2022-03-23	12:15:07	66.3	78.9	66.4	66.2
129	2022-03-23	12:15:08	66.9	78.3	66.7	66.4
130	2022-03-23	12:15:09	65.8	78.2	66.7	66.1
131	2022-03-23	12:15:10	65.7	78.2	66.1	65.9
132	2022-03-23	12:15:11	65.6	77.7	66.0	65.6
133	2022-03-23	12:15:12	65.4	78.1	65.6	65.4
134	2022-03-23	12:15:13	66.2	78.2	66.0	65.6
135	2022-03-23	12:15:14	66.5	78.1	66.4	66.0
136	2022-03-23	12:15:15	66.2	78.6	66.3	66.2
137	2022-03-23	12:15:16	65.8	77.0	66.3	65.9
138	2022-03-23	12:15:17	65.0	76.4	65.9	65.4
139	2022-03-23	12:15:18	66.8	80.1	66.5	65.4
140	2022-03-23	12:15:19	69.4	82.7	68.5	66.6
141	2022-03-23	12:15:20	71.0	84.4	70.3	68.5
142	2022-03-23	12:15:21	71.2	83.3	70.9	70.4
143	2022-03-23	12:15:22	71.4	83.3	71.2	70.9
144	2022-03-23	12:15:23	71.0	82.0	71.3	71.0
145	2022-03-23	12:15:24	70.9	83.0	71.1	70.9
146	2022-03-23	12:15:25	69.7	81.7	70.9	70.1
147	2022-03-23	12:15:26	69.3	81.1	70.2	69.6
148	2022-03-23	12:15:27	68.8	81.0	69.6	69.0
149	2022-03-23	12:15:28	75.2	90.0	74.4	69.2
150	2022-03-23	12:15:29	69.3	81.8	73.7	71.5
151	2022-03-23	12:15:30	74.1	87.1	73.9	71.5
152	2022-03-23	12:15:31	67.6	79.0	73.2	70.6
153	2022-03-23	12:15:32	66.2	78.0	70.6	68.4
154	2022-03-23	12:15:33	65.8	78.3	68.4	67.0
155	2022-03-23	12:15:34	65.0	77.0	67.0	65.8
156	2022-03-23	12:15:35	64.6	76.5	65.8	65.1
157	2022-03-23	12:15:36	64.0	75.7	65.1	64.5
158	2022-03-23	12:15:37	63.1	74.6	64.5	63.6
159	2022-03-23	12:15:38	62.2	74.0	63.6	62.8
160	2022-03-23	12:15:39	62.1	75.2	62.8	62.3
161	2022-03-23	12:15:40	62.0	74.2	62.3	62.0
162	2022-03-23	12:15:41	62.0	75.0	62.2	61.9
163	2022-03-23	12:15:42	62.2	74.6	62.3	61.9
164	2022-03-23	12:15:43	63.5	75.2	63.0	62.3
165	2022-03-23	12:15:44	62.1	73.5	63.0	62.4
166	2022-03-23	12:15:45	62.1	74.5	62.5	62.1
167	2022-03-23	12:15:46	62.5	74.4	62.5	62.1
168	2022-03-23	12:15:47	62.3	76.7	62.6	62.2
169	2022-03-23	12:15:48	62.2	73.8	62.3	62.1
170	2022-03-23	12:15:49	62.8	75.3	62.7	62.2
171	2022-03-23	12:15:50	64.3	76.9	63.9	62.5
172	2022-03-23	12:15:51	64.2	76.6	64.2	63.9
173	2022-03-23	12:15:52	64.7	77.1	64.6	63.9
174	2022-03-23	12:15:53	66.2	78.7	65.8	64.6
175	2022-03-23	12:15:54	65.8	77.7	66.1	65.7
176	2022-03-23	12:15:55	66.0	81.1	66.5	65.6
177	2022-03-23	12:15:56	64.9	77.3	65.7	65.2
178	2022-03-23	12:15:57	65.0	76.2	65.3	65.0
179	2022-03-23	12:15:58	65.3	77.3	65.3	65.0
180	2022-03-23	12:15:59	66.9	78.9	66.5	65.3
181	2022-03-23	12:16:00	68.4	81.2	67.8	66.5

182	2022-03-23	12:16:01	67.7	79.8	68.0	67.7
183	2022-03-23	12:16:02	66.0	78.2	67.7	66.7
184	2022-03-23	12:16:03	66.6	78.9	66.9	66.6
185	2022-03-23	12:16:04	65.3	77.4	66.6	65.8
186	2022-03-23	12:16:05	65.8	77.1	65.9	65.7
187	2022-03-23	12:16:06	66.2	78.3	66.2	65.7
188	2022-03-23	12:16:07	67.1	78.4	66.8	66.3
189	2022-03-23	12:16:08	66.3	78.5	66.8	66.5
190	2022-03-23	12:16:09	66.9	78.8	66.8	66.5
191	2022-03-23	12:16:10	69.1	82.9	68.4	66.8
192	2022-03-23	12:16:11	67.7	79.9	68.5	67.8
193	2022-03-23	12:16:12	66.2	78.8	67.8	66.8
194	2022-03-23	12:16:13	66.9	79.6	66.9	66.7
195	2022-03-23	12:16:14	66.8	79.4	66.9	66.7
196	2022-03-23	12:16:15	66.4	78.2	67.0	66.5
197	2022-03-23	12:16:16	65.3	77.8	66.5	65.9
198	2022-03-23	12:16:17	64.9	83.0	65.9	65.2
199	2022-03-23	12:16:18	65.3	77.3	65.4	65.0
200	2022-03-23	12:16:19	66.2	77.8	66.0	65.3
201	2022-03-23	12:16:20	66.0	77.4	66.1	65.9
202	2022-03-23	12:16:21	65.7	78.0	66.0	65.7
203	2022-03-23	12:16:22	66.1	78.1	66.1	65.7
204	2022-03-23	12:16:23	67.2	78.9	66.9	66.1
205	2022-03-23	12:16:24	66.2	78.0	66.8	66.4
206	2022-03-23	12:16:25	66.3	79.1	66.5	66.2
207	2022-03-23	12:16:26	66.4	77.9	66.4	66.1
208	2022-03-23	12:16:27	66.4	79.7	66.5	66.4
209	2022-03-23	12:16:28	65.8	79.0	66.4	66.0
210	2022-03-23	12:16:29	65.5	78.2	66.0	65.6
211	2022-03-23	12:16:30	65.9	78.8	65.9	65.5
212	2022-03-23	12:16:31	66.7	78.3	66.4	66.0
213	2022-03-23	12:16:32	67.4	78.5	67.1	66.4
214	2022-03-23	12:16:33	66.8	78.6	67.1	66.8
215	2022-03-23	12:16:34	65.3	77.9	66.8	65.9
216	2022-03-23	12:16:35	65.1	76.8	66.0	65.4
217	2022-03-23	12:16:36	64.7	76.1	65.4	64.9
218	2022-03-23	12:16:37	64.4	78.3	64.9	64.5
219	2022-03-23	12:16:38	64.1	77.4	64.7	64.2
220	2022-03-23	12:16:39	64.9	77.6	64.8	64.2
221	2022-03-23	12:16:40	64.8	76.8	64.9	64.8
222	2022-03-23	12:16:41	65.3	77.9	65.2	64.8
223	2022-03-23	12:16:42	64.1	75.5	65.1	64.4
224	2022-03-23	12:16:43	64.6	76.8	64.6	64.3
225	2022-03-23	12:16:44	64.0	75.2	64.5	64.2
226	2022-03-23	12:16:45	63.6	75.6	64.2	63.8
227	2022-03-23	12:16:46	63.7	75.7	64.0	63.7
228	2022-03-23	12:16:47	63.7	75.3	63.8	63.5
229	2022-03-23	12:16:48	63.9	77.2	63.9	63.7
230	2022-03-23	12:16:49	64.2	78.0	64.1	63.8
231	2022-03-23	12:16:50	64.8	76.6	64.6	64.1
232	2022-03-23	12:16:51	64.8	76.3	64.8	64.4
233	2022-03-23	12:16:52	65.1	77.6	65.0	64.7
234	2022-03-23	12:16:53	64.9	76.6	65.0	64.9
235	2022-03-23	12:16:54	64.5	75.9	64.9	64.6
236	2022-03-23	12:16:55	65.0	78.0	64.9	64.6
237	2022-03-23	12:16:56	66.2	77.9	65.9	64.9
238	2022-03-23	12:16:57	67.1	79.3	66.7	65.9
239	2022-03-23	12:16:58	65.8	77.0	66.7	66.2
240	2022-03-23	12:16:59	66.8	78.1	66.6	66.1
241	2022-03-23	12:17:00	66.9	77.9	66.8	66.6
242	2022-03-23	12:17:01	66.5	78.3	66.7	66.5

243	2022-03-23	12:17:02	66.3	77.7	66.6	66.4
244	2022-03-23	12:17:03	66.3	79.6	66.4	66.3
245	2022-03-23	12:17:04	65.6	77.1	66.3	65.8
246	2022-03-23	12:17:05	65.0	77.6	65.8	65.2
247	2022-03-23	12:17:06	65.3	78.3	65.6	65.3
248	2022-03-23	12:17:07	65.2	77.1	65.3	65.1
249	2022-03-23	12:17:08	65.3	77.4	65.4	65.2
250	2022-03-23	12:17:09	64.1	78.0	65.3	64.5
251	2022-03-23	12:17:10	63.8	77.6	64.5	64.0
252	2022-03-23	12:17:11	64.0	77.5	64.3	64.0
253	2022-03-23	12:17:12	64.0	76.3	64.1	63.8
254	2022-03-23	12:17:13	64.4	75.9	64.3	64.1
255	2022-03-23	12:17:14	63.4	75.7	64.3	63.7
256	2022-03-23	12:17:15	63.6	75.3	63.7	63.4
257	2022-03-23	12:17:16	62.8	74.9	63.8	63.1
258	2022-03-23	12:17:17	62.1	75.1	63.1	62.4
259	2022-03-23	12:17:18	60.2	72.3	62.4	61.1
260	2022-03-23	12:17:19	58.8	70.4	61.1	59.8
261	2022-03-23	12:17:20	58.8	70.7	59.8	59.2
262	2022-03-23	12:17:21	59.3	72.5	59.4	59.1
263	2022-03-23	12:17:22	62.6	75.1	61.7	59.3
264	2022-03-23	12:17:23	63.0	76.8	62.7	61.7
265	2022-03-23	12:17:24	66.9	80.4	65.7	62.7
266	2022-03-23	12:17:25	65.6	79.9	65.8	65.5
267	2022-03-23	12:17:26	66.4	78.4	66.1	65.6
268	2022-03-23	12:17:27	64.9	76.9	66.1	65.4
269	2022-03-23	12:17:28	65.3	77.1	65.5	65.3
270	2022-03-23	12:17:29	65.7	77.5	65.6	65.4
271	2022-03-23	12:17:30	65.5	78.4	65.7	65.4
272	2022-03-23	12:17:31	65.5	78.7	65.5	65.3
273	2022-03-23	12:17:32	66.0	80.2	65.8	65.5
274	2022-03-23	12:17:33	65.5	79.4	65.9	65.6
275	2022-03-23	12:17:34	65.8	77.3	65.8	65.6
276	2022-03-23	12:17:35	66.0	77.9	66.0	65.6
277	2022-03-23	12:17:36	67.5	79.6	67.0	66.0
278	2022-03-23	12:17:37	68.4	79.7	68.0	67.0
279	2022-03-23	12:17:38	69.6	82.5	69.1	68.0
280	2022-03-23	12:17:39	68.4	80.8	69.1	68.6
281	2022-03-23	12:17:40	67.5	79.0	68.6	67.9
282	2022-03-23	12:17:41	66.8	79.3	67.9	67.2
283	2022-03-23	12:17:42	65.3	76.3	67.2	66.1
284	2022-03-23	12:17:43	65.9	78.3	66.1	65.8
285	2022-03-23	12:17:44	65.4	78.4	66.0	65.6
286	2022-03-23	12:17:45	65.8	77.7	65.8	65.6
287	2022-03-23	12:17:46	65.4	77.0	65.8	65.4
288	2022-03-23	12:17:47	64.9	76.8	65.4	65.1
289	2022-03-23	12:17:48	64.5	77.5	65.1	64.7
290	2022-03-23	12:17:49	64.4	75.9	64.8	64.5
291	2022-03-23	12:17:50	64.3	77.8	64.5	64.3
292	2022-03-23	12:17:51	63.7	75.4	64.4	63.9
293	2022-03-23	12:17:52	63.9	76.8	64.0	63.9
294	2022-03-23	12:17:53	63.4	74.9	63.9	63.6
295	2022-03-23	12:17:54	62.7	74.2	63.6	63.1
296	2022-03-23	12:17:55	63.6	74.9	63.4	63.0
297	2022-03-23	12:17:56	62.7	74.0	63.4	63.0
298	2022-03-23	12:17:57	62.9	76.0	63.0	62.8
299	2022-03-23	12:17:58	64.3	76.0	63.9	63.0
300	2022-03-23	12:17:59	64.1	76.5	64.0	63.9
301	2022-03-23	12:18:00	65.1	77.7	64.8	64.0
302	2022-03-23	12:18:01	64.3	76.6	64.6	64.2
303	2022-03-23	12:18:02	65.1	77.5	64.9	64.5

304	2022-03-23	12:18:03	65.1	76.4	65.1	64.9
305	2022-03-23	12:18:04	65.5	76.7	65.4	65.0
306	2022-03-23	12:18:05	66.3	78.5	66.0	65.4
307	2022-03-23	12:18:06	67.9	81.9	67.4	66.0
308	2022-03-23	12:18:07	67.6	79.8	67.8	67.4
309	2022-03-23	12:18:08	66.6	78.5	67.4	66.9
310	2022-03-23	12:18:09	66.8	80.7	66.9	66.7
311	2022-03-23	12:18:10	68.3	81.3	68.0	66.9
312	2022-03-23	12:18:11	66.9	78.2	68.0	67.3
313	2022-03-23	12:18:12	67.1	78.9	67.4	67.1
314	2022-03-23	12:18:13	67.3	78.5	67.3	67.0
315	2022-03-23	12:18:14	68.3	81.1	68.1	67.3
316	2022-03-23	12:18:15	67.4	78.8	68.1	67.5
317	2022-03-23	12:18:16	66.3	78.0	67.5	66.8
318	2022-03-23	12:18:17	66.6	78.7	66.9	66.6
319	2022-03-23	12:18:18	67.1	78.7	67.0	66.7
320	2022-03-23	12:18:19	67.5	79.4	67.3	66.9
321	2022-03-23	12:18:20	66.8	79.5	67.4	66.9
322	2022-03-23	12:18:21	66.6	78.4	67.0	66.7
323	2022-03-23	12:18:22	66.6	79.1	66.7	66.5
324	2022-03-23	12:18:23	67.0	79.1	67.0	66.6
325	2022-03-23	12:18:24	66.6	79.0	67.1	66.6
326	2022-03-23	12:18:25	66.6	78.6	66.9	66.6
327	2022-03-23	12:18:26	66.0	77.6	66.6	66.2
328	2022-03-23	12:18:27	65.5	78.0	66.2	65.7
329	2022-03-23	12:18:28	65.3	77.7	65.7	65.5
330	2022-03-23	12:18:29	65.1	77.0	65.5	65.2
331	2022-03-23	12:18:30	63.8	75.8	65.2	64.4
332	2022-03-23	12:18:31	64.0	75.3	64.4	64.1
333	2022-03-23	12:18:32	64.0	75.7	64.2	64.0
334	2022-03-23	12:18:33	64.6	76.8	64.5	64.0
335	2022-03-23	12:18:34	64.4	76.4	64.6	64.4
336	2022-03-23	12:18:35	64.8	77.4	64.8	64.4
337	2022-03-23	12:18:36	64.1	77.1	64.6	64.1
338	2022-03-23	12:18:37	65.7	77.1	65.3	64.4
339	2022-03-23	12:18:38	65.0	77.9	65.4	65.0
340	2022-03-23	12:18:39	65.0	78.4	65.0	64.9
341	2022-03-23	12:18:40	65.2	77.6	65.2	64.9
342	2022-03-23	12:18:41	65.0	76.4	65.2	64.9
343	2022-03-23	12:18:42	65.2	76.3	65.3	65.1
344	2022-03-23	12:18:43	66.6	78.7	66.2	65.2
345	2022-03-23	12:18:44	67.4	79.7	67.0	66.2
346	2022-03-23	12:18:45	66.2	79.3	67.0	66.5
347	2022-03-23	12:18:46	66.0	78.6	66.6	66.2
348	2022-03-23	12:18:47	67.0	79.6	66.8	66.1
349	2022-03-23	12:18:48	66.3	78.9	66.9	66.4
350	2022-03-23	12:18:49	65.9	77.3	66.3	66.1
351	2022-03-23	12:18:50	65.2	77.0	66.1	65.5
352	2022-03-23	12:18:51	64.9	76.3	65.5	65.1
353	2022-03-23	12:18:52	64.7	76.2	65.1	64.7
354	2022-03-23	12:18:53	67.0	79.9	66.7	64.8
355	2022-03-23	12:18:54	68.2	80.6	67.7	66.7
356	2022-03-23	12:18:55	67.1	79.2	67.5	67.2
357	2022-03-23	12:18:56	66.5	78.5	67.3	66.8
358	2022-03-23	12:18:57	67.1	79.2	67.0	66.8
359	2022-03-23	12:18:58	67.1	78.5	67.1	66.9
360	2022-03-23	12:18:59	67.8	80.9	67.6	67.1
361	2022-03-23	12:19:00	67.5	79.3	67.6	67.4
362	2022-03-23	12:19:01	66.5	79.3	67.6	66.9
363	2022-03-23	12:19:02	65.8	77.8	66.9	66.2
364	2022-03-23	12:19:03	65.8	78.2	66.2	65.9

365	2022-03-23	12:19:04	65.4	76.7	66.0	65.6
366	2022-03-23	12:19:05	67.2	81.8	66.8	65.6
367	2022-03-23	12:19:06	66.8	77.7	66.9	66.7
368	2022-03-23	12:19:07	66.1	78.4	66.7	66.2
369	2022-03-23	12:19:08	65.9	77.6	66.2	65.8
370	2022-03-23	12:19:09	67.2	78.7	66.9	66.1
371	2022-03-23	12:19:10	69.5	82.0	68.8	66.9
372	2022-03-23	12:19:11	69.0	82.2	69.1	68.8
373	2022-03-23	12:19:12	69.3	80.7	69.2	68.8
374	2022-03-23	12:19:13	70.3	83.6	70.1	69.1
375	2022-03-23	12:19:14	69.3	82.3	70.0	69.6
376	2022-03-23	12:19:15	68.4	80.8	69.7	68.8
377	2022-03-23	12:19:16	69.2	81.6	69.1	68.6
378	2022-03-23	12:19:17	69.5	84.7	69.5	68.9
379	2022-03-23	12:19:18	70.3	85.6	70.0	69.5
380	2022-03-23	12:19:19	70.6	85.7	70.6	70.0
381	2022-03-23	12:19:20	71.0	85.2	71.0	70.3
382	2022-03-23	12:19:21	72.2	85.5	71.8	70.6
383	2022-03-23	12:19:22	71.3	84.4	71.9	71.4
384	2022-03-23	12:19:23	70.1	82.5	71.4	70.6
385	2022-03-23	12:19:24	69.4	81.1	70.6	69.8
386	2022-03-23	12:19:25	68.7	83.0	69.9	69.1
387	2022-03-23	12:19:26	67.6	80.3	69.1	68.3
388	2022-03-23	12:19:27	66.1	77.7	68.3	67.0
389	2022-03-23	12:19:28	67.0	80.6	67.1	66.9
390	2022-03-23	12:19:29	67.6	81.6	67.5	67.0
391	2022-03-23	12:19:30	67.9	79.5	67.8	67.3
392	2022-03-23	12:19:31	67.3	79.3	67.8	67.4
393	2022-03-23	12:19:32	66.2	79.1	67.5	66.7
394	2022-03-23	12:19:33	66.3	78.9	66.7	66.3
395	2022-03-23	12:19:34	66.0	78.2	66.7	66.1
396	2022-03-23	12:19:35	65.1	75.6	66.1	65.4
397	2022-03-23	12:19:36	65.4	77.8	65.5	65.3
398	2022-03-23	12:19:37	66.6	78.7	66.2	65.5
399	2022-03-23	12:19:38	65.9	77.3	66.1	66.0
400	2022-03-23	12:19:39	66.6	78.6	66.4	66.0
401	2022-03-23	12:19:40	67.1	81.8	66.9	66.4
402	2022-03-23	12:19:41	67.2	79.9	67.2	66.7
403	2022-03-23	12:19:42	67.1	79.7	67.3	67.1
404	2022-03-23	12:19:43	66.8	78.8	67.1	66.9
405	2022-03-23	12:19:44	66.7	78.3	67.0	66.7
406	2022-03-23	12:19:45	66.3	77.9	66.8	66.4
407	2022-03-23	12:19:46	65.9	79.1	66.4	66.1
408	2022-03-23	12:19:47	66.0	78.5	66.3	66.1
409	2022-03-23	12:19:48	66.5	79.0	66.3	66.1
410	2022-03-23	12:19:49	66.9	79.9	66.8	66.3
411	2022-03-23	12:19:50	66.9	78.3	66.9	66.7
412	2022-03-23	12:19:51	67.4	79.0	67.2	66.8
413	2022-03-23	12:19:52	66.8	78.0	67.2	66.8
414	2022-03-23	12:19:53	66.7	77.9	67.0	66.8
415	2022-03-23	12:19:54	67.4	80.3	67.2	66.8
416	2022-03-23	12:19:55	68.7	81.5	68.2	67.2
417	2022-03-23	12:19:56	69.7	82.2	69.3	68.2
418	2022-03-23	12:19:57	70.1	82.7	69.8	69.3
419	2022-03-23	12:19:58	70.0	82.0	70.0	69.8
420	2022-03-23	12:19:59	69.7	81.2	70.0	69.8
421	2022-03-23	12:20:00	70.4	83.7	70.3	69.7
422	2022-03-23	12:20:01	67.8	79.9	70.2	68.8
423	2022-03-23	12:20:02	69.2	84.7	69.5	68.3
424	2022-03-23	12:20:03	66.6	79.1	69.2	67.8
425	2022-03-23	12:20:04	66.0	77.4	67.8	66.7

426	2022-03-23	12:20:05	65.5	79.1	66.7	66.0
427	2022-03-23	12:20:06	65.7	79.3	66.0	65.8
428	2022-03-23	12:20:07	65.2	78.4	65.8	65.5
429	2022-03-23	12:20:08	66.1	78.3	65.9	65.4
430	2022-03-23	12:20:09	66.6	79.2	66.4	65.9
431	2022-03-23	12:20:10	65.7	78.6	66.3	65.9
432	2022-03-23	12:20:11	67.2	79.9	66.8	65.9
433	2022-03-23	12:20:12	68.1	79.7	67.8	66.7
434	2022-03-23	12:20:13	69.9	82.4	69.2	67.8
435	2022-03-23	12:20:14	69.6	83.6	69.5	69.2
436	2022-03-23	12:20:15	69.1	81.7	69.5	69.2
437	2022-03-23	12:20:16	69.6	80.9	69.5	69.2
438	2022-03-23	12:20:17	69.8	81.6	69.7	69.4
439	2022-03-23	12:20:18	68.4	80.5	69.6	68.9
440	2022-03-23	12:20:19	68.5	80.7	68.9	68.6
441	2022-03-23	12:20:20	69.5	82.9	69.4	68.6
442	2022-03-23	12:20:21	69.8	83.7	69.9	69.4
443	2022-03-23	12:20:22	70.3	84.4	70.2	69.4
444	2022-03-23	12:20:23	70.9	84.6	70.7	70.2
445	2022-03-23	12:20:24	72.1	87.2	71.6	70.6
446	2022-03-23	12:20:25	72.8	87.2	72.4	71.4
447	2022-03-23	12:20:26	72.7	86.2	73.0	72.3
448	2022-03-23	12:20:27	71.5	85.3	72.4	71.7
449	2022-03-23	12:20:28	71.1	83.0	71.6	71.4
450	2022-03-23	12:20:29	72.2	84.1	72.0	71.3
451	2022-03-23	12:20:30	68.6	79.9	71.8	70.1
452	2022-03-23	12:20:31	67.2	80.0	70.1	68.5
453	2022-03-23	12:20:32	68.4	81.3	68.7	68.3
454	2022-03-23	12:20:33	67.0	79.3	68.4	67.5
455	2022-03-23	12:20:34	66.2	79.4	67.5	66.7
456	2022-03-23	12:20:35	66.1	78.6	66.7	66.2
457	2022-03-23	12:20:36	66.9	78.9	66.8	66.5
458	2022-03-23	12:20:37	66.3	78.7	66.9	66.4
459	2022-03-23	12:20:38	65.2	77.4	66.4	65.6
460	2022-03-23	12:20:39	63.9	75.2	65.6	64.6
461	2022-03-23	12:20:40	63.0	75.1	64.6	63.7
462	2022-03-23	12:20:41	63.1	75.9	63.7	63.3
463	2022-03-23	12:20:42	63.7	75.8	63.6	63.3
464	2022-03-23	12:20:43	63.1	75.0	63.6	63.2
465	2022-03-23	12:20:44	62.7	75.5	63.2	62.8
466	2022-03-23	12:20:45	63.5	75.7	63.4	63.0
467	2022-03-23	12:20:46	63.7	76.2	63.7	63.2
468	2022-03-23	12:20:47	65.1	77.7	64.6	63.8
469	2022-03-23	12:20:48	65.1	76.9	65.0	64.4
470	2022-03-23	12:20:49	66.7	79.7	66.2	65.1
471	2022-03-23	12:20:50	67.9	80.7	67.4	66.2
472	2022-03-23	12:20:51	67.2	79.7	67.2	67.1
473	2022-03-23	12:20:52	67.5	78.4	67.4	67.1
474	2022-03-23	12:20:53	68.3	80.2	67.9	67.4
475	2022-03-23	12:20:54	69.5	80.9	69.0	67.9
476	2022-03-23	12:20:55	68.0	81.9	69.0	68.3
477	2022-03-23	12:20:56	66.7	78.9	68.4	67.3
478	2022-03-23	12:20:57	66.9	79.0	67.3	67.1
479	2022-03-23	12:20:58	66.9	80.7	67.1	66.9
480	2022-03-23	12:20:59	66.8	78.2	66.9	66.8
481	2022-03-23	12:21:00	66.4	78.5	66.9	66.5
482	2022-03-23	12:21:01	66.5	78.7	66.6	66.4
483	2022-03-23	12:21:02	66.1	79.4	66.7	66.2
484	2022-03-23	12:21:03	64.6	76.5	66.1	65.3
485	2022-03-23	12:21:04	65.5	77.1	65.5	65.2
486	2022-03-23	12:21:05	64.3	78.1	65.4	64.7

487	2022-03-23	12:21:06	64.4	76.6	64.7	64.4
488	2022-03-23	12:21:07	63.2	75.8	64.4	63.7
489	2022-03-23	12:21:08	64.7	77.3	64.5	63.6
490	2022-03-23	12:21:09	65.4	77.2	65.1	64.5
491	2022-03-23	12:21:10	66.2	77.8	65.9	65.0
492	2022-03-23	12:21:11	65.7	78.0	66.1	65.7
493	2022-03-23	12:21:12	64.7	77.0	65.7	65.1
494	2022-03-23	12:21:13	65.1	78.2	65.3	65.0
495	2022-03-23	12:21:14	63.8	78.5	65.0	64.2
496	2022-03-23	12:21:15	63.1	75.7	64.1	63.5
497	2022-03-23	12:21:16	63.3	76.2	63.5	63.3
498	2022-03-23	12:21:17	63.4	75.5	63.5	63.4
499	2022-03-23	12:21:18	64.5	77.1	64.2	63.4
500	2022-03-23	12:21:19	64.3	76.1	64.4	64.2
501	2022-03-23	12:21:20	63.8	76.5	64.2	63.9
502	2022-03-23	12:21:21	65.7	77.8	65.2	64.0
503	2022-03-23	12:21:22	66.7	79.5	66.3	65.2
504	2022-03-23	12:21:23	68.4	79.7	67.8	66.3
505	2022-03-23	12:21:24	67.0	78.4	67.7	67.3
506	2022-03-23	12:21:25	67.0	78.9	67.3	67.1
507	2022-03-23	12:21:26	67.4	81.1	67.3	67.1
508	2022-03-23	12:21:27	66.7	78.8	67.4	66.9
509	2022-03-23	12:21:28	65.9	77.4	66.9	66.2
510	2022-03-23	12:21:29	65.4	78.8	66.2	65.7
511	2022-03-23	12:21:30	68.5	81.1	67.7	65.8
512	2022-03-23	12:21:31	67.8	79.1	67.8	67.5
513	2022-03-23	12:21:32	68.5	81.3	68.4	67.7
514	2022-03-23	12:21:33	70.4	82.1	69.8	68.4
515	2022-03-23	12:21:34	72.7	85.1	72.0	69.9
516	2022-03-23	12:21:35	74.3	85.9	73.5	72.0
517	2022-03-23	12:21:36	74.9	86.0	74.5	73.5
518	2022-03-23	12:21:37	76.1	89.0	75.7	74.5
519	2022-03-23	12:21:38	72.9	88.2	75.8	73.9
520	2022-03-23	12:21:39	67.7	79.4	73.8	71.0
521	2022-03-23	12:21:40	66.7	79.5	71.0	68.9
522	2022-03-23	12:21:41	66.4	78.3	68.9	67.5
523	2022-03-23	12:21:42	64.4	77.8	67.5	65.8
524	2022-03-23	12:21:43	64.6	76.5	65.8	65.2
525	2022-03-23	12:21:44	65.5	77.6	65.4	65.2
526	2022-03-23	12:21:45	65.4	76.8	65.5	65.3
527	2022-03-23	12:21:46	64.9	77.4	65.4	65.1
528	2022-03-23	12:21:47	64.5	75.5	65.1	64.8
529	2022-03-23	12:21:48	64.3	77.4	64.7	64.3
530	2022-03-23	12:21:49	64.1	76.6	64.5	64.2
531	2022-03-23	12:21:50	64.5	77.7	64.5	64.3
532	2022-03-23	12:21:51	63.9	76.2	64.5	64.1
533	2022-03-23	12:21:52	64.8	76.8	64.6	64.1
534	2022-03-23	12:21:53	64.8	78.9	64.8	64.6
535	2022-03-23	12:21:54	65.8	79.5	65.5	64.5
536	2022-03-23	12:21:55	67.3	79.3	66.8	65.5
537	2022-03-23	12:21:56	67.2	79.6	67.2	66.8
538	2022-03-23	12:21:57	66.6	78.7	67.0	66.7
539	2022-03-23	12:21:58	68.7	80.9	68.3	66.8
540	2022-03-23	12:21:59	68.7	83.1	68.9	68.3
541	2022-03-23	12:22:00	66.1	78.3	68.3	67.0
542	2022-03-23	12:22:01	65.5	78.4	67.0	66.1
543	2022-03-23	12:22:02	65.3	77.0	66.1	65.5
544	2022-03-23	12:22:03	63.8	75.7	65.5	64.6
545	2022-03-23	12:22:04	64.6	75.8	64.7	64.5
546	2022-03-23	12:22:05	64.9	77.0	64.8	64.7
547	2022-03-23	12:22:06	65.9	77.8	65.5	64.8

548	2022-03-23	12:22:07	65.1	77.0	65.4	65.2
549	2022-03-23	12:22:08	65.3	77.7	65.5	65.2
550	2022-03-23	12:22:09	64.3	75.6	65.2	64.6
551	2022-03-23	12:22:10	64.2	76.1	64.7	64.3
552	2022-03-23	12:22:11	64.9	76.7	64.7	64.4
553	2022-03-23	12:22:12	64.2	75.6	64.8	64.3
554	2022-03-23	12:22:13	63.5	75.5	64.3	63.8
555	2022-03-23	12:22:14	63.1	75.5	63.8	63.4
556	2022-03-23	12:22:15	63.3	79.9	63.5	63.3
557	2022-03-23	12:22:16	63.0	75.2	63.3	63.1
558	2022-03-23	12:22:17	62.6	74.7	63.1	62.8
559	2022-03-23	12:22:18	62.8	75.6	62.9	62.6
560	2022-03-23	12:22:19	62.3	74.0	62.8	62.4
561	2022-03-23	12:22:20	62.7	74.8	62.7	62.3
562	2022-03-23	12:22:21	63.5	76.0	63.2	62.7
563	2022-03-23	12:22:22	64.0	76.0	63.8	63.2
564	2022-03-23	12:22:23	63.9	78.3	63.9	63.6
565	2022-03-23	12:22:24	63.9	76.2	64.0	63.8
566	2022-03-23	12:22:25	64.0	76.4	64.1	63.9
567	2022-03-23	12:22:26	63.4	76.8	64.1	63.5
568	2022-03-23	12:22:27	62.8	74.6	63.5	63.0
569	2022-03-23	12:22:28	62.1	75.4	63.0	62.4
570	2022-03-23	12:22:29	63.4	77.9	63.3	62.6
571	2022-03-23	12:22:30	64.1	76.0	63.8	63.3
572	2022-03-23	12:22:31	63.0	75.0	63.8	63.3
573	2022-03-23	12:22:32	64.1	76.5	63.9	63.3
574	2022-03-23	12:22:33	63.0	73.9	63.8	63.2
575	2022-03-23	12:22:34	63.4	74.7	63.4	63.2
576	2022-03-23	12:22:35	63.6	75.3	63.6	63.3
577	2022-03-23	12:22:36	63.2	75.0	63.6	63.3
578	2022-03-23	12:22:37	63.2	75.9	63.5	63.2
579	2022-03-23	12:22:38	62.3	74.3	63.2	62.6
580	2022-03-23	12:22:39	61.5	73.0	62.6	62.0
581	2022-03-23	12:22:40	62.0	74.7	62.1	61.7
582	2022-03-23	12:22:41	62.3	75.1	62.4	62.1
583	2022-03-23	12:22:42	62.1	74.2	62.2	61.9
584	2022-03-23	12:22:43	63.6	77.0	63.3	62.2
585	2022-03-23	12:22:44	65.1	75.8	64.5	63.3
586	2022-03-23	12:22:45	65.0	77.8	64.9	64.5
587	2022-03-23	12:22:46	65.4	77.0	65.2	64.9
588	2022-03-23	12:22:47	64.4	77.6	65.2	64.7
589	2022-03-23	12:22:48	65.5	78.7	65.3	64.7
590	2022-03-23	12:22:49	65.1	77.8	65.4	65.0
591	2022-03-23	12:22:50	66.0	78.4	65.7	65.1
592	2022-03-23	12:22:51	66.0	78.7	66.1	65.5
593	2022-03-23	12:22:52	65.4	77.1	65.9	65.5
594	2022-03-23	12:22:53	65.6	78.5	65.6	65.5
595	2022-03-23	12:22:54	65.7	78.5	65.8	65.6
596	2022-03-23	12:22:55	65.0	77.2	65.7	65.2
597	2022-03-23	12:22:56	64.6	77.5	65.2	64.8
598	2022-03-23	12:22:57	65.1	77.6	65.1	64.7
599	2022-03-23	12:22:58	66.0	78.7	65.8	65.1
600	2022-03-23	12:22:59	63.7	77.1	65.5	64.4
601	2022-03-23	12:23:00	64.3	77.0	64.5	64.2
602	2022-03-23	12:23:01	65.8	77.9	65.4	64.5
603	2022-03-23	12:23:02	65.3	78.0	65.5	65.3
604	2022-03-23	12:23:03	65.4	78.0	65.4	65.2
605	2022-03-23	12:23:04	65.4	77.0	65.5	65.3
606	2022-03-23	12:23:05	66.2	77.3	66.0	65.4
607	2022-03-23	12:23:06	65.7	76.8	66.0	65.7
608	2022-03-23	12:23:07	65.7	77.8	65.8	65.6

609	2022-03-23	12:23:08	65.2	76.7	65.8	65.3
610	2022-03-23	12:23:09	65.0	76.4	65.5	65.1
611	2022-03-23	12:23:10	65.1	77.2	65.4	65.0
612	2022-03-23	12:23:11	64.4	76.5	65.0	64.5
613	2022-03-23	12:23:12	65.3	76.8	65.1	64.8
614	2022-03-23	12:23:13	65.2	79.1	65.2	65.0
615	2022-03-23	12:23:14	65.2	78.0	65.5	65.1
616	2022-03-23	12:23:15	66.4	77.7	66.1	65.2
617	2022-03-23	12:23:16	66.8	80.6	66.7	65.9
618	2022-03-23	12:23:17	66.8	78.8	67.1	66.7
619	2022-03-23	12:23:18	65.8	78.0	66.7	66.1
620	2022-03-23	12:23:19	66.0	78.0	66.1	66.0
621	2022-03-23	12:23:20	65.8	78.6	66.1	65.8
622	2022-03-23	12:23:21	65.9	77.2	66.0	65.9
623	2022-03-23	12:23:22	65.3	76.6	65.9	65.5
624	2022-03-23	12:23:23	65.1	76.8	65.5	65.3
625	2022-03-23	12:23:24	65.5	77.4	65.4	65.3
626	2022-03-23	12:23:25	67.1	79.0	66.6	65.5
627	2022-03-23	12:23:26	69.2	81.0	68.5	66.6
628	2022-03-23	12:23:27	68.8	81.2	68.8	68.5
629	2022-03-23	12:23:28	67.8	80.4	68.6	68.0
630	2022-03-23	12:23:29	68.2	79.8	68.3	68.0
631	2022-03-23	12:23:30	68.5	79.3	68.5	68.1
632	2022-03-23	12:23:31	67.5	79.8	68.2	67.8
633	2022-03-23	12:23:32	67.7	80.5	68.1	67.6
634	2022-03-23	12:23:33	65.9	78.0	67.6	66.6
635	2022-03-23	12:23:34	66.0	77.5	66.6	66.2
636	2022-03-23	12:23:35	67.8	80.1	67.6	66.2
637	2022-03-23	12:23:36	69.9	81.9	69.3	67.6
638	2022-03-23	12:23:37	66.9	79.2	68.8	67.7
639	2022-03-23	12:23:38	66.5	79.0	67.7	67.0
640	2022-03-23	12:23:39	66.9	78.8	67.0	66.8
641	2022-03-23	12:23:40	67.0	78.6	67.1	66.9
642	2022-03-23	12:23:41	66.9	78.5	67.0	66.8
643	2022-03-23	12:23:42	66.2	77.8	67.0	66.5
644	2022-03-23	12:23:43	66.3	76.9	66.5	66.3
645	2022-03-23	12:23:44	65.8	79.3	66.4	66.0
646	2022-03-23	12:23:45	65.3	76.4	66.0	65.5
647	2022-03-23	12:23:46	66.1	78.6	66.0	65.6
648	2022-03-23	12:23:47	64.7	77.3	65.9	65.1
649	2022-03-23	12:23:48	63.9	75.8	65.1	64.3
650	2022-03-23	12:23:49	63.4	76.1	64.3	63.7
651	2022-03-23	12:23:50	62.5	74.7	63.7	63.0
652	2022-03-23	12:23:51	62.3	74.2	63.0	62.5
653	2022-03-23	12:23:52	61.4	75.2	62.5	61.9
654	2022-03-23	12:23:53	62.9	75.2	62.7	61.9
655	2022-03-23	12:23:54	62.0	74.2	62.7	62.2
656	2022-03-23	12:23:55	62.2	74.3	62.4	62.2
657	2022-03-23	12:23:56	62.0	73.2	62.2	61.9
658	2022-03-23	12:23:57	62.8	74.6	62.7	61.8
659	2022-03-23	12:23:58	63.5	76.2	63.3	62.7
660	2022-03-23	12:23:59	63.6	77.2	63.7	63.1
661	2022-03-23	12:24:00	62.4	73.5	63.3	62.7
662	2022-03-23	12:24:01	63.2	76.1	63.2	62.7
663	2022-03-23	12:24:02	62.6	75.5	63.2	62.7
664	2022-03-23	12:24:03	61.4	73.8	62.7	61.9
665	2022-03-23	12:24:04	62.4	74.2	62.4	61.8
666	2022-03-23	12:24:05	63.4	75.5	63.0	62.4
667	2022-03-23	12:24:06	64.4	76.2	64.0	63.0
668	2022-03-23	12:24:07	65.2	76.4	64.7	64.1
669	2022-03-23	12:24:08	65.4	76.7	65.2	64.7

670	2022-03-23	12:24:09	65.2	77.3	65.2	65.0
671	2022-03-23	12:24:10	66.9	80.5	66.6	65.2
672	2022-03-23	12:24:11	69.1	82.5	68.3	66.6
673	2022-03-23	12:24:12	67.5	79.9	68.3	67.7
674	2022-03-23	12:24:13	67.6	80.3	67.7	67.6
675	2022-03-23	12:24:14	67.9	79.5	67.9	67.7
676	2022-03-23	12:24:15	67.9	79.9	68.0	67.8
677	2022-03-23	12:24:16	67.7	79.6	67.9	67.7
678	2022-03-23	12:24:17	69.1	80.6	68.7	67.8
679	2022-03-23	12:24:18	68.0	79.7	68.7	68.2
680	2022-03-23	12:24:19	67.2	81.1	68.2	67.5
681	2022-03-23	12:24:20	67.3	83.0	67.7	67.4
682	2022-03-23	12:24:21	66.5	79.4	67.3	66.9
683	2022-03-23	12:24:22	66.1	77.9	66.9	66.4
684	2022-03-23	12:24:23	65.8	79.4	66.4	66.0
685	2022-03-23	12:24:24	65.2	78.2	66.0	65.5
686	2022-03-23	12:24:25	65.6	78.0	65.6	65.5
687	2022-03-23	12:24:26	66.3	77.5	66.2	65.5
688	2022-03-23	12:24:27	66.7	79.5	66.6	66.1
689	2022-03-23	12:24:28	67.4	78.9	67.1	66.6
690	2022-03-23	12:24:29	66.6	79.0	67.1	66.7
691	2022-03-23	12:24:30	66.6	78.3	66.9	66.6
692	2022-03-23	12:24:31	65.6	77.1	66.5	66.0
693	2022-03-23	12:24:32	64.8	75.9	66.0	65.3
694	2022-03-23	12:24:33	64.4	77.5	65.2	64.7
695	2022-03-23	12:24:34	65.2	76.8	65.1	64.7
696	2022-03-23	12:24:35	65.0	77.2	65.1	65.0
697	2022-03-23	12:24:36	64.3	76.3	65.0	64.5
698	2022-03-23	12:24:37	63.8	76.0	64.5	64.0
699	2022-03-23	12:24:38	65.4	77.5	65.0	64.1
700	2022-03-23	12:24:39	64.1	76.2	64.9	64.3
701	2022-03-23	12:24:40	63.6	75.8	64.4	63.9
702	2022-03-23	12:24:41	62.7	75.0	63.9	63.2
703	2022-03-23	12:24:42	63.8	75.2	63.6	63.2
704	2022-03-23	12:24:43	64.0	75.4	63.9	63.6
705	2022-03-23	12:24:44	63.3	75.2	63.9	63.5
706	2022-03-23	12:24:45	64.6	77.5	64.4	63.5
707	2022-03-23	12:24:46	65.0	77.2	64.7	64.4
708	2022-03-23	12:24:47	65.2	76.5	65.1	64.7
709	2022-03-23	12:24:48	65.2	77.1	65.2	65.1
710	2022-03-23	12:24:49	65.0	76.0	65.2	65.0
711	2022-03-23	12:24:50	66.4	77.9	66.0	65.1
712	2022-03-23	12:24:51	66.1	78.7	66.2	66.0
713	2022-03-23	12:24:52	67.2	79.7	66.9	65.9
714	2022-03-23	12:24:53	67.6	80.4	67.3	66.9
715	2022-03-23	12:24:54	69.1	80.9	68.6	67.3
716	2022-03-23	12:24:55	69.8	85.7	69.5	68.6
717	2022-03-23	12:24:56	68.7	81.3	69.2	68.7
718	2022-03-23	12:24:57	70.2	83.5	69.9	68.9
719	2022-03-23	12:24:58	70.0	82.8	70.1	69.8
720	2022-03-23	12:24:59	69.7	82.6	70.0	69.8
721	2022-03-23	12:25:00	70.0	82.7	70.1	69.5
722	2022-03-23	12:25:01	72.5	87.3	71.9	70.1
723	2022-03-23	12:25:02	72.3	86.7	72.2	71.9
724	2022-03-23	12:25:03	74.6	88.7	73.8	72.2
725	2022-03-23	12:25:04	73.5	87.1	73.8	73.6
726	2022-03-23	12:25:05	71.3	85.8	73.6	72.4
727	2022-03-23	12:25:06	70.3	84.9	72.4	71.1
728	2022-03-23	12:25:07	68.5	82.5	71.1	69.7
729	2022-03-23	12:25:08	67.8	81.6	69.7	68.6
730	2022-03-23	12:25:09	67.8	81.5	68.7	68.1

731	2022-03-23	12:25:10	66.6	79.6	68.1	67.2
732	2022-03-23	12:25:11	65.8	78.8	67.2	66.3
733	2022-03-23	12:25:12	65.4	79.9	66.3	65.7
734	2022-03-23	12:25:13	64.5	78.4	65.8	65.0
735	2022-03-23	12:25:14	65.2	78.5	65.3	64.7
736	2022-03-23	12:25:15	66.5	79.5	66.2	65.2
737	2022-03-23	12:25:16	66.4	81.0	66.6	66.2
738	2022-03-23	12:25:17	64.1	77.7	66.1	64.9
739	2022-03-23	12:25:18	63.6	76.2	64.9	64.2
740	2022-03-23	12:25:19	64.2	77.3	64.2	64.1
741	2022-03-23	12:25:20	63.3	75.6	64.3	63.4
742	2022-03-23	12:25:21	62.6	74.7	63.4	62.7
743	2022-03-23	12:25:22	63.5	75.7	63.7	63.1
744	2022-03-23	12:25:23	61.4	73.6	63.2	62.2
745	2022-03-23	12:25:24	62.9	74.4	62.7	62.2
746	2022-03-23	12:25:25	62.6	73.8	62.7	62.5
747	2022-03-23	12:25:26	64.9	76.2	64.2	62.6
748	2022-03-23	12:25:27	64.6	76.0	64.7	64.2
749	2022-03-23	12:25:28	65.0	76.8	64.8	64.2
750	2022-03-23	12:25:29	65.6	78.8	65.5	64.8
751	2022-03-23	12:25:30	64.5	76.3	65.2	64.7
752	2022-03-23	12:25:31	64.3	76.3	64.7	64.5
753	2022-03-23	12:25:32	64.0	78.0	64.6	64.2
754	2022-03-23	12:25:33	63.8	75.8	64.2	63.9
755	2022-03-23	12:25:34	65.6	78.5	65.5	63.9
756	2022-03-23	12:25:35	68.7	80.9	67.8	65.5
757	2022-03-23	12:25:36	65.6	78.2	67.7	66.3
758	2022-03-23	12:25:37	64.6	77.8	66.3	65.3
759	2022-03-23	12:25:38	64.0	75.9	65.3	64.6
760	2022-03-23	12:25:39	63.7	76.8	64.6	64.0
761	2022-03-23	12:25:40	64.5	77.5	64.5	64.1
762	2022-03-23	12:25:41	63.7	78.3	64.4	63.8
763	2022-03-23	12:25:42	62.7	74.9	63.8	63.2
764	2022-03-23	12:25:43	62.4	74.6	63.1	62.7
765	2022-03-23	12:25:44	64.4	76.0	63.9	62.8
766	2022-03-23	12:25:45	63.9	77.1	64.1	63.8
767	2022-03-23	12:25:46	63.9	79.0	64.0	63.7
768	2022-03-23	12:25:47	63.1	74.6	64.0	63.3
769	2022-03-23	12:25:48	63.1	75.4	63.5	63.2
770	2022-03-23	12:25:49	63.7	75.7	63.5	63.2
771	2022-03-23	12:25:50	64.9	76.8	64.5	63.5
772	2022-03-23	12:25:51	66.8	77.8	66.2	64.5
773	2022-03-23	12:25:52	68.3	80.7	67.7	66.2
774	2022-03-23	12:25:53	67.7	78.7	67.8	67.6
775	2022-03-23	12:25:54	66.8	77.5	67.6	67.0
776	2022-03-23	12:25:55	65.8	76.8	67.0	66.3
777	2022-03-23	12:25:56	65.6	78.7	66.3	65.8
778	2022-03-23	12:25:57	65.6	77.1	65.9	65.6
779	2022-03-23	12:25:58	65.2	76.3	65.6	65.3
780	2022-03-23	12:25:59	65.4	76.4	65.4	65.3
781	2022-03-23	12:26:00	66.0	78.1	65.8	65.4
782	2022-03-23	12:26:01	64.9	76.4	65.7	65.2
783	2022-03-23	12:26:02	66.0	77.3	65.8	65.2
784	2022-03-23	12:26:03	66.6	78.3	66.3	65.8
785	2022-03-23	12:26:04	67.1	79.2	66.9	66.3
786	2022-03-23	12:26:05	67.8	80.8	67.7	66.7
787	2022-03-23	12:26:06	68.7	81.0	68.5	67.7
788	2022-03-23	12:26:07	70.8	83.6	70.2	68.5
789	2022-03-23	12:26:08	69.0	80.3	69.9	69.2
790	2022-03-23	12:26:09	70.2	84.6	70.0	69.5
791	2022-03-23	12:26:10	71.3	83.6	70.9	69.9

792	2022-03-23	12:26:11	71.0	84.5	71.1	70.8
793	2022-03-23	12:26:12	70.2	84.3	71.0	70.5
794	2022-03-23	12:26:13	71.9	89.5	71.5	70.5
795	2022-03-23	12:26:14	70.7	85.7	71.3	70.9
796	2022-03-23	12:26:15	70.6	83.6	70.9	70.6
797	2022-03-23	12:26:16	72.7	86.3	72.1	70.7
798	2022-03-23	12:26:17	71.1	84.9	72.0	71.5
799	2022-03-23	12:26:18	71.3	84.3	71.5	71.3
800	2022-03-23	12:26:19	71.6	85.6	71.8	71.4
801	2022-03-23	12:26:20	68.9	83.3	71.4	69.9
802	2022-03-23	12:26:21	68.0	79.6	69.9	68.8
803	2022-03-23	12:26:22	68.5	80.2	68.9	68.6
804	2022-03-23	12:26:23	69.6	82.0	69.3	68.6
805	2022-03-23	12:26:24	69.7	83.0	69.6	69.3
806	2022-03-23	12:26:25	69.4	82.1	69.6	69.5
807	2022-03-23	12:26:26	70.2	82.6	70.0	69.5
808	2022-03-23	12:26:27	71.1	84.2	70.8	70.0
809	2022-03-23	12:26:28	70.2	82.1	70.8	70.4
810	2022-03-23	12:26:29	69.2	81.1	70.4	69.7
811	2022-03-23	12:26:30	70.0	82.9	70.0	69.8
812	2022-03-23	12:26:31	70.2	81.5	70.1	69.9
813	2022-03-23	12:26:32	70.5	82.4	70.4	70.0
814	2022-03-23	12:26:33	71.4	84.0	71.2	70.4
815	2022-03-23	12:26:34	72.2	84.8	71.9	71.2
816	2022-03-23	12:26:35	73.4	85.9	73.2	71.2
817	2022-03-23	12:26:36	71.1	84.0	73.3	71.9
818	2022-03-23	12:26:37	69.1	81.9	71.8	70.3
819	2022-03-23	12:26:38	68.2	80.1	70.3	69.1
820	2022-03-23	12:26:39	67.1	79.0	69.0	67.9
821	2022-03-23	12:26:40	67.1	84.4	68.3	67.3
822	2022-03-23	12:26:41	65.9	78.4	67.3	66.5
823	2022-03-23	12:26:42	66.2	79.1	66.5	66.2
824	2022-03-23	12:26:43	66.4	80.2	66.5	66.3
825	2022-03-23	12:26:44	66.0	79.0	66.4	66.1
826	2022-03-23	12:26:45	67.1	80.8	66.9	66.2
827	2022-03-23	12:26:46	67.7	79.8	67.5	66.7
828	2022-03-23	12:26:47	67.5	79.5	67.6	67.4
829	2022-03-23	12:26:48	67.3	78.7	67.5	67.3
830	2022-03-23	12:26:49	67.3	80.1	67.4	67.2
831	2022-03-23	12:26:50	67.1	79.2	67.4	67.1
832	2022-03-23	12:26:51	68.1	79.9	67.9	67.2
833	2022-03-23	12:26:52	68.1	80.8	68.1	67.8
834	2022-03-23	12:26:53	67.2	80.3	67.9	67.4
835	2022-03-23	12:26:54	66.7	78.7	67.4	66.9
836	2022-03-23	12:26:55	65.5	77.6	67.0	66.1
837	2022-03-23	12:26:56	65.8	78.2	66.1	65.9
838	2022-03-23	12:26:57	66.1	78.4	66.2	65.8
839	2022-03-23	12:26:58	65.1	77.1	66.2	65.5
840	2022-03-23	12:26:59	64.3	76.5	65.5	64.8
841	2022-03-23	12:27:00	65.5	77.9	65.3	64.8
842	2022-03-23	12:27:01	64.7	77.0	65.4	64.9
843	2022-03-23	12:27:02	65.2	77.6	65.1	64.9
844	2022-03-23	12:27:03	65.8	77.4	65.7	65.0
845	2022-03-23	12:27:04	66.0	78.3	65.9	65.7
846	2022-03-23	12:27:05	66.5	78.8	66.3	65.8
847	2022-03-23	12:27:06	66.3	78.4	66.6	66.2
848	2022-03-23	12:27:07	66.9	78.9	66.7	66.1
849	2022-03-23	12:27:08	68.3	79.9	67.8	66.7
850	2022-03-23	12:27:09	68.7	81.6	68.5	67.7
851	2022-03-23	12:27:10	70.1	82.4	69.6	68.5
852	2022-03-23	12:27:11	69.0	82.2	69.7	69.1

853		2022-03-23	12:27:12	70.1	82.6	69.8	69.1
854		2022-03-23	12:27:13	69.5	82.1	70.0	69.4
855		2022-03-23	12:27:14	69.3	81.9	69.4	69.3
856		2022-03-23	12:27:15	71.2	84.8	70.8	69.4
857		2022-03-23	12:27:16	72.1	88.0	71.7	70.8
858		2022-03-23	12:27:17	75.1	90.4	74.2	71.7
859		2022-03-23	12:27:18	73.8	89.9	74.4	73.8
860		2022-03-23	12:27:19	72.6	85.9	73.8	73.1
861		2022-03-23	12:27:20	71.6	84.6	73.1	72.2
862		2022-03-23	12:27:21	72.3	83.7	72.4	72.2
863		2022-03-23	12:27:22	71.7	83.6	72.2	71.9
864		2022-03-23	12:27:23	69.1	84.3	71.9	70.3
865		2022-03-23	12:27:24	68.9	81.2	70.3	69.5
866		2022-03-23	12:27:25	69.4	82.6	69.9	69.3
867		2022-03-23	12:27:26	67.8	80.0	69.3	68.4
868		2022-03-23	12:27:27	67.4	78.8	68.4	67.8
869		2022-03-23	12:27:28	67.6	79.5	67.8	67.6
870		2022-03-23	12:27:29	66.4	77.5	67.7	66.9
871		2022-03-23	12:27:30	65.9	78.4	66.9	66.2
872		2022-03-23	12:27:31	66.6	80.0	66.6	66.3
873		2022-03-23	12:27:32	67.2	78.6	67.0	66.6
874		2022-03-23	12:27:33	66.9	78.7	67.0	66.8
875		2022-03-23	12:27:34	67.3	78.8	67.2	67.0
876		2022-03-23	12:27:35	67.4	79.4	67.5	67.2
877		2022-03-23	12:27:36	67.5	80.4	67.5	67.2
878		2022-03-23	12:27:37	65.7	77.0	67.4	66.4
879		2022-03-23	12:27:38	65.8	78.0	66.4	66.0
880		2022-03-23	12:27:39	66.1	80.1	66.2	65.9
881		2022-03-23	12:27:40	66.2	77.9	66.3	66.0
882		2022-03-23	12:27:41	65.8	78.1	66.1	65.9
883		2022-03-23	12:27:42	65.4	78.9	65.9	65.6
884		2022-03-23	12:27:43	66.2	78.7	66.0	65.6
885		2022-03-23	12:27:44	66.5	77.4	66.4	66.0
886		2022-03-23	12:27:45	66.1	78.1	66.3	66.1
887		2022-03-23	12:27:46	67.1	81.3	66.8	66.2
888		2022-03-23	12:27:47	66.9	79.5	67.0	66.8
889		2022-03-23	12:27:48	66.3	77.4	66.8	66.5
890		2022-03-23	12:27:49	65.9	76.9	66.5	66.1
891		2022-03-23	12:27:50	65.5	77.5	66.3	65.7
892		2022-03-23	12:27:51	65.4	77.4	65.8	65.5
893		2022-03-23	12:27:52	65.2	77.2	65.6	65.3
894		2022-03-23	12:27:53	64.3	76.1	65.4	64.6
895		2022-03-23	12:27:54	64.2	76.0	64.6	64.3
896		2022-03-23	12:27:55	65.0	77.0	64.8	64.4
897		2022-03-23	12:27:56	64.6	76.9	64.9	64.6
898		2022-03-23	12:27:57	65.2	77.2	65.1	64.6
899		2022-03-23	12:27:58	65.2	77.4	65.3	65.1
900		2022-03-23	12:27:59	64.0	75.5	65.1	64.5
901		2022-03-23	12:28:00	64.0	76.4	64.4	64.1
902	Stop	2022-03-23	12:28:01				

Noise Appendix

Field Sheets

Lary: equipment seen entering driveway ~200 feet east.

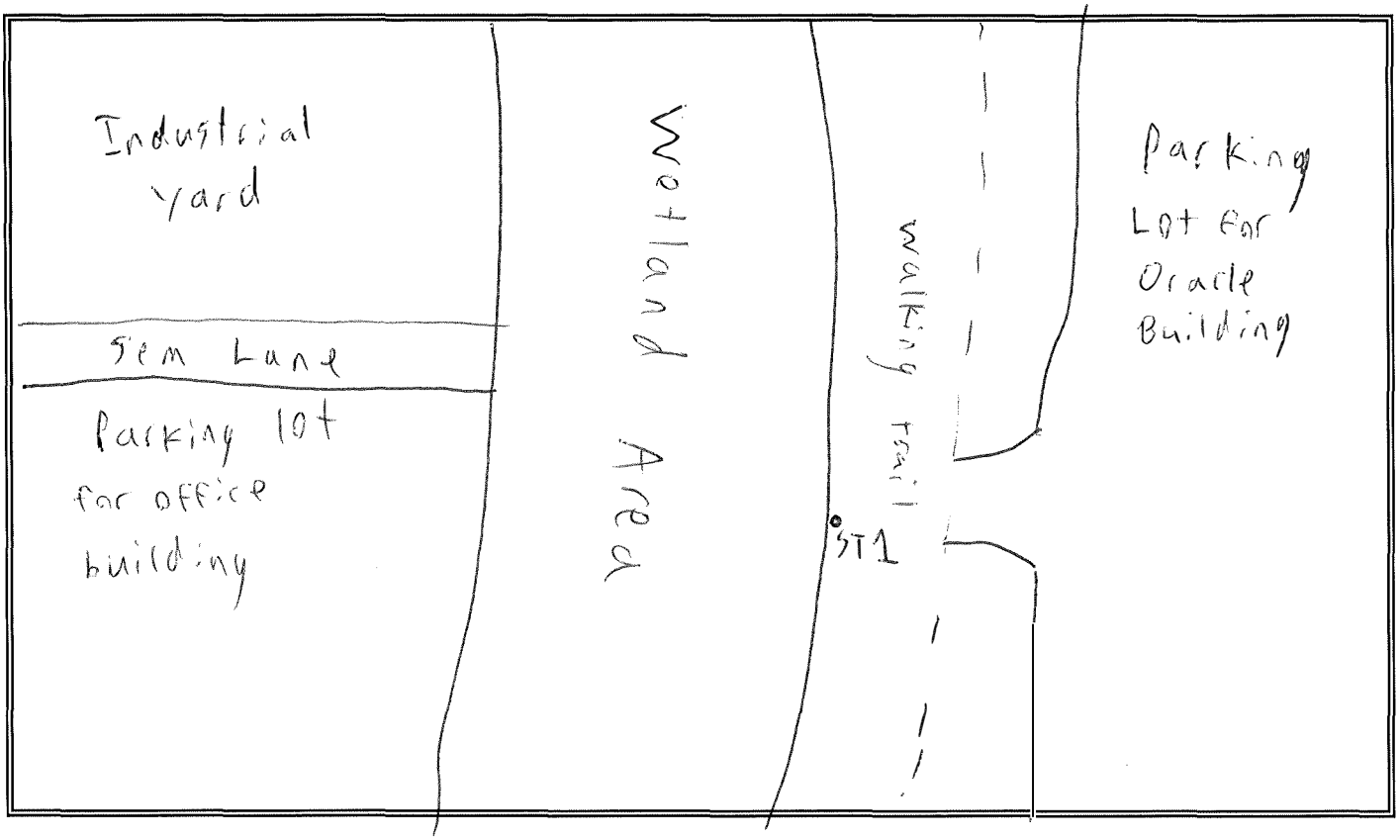
Meter Locations

Site #	Meter #	Start Time	Start Date	Stop Time	Stop Date	Start Cal	End Cal	Lock #	Location Description
LT1	Piccolo II A	10:10am	03/23/2022	10:45	2022 03 25				Pole #6 On Extend stay property. Sem Lane westbound.
LT2	Piccolo II J	10:15am	03/23/2022	10:55	2022 03 25				Pole #3 on project property Sem Lane eastbound.
LT4	Piccolo II I	10:35am	03/23/2022	11:05	2022 03 25				Utility pole on NW corner of O'Neill and Keith St. Upaul driveway ~100ft south
LT3	Piccolo II D	10:45am	03/23/2022	11:15	2022 03 25				~50 feet south of third driveway to mobile home park.

NOISE MEASUREMENT SITE INFORMATION SHEET

PROJECT NAME: 1301 Shoreway Road
PROJECT #:
SITE NUMBER: ST 1
DATE/TIME: 03/23/2022, 11:00AM
LOCATION/ADDRESS: 10 Twin Dolphin Dr, Redwood City
ENGINEERS: Noah Schumaker, Zachary Corrigo

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

61°F, 2.2 mph from SE, clear skies, 67% humidity

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date) - meter has not been updated for daylight savings

File number - data.026, Larson-Davis 831

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: N/A COMMENTS: Engine start

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

PROJECT NAME: 1301 Shoreway Road
SITE NUMBER: ST 1
LOCATION/ADDRESS: 10 Twin Dolphin Dr, Redwood City

PROJECT #:
DATE/TIME: 03/23/2022, 11:[illegible]AM
ENGINEERS: Noah Schumaker, Zachary Corey

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	11:13						Engine revving up in industrial yard and single engine plane flies overhead
2	11:14						Industrial yard engine noise and reverse alarm
3	11:16						Industrial yard engine noise stops
4	11:16						Single engine propeller plane flies overhead
5	11:19						Another single engine propeller plane flies overhead
6							
7							
8							
9							
10							
11							
12							
13							
14							Leq 59.4
15							Lmax 75.6
16							Lmin 47.7
17							L10 57.5
18							L33 50.8
19							L50 50.1
20							L90 48.5

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA
Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

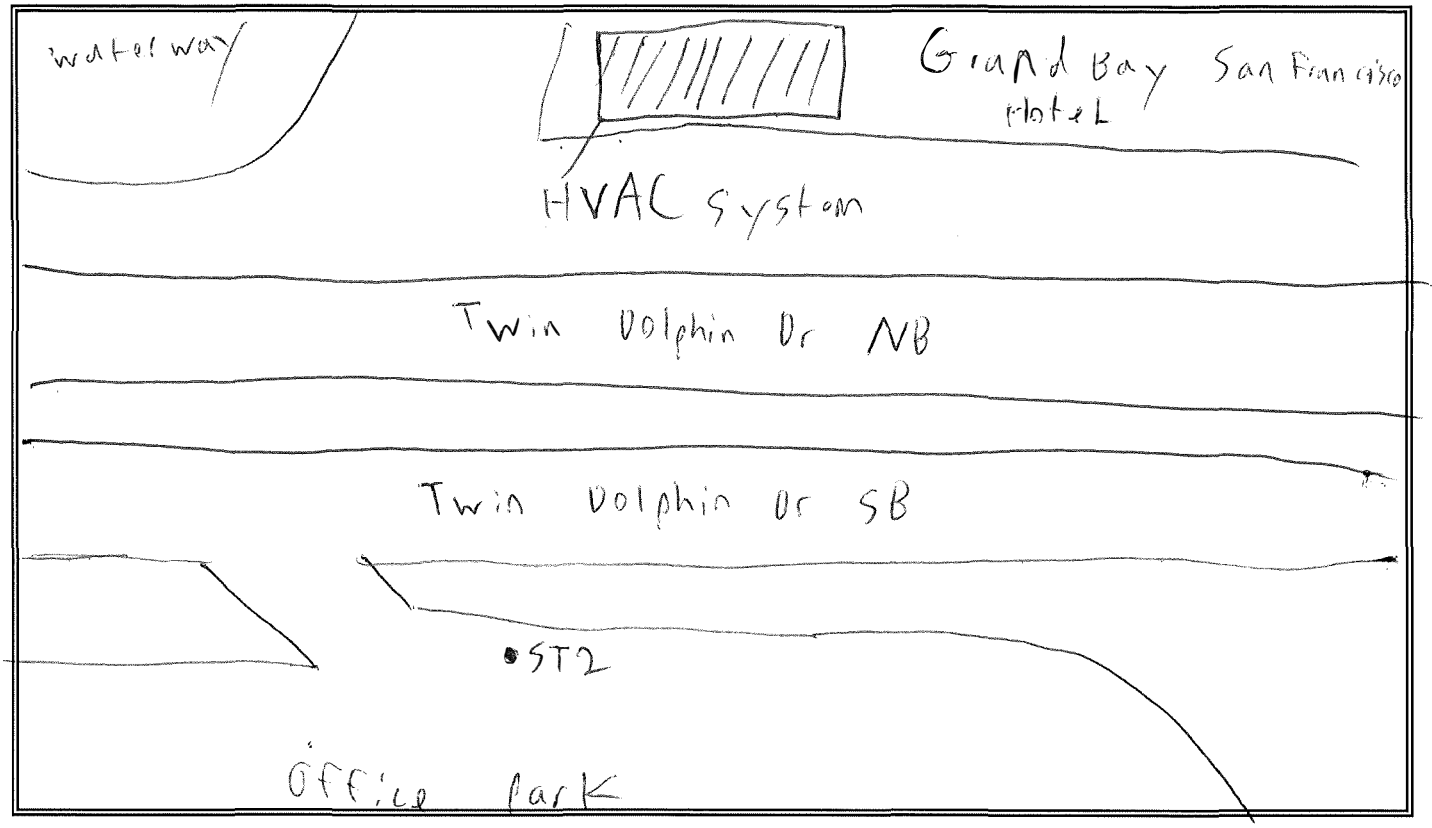
NOISE MEASUREMENT SITE INFORMATION SHEET

PROJECT NAME: 1301 Shoreway Road project PROJECT #:

SITE NUMBER: ST2 DATE/TIME: 03/23/2022, 11:46am

LOCATION/ADDRESS: 230 Twin Dolphin Dr, Redwood City ENGINEERS: Noah Schumaker, Zachary Cornejo

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

63 °F, 3 mph from SE, clear sky, 67% humidity

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

File # - Data.027

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

PROJECT NAME: 1301 Shoreway Road project
PROJECT #:
SITE NUMBER: ST2
DATE/TIME: 03/23/2022, 11 46 am
LOCATION/ADDRESS: 220 Twin Dolphin
ENGINEERS: Noah Schumaker, Zachary Cornejo

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)	
1	11:46						Single engine propeller plane flies overhead	
2	11:47						Single engine propeller plane flies overhead	
3	11:48							
4	49						Single engine propeller plane flies overhead	
5	50							
6	44						Single engine propeller plane flies overhead	
7	50							
8	51						Medium truck drove by SB	
9	52							
10	53						Light truck drove by SB	
11	54						Single engine propeller plane flies overhead	
12	55							
13	56						Single engine propeller plane flies overhead	
14	57						Modified car drives SB	Leq 66.5
15	58						Single engine propeller plane flies overhead	Lmax 87.8
16	59						Single engine propeller plane flies overhead	Lmin 50.6
17	12:00							L10 66.0
18								L33 58.1
19								L50 55.0
20								L90 51.7

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA

Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

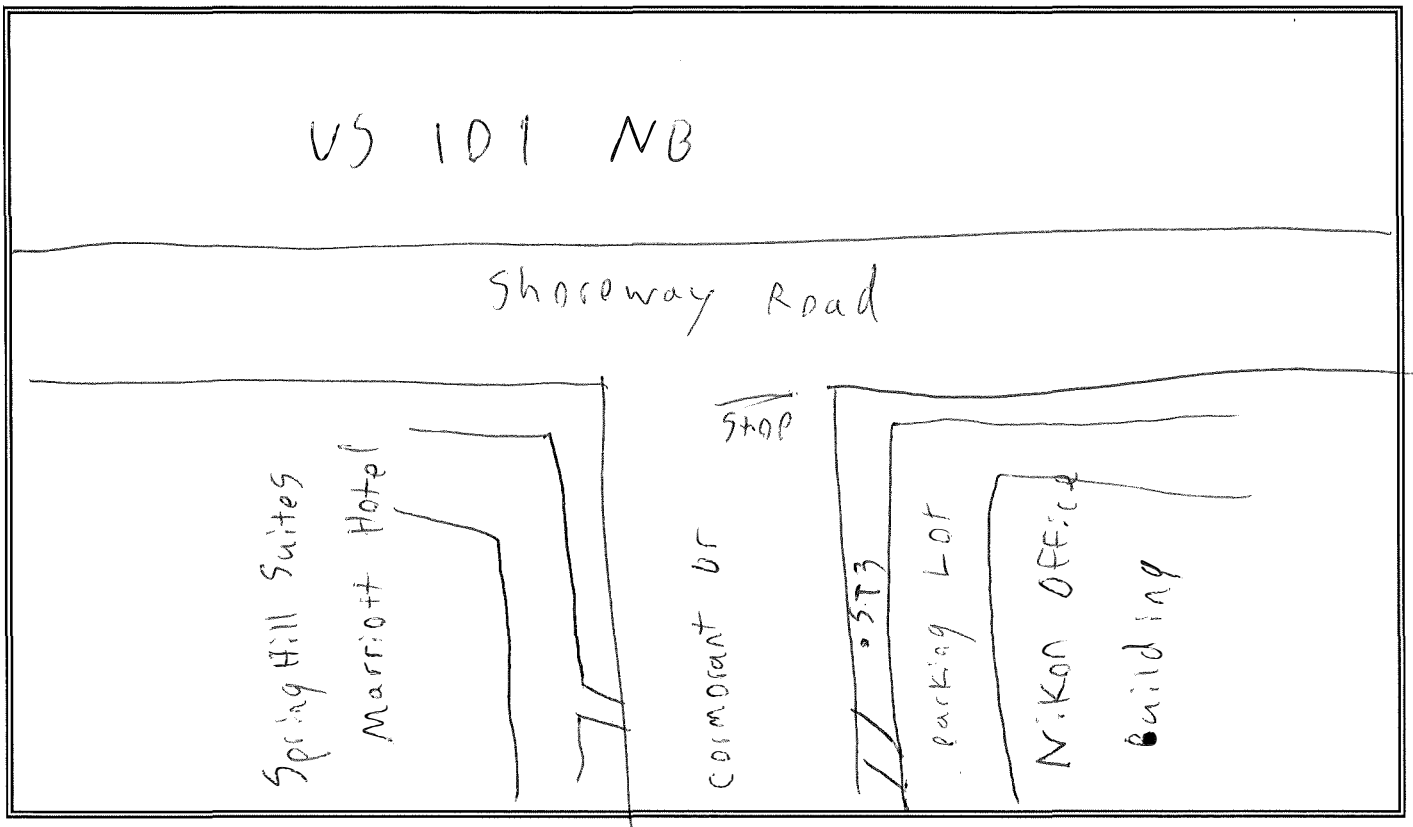
NOISE MEASUREMENT SITE INFORMATION SHEET

PROJECT NAME: 1301 Shoreway Road Project PROJECT #:

SITE NUMBER: ST3 DATE/TIME: 03/23/2022, 12:13

LOCATION/ADDRESS: 1399 Shoreway Rd, Belmont ENGINEERS: Noah Schumacher, Zachary Cornejo

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

65.6°F, 3.3 mph windspeed, clear sky, 66%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

File name - Data_028

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: 25 mph COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

PROJECT NAME:

SITE NUMBER: ST-3

PROJECT #:

DATE/TIME: 03/23/2022, 12:13

ENGINEERS: Noah Schumaker, Zachary Cornejo

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	12:13						Single engine plane flew overhead
2	14						Garbage truck drives WB on cormorant Dr
3	15						Large truck drive WB on Cormorant Dr
4	16						
5	17						Garbage truck drives WB on Cormorant Dr
6	18						Medium truck drives WB on Cormorant Dr
7	19						Single engine propeller plane flew overhead
8	20						Large truck drives WB on cormorant Dr. Single engine plane overhead
9	21						Garbage truck drives WB on Cormorant Dr.
10	22						Light truck EB on Cormorant Dr.
11	23						
12	24						
13	25						Single engine propeller plane flew overhead
14	26						Single engine flew overhead, large, garbage WB cormorant Dr.
15	27						Single engine propeller plane flew overhead
16	28						
17							
18							
19							
20							

Leq	67.1
Lmax	75.8
Lmin	59.1
L10	64.8
L33	66.6
L50	65.9
L90	63.5

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA

Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

Noise Appendix

Field Pictures

Noise Monitoring Site LT-1
Location: 120 Sem Lane



Looking southwest along Sem Lane, SLM is ~260 feet from Shoreway Road.



Looking northeast, SLM attached to light post 6 in the Extended Stay America parking lot.



Standing on Sem Lane, looking north at the SLM.

Noise Monitoring Site LT-2
Location: 1301 Shoreway Road



Looking southwest towards Shoreway Road. ~15 feet from Sem Lane.



Facing north, SLM is ~220 feet north of Shoreway Road.



Looking southwest, Extended Stay America hotel can be seen off to the right.



Looking northeast, 1301 Shoreway Road can be seen on the right edge of the frame.

Noise Monitoring Site LT-3
Location: Across Karen Road from 31 Karen Road.



Standing on Karen Road, looking northwest towards Oniell Ave, which is ~320 feet west of the SLM.



Looking northeast, Harbor Boulevard is ~ 480 feet east (off camera to the right).

Noise Monitoring Site LT-4
Location: Southwest corner of Oniell Avenue and Kedith Street



Standing at the intersection of Kedith Street and Oniell Avenue, looking southwest.



Standing on Oniell Avenue, looking northwest down Kedith Street.

Noise Monitoring Site ST-1
Location: 10 Twin Dolphin Drive



Looking west towards 1301 Shoreway Road and Extended Stay America Hotel.



Facing north, SLM is set up on the edge of a walking path in the southwest corner of the 10 Twin Dolphin Drive parking lot.



Facing south, off camera to the left is the southwest corner of the 10 Twin Dolphin Drive parking lot.

Noise Monitoring Site ST-2

Location: 230 Twin Dolphin Drive



Looking northeast toward Twin Dolphin Drive.



Looking south, 230 Twin Dolphin Drive is behind the SLM.

Noise Monitoring Site ST-3

Location: 1399 Shoreway Road



Facing southwest, ~ 130 feet northeast of Shoreway Road.



Looking northwest, 1399 Shoreway Road pictured behind the SLM.



Facing northeast, ~30 west of Cormorant Drive.



Standing in the parking lot of 1399 Shoreway Road, looking southeast.

Construction Noise Data and Analysis

	Demolition/Site Clearing/Shoring/Mas	Structural Concrete	Building Construction	Building Exterior	Building Interior	On-Site Improvements	Off-Site Improvements
2 Loudest Pieces @ 50 Feet							
L_{max}	89	89	87	85	84	85	85
L_{eq}	85	86	82	81	80	81	82
L_{max} @ distances (feet):							
25	95	95	93	91	90	91	91
50	89	89	87	85	84	85	85
100	83	83	81	79	78	79	79
200	77	77	75	73	72	73	73
300	74	74	71	70	69	69	70
400	71	71	68	67	66	66	67
500	69	69	67	65	64	65	65
560	68	68	66	64	63	64	64
700	67	66	64	62	61	62	62
800	65	65	62	61	60	60	61
900	64	64	61	60	59	59	60
1000	63	63	61	59	58	59	59
1200	62	62	59	58	57	57	58
1400	61	60	58	56	55	56	56
1600	59	59	56	55	54	54	55
1800	58	58	55	54	53	53	54
2000	57	57	55	53	52	53	53
L_{eq} @ distances (feet):							
25	92	92	88	87	86	87	88
50	85	86	82	81	80	81	82
100	79	80	76	75	74	75	76
200	73	74	70	69	68	69	70
300	70	70	67	66	64	65	66
400	67	68	64	63	62	63	64
500	65	66	62	61	60	61	62
560	64	65	61	60	59	60	61
700	63	63	59	58	57	58	59
800	61	62	58	57	56	57	58
900	60	61	57	56	55	56	57
1000	59	60	56	55	54	55	56
1200	58	58	55	54	52	53	54
1400	57	57	53	52	51	52	53
1600	55	56	52	51	50	51	52
1800	54	55	51	50	49	50	50
2000	53	54	50	49	48	49	50

Qty	Description	Hours/day
	Demolition/Site Clearing/Shoring/Mass Excavation	**Total phase:**
2	Excavator	8
2	Scraper	8
1	Compactor	8
1	Dozer	8
2	Grader	8
1	Water Truck	8
2	Dump Truck	8
1	Drill Rig	8
1	Crane	8
1	Street Sweeper	8
1	Gradall	8
	Structural Concrete	**Total phase:**
45	Concrete Trucks	8
1	Concrete Pump	8
1	Crane	8
1	Gradall	8
2	Laser Screed	8
	Building Construction	**Total phase:**
1	Crane	4
1	Gradall	4
1	Concrete Pump	8
2	Welders	8
	Building Exterior	**Total phase:**
1	Crane	8
2	Gradall	4
1	Welders	8
6	Boomlift	8
1	Loader	8
1	Backhoe	8
	Building Interior	**Total phase:**
4	JLG Manlift	8
1	Gradall	4
	On-Site Improvements	**Total phase:**
1	Backhoe	8
1	Excavator	8

2	Dump Truck	8
5	Concrete Trucks	8
1	Concrete Pump	8
1	Skip Loader	8
1	Paver	8
	Off-Site Improvements	**Total phase:**
1	Backhoe	8
1	Excavator	8
2	Dump Truck	8
5	Concrete Trucks	8
1	Concrete Pump	8
1	Skip Loader	8
1	Paver	8

Construction Noise

Demolition/Site Clearing/Shoring/Mass Excavation

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Grader	85	40%	81.0
Grader	85	40%	81.0
Scraper	84	40%	80.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	89
All Sources Combined - Leq sound level (dBA) at 50 feet =	85

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	92
50	0	0.0	89	85
100	-6	0.0	83	79
200	-12	0.0	77	73
300	-16	0.0	74	70
400	-18	0.0	71	67
500	-20	0.0	69	65
560	-21	0.0	68	64
700	-23	0.0	67	63
800	-24	0.0	65	61
900	-25	0.0	64	60
1000	-26	0.0	63	59
1200	-28	0.0	62	58
1400	-29	0.0	61	57
1600	-30	0.0	59	55
1800	-31	0.0	58	54
2000	-32	0.0	57	53

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Structural Concrete

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Laser Screed	85	50%	82.0
Laser Screed	85	50%	82.0
Gradall	83	40%	79.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	89
All Sources Combined - Leq sound level (dBA) at 50 feet =	86

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	92
50	0	0.0	89	86
100	-6	0.0	83	80
200	-12	0.0	77	74
300	-16	0.0	74	70
400	-18	0.0	71	68
500	-20	0.0	69	66
560	-21	0.0	68	65
700	-23	0.0	66	63
800	-24	0.0	65	62
900	-25	0.0	64	61
1000	-26	0.0	63	60
1200	-28	0.0	62	58
1400	-29	0.0	60	57
1600	-30	0.0	59	56
1800	-31	0.0	58	55
2000	-32	0.0	57	54

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Construction

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
Concrete Pump	81	50%	78.0
Crane	81	16%	73.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	87
All Sources Combined - Leq sound level (dBA) at 50 feet =	82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
200	-12	0.0	75	70
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
560	-21	0.0	66	61
700	-23	0.0	64	59
800	-24	0.0	62	58
900	-25	0.0	61	57
1000	-26	0.0	61	56
1200	-28	0.0	59	55
1400	-29	0.0	58	53
1600	-30	0.0	56	52
1800	-31	0.0	55	51
2000	-32	0.0	55	50

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Exterior

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
Loader	79	40%	75.0
Backhoe	78	40%	74.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	85
All Sources Combined - Leq sound level (dBA) at 50 feet =	81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	87
50	0	0.0	85	81
100	-6	0.0	79	75
200	-12	0.0	73	69
300	-16	0.0	70	66
400	-18	0.0	67	63
500	-20	0.0	65	61
560	-21	0.0	64	60
700	-23	0.0	62	58
800	-24	0.0	61	57
900	-25	0.0	60	56
1000	-26	0.0	59	55
1200	-28	0.0	58	54
1400	-29	0.0	56	52
1600	-30	0.0	55	51
1800	-31	0.0	54	50
2000	-32	0.0	53	49

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Interior

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
JLG Manlift	75	20%	68.0
JLG Manlift	75	20%	68.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	84
All Sources Combined - Leq sound level (dBA) at 50 feet =	80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
200	-12	0.0	72	68
300	-16	0.0	69	64
400	-18	0.0	66	62
500	-20	0.0	64	60
560	-21	0.0	63	59
700	-23	0.0	61	57
800	-24	0.0	60	56
900	-25	0.0	59	55
1000	-26	0.0	58	54
1200	-28	0.0	57	52
1400	-29	0.0	55	51
1600	-30	0.0	54	50
1800	-31	0.0	53	49
2000	-32	0.0	52	48

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

On-Site Improvements

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Concrete Pump	81	50%	78.0
Concrete Trucks	79	40%	75.0
Concrete Trucks	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	87
50	0	0.0	85	81
100	-6	0.0	79	75
200	-12	0.0	73	69
300	-16	0.0	69	65
400	-18	0.0	66	63
500	-20	0.0	65	61
560	-21	0.0	64	60
700	-23	0.0	62	58
800	-24	0.0	60	57
900	-25	0.0	59	56
1000	-26	0.0	59	55
1200	-28	0.0	57	53
1400	-29	0.0	56	52
1600	-30	0.0	54	51
1800	-31	0.0	53	50
2000	-32	0.0	53	49

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Off-Site Improvements

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Concrete Pump	81	50%	78.0
Excavator	81	40%	77.0
Concrete Trucks	79	40%	75.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	85
All Sources Combined - Leq sound level (dBA) at 50 feet =	82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	88
50	0	0.0	85	82
100	-6	0.0	79	76
200	-12	0.0	73	70
300	-16	0.0	70	66
400	-18	0.0	67	64
500	-20	0.0	65	62
560	-21	0.0	64	61
700	-23	0.0	62	59
800	-24	0.0	61	58
900	-25	0.0	60	57
1000	-26	0.0	59	56
1200	-28	0.0	58	54
1400	-29	0.0	56	53
1600	-30	0.0	55	52
1800	-31	0.0	54	50
2000	-32	0.0	53	50

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Traffic Data for Operational Noise Analysis

Road	Segment	ADT				Truck%	Speed
		Existing or Baseline Conditions	Existing or Baseline + Project	Cumulative No Project	Cumulative + Project	Percent Truck (H&M)	Posted Speeds
Shoreway Road	North of Marine Parkway	6,350	6,350	8,940	8,940	2%	25
	South of Marine Parkway	5,040	8,730	6,880	10,570	2%	35
	North of Cormorant Drive	4,560	5,390	5,500	6,330	2%	35
	South of Cormorant Drive	4,740	5,430	5,140	5,830	2%	35
	North of Holly Street	5,200	5,890	7,000	7,690	2%	35
	South of Holly Street	3,760	3,760	4,760	4,760	4%	25
Marine Parkway	East of Shoreway Road	30,670	30,820	32,320	32,470	2%	30
	West of Shoreway Road	37,940	41,690	44,330	47,880	2%	30
Cormorant Drive	East of Shoreway Road	1,080	1,230	2,460	2,610	10%	25
Holly Street	East of Shoreway Road	27,990	27,990	35,770	35,770	2%	35
	West of Shoreway Road	35,220	35,910	45,350	46,040	2%	35

Appendix I

Transportation Impact Analysis & Site Distance Analysis

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Office Development at 1301 Shoreway Drive

Transportation Impact Analysis

Prepared for:

ICF International, Inc.

January 19, 2024

Hexagon Transportation Consultants, Inc.

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Areawide Circulation Plans **Corridor Studies** Pavement Delineation Plans **Traffic Handling Plans** Impact Fees **Interchange Analysis** Parking **Transportation Planning** Traffic Calming **Traffic Control Plans** Traffic Simulation **Traffic Impact Analysis** Traffic Signal Design **Travel Demand Forecasting**

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Executive Summary

This report presents the results of the transportation impact analysis conducted for the office development located at 1301 Shoreway Road in Belmont, California. The project would demolish the existing office building on the site and construct two new office buildings comprising 542,035 s.f. of building area. Access to the project site would be provided from Shoreway Road and Sem Lane. The project proposes 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in a nine-floor parking garage.

VMT Analysis

According to the beta version of the C/CAG VMT Estimation Tool, the San Mateo County average daily VMT per employee is 17.21. The VMT threshold for new development is 15% below the Countywide average, so the threshold is 14.63 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee is 15.8, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 7.4%, to a value of 14.63 daily VMT per employee.

Since the C/CAG VMT Estimation Tool is not yet fully adopted, Hexagon also used the C/CAG travel demand model for comparison. According to the C/CAG Travel Demand Model, the San Mateo County average daily VMT per employee is 17.9, so the threshold is 15.215 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee according to the model is 16.2, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 6%, to a value of 15.215 daily VMT per employee, which is close to the VMT reduction calculated based on the C/CAG VMT estimation tool. Therefore, project is required to provide mitigation measures to reduce its VMT by 6-7.4%.

The VMT for the employee trips will need to be reduced in order to mitigate the potential VMT impact. This can be done by encouraging employees to use alternatives to single-occupant trips, such as carpooling, transit, and bicycling. The project should develop and submit a transportation demand management (TDM) and monitoring plan to describe what programs it would implement to reduce VMT and how those programs would be monitored for adherence.

The project is required to earn minimum of 18 TDM points, with TDM measures assigned values based on estimated benefit and cost, which would achieve a 15% trip reduction. According to the City of Belmont General Plan Goal 3.2, the project is required to achieve a 15 percent trip reduction. With the implementation of all of the potential TDM measures, the average VMT per employee would be reduced by 15% and would reduce the project impact to a less-than-significant level. This 15% trip

reduction goal exceeds the project level goal of 6-7.4% VMT reduction. The project's intent to reduce VMT by 15% would meet both C/CAG and the City of Belmont's VMT goals.

Project Trip Generation

The proposed project would generate 477 trips in the AM peak hour and 452 trips in the PM peak hour.

Intersection Levels of Service

The results of the intersection LOS analysis under existing plus project and background plus project conditions show that all the study intersections except El Camino Real/Ralston Avenue would operate at an acceptable level during both the AM and PM peak hours of traffic when measured against the applicable municipal and CMP level of service standards.

The addition of the project trips would result in LOS E operation at the El Camino Real/Ralston Avenue intersection with an increase in delay of 9-11 seconds and an increase in V/C of 0.03-0.06 during the AM peak hour, which would be considered an adverse effect based on the City of Belmont LOS standards. The City of Belmont General Plan identified the following planned improvements at the intersection of El Camino Real and Ralston Avenue – Conversion of two exclusive left turn lanes on eastbound Ralston Avenue into one left turn lane and one shared through and left turn lane. Conversion of the shared through and right turn lane into a through lane and the addition of an exclusive right turn lane. This would bring down the average delay to 62.8 seconds under existing plus project conditions and 69.4 seconds under background plus project conditions. However, the adverse effect would remain based on the City of Belmont LOS standards.

Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the planned improvement at El Camino Real and Ralston would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 8.7% of the cumulative traffic growth at this intersection. The fair share towards the cost of the improvement was estimated based on the Caltrans formula.

The General Plan EIR had the following to say about the intersections of El Camino Real and Ralston Avenue. "It should be noted that any improvements at Ralston Avenue and El Camino Real would require coordination and approval from Caltrans and San Mateo County. Additional impacts resulting from the addition of turn lanes include non-compliance with policies contained within the Ralston Avenue Corridor Study and Improvement Plan, the City's Complete Streets initiatives, the General Plan vision and policy directives for safe and efficient active transportation. Therefore, the impacts of the Project would remain significant and unavoidable".

The results of the level of service analysis under cumulative and cumulative plus project conditions show that the El Camino Real/Ralston Avenue, Island Parkway/US 101 NB Off Ramp/Ralston Avenue, and Shoreway Road/Airport Way/Holly Street (Redwood City) intersections would experience an adverse effect due to the project according to the Belmont and Redwood City criteria.

It should be noted that the intersection of El Camino Real/Ralston Avenue was identified as operating at LOS F in the General Plan EIR. Further improvements are not feasible due to right-of-way constraints. The adverse effect in the General Plan EIR was considered significant and unavoidable.

The addition of the project trips would result in LOS D operation at the Island Parkway/US 101 NB Off Ramp and Ralston Avenue intersection with an increase in delay of 4 to 13 seconds and an increase in V/C of 0.05-0.06 during the AM and PM peak hours, which would be considered an adverse effect based on the City of Belmont adverse LOS effect criteria. Based on the geometry of the intersection, with bridges connecting to each approach, any widening to add a through lane to increase the

intersection capacity would be difficult. The General Plan EIR identified queuing deficiencies at this intersection, but widening was considered infeasible due to right-of-way constraints. The policies could partially mitigate the impacts by improving multimodal infrastructure, coordinating land use and transportation planning, and implementing Travel Demand Management measures, thereby reducing vehicle trips on the roadway network.

The operation of the Shoreway Road/Airport Way and Holly Street intersection located in Redwood City would operate at LOS F during the PM peak hour under cumulative conditions, and the addition of the project trips would cause an increase in delay of 20 seconds. Changing the signal control for the Shoreway Road southbound right turn from permitted to permitted + overlap would result in acceptable LOS D (average delay 44.1 seconds) operation during the PM peak hour. This change would require modifications to the signal equipment. This change would disallow the east bound left turning vehicles from making U-turns at this intersection. However, there is very little U-turn demand at this intersection. The intersection level of service results for all scenarios are summarized in Table ES-1

Operational Analysis

A vehicle queuing analysis was conducted for the left-turn movements at intersections where the project would add maximum traffic to the left-turn queue. The left-turn queue on southbound El Camino Real at Ralston Avenue would exceed the capacity during the AM peak hour under existing, background and cumulative conditions. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 305 feet to a maximum of 355 feet during the AM peak hour. The project would increase the 95th percentile queue by three vehicles during the AM peak hour.

The left-turn queue on northbound Shoreway Road at Ralston Avenue exceeds capacity during the PM peak hour under existing, background, and cumulative conditions. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 125 feet to a maximum of 210 feet during the PM peak hour. The project would increase the 95th percentile queue by 8 vehicles during the PM peak hour. The 95th percentile queue of through and left turning vehicles on this approach under cumulative conditions is 40 vehicles during the PM peak hour. Although the painted left turn pocket could not accommodate the left turning queue, the entire street (approximately 700 feet) is available for storage since almost all vehicles turn left at the signal.

The added queue constitutes an adverse effect because the intersection would already have queues that exceed the turn lane capacity, and the project would increase the queue by at least 1%. It is not possible to increase the length of the turn lane. The deficiency at both the intersections were identified in the General Plan EIR, and Belmont does not intend to make any improvements.

The left-turn queue on eastbound Holly Street at Shoreway Road would exceed capacity during the AM peak hour under cumulative conditions. Under cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 25 feet during the AM peak hour. The project would increase the 95th percentile queue by 4 vehicles during the AM peak hour under background and cumulative conditions. Extension of the eastbound left turning pocket up to 50 feet is possible by reducing the median width along Holly Street. This could accommodate two more vehicles. The 95th percentile queue length value indicates that the storage pocket would be exceeded only 5 percent of the time. Therefore, with the extension of the storage pocket, the project would not cause operational issues for eastbound traffic.

Signal Warrant Analysis

A peak hour signal warrant analysis (*MUTCD 2010 Edition,* Part 4, Warrant 3) was performed for the unsignalized study intersection to determine whether the project would produce an impact according to the City of Belmont potentially significant impact criteria. The peak-hour signal warrant was checked for existing, background and project conditions. The signal warrant analysis results show that the intersection at Elmer Street/Ralston Avenue is warranted for a traffic signal during the AM (background) and PM (existing and background) peak hour, with or without the project.

Proposed Mitigation

The *Final Ralston Avenue Corridor Study and Improvements Plan*, dated August 26, 2014, recommends the signalization of the intersection at Ralston Avenue and Elmer Street. Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the traffic signal would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 37% of the cumulative traffic growth at this intersection.

Table ES-1
Intersections Level of Service Summary

				Existing		Existing Plus Project				Background		Background Plus Project				Cumulative		Cumulative Plus Project			
Int. #	Study Intersection	Peak Hour	Control[1]	Avg. Delay (sec)[2]	LOS	Avg. Delay (sec)[2]	LOS	Incr. In Avg. Delay (sec)	Incr. In Crit. V/C (sec)	Avg. Delay (sec)[2]	LOS	Avg. Delay (sec)[2]	LOS	Incr. In Avg. Delay (sec)	Incr. In Crit. V/C (sec)	Avg. Delay (sec)[2]	LOS	Avg. Delay (sec)[2]	LOS	Incr. In Avg. Delay (sec)	Incr. In Crit. V/C (sec)
1	El Camino Real & Ralston Avenue*	AM	Signal	54.9	D	66.6	E	11.7	0.064	61.7	E	70.8	E	9.1	0.030	**114.1**	**F**	**>120**	**F**	**8.8**	**0.030**
		PM		52.3	D	51.5	D	-0.8	0.022	54.8	D	56.5	E	1.7	0.022	**112.1**	**F**	**118.6**	**F**	**6.5**	**0.026**
2	Old County Road and Ralston Avenue	AM	Signal	39.1	D	39.9	D	0.8	0.046	40.9	D	42.6	D	1.7	0.046	50.6	D	52.6	D	2.0	0.046
		PM		37.0	D	38.4	D	1.4	0.041	38.0	D	39.7	D	1.7	0.041	29.1	C	31.0	C	1.9	0.041
3	Elmer Street and Ralston Avenue[3]	AM	OWSC	13.0	B	14.3	B	1.3	-	15.1	C	17.3	C	2.2	-	28.3	C	32.8	C	4.5	0.044
	(Unsignalized)	PM		14.8	B	15.0	B	0.2	-	18.7	C	19.1	C	0.4	-	36.1	D	35.7	D	-0.4	0.000
4	Hiller Street and Ralston Avenue	AM	Signal	38.4	D	41.8	D	3.4	0.571	46.1	D	49.0	D	2.9	0.050	40.8	D	41.2	D	0.4	0.046
		PM		30.6	C	31.3	C	0.7	0.044	30.8	C	31.8	C	1.0	0.045	31.1	C	33.4	C	2.3	-0.005
5	US 101 SB off ramp and Ralston Avenue	AM	Signal	18.1	B	19.3	B	1.2	0.040	18.4	B	20.2	C	1.8	0.041	18.9	B	19.6	B	0.7	0.037
		PM		23.4	C	25.9	C	2.5	0.073	21.0	C	24.6	C	3.6	0.071	22.3	C	24.8	C	2.5	0.064
6	Island Parkway/US 101 NB Off Ramp and Ralston Avenue	AM	Signal	38.4	D	41.9	D	3.5	0.073	44.3	D	47.1	D	2.8	0.071	49.7	D	54.7	D	5.0	0.063
		PM		31.3	C	33.5	C	2.2	0.062	32.5	C	35.6	D	3.1	0.062	**77.5**	**E**	**90.7**	**F**	**13.2**	**0.058**
7	Marine Parkway and Oracle Parkway/Shoreway Road (Redwood City)	AM	Signal	17.2	B	23.8	C	6.6	-	18.1	B	28.6	C	10.5	-	24.9	C	35.2	D	10.3	-
		PM		28.1	C	39.1	D	11.0	-	30.9	C	43.3	D	12.4	-	35.8	D	49.4	D	13.6	-
8	Shoreway Road and Cormorant Drive	AM	OWSC	10.2	B	10.9	B	0.7	-	12.7	B	13.8	B	1.1	-	10.8	B	11.2	B	0.4	-
	(Unsignalized)	PM		12.5	B	13.8	B	1.3	-	13.6	B	15.3	C	1.7	-	15.5	C	16.8	C	1.3	-
9	Shoreway Road/Airport Way and Holly Street (Redwood City)	AM	Signal	16.4	B	17.7	B	1.3	-	17.2	B	18.8	B	1.6	-	21.4	C	23.1	C	1.7	-
		PM		29.4	C	35.9	D	6.5	-	33.4	C	40.9	D	7.5	-	**88.1**	**F**	**107.8**	**F**	**19.7**	-

Notes:

* denotes CMP intersection

[1] Intersection control type definitions: OWSC = One-way-stop-control

[2] For OWSC, the average delay and LOS is reported for the worst movement.

[3] Elmer Street/Ralston Avenue intersections is signalized under Cumulative conditions.

Bold indicates substandard level of service

indicates an adverse effect

1. Introduction

This report presents the results of the transportation impact analysis conducted for the office development located at 1301 Shoreway Road in Belmont, California (see Figure 1). The project would demolish the existing office building on the site and construct two new office buildings comprising 542,035 s.f. of building area. Access to the project site would be provided from Shoreway Road and Sem Lane (see Figure 2). The project proposes 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in a nine-floor parking garage.

CEQA Transportation Analysis Scope and Methodology

The CEQA transportation analysis for the project consists of a project-level vehicle miles traveled (VMT) impact analysis. SB 743 established VMT as the appropriate measure for transportation impacts under CEQA. The Governor's Office of Planning & Research (OPR) published guidelines for the evaluation of VMT, which became mandatory as of July 1, 2020. This study uses the suggested OPR VMT guidelines adopted by the City of Belmont.

Local Transportation Analysis Scope

The local transportation analysis supplements the VMT analysis by identifying potential adverse operational effects that may arise due to a new development, as well as evaluating the effects of a new development on site access, circulation, and other safety-related elements in the proximate area of the project.

The potential adverse effects of the project were evaluated in accordance with the standards set forth by the Cities of Belmont and Redwood City, and the San Mateo County Congestion Management Program (CMP). The Local Transportation Analysis (LTA) component of the traffic study includes an analysis of weekday AM (7-9 AM) and PM (4-6 PM) peak-hour traffic conditions and determines whether the project would have any adverse effects on key intersections in the vicinity of the site. The traffic analysis is based on level of service for seven signalized intersections and two unsignalized intersections, for a total of nine study intersections. One study intersection in the City of Belmont is a CMP intersection, and two study intersections are located in Redwood City. The study also analyzes potential impacts to transit, bicycle, and pedestrian circulation.



Figure 1
Site Location and Study Intersections

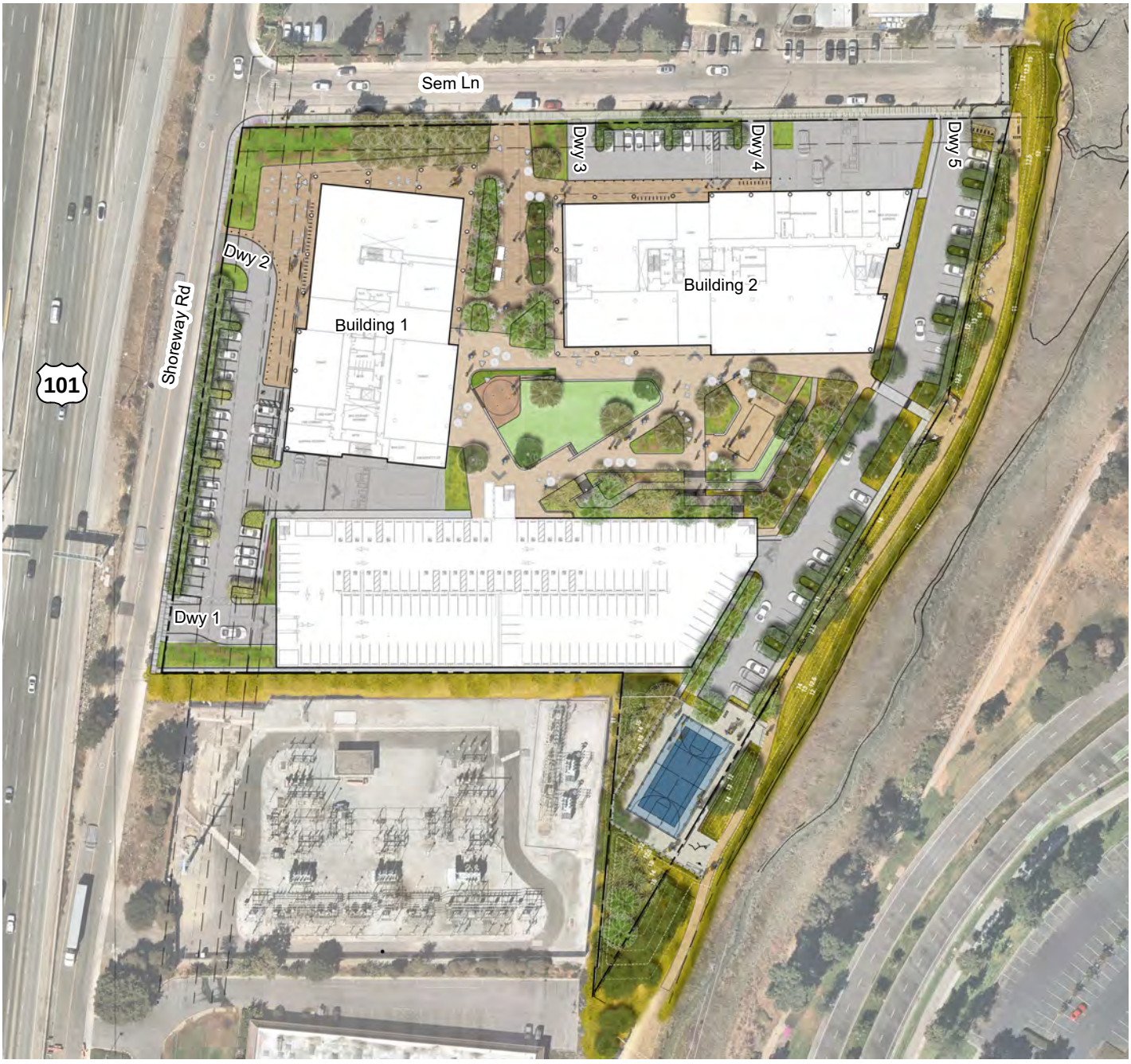


Figure 2
Project Site Plan

The study includes the following intersections:

1. El Camino Real & Ralston Avenue*
2. Old County Road and Ralston Avenue
3. Elmer Street and Ralston Avenue (unsignalized)
4. Hiller Street and Ralston Avenue
5. US 101 Southbound off ramp & Ralston Avenue
6. Island Parkway/US 101 Northbound off Ramp & Ralston Avenue
7. Shoreway Road & Ralston Avenue (Redwood City)
8. Shoreway Road & Cormorant Drive (unsignalized)
9. Airport Way & Holly Street (Redwood City)

Congestion Management Program (CMP) intersection identified with an asterisk (*).

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour is expected to occur between 7:00 AM and 9:00 AM, and the PM peak hour between 4:00 PM and 6:00 PM on a typical weekday. These are the hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing weekday AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak-hour traffic volumes were obtained from recent pre-COVID counts at all the intersections. The traffic counts that are older than 2019 were adjusted to pre-COVID (2019, early 2020) conditions with Street Light Data.

Scenario 2: *Background Conditions.* Background traffic volumes were estimated by adding to existing volumes the projected volumes from approved but not yet completed developments in the project area. A list of such projects was provided by the City of Belmont, the City of San Mateo, Redwood City and the City of San Carlos.

Scenario 3: *Existing Plus Project Conditions.* Existing plus project peak hour traffic volumes were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions to determine the effects the project would have on the existing roadway network.

Scenario 4: *Background Plus Project Conditions.* Background plus project traffic volumes were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions to determine potential adverse effects of the project.

Scenario 5: *Cumulative Conditions.* Cumulative traffic volumes represent traffic growth through the year 2040 based on the C/CAG 2040 land use projections. Cumulative traffic volumes were obtained from the 2040 C/CAG travel demand farecasting model. Cumulative plus project traffic volumes were estimated by adding to cumulative traffic volumes the additional traffic generated by the project. Cumulative plus project conditions were evaluated relative to cumulative conditions to determine potential adverse effects of the project.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from the City of Belmont, Redwood City, the City of San Carlos, the City of San Mateo, field observations, and new traffic counts. The following data were obtained from these sources:

- existing peak-hour intersection turning-movement volumes,
- existing lane configurations,
- signal timing and phasing,
- existing bicycle and pedestrian volumes, and
- list of approved projects.

Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The correlation between average control delay and level of service is shown in Table 1. The various analysis methods are described below.

Signalized Intersections

The City of Belmont level of service methodology for signalized intersections is the 2000 *Highway Capacity Manual* (HCM) method. The *2000 Highway Capacity Manual* methodology estimates the average control delay per vehicle in seconds. *Control delay* is the amount of delay that is attributed to the particular traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average delay can then be correlated to a level of service. This method was applied using the Synchro software. The City of Belmont level of service standard for signalized intersections varies according to the existing intersection level of service.

Unsignalized Intersections

For the unsignalized study intersections, the level of service that is reported in this traffic study corresponds to the average control delay for all stop-controlled approaches. This method is applicable for both side street stop-controlled and all-way stop-controlled intersections. The City of Belmont level of service standard for unsignalized intersections varies according to the existing intersection level of service. The delay and corresponding level of service at the unsignalized and stop-controlled intersections are presented in Table 2.

CMP Study Intersection

The study intersection of El Camino Real (SR 82) and Ralston Avenue is a CMP intersection. The CMP level of service standard for CMP intersections within the City of Belmont is LOS E or better.

Adverse Intersection operation effects criteria are used to establish what constitutes an adverse effect. For this analysis, the criteria used to determine potential adverse effects are based on the City of Belmont criteria as detailed in the *City of Belmont Guidelines for Traffic Impact Studies*, August 2014.

Table 1
Signalized Intersection Level of Service Definition

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lenghts, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p10-16.

Table 2
Unsignalized Intersection Level of Service Definition

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

Intersection LOS Adverse Effect Criteria for Belmont Intersections

For the purpose of this study, the project is said to create an adverse effect on traffic conditions at a signalized, all-way stop-controlled, or side-street stop-controlled intersection in the City of Belmont if for either peak hour the project meets the corresponding criteria shown in Table 3 or 4. For criteria pertinent to side-street stop-controlled intersections, the City guidelines state that the criteria do not apply to low volume roadways, but do not define what constitutes a "low volume roadway".

Table 3
Signalized Intersection Potential Adverse Effect Criteria

If the base case (without project) LOS is:	Then the corresponding average control delay is:	The adverse effect caused by the project is considered potential if the increase in delay due to the project is:	And the Volume-to-Capacity ratio increases by more than:
A	10.0 or less	10.0 seconds	0.02
B	10.1 to 20.0	10.0 seconds	0.02
C	20.1 to 35.0	7.5 seconds	0.02
D	35.1 to 55.0	4.0 seconds	0.01
E	55.1 to 80.0	4.0 seconds [1]	0.01
F	greater than 80.0	4.0 seconds [1]	0.01

Notes:
1. If the addition of project traffic results in a reduction in intersection control delay, then the adverse effect caused by the project is considered potential if 35 or more project vehicle trips are added to an intersection operating at LOS E, or 20 or more project vehicle trips are added to an intersection operating at LOS F.

Table 4
Unsignalized Intersection Potential Adverse Effect Criteria

If the base case (without project) LOS is:	Then the existing average control delay experienced by all drivers entering the intersection is:	The adverse effect caused by the project is potential if the increase in average control delay due to the project is:
A	10.0 or less	10.0 seconds
B	10.1 to 15.0	5.0 seconds
C	15.1 to 25.0	5.0 seconds
D	25.1 to 35.0	4.0 seconds
E	35.1 to 50.0	4.0 seconds [1]
F	greater than 50.0	4.0 seconds [1]

Notes:
1. If the addition of project traffic results in a reduction in intersection control delay, then the adverse effect caused by the project is considered potential if 25 or more project vehicle trips are added to an intersection operating at LOS E, or 15 or more project vehicle trips are added to an intersection operating at LOS F.

Other Intersection-Level Adverse Effect Criteria

In addition to the intersection-LOS adverse effects, the *Guidelines for Traffic Impact Studies* also identifies the following intersection-level non-LOS adverse effect criteria:

- Signal Warrants: The project traffic causes an intersection to meet or exceed Caltrans signal warrant criteria. For locations where base case volumes already exceed signal warrant criteria levels, traffic increases the demand to capacity ratio (V/C) by 0.01.

- Turn Lanes: The project traffic increases volumes to a level meeting or exceeding criteria for provision of a right or left turn lane on an intersection approach. For locations where base case volumes already exceed turn lane warrant criteria levels, project traffic increases peak hour volume by more than 1%.
- Sight Lines: The project creates an unsignalized intersection or the project adds to an existing unsignalized intersection approach that does not have adequate sight lines based upon Caltrans criteria for state highway intersections and/or criteria for City roadway intersections.
- Vehicle Queues: The project traffic creates vehicle queues exceeding turn lane capacity or causing problematic back-ups of traffic on driveways or roadways on or off the project site. For intersections where base case volumes already create vehicle queues exceeding turn lane capacity, project traffic increases vehicle queues by 1%.

City of Redwood City Signalized Intersections

The City of Redwood City General Plan contains the following transportation policy with respect to level of service:

> "Program BE-55 / Level of Service Policy Evaluation: Evaluate Redwood City's current Level of Service (LOS) policies for motor vehicle circulation. The evaluation shall consider the following to ensure efficient traffic flow and balance multi-modal mobility goals:
>
> Maintaining LOS D or better for motor vehicles in all areas of the city, except the Downtown area as defined by the Downtown Precise Plan. In Downtown, no minimum vehicular LOS standard will be maintained but vehicular LOS will be calculated and alternate LOS standards for other travel modes will be established."

The study intersections are located outside the Downtown area; thus, the intersections are subject to the City's LOS D standard.

According to common Redwood City practice, the project is said to create an adverse effect on traffic conditions at a study intersection if the project would cause:

Signalized Intersection

1. Operations at a signalized intersection to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
2. Average delay at a signalized intersection operating at an unacceptable level (LOS E or F) to increase by 5 seconds or more.

Other Transportation Adverse Effect Criteria in Belmont

The project would have an adverse effect if it results in any of the following conditions:

- On-site Roads and Frontage Improvements: The proposed on-site circulation would not meet the City's minimum standards for roadway or driveway design, or, in the opinion of the registered traffic engineer conducting the study, result in safety hazards to pedestrians, bicyclists or vehicles.
- Parking: The proposed on-site vehicle or bicycle parking supply would not be adequate to accommodate parking demand based upon City code criteria.
- Emergency Access: The project site would have inadequate emergency access.
- Policies and Plans: The project would conflict with adopted policies, plans, or programs.

- Road Hazards: The project would substantially increase hazards to pedestrians, bicyclists or vehicles due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Mitigation of Potential Adverse Effects for Belmont Intersections

In the event any adverse effects are identified in the Local Transportation Analysis, potential improvements shall be evaluated to determine whether they adequately address the adverse effects. The proposed improvements may be suggested by the applicant or the City and shall be evaluated by the Director of Community Development and the Director of Public Works. Improvements may include, but are not limited to, the following:

1. Installation of physical improvements at the affected intersection or roadway segment;
2. Installation of physical improvements at another intersection or roadway segment that will improve traffic flow within the transportation corridor (such as the Ralston Avenue Corridor);
3. Contribution of a fair share toward transportation improvements planned by the City and included in its capital improvement program or otherwise planned for construction;
4. Contribution of a fair share toward transit improvements or operations to relieve traffic congestion;
5. Modifications of the proposed land use or site design or operational measures to reduce trip generation.

Report Organization

This report has a total of nine chapters. Chapter 2 describes existing conditions including the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 presents the Vehicle Miles Traveled (VMT) analysis. Chapter 4 presents the traffic conditions in the study area under background conditions. Chapter 5 presents project conditions including descriptions of the method used to estimate project traffic, its adverse effect on the transportation system, and any recommended improvements. Chapter 6 presents the intersection operations under cumulative conditions. Chapter 7 presents the Travel Demand Management Plan for the proposed project. Chapter 8 provides an evaluation of other transportation-related issues, such as site access, on-site circulation, vehicle queuing, parking, as well as potential adverse effects on bicycle, pedestrian, and transit facilities. Chapter 9 presents the study conclusions including a summary of recommended improvements.

2. Existing Conditions

This chapter describes existing conditions for all of the major transportation facilities near the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project is provided via US 101, and El Camino Real, which are described below.

US 101 is a north/south freeway that extends from north of San Francisco to south of San Jose. In the project vicinity, US 101 has eight mixed-flow lanes. US 101 provides access to the project site via interchanges at Ralston Avenue and Holly Street. A bicycle/pedestrian bridge crosses US-101 just north of the Ralston Avenue interchange, providing access to the Bay Trail multiuse path.

El Camino Real is a north-south four to six-lane arterial roadway that runs parallel to US-101 between San Francisco and San Jose and provides alternative regional access to the proposed project site. The posted speed limit on El Camino Real is 35 mph. El Camino Real provides access to the project site via Ralston Avenue/Harbor Boulevard.

Local access to the project site is provided by Ralston Avenue/Marine Parkway, Holly Street, Shoreway Road, Twin Dolphin Drive and Cormorant Drive. These roadways are described below.

Ralston Avenue/Marine Parkway is an east-west divided arterial that extends from SR 92 in the west to Redwood Shores in the east. Ralston Avenue is two- to four-lanes wide and has a posted speed limit of 30 mph in the project vicinity. Ralston Avenue transitions to Marine Parkway east of Shoreway Road. Sidewalks or separated walking paths are present on both sides of Marine Parkway. Bike lanes are available in both directions along Marine Parkway east of Shoreway Road/Oracle Parkway. West of Shoreway Road/Oracle Parkway, a Class I bicycle path begins and crosses US-101 via a dedicated bridge. Ralston Avenue/Marine Parkway provides access to the project site through Shoreway Road.

Shoreway Road is a north-south two-lane frontage roadway to the east of US 101. Shoreway Road extends from the Ralston Avenue interchange with US 101 and terminates south at Holly Street. Shoreway Road serves as the primary access route from US 101 to the Project site. North of Cormorant Drive, sidewalks are available on the east side of Shoreway Road. South of Cormorant Drive, a sidewalk is available only on the east side of Shoreway Road for about 350

feet. On-street parking is prohibited along most sections of Shoreway Road. The speed limit on Shoreway Road is 35 mph.

Cormorant Drive is a two-lane east-west roadway that connects Shoreway Road and Twin Dolphin Drive. Cormorant Drive becomes Shoreline Drive east of Twin Dolphin Drive and connects to Redwood Shores Parkway. Sidewalks are present along both sides of Cormorant Drive. Cormorant Drive serves as the southern boundary of the project site and provides direct access to the project site. The speed limit on Cormorant Drive is 25 mph.

Sem Lane is a two-lane east-west cul-de-sac that starts from Shoreway Road and ends at the public access trail near the project's eastern boundary. Sidewalks are present along the north side of Sem Lane for approximatley 350 ft. The public access trail that starts from Sem Lane runs parallel to Shoreway Road and connects to Shoreway Road 650 feet south of the project. Sem Lane provides direct access to the project site. The speed limit on Sem Lane is 25 mph. On-street parking is prohibited on Sem Lane.

Twin Dolphin Drive is a four-lane north-south divided roadway that connects Marine Parkway to Holly Street/Redwood Shores Parkway. The speed limit on Twin Dolphin Drive is 35 mph. Twin Dolphin Drive provides access to the project site via Marine Parkway/Cormorant Drive and Shoreway Road. The four-lane roadway has a landscaped median with left-turn pockets, sidewalks on the east side of the street, and bike lanes on both sides of the street. On-street parking is prohibited on Twin Dolphin Drive.

Holly Street/Redwood Shores Parkway extends in an east-west direction starting from Elm Street, west of El Camino Real, across US 101 to Twin Dolphin Dive, where it continues as Redwood Shores Parkway. Holly Street has one lane in each direction west of El Camino Real and two lanes in each direction east of El Camino Real. Holly Street transitions to Redwood Shores Parkway east of Twin Dolphin Drive with a posted speed limit of 35 mph in the project vicinity. Sidewalks are present on both sides of Redwood Shores Parkway. West of Twin Dolphin Drive, sidewalks are only present along one side of Holly Street. Bike lanes are available on both sides of the street east of Industrial Road. Holly Street/Redwood Shores Parkway provides access to the project site through Twin Dolphin Drive and Shoreway Road.

Existing Bicycle Facilities

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are pathways, separate from roadways that are designated for use by bicycles. Often, these pathways also allow pedestrian access. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III) are existing rights-of-way that accommodate bicycles but are not separate from the existing travel lanes. Routes are typically designated only with signs.

Within the project area, continuous bike paths run parallel to Twin Dolphin Drive, Redwood Shores Parkway, and Marine Parkway. Bike lanes are present along Holly Street/ Redwood Shores Parkway east of Industrial Road and Marine Parkway east of Shoreway Road. Twin Dolphin Drive, Shoreway Road and Shoreline Drive are designated as bike routes. Although not designated as a bike route, Cormorant Drive carries low traffic volume and is conducive to bicyclists (see Figure 3).

Multi-use trails in the project vicinity include the Bay Trail and the O'Neill Slough Trail. The Bay Trail, located approximately half mile north of the project site, is a 330-mile network of Class I bicycle paths and hiking trails around the Bay Area, with a planned network of over 500 miles of trails. There is also a Class I bicycle path that begins north Ralston Avenue near the Bay Trail, crosses US-101 via a dedicated bridge, and travels alongside Ralston Avenue where it terminates at Hiller Street.

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. Roadways providing pedestrian access to the project site include Marine Parkway, Cormorant Drive, Sem Lane and Shoreway Road. North of Cormorant Drive, sidewalks are available on the east side of Shoreway Road. South of Cormorant Drive, a sidewalk is available only on the east side of Shoreway Road for about 350 feet. Sidewalks are present along both sides of Cormorant Drive. Sem Lane provides a sidewalk only for 350 feet on one side of the street. Sidewalks are provided on both sides of Shoreline Drive in the vicinity of the project site. Sidewalks are only provided on the east side of Shoreline Drive when it approaches Redwood Shores Parkway. Holly Street provides a sidewalk only on one side of the street.

Crosswalks with pedestrian signal heads and push buttons are found on one or more approaches at most of the signalized study intersections. The stop-controlled intersections on Shoreway Road at Sem Lane and Cormorant Drive have crosswalks only on the east approach. The intersection at Shoreway Road and Marine Parkway has crosswalks on all but the west approach. Crosswalks are only present on the east and south approaches at the intersections of Shoreway Road/Airport Way and Holly Street.

A pedestrian trail running along Belmont Creek is located just north of the project site with a connection to the project site at the end of Sem Lane.

Existing Transit Service

Existing bus service in Belmont is provided by SamTrans, and rail service is provided by Caltrain. There are no bus stops or stations within walking distance of the site. The Twin Dolphin Shuttle service that connected the project site with the San Carlos Caltrain Station was suspended in July 2020 due to COVID-19 and the loss of the contributing employer partner and Shuttle Grant funding. Figure 4 shows the bus service and Caltrain stations in the project vicinity.

Existing Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were obtained from field observations and are shown on Figure 5. Current traffic conditions on the roadway network are atypical due to the unprecedented conditions caused by the COVID-19 pandemic in San Mateo County. Traffic counts conducted in May 2021 along Ralston Avenue were approximately 40% lower than the 2019 counts during the AM peak hour and 22% lower during the PM peak hour. Pre-pandemic traffic counts were available at eight of the study intersections. The intersection of Hiller Street and Ralston Avenue was counted in 2017. This count was factored up based on 2019 Street Light data along Ralston Avenue. Intersection volumes along Ralston Avenue were balanced based on cross streets and driveway locations. The existing peak-hour intersection volumes are shown on Figure 6. Intersection turning-movement counts conducted for this analysis are presented in Appendix A.

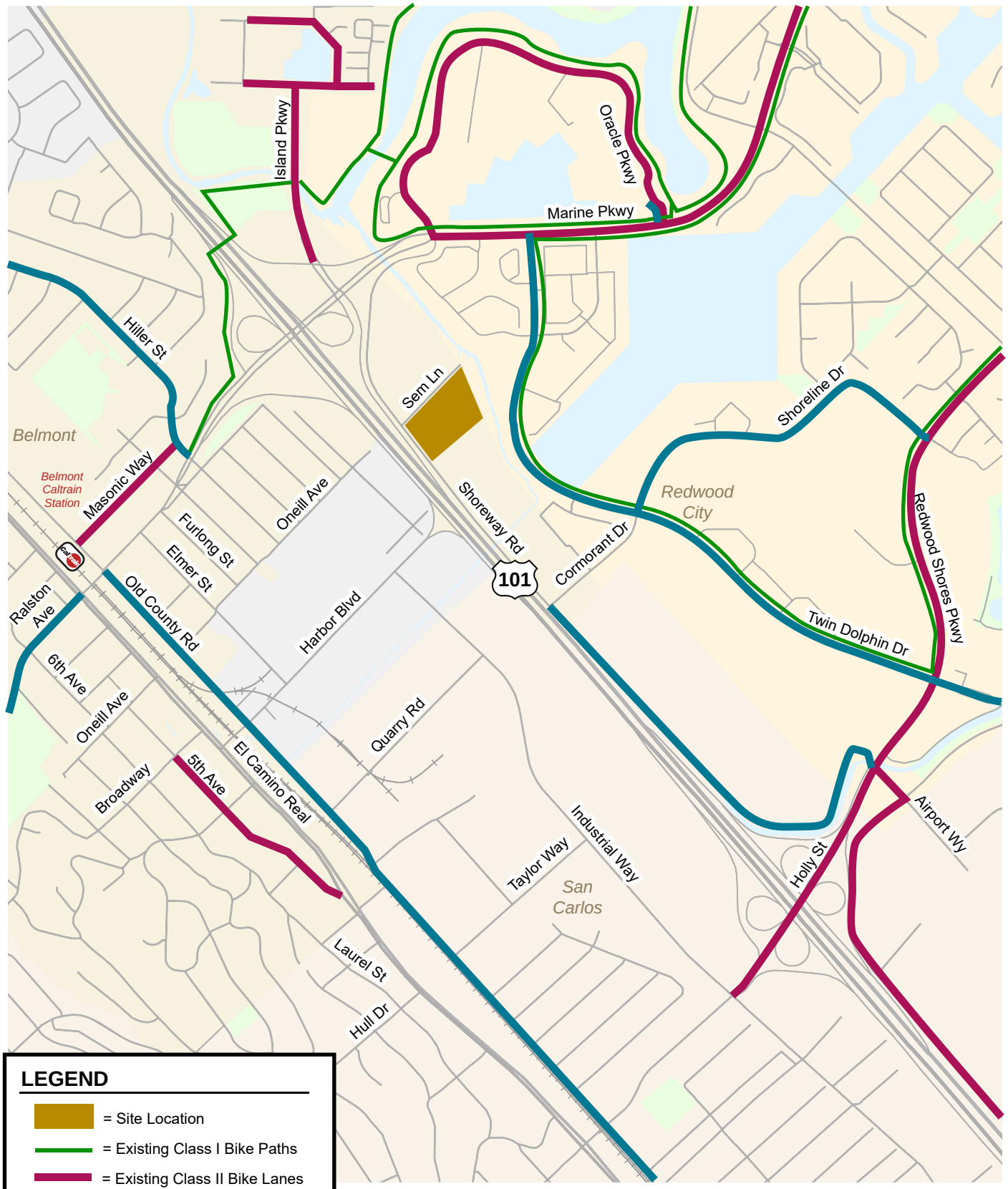


Figure 3
Existing Bicycle Facilities



Figure 4
Existing Transit Services

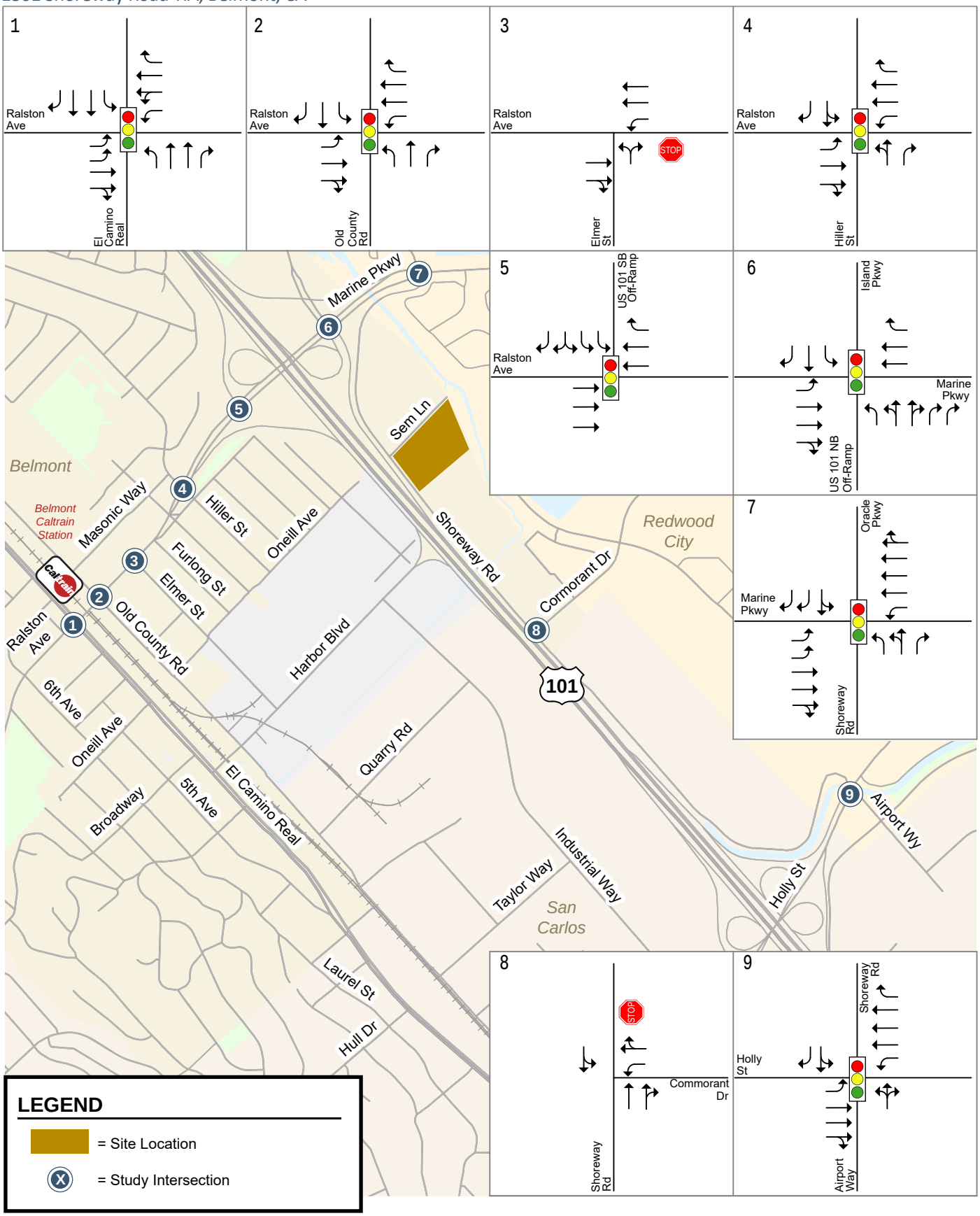


Figure 5
Existing Lane Configurations

NORTH
Not to Scale

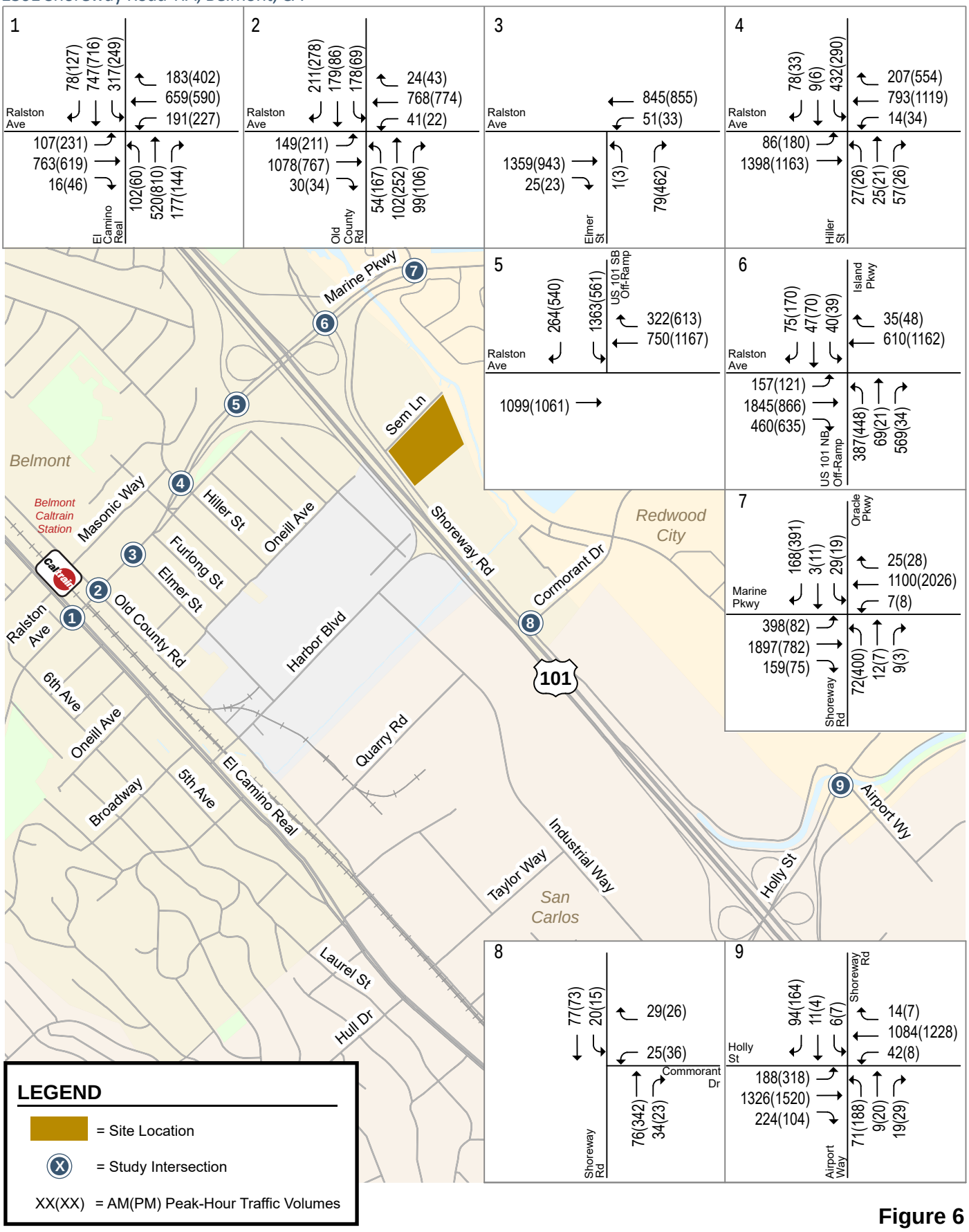


Figure 6
Existing Traffic Volumes

Existing Intersection Levels of Service

The results of the level of service analysis measured against the City of Belmont, Redwood City and CMP level of service standards under existing conditions show that all the study intersections are operating at acceptable levels during both the AM and PM peak hours (see Table 5). The level of service calculation sheets are included in Appendix B.

Table 5
Existing Intersection Levels of Service Summary

Int. #	Study Intersection	Peak Hour	Control Type[1]	Count Date[2]	Avg. Delay (sec)[1]	LOS
1	El Camino Real & Ralston Avenue*	AM	Signal	01/14/20	54.9	D
		PM		01/14/20	52.3	D
2	Old County Road and Ralston Avenue	AM	Signal	01/14/20	39.1	D
		PM		01/14/20	37.0	D
3	Elmer Street and Ralston Avenue	AM	OWSC	01/14/20	13.0	B
	(Unsignalized)	PM		01/14/20	14.8	B
4	Hiller Street and Ralston Avenue	AM	Signal	10/26/17	38.4	D
		PM		10/26/17	30.6	C
5	US 101 SB off ramp and Ralston Avenue	AM	Signal	11/03/19	18.1	B
		PM		11/03/19	23.4	C
6	Island Parkway/US 101 NB Off Ramp and Ralston Avenue	AM	Signal	11/03/19	38.4	D
		PM		11/03/19	31.3	C
7	Marine Parkway and Oracle Parkway/Shoreway Road (Redwood City)	AM	Signal	03/21/19	17.2	B
		PM		03/21/19	28.1	C
8	Shoreway Road and Cormorant Drive	AM	OWSC	03/21/19	10.2	B
	(Unsignalized)	PM		03/21/19	12.5	B
9	Shoreway Road/Airport Way and Holly Street (Redwood City)	AM	Signal	03/02/19	16.4	B
		PM		03/02/19	29.4	C

Notes:
* denotes CMP intersection
[1] Intersection control type definitions: OWSC = One-way-stop-control; For OWSC, the average delay and LOS is reported for the worst movement.
[2] 2017 counts were adjusted to pre-Covid conditions based on 2019 StreetLight data.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. Existing Conditions field observations were conducted in February 2018 and January 2020 (pre-Covid). The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions. Below is a description of the existing field conditions that were observed at the study intersections.

El Camino Real and Ralston Avenue

The Old County Road/Ralston Avenue intersection and El Camino Real/Ralston Avenue intersection are spaced less than 200 feet apart. During the AM and PM peak hours, some southbound left turning vehicles spilled out of the turn pocket and required two signal cycles to clear the intersection. This occasionally happened whenever eastbound vehicles at the Old County Road/Ralston Avenue intersection extended back to the El Camino Real/Ralston Avenue intersection. Also, eastbound through movements on Ralston Avenue occasionally needed two signal cycles to clear the intersection during the AM and PM peak hours.

Old County Road and Ralston Avenue

During the AM peak hour, southbound left turning vehicles required two cycles to clear the intersection. The southbound queues extended up to Masonic Way. During the PM peak hour, northbound traffic was heavy. Occasionally, northbound through vehicles required two signal cycles to clear the intersection. The westbound queue extended past Elmer Street and occasionally required two signals to clear the intersection.

Elmer Street and Ralston Avenue

During the PM peak hour, northbound traffic was heavy. Occasionally, northbound vehicles required 50 to 70 seconds to clear the stop-controlled intersection.

Hiller Street and Ralston Avenue

During the AM peak hour, southbound left turning vehicles occasionally required two signal cycles to clear the intersection. The southbound queues extended past Masonic Way.

US 101 Northbound Ramps/Island Parkway and Ralston Avenue

During the AM peak hour, eastbound traffic was heavy, and vehicles from the Oracle Parkway/Ralston Avenue intersection backed up to the US 101 northbound ramps. Occasionally eastbound through vehicles required two signal cycles to clear the intersection.

Oracle Parkway/Shoreway Road and Marine Parkway

This intersection operates without any significant operational issues during the AM peak hour. During the PM peak hour, the northbound left-turn queue extends out of the dedicated turn pocket with at most 20 vehicles in the queue. Northbound left-turn traffic generally clears within one cycle, however occasionally, two to three northbound left-turn vehicles need to wait through two cycles to clear the intersection. All the other movements clear within one cycle, and the intersection operates at acceptable levels.

3. Vehicle Miles Traveled (VMT) Analysis

Pursuant to SB 743, the CEQA 2019 Update Guidelines Section 15064.3, subdivision (b) states that vehicle miles travelled (VMT) will be the metric in analyzing transportation impacts for land use projects for California Environmental Quality Act (CEQA) purposes. The City of Belmont adopted a resolution to adopt the VMT Methodology for application within Belmont.

The project is located 1.2 miles from the Caltrain Station. Therefore, the project does not meet the screening criteria as per Office of Planning and Research (OPR) and the City of Belmont's VMT policy.

VMT Analysis Methodology

To determine whether a project would result in CEQA transportation impacts related to VMT, Hexagon used the beta version of the C/CAG VMT Estimation Tool and C/CAG travel demand model to determine the work VMT in the project's zone. The VMT threshold for new development is 15% below the Countywide average.

According to the beta version of the C/CAG VMT Estimation Tool, the San Mateo County average daily VMT per employee is 17.21, so the threshold is 14.63 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee is 15.8, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 7.4%, to a value of 14.63 daily VMT per employee.

Since the C/CAG VMT Estimation Tool is not yet fully adopted, Hexagon also used the C/CAG travel demand model for comparison. According to the C/CAG Travel Demand Model, the San Mateo County average daily VMT per employee is 17.9, so the threshold is 15.215 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee according to the model is 16.2, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 6%, to a value of 15.215 daily VMT per employee, which is close to the VMT reduction calculated based on the C/CAG VMT estimation tool. Therefore, project is required to provide mitigation measures to reduce its VMT by 6-7.4%. This 15% trip reduction goal exceeds the project level goal of 6-7.4% VMT reduction.

VMT Reduction for Employee Trips

The VMT for the employee trips will need to be reduced in order to mitigate the potential VMT impact. This can be done by encouraging employees to use alternatives to single-occupant trips, such as carpooling, transit, and bicycling. The project would need to implement a transportation demand

management (TDM) to reduce VMT. The City of Belmont has adopted a TDM policy with a point system. Office or institutional projects over 50,000 sq.ft. are required to achieve 18 TDM points. Implementing a TDM program in compliance with the Belmont policy and achieving 18 points would reduce the project's trips and corresonding VMT by at least 15%, which would mitigate the VMT impact.

A recommended TDM Plan is included in Chapter 7 of this report. With the implementation of all of the potential TDM measures, the average VMT per employee would be reduced by 15%, which would reduce the project impact to a less-than-significant level. The project's intent to reduce VMT by 15% would meet both C/CAG and the City of Belmont's VMT goals.

4. Background Conditions

This chapter presents background traffic conditions without the project. Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions. The background scenario predicts a realistic baseline traffic condition that would occur as approved development gets built and occupied.

Transportation Network under Background Conditions

It is assumed in this analysis that the transportation network under background conditions, including roadways and intersection lane configurations, would be the same as that described under existing conditions at all study intersections.

Background Traffic Volumes

Background conditions traffic volumes were estimated by adding to the existing traffic volumes the traffic estimated to be generated by the approved but not yet constructed projects in the Cities of Belmont, Redwood City, San Mateo, and San Carlos from January 2020 (from the existing volume traffic count date). A list of approved projects was provided on their respective websites for all four cities. Based on a review of traffic studies prepared for these projects, the types and sizes of these developments, and their distance from the project site, the following approved developments are expected to add traffic to at least one of the study intersections during at least one of the peak hour periods:

1. 2 Davis Drive, Belmont – demolish existing warehouse building and construct new 71,000 sq. ft. Office / R&D Building
2. Barrett Community Centre, Belmont (1835 Belburn Drive)– demolish the existing (28,000 s.f.) building and construct 42,000 s.f. multi-use community center
3. Firehouse Square, 1300 El Camino Real, Belmont – 66 affordable residential apartments, 15 market rate townhouses and 3,750 s.f. commercial space
4. Hill Street, 900 El Camino Real, Belmont – 37 unit residential project
5. Windy Hill Project, 1325 Old County Road, Belmont – 250 residential units and 1,350 community flex space
6. 815 Old County Road, Belmont – 177 residential units including 27 affordable units
7. 800 Laurel Avenue, Belmont – Four Multi-story townhome building with 16 dwelling units

8. 580 Masonic Way, Belmont - 139 residential units and 934 s.f. of Café space
9. 800 - 803 Belmont Avenue, Belmont – 125 affordable housing units
10. 1110 Old County Road, Belmont – 12,860 s.f. of office space
11. 601/605/615/625 Harbor Boulevard & 1421 Old County Road, Belmont – 360,000 s.f. of research and development (R&D) and office space
12. 604-608 Harbor Boulevard, Belmont - 103-unit multi-family residential building
13. Transit Village (333 El Camino Real, San Carlos) – 202 new multi-family dwelling units and 25,800 s.f. of commercial space
14. Wheeler Plaza (57 El Camino Real, San Carlos) – demolish existing commercial buildings and construct 9,855 s.f. of retail space, 4,000 s.f. of office space, 4,500 s.f. of restaurant and 139 multi-family residential units
15. Meridian 25 (887 Industrial Road, San Carlos) – demolish existing industrial buildings and construct 528,520 s.f. of office space
16. 644-678 Laurel Street, San Carlos – addition of 6,996 s.f. of retail space
17. 520 El Camino Real, San Carlos – 9 condominium units and 1,730 s.f. of retail space
18. 26 El Camino Real, San Carlos – demolish existing 29-room hotel and construct 104 room-hotel
19. 1257 Magnolia, San Carlos – 9 residential units
20. 560 El Camino Real, San Carlos – 24 residential units and 2,756 s.f. commercial space
21. 817 Walnut Street, San Carlos – 24 residential units
22. Franklin Templeton, 1 Franklin Parkway, San Mateo – 245,260 s.f of office space on vacant site (Phase I expansion)
23. Hillsdale Shopping Center, Sixty 31st Avenue, San Mateo – renovation and reconfiguration of north block at Hillsdale Shopping Center
24. Hillsdale Terraces, San Mateo – 2700 – 2790 El Camino Real, 74 condominium units and 15,678 s.f. commercial space
25. 200 Twin Dolphin Drive, Redwood City – 202,000 s.f. of office development

Trip generation estimates for the approved projects were based on traffic impact studies conducted for each of the projects, if available. For projects that did not require a traffic study (due to their small size), trips were estimated based on ITE trip rates. The estimated trips from the approved projects were distributed and assigned to the project study area roadways based on the trip distribution assumptions present in the traffic studies, if available, or knowledge of the study area.

Trips generated by the approved projects were added to existing traffic volumes to estimate background traffic volumes. The AM and PM peak-hour intersection traffic volumes under background conditions are shown on Figure 7. The trips assigned to the study intersections are tabulated in Appendix C.

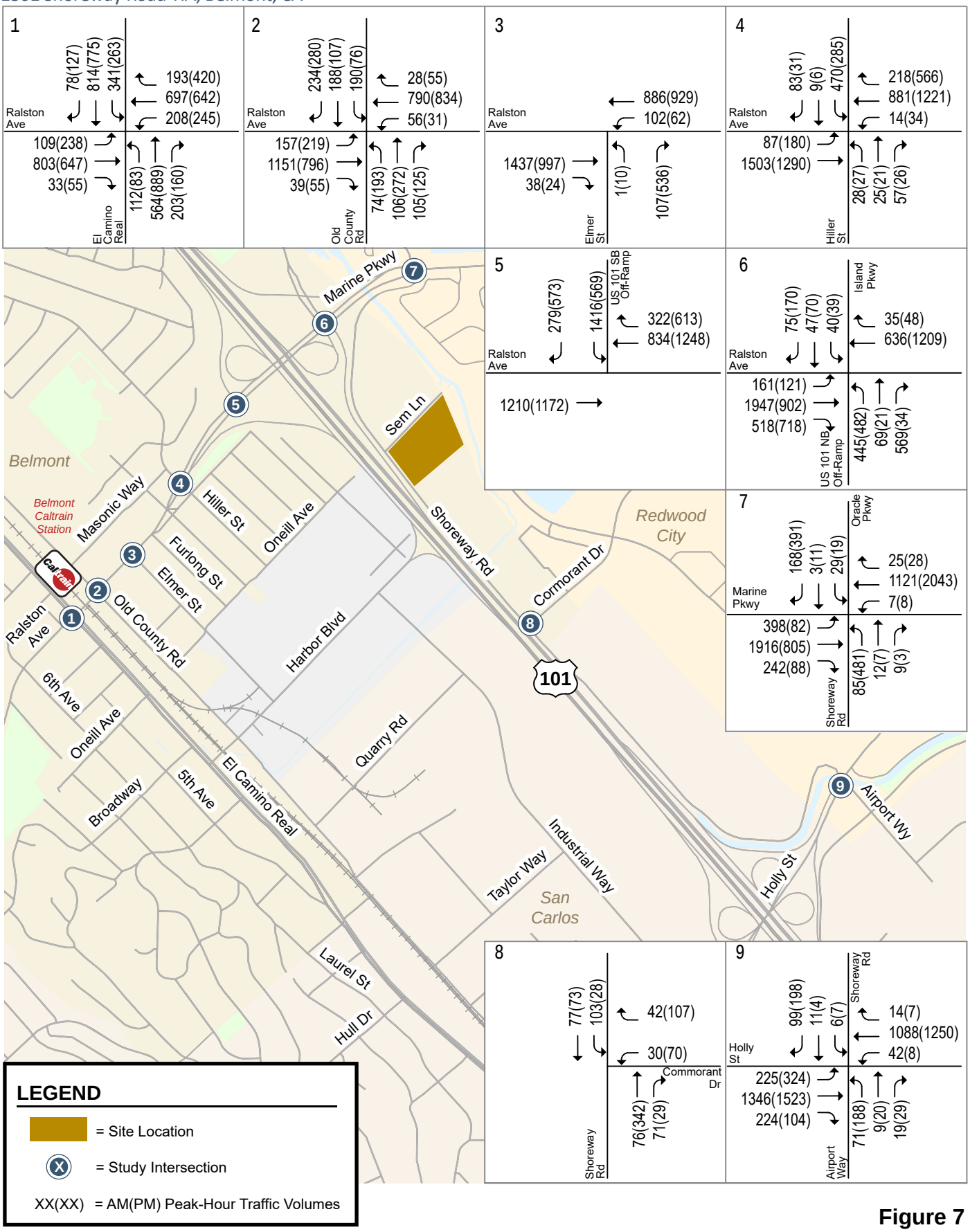


Figure 7
Background Traffic Volumes

Background Intersection Levels of Service

The results of the level of service analysis measured against the City of Belmont, Redwood City, and CMP level of service standards under background conditions show that all the study intersections would operate at acceptable levels during both the AM and PM peak hours (see Table 6). The LOS at the El Camino Real and Ralston Avenue CMP intersection would change from D to E under background conditions. The acceptable level of service standard for CMP intersections within the City of Belmont is LOS E or better. The level of service calculation sheets are included in Appendix B.

Table 6
Background Intersection Levels of Service

Int. #	Study Intersection	Peak Hour	Existing Avg. Delay (sec)[1]	Existing LOS	Background Avg. Delay (sec)[1]	Background LOS
1	El Camino Real & Ralston Avenue*	AM	54.9	D	61.7	E
		PM	52.3	D	54.8	D
2	Old County Road and Ralston Avenue	AM	39.1	D	40.9	D
		PM	37.0	D	38	D
3	Elmer Street and Ralston Avenue *(Unsignalized)*	AM	13.0	B	15.1	C
		PM	14.8	B	18.7	C
4	Hiller Street and Ralston Avenue	AM	38.4	D	46.1	D
		PM	30.6	C	30.8	C
5	US 101 SB off ramp and Ralston Avenue	AM	18.1	B	18.4	B
		PM	23.4	C	21	C
6	Island Parkway/US 101 NB Off Ramp and Ralston Avenue	AM	38.4	D	44.3	D
		PM	31.3	C	32.5	C
7	Marine Parkway and Oracle Parkway/Shoreway Road (Redwood City)	AM	17.2	B	18.1	B
		PM	28.1	C	30.9	C
8	Shoreway Road and Cormorant Drive *(Unsignalized)*	AM	10.2	B	12.7	B
		PM	12.5	B	13.6	B
9	Shoreway Road/Airport Way and Holly Street (Redwood City)	AM	16.4	B	17.2	B
		PM	29.4	C	33.4	C

Notes:
* denotes CMP intersection
[1] For OWSC, the average delay and LOS is reported for the worst movement.

5. Project Conditions

This chapter describes project traffic estimates and project traffic added to the study intersections.

Transportation Network under Project Conditions

It is assumed in this analysis that the transportation network under project conditions, including roadways and intersection lane configurations, would be the same as that described under existing conditions at all study intersections.

Project Description

The project would demolish the existing office building on the site and construct two new office buildings comprising 542,035 s.f.. Access to the project site would be provided from Shoreway Road and Sem Lane. The project proposes 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in a nine-floor parking garage.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed residential development was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic expected to be produced by many types of land uses. The research is published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 11th Edition* (2021). Project trip generation was estimated by applying to the size and use of the development the appropriate trip generation rates obtained from the ITE Trip Generation Manual, 11th Edition. The average trip generation rates for General Office Building (Land Use 710) were applied to the project. To be conservative, the trip

generation analysis assumes that the project would build up to 544,000 s.f. of office space. The proposed development would generate a total of 5,897 daily vehicle trips, with 827 trips occurring during the AM peak hour and 783 trips occurring during the PM peak hour (see Table 7). A 15% transit trip reduction was applied to the peak hour trip generation estimates for the office based on Belmont General Plan Goal 3.2, which requires a 15% TDM reduction

Existing Land Use

The project site is leased to office uses. Considering the work from home policies followed by most of the offices due to COVID-19, trips generated by the existing office on the site would be less than pre-COVID conditions. Therefore, trips were estimated based on ITE rates instead of driveway counts. Trips associated with the existing uses on the project site can be subtracted from the project trip estimates. Based on the ITE rates, existing uses at the project site generated 226 trips during the AM peak hour and 214 trips during PM peak hour.

Net Project Trip Generation

Based on the ITE trip generation rates, TDM reduction, and credit for former use on the project site, it is estimated that the proposed project would generate an additional 3,398 daily trips, with 477 trips (420 inbound and 57 outbound) occurring during the AM peak hour and 452 trips (77 inbound and 375 outbound) occurring during the PM peak hour.

Table 7
Trip Generation Summary

Land Use	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Uses												
Office[1]	544.00	ksf	10.84	5,897	1.52	728	99	827	1.44	133	650	783
TDM Trip Reduction (15%)[2]				(885)		(109)	(15)	(124)		(20)	(97)	(117)
Total Project Trips				**5,012**		**619**	**84**	**703**		**113**	**553**	**666**
Existing Land Use												
Trips generated by existing uses[3]	148.92	ksf	10.84	1,614	1.52	199	27	226	1.44	36	178	214
Net Project Trips				**3,398**		**420**	**57**	**477**		**77**	**375**	**452**

Notes:
1. Based on Office (710) land use, Institute of Transportation Engineers, Trip Generation, 11th Edition.
2. Based on Belmont General Plan Goal 3.2, the project is required to achieve a 15 percent trip reduction.
3. Trips generated by the existing uses are estimated based on Office (710) land use, Institute of Transportation Engineers, Trip Generation, 11th Edition.

Trip Distribution

The trip distribution pattern for the proposed project was estimated based on existing travel patterns of the surrounding roadway system and the locations of complementary land uses (See Figure 8).

The project trips were assigned to the roadway network and study intersections based on the directions of approach and departure, the roadway network connections, and the location of project driveway (Figure 9).



Figure 8
Project Trip Distribution

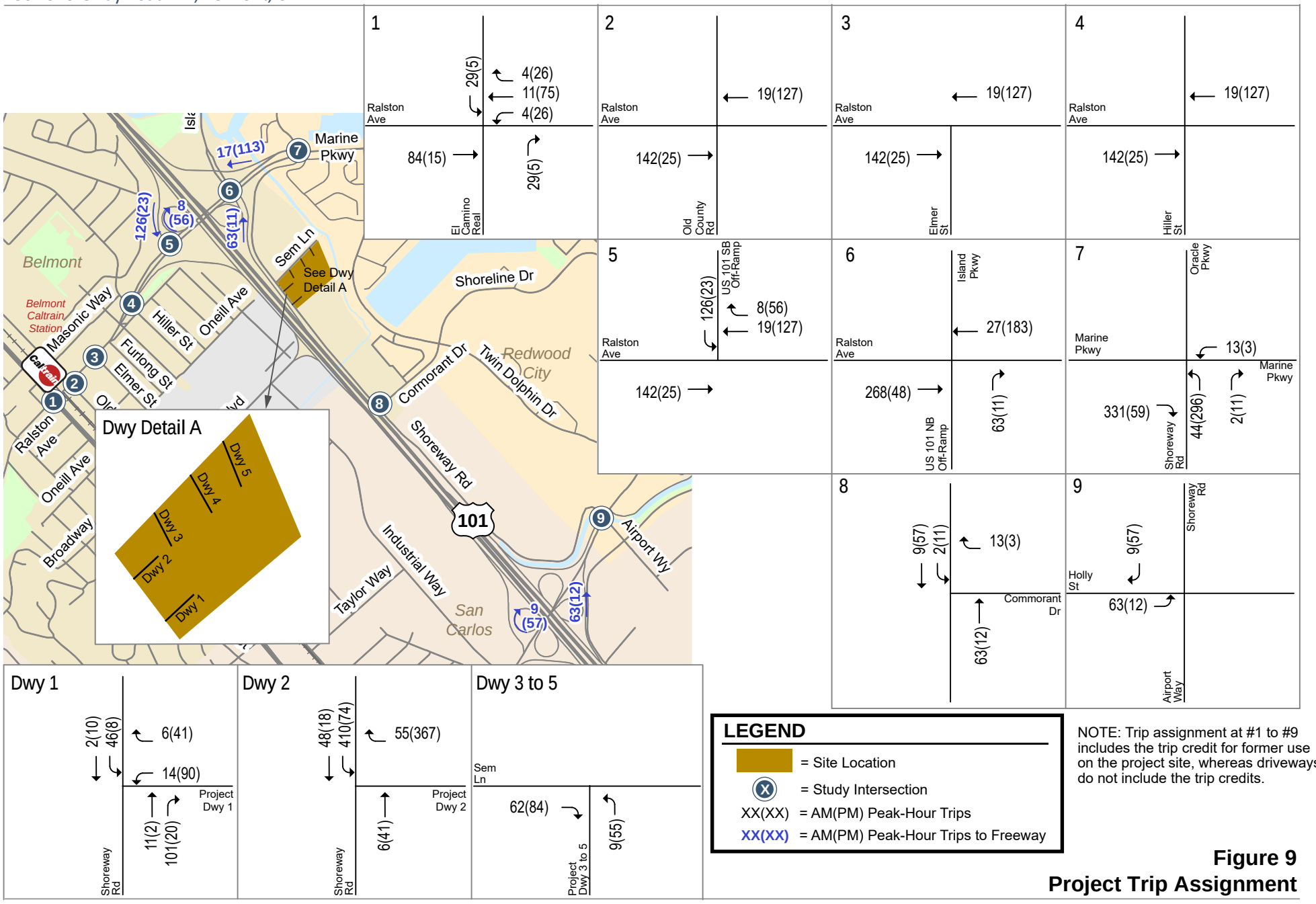


Figure 9
Project Trip Assignment

HEXAGON

Intersection Traffic Volumes

Figures 10 and 11 shows the intersection turning-movement volumes under existing plus project and background plus project conditions, respectively. The volume summary table is included in Appendix C. LOS calculation sheets of each study intersection are included in Appendix B.

Project Conditions Intersection Levels of Service

The results of the intersection LOS analysis under existing plus project and background plus project conditions show that all the study intersections except El Camino Real/Ralston Avenue would operate at an acceptable level during both the AM and PM peak hours of traffic when measured against the applicable municipal and CMP level of service standards (see Table 8).

The addition of the project trips would result in LOS E operation at the El Camino Real/Ralston Avenue intersection with an increase in delay of 9-11 seconds and an increase in V/C of 0.03-0.06 during the AM peak hour, which would be considered an adverse effect based on the City of Belmont LOS standards. The City of Belmont General Plan EIR identified the following planned improvements at the intersection of El Camino Real and Ralston Avenue – Conversion of two exclusive left turn lanes on eastbound Ralston Avenue into one left turn lane and one shared through and left turn lane. Conversion of the shared through and right turn lane into a through lane and the addition of an exclusive right turn lane. This would bring down the average delay to 62.8 seconds under existing plus project conditions and 69.4 seconds under background plus project conditions. However, the adverse effect would remain based on the City of Belmont LOS standards.

The General Plan EIR had the following to say about the intersections of El Camino Real/Ralston Avenue. “It should be noted that any improvements at Ralston Avenue and El Camino Real would require coordination and approval from Caltrans and San Mateo County. Additional impacts resulting from the addition of turn lanes include non-compliance with policies contained within the Ralston Avenue Corridor Study and Improvement Plan, the City’s Complete Streets initiatives, the General Plan vision and policy directives for safe and efficient active transportation. Therefore, the impacts of the Project would remain significant and unavoidable”.

Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the planned improvement at El Camino Real and Ralston would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 8.7% of the cumulative traffic growth at this intersection (see Appendix F).

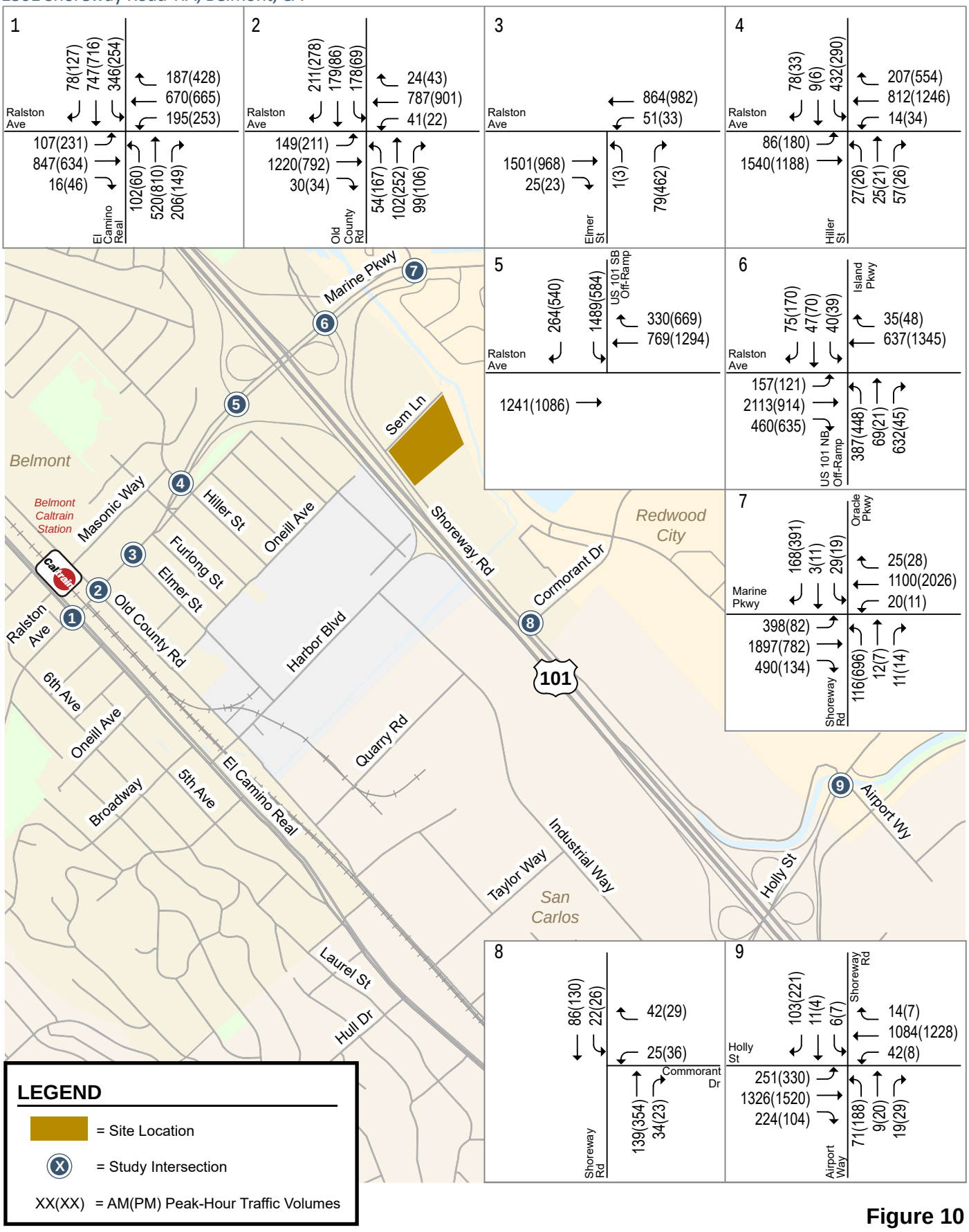


Figure 10
Existing Plus Project Traffic Volumes

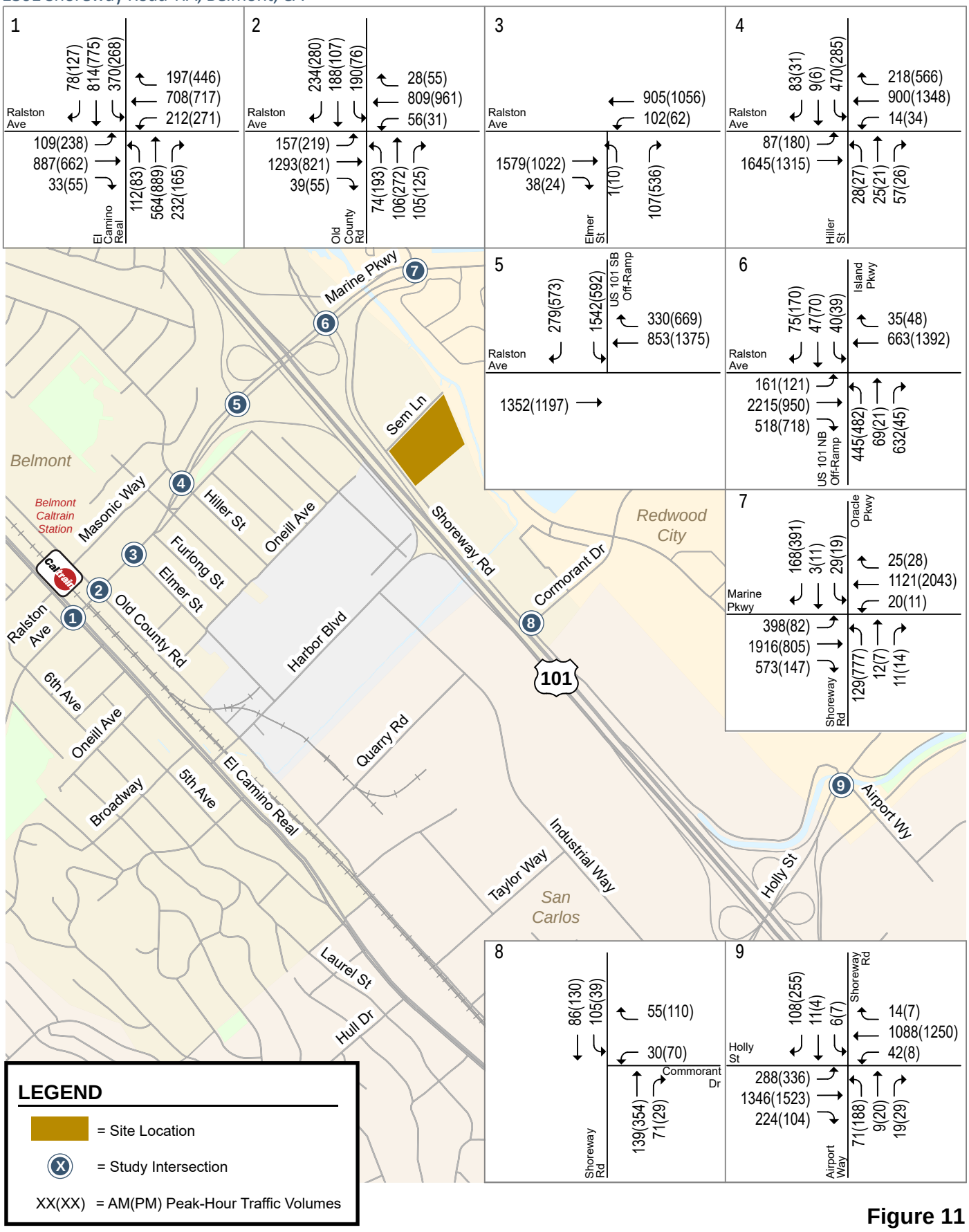


Figure 11
Background Plus Project Traffic Volumes

NORTH
Not to Scale

Table 8
Project Levels of Service

Int. #	Study Intersection	Peak Hour	Existing Avg. Delay (sec)[1]	Existing LOS	Existing Plus Project Avg. Delay (sec)[1]	Existing Plus Project LOS	Existing Plus Project Incr. In Avg. Delay (sec)	Existing Plus Project Incr. In Crit. V/C (sec)	Background Avg. Delay (sec)[1]	Background LOS	Background Plus Project Avg. Delay (sec)[1]	Background Plus Project LOS	Background Plus Project Incr. In Avg. Delay (sec)	Background Plus Project Incr. In Crit. V/C (sec)	Project Trips	Adverse effect
1	El Camino Real & Ralston Avenue*	AM	54.9	D	66.6	E	11.7	0.064	61.7	E	70.8	E	9.1	0.030	161	Yes
		PM	52.3	D	51.5	D	-0.8	0.022	54.8	D	56.5	E	1.7	0.022	152	No
2	Old County Road and Ralston Avenue	AM	39.1	D	39.9	D	0.8	0.046	40.9	D	42.6	D	1.7	0.046	161	No
		PM	37	D	38.4	D	1.4	0.041	38.0	D	39.7	D	1.7	0.041	152	No
3	Elmer Street and Ralston Avenue	AM	13	B	14.3	B	1.3	-	15.1	C	17.3	C	2.2	-	161	No
	(Unsignalized)	PM	14.8	B	15.0	B	0.2	-	18.7	C	19.1	C	0.4	-	152	No
4	Hiller Street and Ralston Avenue	AM	38.4	D	41.8	D	3.4	0.571	46.1	D	49.0	D	2.9	0.050	161	No
		PM	30.6	C	31.3	C	0.7	0.044	30.8	C	31.8	C	1.0	0.045	152	No
5	US 101 SB off ramp and Ralston Avenue	AM	18.1	B	19.3	B	1.2	0.04	18.4	B	20.2	C	1.8	0.041	295	No
		PM	23.4	C	25.9	C	2.5	0.073	21.0	C	24.6	C	3.6	0.071	231	No
6	Island Parkway/US 101 NB Off Ramp and Ralston Avenue	AM	38.4	D	41.9	D	3.5	0.073	44.3	D	47.1	D	2.8	0.071	358	No
		PM	31.3	C	33.5	C	2.2	0.062	32.5	C	35.6	D	3.1	0.062	242	No
7	Marine Parkway and Oracle Parkway/Shoreway Road (Redwood City)	AM	17.2	B	23.8	C	6.6	-	18.1	B	28.6	C	10.5	-	390	No
		PM	28.1	C	39.1	D	11.0	-	30.9	C	43.3	D	12.4	-	369	No
8	Shoreway Road and Cormorant Drive	AM	10.2	B	10.9	B	0.7	-	12.7	B	13.8	B	1.1	-	87	No
	(Unsignalized)	PM	12.5	B	13.8	B	1.3	-	13.6	B	15.3	C	1.7	-	83	No
9	Shoreway Road/Airport Way and Holly Street (Redwood City)	AM	16.4	B	17.7	B	1.3	-	17.2	B	18.8	B	1.6	-	72	No
		PM	29.4	C	35.9	D	6.5	-	33.4	C	40.9	D	7.5	-	69	No

Notes:
* denotes CMP intersection
[1] For OWSC, the average Delay and LOS is reported for the worst movement.
Bold indicates substandard Level of Service
[ ] indicates an adverse effect

Freeway Analysis

Per CMP technical guidelines, a freeway segment level of service analysis is required when a project would add trips greater than one percent of a segment's capacity. The project is expected to generate trips equal to more than one percent of the capacity on some freeway segments in the area (see Table 9). Therefore, a freeway analysis was completed.

The Project would add traffic greater than 1% to freeway segments already operating at LOS F. Therefore, the impact of the proposed project on freeway operations would exceed the thresholds established in the CMP. The General Plan EIR also identified freeway impacts and included the following mitigation statement: In order to reduce the project's impacts on the study freeway segments, additional travel lanes on the freeway segment would need to be constructed to provide sufficient capacity to serve traffic demand. However, the addition of through lanes would result in secondary impacts, including increasing VMT and fiscal constraints due to the need to acquire right-of-way along built out corridors. It should be noted that any freeway segment improvements would need to be coordinated and approved by Caltrans. Implementation of the General Plan, Belmont Village Specific Plan, and Climate Action plan policies and actions may partially mitigate the impact.

Table 9
Freeway Capacity Check

Freeway	Segment	Direction	# of Mixed Flow Lanes	Capacity[1] (vph)	1% of Capacity	Peak Hour	LOS Mixed Flow Lanes	Project Trips
US 101	South of Holly Street	NB	4	9200	92	AM	F	126
						PM	F	23
US 101	South of Holly Street	SB	4	9200	92	AM	F	17
						PM	F	113
US 101	Holly Street to Ralston Avenue	NB	4	9200	92	AM	F	63
						PM	F	11
US 101	Ralston Avenue/Harbor Boulevard to Holly Street/Brittan Avenue	SB	4	9200	92	AM	F	8
						PM	F	56
US 101	Ralston Avenue to E Hillsdale Boulevard	NB	4	9200	92	AM	F	17
						PM	F	113
US 101	E Hillsdale Boulevard to Ralston Avenue/Harbor Boulevard	SB	4	9200	92	AM	F	126
						PM	F	23

Notes:
1. Capacity was based on the ideal capacity cited in the *2000 Highway Capacity Manual*.

6. Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with the proposed project. Cumulative conditions represent future traffic conditions with expected growth in the area. The expected future growth under cumulative conditions was based on the most recent C/CAG 2040 land use projections. Thus, cumulative conditions reflect a horizon year of 2040.

Roadway Network and Traffic Volumes

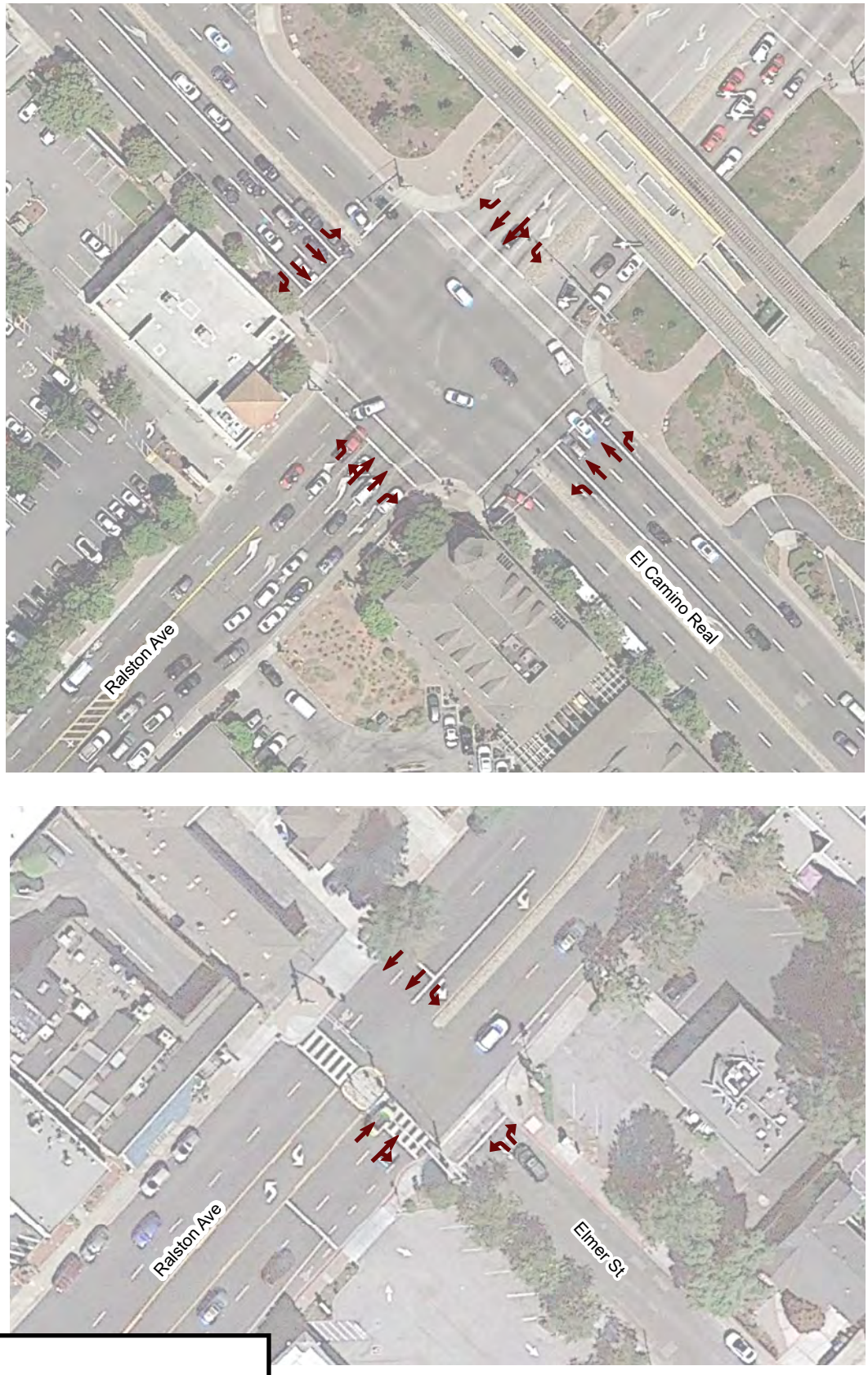
It is assumed that the transportation network under cumulative conditions would include the following improvements identified in the City of Belmont General Plan EIR as mitigation measures to be completed in the study area.

Elmer Street and Ralston Avenue – Installation of a traffic signal with separate left turn and right turn lanes in the northbound direction on Elmer Street (see Figure 12).

El Camino Real and Ralston Avenue – Conversion of two exclusive left turn lanes on eastbound Ralston Avenue into one left turn lane and one shared through and left turn lane. Conversion of the shared through and right turn lane into a through lane and addition of an exclusive right turn lane (see Figure 12).

Cumulative traffic volumes represent traffic growth through the year 2040 based on the most recent C/CAG 2040 land use projections. The 2040 land use data in Belmont and in Redwood Shores were updated with recently approved and pending development projects. The list of development projects was provided by City staff (see Appendix G). Detailed project descriptions were obtained from the Belmont and Redwood City websites. Some development projects are redevelopment projects. Therefore, the size of these projects was reduced by the building size of the existing structures that would be demolished. Development projects are expressed in gross square feet of building area. The C/CAG model uses jobs to estimate trips, so the gross square feet of the commercial buildings were converted to jobs using standard conversion factors. In total, 912 housing units and 8,269 jobs were added to the traffic analysis zones (TAZs) in Belmont, and 11,228 jobs were added to the TAZs in Redwood Shores.

The proposed project trips were then added to the cumulative no project volumes to create the cumulative plus project conditions volumes (see Figure 13).



LEGEND

= Year 2035 Lane Configuration

Figure 12
Lane Configurations in Year 2035

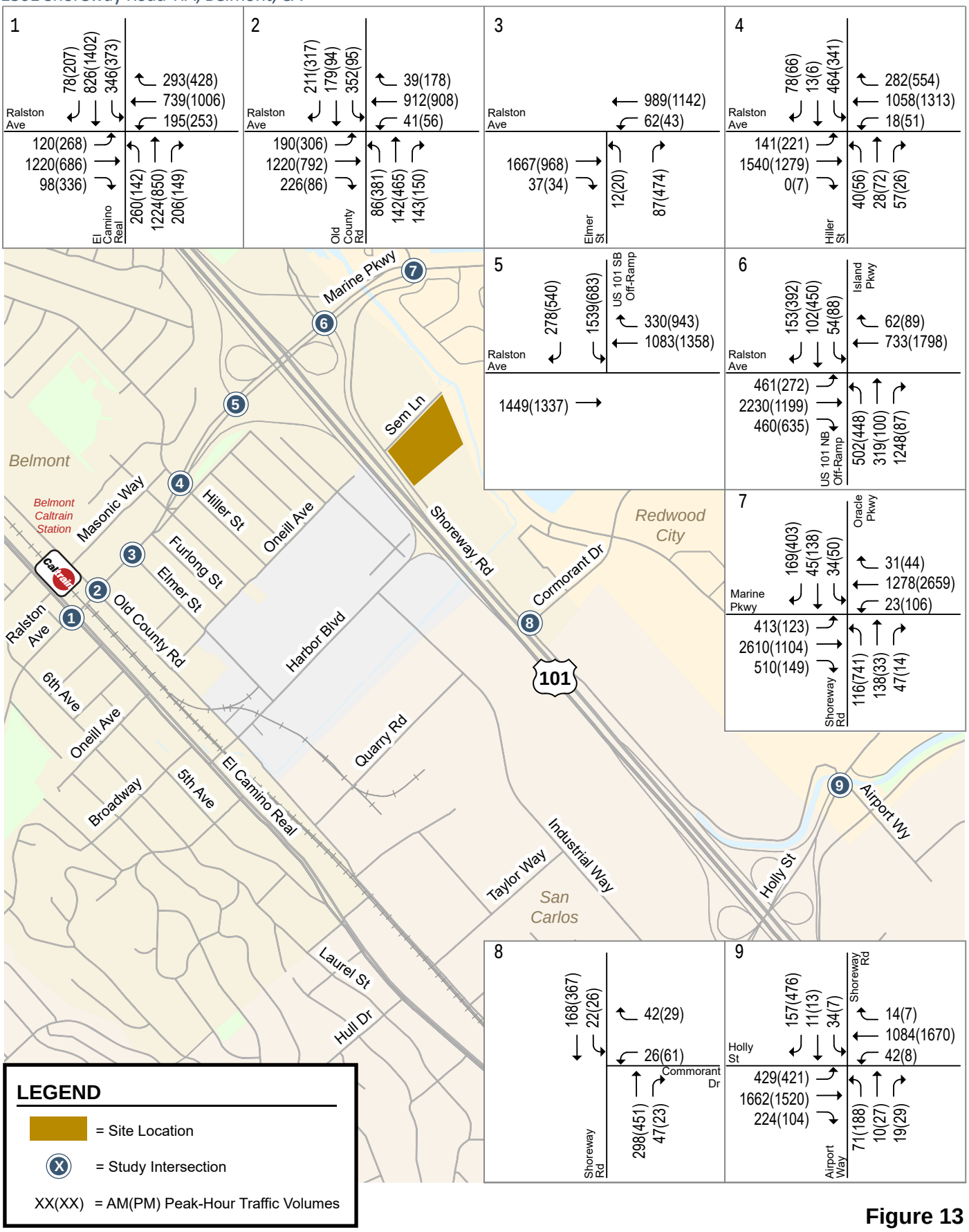


Figure 13
Cumulative Plus Project Traffic Volumes

NORTH
Not to Scale

Intersection Levels of Service Analysis

The results of the level of service analysis measured against the applicable municipal and CMP level of service standards under cumulative and cumulative plus project conditions show that the following intersections would experience an adverse effect due to the project according to the Belmont and Redwood City criteria (see Table 10). The level of service calculation sheets are included in Appendix B.

- El Camino Real and Ralston Avenue
- Island Parkway/US 101 NB Off Ramp and Ralston Avenue
- Shoreway Road/Airport Way and Holly Street (Redwood City)

It should be noted that the intersection of El Camino Real/Ralston Avenue was identified as operating at LOS F in the General Plan EIR. Further improvements are not feasible due to right-of-way constraints. The adverse effect in the General Plan EIR was considered significant and unavoidable.

Mitigation Measure 4.12-1q from the Belmont General Plan EIR: The General Plan EIR had the following to say about the intersection of El Camino Real/Ralston Avenue. “It should be noted, that any improvements at Ralston Avenue and El Camino Real would require coordination and approval from Caltrans and San Mateo County. Additional impacts resulting from the addition of turn lanes include non-compliance with policy contained within the Ralston Avenue Corridor Study and Improvement Plan, the City’s Complete Streets initiatives, the General Plan vision and policy directives for safe and efficient active transportation. Therefore, the impacts of the Project would remain significant and unavoidable”.

At the Island Parkway/US 101 NB Off Ramp and Ralston Avenue intersection, the addition of the project trips would result in LOS D and E operation with an increase in delay of 4 to 13 seconds and an increase in V/C of 0.05-0.06 during the AM and PM peak hours, which would be considered an adverse effect based on the City of Belmont LOS effect criteria. Based on the geometry of the intersection, with bridges connecting to each approach, any widening to add a through lane to increase the intersection capacity would be difficult. The General Plan EIR identified queuing deficiencies at this intersection, but widening was considered infeasible due to right-of-way constraints. General Plan policies could partially mitigate the impacts by improving multimodal infrastructure, coordinating land use and transportation planning, and implementing Travel Demand Management measures, thereby reducing vehicle trips on the roadway network.

The operation of the Shoreway Road/Airport Way and Holly Street intersection located in Redwood City would operate at LOS F during the PM peak hour under cumulative conditions, and the addition of the project trips would cause an increase in delay of 20 seconds. Changing the signal control for the Shoreway Road southbound right turn from permitted to permitted + overlap would result in acceptable LOS D (average delay 44.1 seconds) operation during the PM peak hour. This change would require modifications to the signal equipment. This change would disallow the eastbound left turning vehicles from making U-turns at this intersection. However, there is very little U-turn demand at this intersection.

Table 10
Cumulative Intersection Levels of Service

Int. #	Study Intersection	Peak Hour	Cumulative Avg. Delay (sec)[1]	Cumulative LOS	Cumulative Plus Project Avg. Delay (sec)[1]	Cumulative Plus Project LOS	Incr. In Avg. Delay (sec)	Incr. In Crit. V/C (sec)
1	El Camino Real & Ralston Avenue*	AM	**114.1**	**F**	**>120**	**F**	**8.8**	**0.030**
		PM	**112.1**	**F**	**118.6**	**F**	**6.5**	**0.026**
2	Old County Road and Ralston Avenue	AM	50.6	D	52.6	D	2.0	0.046
		PM	29.1	C	31	C	1.9	0.041
3	Elmer Street and Ralston Avenue	AM	28.3	C	32.8	C	4.5	0.044
		PM	36.1	D	35.7	D	-0.4	0.000
4	Hiller Street and Ralston Avenue	AM	40.8	D	41.2	D	0.4	0.046
		PM	31.1	C	33.4	C	2.3	-0.005
5	US 101 SB off ramp and Ralston Avenue	AM	18.9	B	19.6	B	0.7	0.037
		PM	22.3	C	24.8	C	2.5	0.064
6	Island Parkway/US 101 NB Off Ramp and Ralston Avenue	AM	49.7	D	54.7	D	5.0	0.063
		PM	**77.5**	**E**	**90.7**	**F**	**13.2**	**0.058**
7	Marine Parkway and Oracle Parkway/Shoreway Road (Redwood City)	AM	24.9	C	35.2	D	10.3	-
		PM	35.8	D	49.4	D	13.6	-
8	Shoreway Road and Cormorant Drive *(Unsignalized)*	AM	10.8	B	11.2	B	0.4	-
		PM	15.5	C	16.8	C	1.3	-
9	Shoreway Road/Airport Way and Holly Street (Redwood City)	AM	21.4	C	23.1	C	1.7	-
		PM	**88.1**	**F**	**107.8**	**F**	**19.7**	-

Notes:
* denotes CMP intersection
[1] For OWSC, the average Delay and LOS is reported for the worst movement.
Bold indicates substandard Level of Service
[ ] indicates an adverse effect

7. Travel Demand Management Plan

Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, and air pollution problems. This chapter describes the recommended TDM Plan for the project.

The City has adopted a points-based system to evaluate proposed projects, which must achieve a points target based on their type and size. Institutional or Office land uses whose size is greater than 50,000 s.f. are required to achieve a minimum of 18 points. TDM measures are each worth a certain number of points, and new projects must include a combination of measures whose total points meet the target.

The following TDM measures, all of which are required by the City of Belmont's TDM program, should be implemented as soon as the project is constructed and occupied.

Measure Active-1: Improve Conditions for Walking and Biking

The TDM measures to be implemented for the proposed development include design measures related to the physical attributes of the site and the proposed building. Such design measures encourage walking, biking, and use of transit. For the proposed project, these include:

Active-1a: Sidewalk-facing / pedestrian-oriented building entrances

Locate the primary building entrance along a public sidewalk; for buildings with no frontage on a public street, the primary entrance must be placed along a pedestrian pathway that connects directly to a public sidewalk. The site plan includes entrances along a pedestrian pathway that connects to Shoreway Road and Sem Lane.

Active-1b: Multiple pedestrian entrances for large buildings

For buildings with frontage on more than one public street, provide pedestrian entrances along the public sidewalks for both streets—both entrances must be equally accessible to all building users. The project plan includes sidewalks on Sem Lane along its frontage. The project plan includes pedestrian entrances along the Sem Lane sidewalks.

Table 11
Trip Reduction Calculations

Measure	Description	Allowable Points	Project Points
Active-1	Improve conditions for walking and biking		
Active-1a	Sidewalk-facing / pedestrian-oriented building entrances	1	1
Active-1b	Multiple pedestrian entrances for large buildings	0.5	0.5
Active-1c	Pedestrian breezeways / paseos	1	1
Active-1d	Extra-wide sidewalks and amenities	0.5	
Active-2	Short-term bicycle parking for customers/visitors		
Active-2a	On-street bicycle racks/lockers	0.5	0.5
Active-2b	Indoor bicycle racks and/or lockers	1	
Active-3	Long-term bicycle parking for residents/workers	2	2
Active-4	Shower and locker facilities	2	2
Transit-1	Provide curbside carpool/vanpool/rideshare loading zones	0.5	0.5
Transit-2	Provide preferential parking for carpool/vanpool vehicles	1	1
Transit-3	Provide employees with carpool/vanpool matching services	1	1
Transit-4	Provide/participate in shuttle program[1]	4–6	0
Transit-5	Provide guaranteed emergency rides	2	2
Transit-6	Provide free transit passes[2]	3–12	0
Transit-7	Participate in a Transportation Management Association[3]	1-6	4
Amenities-1	Designate a TDM Liaison	2	2
Amenities-2	Allow telecommuting and flexible work schedules[4]	1-6	3
Innovation	Flexible category to propose an unlisted, effective TDM measure	1-6	
	Total Proposed TDM Project Points		20.5

Notes:

1. If a shuttle service provides four or more trip-options each for both the morning and evening commutes, Measure Transit-4 is worth 6 points and at least three trip-time options worth 4 points.

2. Points will be assigned on a scale with passes valued at $40 per month worth 3 points and passes worth $164 or more per month are worth a maximum of 12 points.

3. TMAs with minimal services and costs may only be worth 1 point, while TMAs with higher costs and services (e.g., high-quality, frequent shuttle service) may be worth up to 6 points.

4. Maximum of 6 points require all employees to telecommute atleast two days per week

Active-1c: Pedestrian breezeways / paseos

For buildings that span the full width of a block, provide a public or semi-public pedestrian breezeway or paseo through the project. (To qualify for points, the breezeway or paseo must not run immediately adjacent and parallel to another sidewalk or pedestrian pathway and must provide a mid-block passthrough that could substantively increase convenience for pedestrians/bicyclists). The proposed project plan includes pedestrian paths to connect the two buildings and the garage building.

Active-1d: Extra-wide sidewalks and amenities

Provide wide sidewalks that include street trees and sufficient room for café and/or bench seating. It is assumed that the project would add a sidewalk to Sem Lane along its frontage. It is further assumed that the project would improve the sidewalk along Shoreway Road with landscaping and lighting.

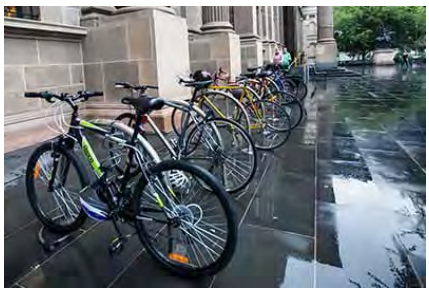
Measure Active-2: Short-term Bicycle Parking for Customers/Visitors



Active-2a: Provide an on-street bicycle rack or on-site locker with capacity for at least two bicycles plus at least one additional bicycle for every 15 feet of building street frontage beyond 25 ft.

Active-2b: Provide secure indoor bicycle racks, cages, and/or lockers in a project lobby, garage, or other generally accessible area. For office or institutional uses, customer/visitor bicycle parking must be provided at a rate of one space per 2,500 square feet of gross floor area, which may be provided either in a shared lobby or within each office.

It is assumed that the project would provide bicycle parking in conformance with these requirements.



Based on the Zoning Ordinance (8A.4) bicycle parking requirements, the project is planning to provide 29 short term bicycle parking spaces to meet the City's requirement. Though the City's requirement based on the Zoning code is less than the TDM guidelines, the project is eligible to receive TDM points based on the number of bicycle parking spaces provided at the project site.

Measure Active-3: Long-term Bicycle Parking for Residents/Workers

Providing secure bicycle parking encourages bicycle commuting among the employees. Bicycle parking must offer users the ability to lock their bikes and be located in an area of the project that is not accessible by the general public and/or that is consistently monitored during the building's usual hours of operation. Based on the City of Belmont TDM Program Report, for office and institutional uses, long-term bicycle parking must be provided at a minimum rate of one space per 1,000 square feet of gross floor area. Therefore, the project is required to provide 544 long-term bicycle parking spaces.



Based on the Zoning Ordinance (8A.4) bicycle parking requirements, the project is planning to provide 108 long term bicycle parking to meet the City's requirement. Though the City's requirement based on the Zoning code is less than the TDM guidelines, the project is eligible to receive TDM points based on the number of bicycle parking spaces provided at the project site.

Measure Active-4: Shower and Locker Facilities

Provide shower and locker facilities for workers to promote active commuting, especially by bicycle. To satisfy this measure, a minimum of one shower must be provided, with one additional shower per every 50 employees beyond the first 50 as per the City's TDM Report. Multiple shower heads are insufficient

to meet this requirement; each stall must offer visual privacy for the user and space for dressing/undressing and dry storage of clothing and belongings. Showers must be kept reasonably clean and in good working order. Regardless of the number of showers provided, at least one shower facility that is both gender-neutral and ADA-accessible must be provided. Lockers must be provided at a rate of one for every ten employees. Based on an assumption of 4 employees per 1,000 square feet of building area, the project should provide 44 showers including one gender-neutral ADA accessible shower. However, based on past experience with the typical usage of shower facilities, the developer believes that 44 showers would be far in excess of the demand. The project is planning to provide 8 total unisex showers adjacent to the Class I bike parking, which the developer believes will meet the demand.

Measure Transit-1: Provide Curbside Carpool/Vanpool/Rideshare Loading Zones



The site plan shows a drop off and pick up area for employees who carpool or vanpool in front of building 1 and 2 with access from Shoreway Road and Sem Lane. This drop-off and pick-up areas would provide greater convenience for employees who rideshare with people who work at other nearby work locations, as well as those who use on-demand ride services such as Lyft and Uber. Curbside carpool/vanpool/rideshare loading zones increase the convenience of using these alternatives to single-occupancy vehicles (thereby incentivizing their use), while also serving to increase traveler awareness of these options.

Measure Transit-2: Provide Preferential Parking for Carpool/Vanpool Vehicles



Allowing carpool and vanpool participants and drivers of low-emission (electric) vehicles to park near building entrances or on the first floor of a parking garage is a common TDM measure. Preferential parking spaces in “prime” locations provide a prominent visual message to employees that alternative transportation and efforts to reduce trips and greenhouse gas emissions are valued.

The project would provide a total of 1,626 parking spaces in the parking garage and surface parking. Based on the City of Belmont Zoning Ordinance, ten percent of vehicle spaces should be reserved for carpools or vanpools, with a minimum of one space required. The preferential parking spaces shall be provided free of charge. Therefore, the project is required to designate 163 parking spaces for use by carpools, vanpools, and clean air or electric vehicles. These spaces should be located near the entrances of the buildings or on the ground level of the parking structure.

Measure Transit-3: Provide Employees or Tenants with Carpool/Vanpool Matching Services

The TDM guidelines state that for commercial, industrial, and/or residential uses, offer or contract with services that help match employees or residents with others at that building, business, or any nearby businesses for potential carpooling/vanpooling.

One of the greatest impediments to carpool and vanpool formation can be finding suitable riders with similar work schedules, origins, and destinations. Facilitated rideshare matching can overcome this obstacle by enabling commuters who are interested in ridesharing to enter their travel preferences into a database and receive a list of potential rideshare partners. The success of these programs is largely determined by the number of participants and, in turn, the number of potential matches that can be made.

The transportation coordinator should provide employees with information on 511.org's "merge" ridematching service and other peer-to-peer rideshare programs. For example, Scoop and Waze Carpool utilize mobile apps to match commuters. The transportation coordinator should inform employees the available rideshare resources, encourage employees to carpool, and make effort to arrange a similar work schedule for employees that can carpool if possible.

- **Merge.** The Merge service provides an interactive, on-demand system that helps commuters find carpools, vanpools or bicycle partners. This free car and vanpool ride matching service helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users are provided with a list of other commuters near their employment or residential ZIP code along with the closest cross street, email, phone number, and hours they are available to commute to and from work. Participants are then able to select and contact others with whom they wish to commute. The service also provides a list of existing carpools and vanpools in their employment or residential area that may have vacancies.
- **Scoop.** Scoop is an app that tries to increase carpooling by connecting riders with drivers. Scoop is aimed at filling empty seats on existing commutes. The night before going to work, a user tells the app that they are looking to either drive or ride and what time they plan on leaving. They're then automatically matched with someone on a similar route. The rider pays the driver a distance-based fee for the ride through the app. In the early afternoon the process repeats for evening commutes. In order to deal with the uncertainty of rides that are only scheduled one-way, Scoop includes a backup commute options with Lyft.
- **Waze Carpool.** Waze is an app that allows users to drive or ride in a carpool. Users get matched with riders on their route by requesting a ride from a driver going in the same direction. Drivers and riders split the cost of gas and drivers are reimbursed for other ride-related costs.
- **511 Carpool Calculator.** The 511 Carpool Calculator is a 511-sponsored online calculator that determines the cost of commuting by driving alone. Users input commute details such as the number of miles traveled to and from work, vehicle mileage, fuel cost, parking costs, and bridge tolls. The tool then calculates solo commuting costs and vehicle CO2 emissions as well as the potential savings by adding carpool partners.

Carpool/Vanpool Incentives for New Users



The 511 Regional Rideshare Program and the Peninsula Traffic Congestion Relief Alliance (511.org and commute.org) offer a number of incentive programs to encourage people to try carpooling and vanpooling. Most of these programs are designed to reward someone for forming or trying a carpool or vanpool and provide an award or subsidy after the first three or six months of use.

The Peninsula Traffic Congestion Relief Alliance offers a carpool incentive program called “The Carpool Rewards Program”. The Carpool Rewards Program rewards commuters who use Scoop and Waze Carpool to log their carpool trips to and from work. This program provides $25 e-gift card reward after every ten days of users logging their carpool trips in their account up to four times for a total of $100. Similarly, the Bicycle to Work Rewards program provides $25 e-gift card reward after every ten days of users logging their bicycle trips in their account up to four times for a total of $100. Similar rewards program is available for commuters who use bicycle to work and vanpool to the work.

Vanpool Seat Subsidy. The 511 Regional Rideshare Program also offers a vanpool seat subsidy in the form of gas cards. The seat subsidy will provide seat subsidy for three months per van during the program year, to help cover the fare of a lost participant. The gas cards will be offered to eligible vans on a first-come, first-served basis until the funds are exhausted.

Discounted Tolls. The 511 Regional Rideshare Program offers free toll passage on seven of the Bay Area’s bridges for vanpools with 11-15 people who register with 511. Additionally, the program also offers toll discounts to carpools with three or more people (two people in a two-seat vehicle) on eight of the Bay Area’s bridges during peak commute hours. The discounts vary per bridge, but typically are half of the standard toll price.

Enterprise Vanpool Subsidy. The 511 Regional Rideshare Program provides $350 monthly subsidy to the vanpools rented from Enterprise. The subsidy is awarded on a first-come, first-served basis, until funds are exhausted.

Carpool Promotions: 511 also has occasional promotions such as winning gift cards by taking carpools using app-based programs such as Scoop or Waze Carpool. Carpoolers would track their carpool usage and upload verification by screenshots of completed trips to be entered into a raffle to win small prizes every month.

Measure Transit-4: Provide/Participate in Shuttle Program

The Belmont TDM guidelines state that for commercial and/or industrial uses, provide or join a service that enables employees to commute to and from work by shuttle. At a minimum, shuttle service must: serve all areas of Belmont, serve the station, be ADA accessible, provide space for bikes, and offer at least three trip-time options each for both the morning and evening commutes. The Twin Dolphin Shuttle service that connected the project site with the San Carlos Caltrain Station was suspended in July 2020 due to COVID-19 and the loss of the contributing employer partner and Shuttle Grant funding. Based on the size of the project, the project would create demand for transit where there is no service. The project should provide its own shuttle to nearby Caltrain stations if the prior service is not reinstated. Twin Dolphin shuttle service had a bus stop located at the project site. The shuttle program is not required to achieve the required TDM points as per City of Belmont TDM policies, but the program is mandatory to be in compliance with C/CAG TDM requirements.

Measure Transit-5: Provide Guaranteed Emergency Rides

For commercial and/or industrial uses, guarantee employees a ride (or reimbursement for the cost of a ride) to their home and/or to other locations in the event of an emergency. Covered locations shall include the employee's home, an employee's child's school, and/or medical/emergency service facilities. Employers may provide rides directly, such as through other employees, but must give employees the option to be reimbursed for use of a taxi, point-to-point car share, or ride-hailing service.

Future tenant(s) should reimburse their employees who use alternative modes of transportation for taxi, Lyft, or Uber rides home in the event of an emergency. The transportation coordinator should administer the program and provide the reimbursement. Employees would need to provide an explanation of the emergency and the receipt from the taxi service or on-demand ride service for reimbursement. A limit on the number of rides that will be provided per employee per year would be reasonable.

Measure Transit-6: Provide Free Transit Passes

Provide employees and/or residents with free transit passes. Transit passes may be for a monthly pass on transit systems serving the Belmont area or may be "cash value" passes used for multiple transit systems (i.e., Clipper Card). However, in no case may the value of each pass be less than $40 per month. The number of points will be assigned based on the cash value of the pass. Points will be assigned on a scale with passes valued at $40 per month worth 3 points and passes worth $164 or more per month are worth a maximum of 12 points. Minimum pass values shall be inflation adjusted annually using a baseline of 2019 dollars. Additionally, to receive the maximum 12 points, a pass must be worth at least the value of a Caltrain monthly pass at a level that qualifies for free transfers to the SamTrans and VTA transit systems. Transit passes are not required to achieve the required TDM points as per City of Belmont TDM policies, but free passes are mandatory to be in compliance with C/CAG TDM requirements.

Measure Transit-7: Participate in a Transportation Management Association

Transportation Management Association (TMA) are associations of businesses, property owners, tenants, and cities that offer programs and services to give commuters alternatives to driving alone. TMAs are supported by member dues.

Commute.org (formally the Peninsula Traffic Congestion Relief Alliance) is the transportation demand management (TDM) agency for San Mateo County, California, Commute.org is a joint powers agency (JPA) comprised of 19 cities including Belmont and towns as well as the County of San Mateo.

Commute.org's commuter programs, which it manages through its web-based platform STAR, include carpool rewards, the Vanpool Incentive Program, Bicycle to Work Rewards, Try Transit free transit tickets, Guaranteed Ride Home, and quarterly challenges.

Commute.org manages 29 shuttle routes that provide first/last mile transportation between transit stations and worksites in San Mateo County. The shuttles are operated by MV Transportation and the program is funded through a combination of grants from agencies and funds from private employers, property managers, and sponsoring cities. Grant providers include the Bay Area Air Quality Management District, City/County Association of Governments of San Mateo County (C/CAG), San Mateo County Transportation Authority, and SamTrans. The proposed development shall register with Commute.org.

Measure Amenities-1: Designate a TDM Liaison

The Belmont TDM guidelines state that the project should designate a TDM liaison who will be responsible for regularly providing TDM/transit information to employees/residents and for coordinating with City staff on TDM programs and compliance. The Transportation Coordinator would be a point of contact for employers when TDM-related questions arise and would be responsible for ensuring that tenants are aware of all transportation options and how to fully utilize the TDM Plan. The Transportation Coordinator would provide the following services and functions to ensure the TDM Plan runs smoothly:

- Provide transportation information packets to new tenants, for distribution to all employees.
- Set up and maintain an online kiosk with information about alternatives to driving alone to work.
- Provide trip planning assistance and/or ride-matching assistance employees who are considering an alternative mode.
- Manage annual surveys and submit annual TDM monitoring reports to the City. The results will be used to determine whether the implemented TDM measures are effective and whether new TDM measures should be implemented.

Online Transportation Kiosk

This TDM plan recommends an “online kiosk” with transportation information that employees could access from their smart phones, their desk at work, or anywhere else. In addition to including all of the non-auto transportation alternatives that would be provided in the tenant orientation (welcome) packet, the online kiosk can have a list of nearby restaurants and entertainment uses to help encourage employees to walk to their destinations.

The developer would have responsibility for setting up this online information center. The Transportation Coordinator would have responsibility for maintenance of the online kiosk with information regarding non-auto transportation alternatives. The online kiosk would update key transportation information included in the welcome packets. Additionally, transportation news and commuter alerts should be posted online. TDM-related links and information would be posted on this forum, and the Transportation Coordinator should have host permissions to send tenants email notifications pertaining to the TDM Plan and measures. The online kiosk would include information about all the measures, services, and facilities discussed in this Plan, including:

- A summary of SamTrans, shuttles and Caltrain services and links to further information about their routes and schedules.
- Bicycling resources on 511.org.
- A local bikeways map.
- Information about ride matching services (511.org and on-site ride matching).
- A link to the many other trip planning resources available in the Bay Area such as Citymapper, Moovit, the 511 Transit Trip Planner, Waze, real-time traffic conditions, etc.

Measure Amenities- 2: Allow Telecommuting and Flexible Work Schedules

Telecommuting and flexible work schedules reduce VMT by decreasing the number of days on which workers must commute to work. For workers that commute by car, this therefore reduces car trips and VMT. The effectiveness of this measure may vary widely depending on employee participation rates, the number of days on which they telecommute, and the degree to which driving alone is their normal mode of commuting. As more employees switch to non-automotive transportation, this measure

actually becomes less effective. Require all employees to telecommute at least two days per week to obtain 6 TDM points and one day per week to obtain 3 TDM points.



The project should include the following infrastructure to support its future tenants to implement an alternative work schedule:

- Heating, cooling, and ventilation systems should be available for extended schedules.
- Fiber optic wiring should be included to facilitate telecommuting.
- Security services should be provided to support extended schedules.
- Access to buildings and parking areas should be available to employees working outside of regular business hours.

Monitoring and Reporting

Consistent with Belmont General Plan Goal 3.2, the goal of these TDM measures is to achieve a 15 percent reduction. Regular monitoring is required to ensure that the implemented TDM measures are effective in meeting the trip reduction target. The program should be evaluated annually to assess the actual level of trip reduction achieved at the site and to identify any adjustments to the program necessary to ensure the TDM measures are successful.

Development Review

The applicant should submit the building and/or streetscape plans to the City of Belmont in order to comply with TDM measures such as improving condition for walking and biking, bicycle parking, shower and locker facilities, loading zones and location of preferential parking spaces. The applicant should also provide the City of Belmont with documentation that demonstrates the provision of carpool/vanpool matching programs, shuttle service contracts, guaranteed emergency ride programs and free transit passes (if proposed). Applicant would need to provide the City of Belmont with documentation that describes the TMA that would be joined or created as well as assign a TDM liaison. Details around telecommuting and flexible work arrangements available to employees would also need to be provided. City staff will review these materials and, if approved, the project will be awarded the appropriate number of points.

Pre-occupancy Inspection

City of Belmont staff would join the applicant or building operator for a tour and inspection of the project features incorporated under the aforementioned TDM measures. Photo/Video documentation of project features may be substituted for an onsite tour at the discretion of the City Staff. The applicant or building operator will submit final copies of the parking notices as well as sample languages indicating the availability of the carpool and vanpool matching services including joining instructions and documents that prove the provision of shuttle services, guaranteed emergency ride program and transit pass program. Applications will also provide the City of Belmont with documentation necessary to substantiate the establishment of a TMA and TDM Liaison as well as the final language for employee flex time.

Annual Monitoring

Through onsite inspection or photographic evidence if required by the Public Works Department, project owners and/or operators should demonstrate ongoing compliance with previously elected sub measures. These include maintaining building entrances, sidewalks, amenities, bicycles, bicycle parking, lockers and shower facilities for active measures. For parking measures, the applicant would need to submit information on degree of usage of loading zone, reserved parking spots and the proportion of employees using the carpool/vanpool, shuttle and emergency ride services. Project owners and/or operators should also demonstrate ongoing compliance for Transportation management association measure by submitting information on how the TMA services are being utilized and copies of the most up-to-date employee packets with information on flexible work arrangements. The TDM liaison would be responsible for providing city staff with TDM program metrics and usage data.

Consistent with common traffic engineering data collection principles, trip generation should be monitored annually by means of AM and PM commute hour driveway counts. The counts should be conducted between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM one day per year on a typical weekday (Tuesday, Wednesday, or Thursday) during the fall when school is in session. Mechanical tube counts, hand counts, or video counts may be used. The peak 60-minute period should be calculated for each two-hour traffic count period. An annual employee survey should be conducted to determine employee transportation mode choice (i.e. drive alone, carpool, bus, Caltrain, etc.).

CMP Compliance

C/CAG requires that all new non-residential developments that would generate over 100 average daily trips limit their impact on regional roadway facilities. To accomplish this, C/CAG provides a list of potential TDM measures those developments may use to reduce their trip generation. The percent trip reduction for each TDM measure is quantified by C/CAG depending on a project's location relative to a high-quality transit station.

C/CAG categorizes new developments as small projects and large projects. Non-residential office, R&D, industrial, and institutional projects larger than 50,000 s.f. are considered to be large projects. The recommended vehicle trip reduction target for the proposed project is 35% below estimated project ADT.

To accomplish the reduction goal, C/CAG provides a list of potential TDM measures, some of which are required and some of which are optional. Each measure has an associated point value and reduction percentage. Based on the C/CAG TDM policy, the project must first fulfill all required measures for individual land uses prior to selecting a sufficient number of additional recommended measures to achieve the minimum 35 percent trip reduction.

As shown in Table 12, the project will achieve the reduction goal of 35 percent for office land use with the TDM measures included in this plan.

C/CAG requires the following for large projects:

- Complete a travel survey of employees/occupants biennially for the first six (6) years after occupancy and then triennially for the life of the project.
- Though project site traffic counts conducted by project tenants are optional, C/CAG would prefer to have one for transportation performance measurement purposes.

Table 12
Estimated C/CAG Trip Credits for Large Offices

Measure	C/CAG Estimated Trip Reduction
Required TDM Measures (Transit Proximate Development)	
Free/Preferential Parking for Carpools	1.0%
TDM Coordinator/Contact Person	0.5%
Actively Participate in Commute.org, or Transportation Management Association (TMA) Equivalent [1]	16.5%
Carpool or Vanpool Program	2.0%
Transit or Ridesharing Passes/Subsidies[2]	10.0%
Pre-tax Transportation Benefits	1.0%
Secure Bicycle Storage	1.0%
Design Streets to Encourage Bike/Pedestrian Access	1.0%
Showers, Lockers, and Changing Rooms for Cyclists	2.0%
TDM Measures Total	**35%**

Notes:

[1] Actively Participate in Commute.org or TMA includes certified participation in Commute.org, or equivalent, commute assistance and ride-matching, guaranteed ride home, and orientation, education, promotional programs, and/or materials.

[2] Public transit passes or subsidies; or carpool/vanpool subsidies to employees equivalent to 30% of the value of their monthly fare or $50 monthly.

8.
Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with project site, including:

- Potential impacts to transit, bicycle and pedestrian facilities
- Vehicle queuing
- Signal warrant analysis
- Vehicular site access and on-site circulation
- Sight distance
- Parking demand

Project Impact on Bicycle, Pedestrian, and Transit Facilities

The project site is well served by existing bicycle facilities. Within the project area, continuous bike paths run parallel to Twin Dolphin Drive, Redwood Shores Parkway and Marine Parkway. Bike lanes are present along Holly Street/ Redwood Shores Parkway east of Industrial Road and Marine Parkway east of Shoreway Road. Twin Dolphin Drive, Shoreway Road and Shoreline Drive are designated as bike routes. Therefore, the project would not affect any existing or planned bicycle facilities, nor would it conflict with any bicycle plans.

Pedestrian activity could occur between the site and the closest bus stops and Caltrain Station. There are existing sidewalks on Shoreway Road and Ralston Avenue that connect the site to the bus stops and to the Caltrain station. Crosswalks with pedestrian signal heads and push buttons are located at most of the signalized intersections in the study area. There is no sidewalk available along the project frontage on Sem Lane. The project would add sidewalk along Sem Lane, which would improve pedestrian circulation in the immediate vicinity. The city has requested that the project widen the sidewalk to 6.5 feet along its Shoreway Road frontage.

There is no existing transit service within walking distance of the site. Since the project is large and would create demand for transit, the project should provide shuttle service to Caltrain either individually or together with other nearby employers. The Twin Dolphin Shuttle service that connected the project site with the San Carlos Caltrain Station was suspended in July 2020 due to COVID-19 and the loss of the contributing employer partner and Shuttle Grant funding. The project should help to reinstate the Twin Dolphin Shuttle service or provide its own shuttle. Twin Dolphin shuttle service had a dedicated bus stop for the project location. The Twin Dolphin Drive shuttle schedule was coordinated with Caltrain arrivals in the morning and departures in the afternoon.

Queuing Analysis

City of Belmont impact criteria state that the project could have an adverse effect if project-generated traffic creates vehicle queues that exceed existing turn lane capacity or cause problematic backups of traffic on driveways or roadways on or off the project site. For selected high-demand movements at key intersections, the estimated maximum vehicle queues were compared to the existing or planned storage capacity to determine if the project would generate a adverse effect based on queuing. Vehicle queues were estimated using Synchro software, which accounts for the effects of upstream intersections and intersection signal timing..

The basis of the analysis is as follows: (1) the Synchro software is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. The following movements were selected for evaluation (see Table 13).

- El Camino Real and Ralston Avenue – southbound left turn (AM)
- Shoreway Road/Oracle Parkway and Ralston Avenue/Marine Parkway – northbound left turn (PM)
- Shoreway Road/Airport Way and Holly Street – eastbound left turn (AM)

El Camino Real and Ralston Avenue

Southbound left turn - The left-turn queue on southbound El Camino Real at Ralston Avenue would exceed the capacity during the AM peak hour under existing, background and cumulative conditions. Field observations confirm that southbound vehicles spill out of the turn pocket at the intersection during the AM peak hour. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 305 feet to a maximum of 355 feet during the AM peak hour. The project would increase the 95th percentile queue by three vehicles during the AM peak hour.

The added queue constitutes an adverse effect because the intersection would already have queues that exceed the turn lane capacity, and the project would increase the queue by at least 1%. It is not possible to increase the length of the turn lane. The deficiency at this intersection was identified in the General Plan EIR, and Belmont does not intend to make any improvements.

Shoreway Road/Oracle Parkway and Ralston Avenue/Marine Parkway

Northbound left turn - The left-turn queue on northbound Shoreway Road at Ralston Avenue exceeds capacity during the PM peak hour under existing, background, and cumulative conditions. Field observations confirm that northbound vehicles experience delay at the intersection during the PM peak hour. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 125 feet to a maximum of 210 feet during the PM peak hour. The project would increase the 95th percentile queue by 8 vehicles during the PM peak hour. The 95th percentile queue of through and left turning vehicles on this approach under cumulative conditions is 40 vehicles during the PM peak hour. Although the painted left turn pocket could not accommodate the left turning queue, the entire street (approximately 700 feet) is available for storage since almost all vehicles turn left at the signal.

Table 13
Queuing Analysis Results for Signalized Intersections

ID	Intersection - Movement	Storage Distance (feet)		95th Percentile Queue (feet)					
				Existing	Existing + Project	Background	Background + Project	Cumulative	Cumulative + Project
1	**El Camino Real and Ralston Avenue**								
	Southbound Left Turn	245	AM	600	600	575	650	550	625
7	**Shoreway Road/Oracle Parkway and Ralston Avenue/Marine Parkway**								
	Northbound Left Turn	90	PM	225	425	275	475	300	500
9	**Shoreway Road/Airport Way and Holly Street**								
	Eastbound Left Turn	250	AM	175	225	200	300	325	400

Bold and shaded= 95th percentile queue exceeds storage length;

The added queue constitutes an adverse effect to the intersection because the intersection already has queues that exceed the turn lane capacity, and the project would increase the queue by at least 1%. The deficiency at this intersection was identified in the General Plan EIR. The addition of turn lanes to this intersection would require substantial right-of way acquisition along built out corridors, which Belmont does not intend to do.

Shoreway Road/Airport way and Holly Street

Eastbound left turn - The left-turn queue on eastbound Holly Street at Shoreway Road would exceed capacity during the AM peak hour under cumulative conditions. Under cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 25 feet during the AM peak hour. The project would increase the 95th percentile queue by 4 vehicles during the AM peak hour under background and cumulative conditions. Extension of the eastbound left turning pocket up to 50 feet is possible by reducing the median width along Holly Street. This could accommodate two more vehicles. The 95th percentile queue length value indicates that the storage pocket would be exceeded only 5 percent of the time. Therefore, with the extension of the storage pocket, the project would not cause operational issues for eastbound traffic.

Signal Warrant Analysis

A peak hour signal warrant analysis (*MUTCD 2010 Edition,* Part 4, Warrant 3) was performed for the unsignalized study intersections to determine whether the project would produce an adverse effect according to the City of Belmont criteria. The peak-hour signal warrant was checked for existing, background, and project conditions. According to the City of Belmont adverse effect criteria, for intersections that are warranted for a traffic signal under the base case (background conditions), the project is considered to produce a potential adverse effect if the project would increase the demand to capacity ratio (V/C) by 0.01. Signal warrant analysis worksheets are included in Appendix D.

Elmer Street and Ralston Avenue

Analysis results show that the signal warrant would be met during the AM (background) and PM (existing and background) peak hour, with or without the project. The project would increase the V/C ratio by 0.01 in comparison to the existing and background conditions. Thus, the project would have an adverse effect.

The *Final Ralston Avenue Corridor Study and Improvements Plan*, dated August 26, 2014, recommends the signalization of the intersection at Ralston Avenue and Elmer Street. Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the traffic signal would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 37% of the cumulative traffic growth at this intersection (see Table 14).

Table 14
Fair Share Calculation

#	Study Intersection	Peak Hour	Existing Volume	Cum Volume + Prject Trips	Difference (A)	1301 Shoreway Road Project Trips (B)	Fair Share % (B / A)
3	Elmer Street and Ralston Avenue	AM	2360	2854	494	161	32.6%
		PM	2319	2681	362	152	42.0%
						Average	**37.3%**

Shoreway Road and Cormorant Drive

The peak-hour signal warrant check was completed for this intersection under all scenarios for the weekday AM and PM peak hours. The analysis revealed that the traffic volumes on the minor stop-controlled approaches would not satisfy the signal warrant under any conditions. The signal warrant analysis worksheets are included in Appendix D.

Site Access and On-Site Circulation

This section describes site access and circulation for the proposed project. This review is based on the project site plans prepared by FOUR CORNERS Properties received by Hexagon on January 3, 2024 (see Figure 2). This site plan is schematic and additional review will be needed once a detailed site plan is available.

The existing project site has one full access driveway on Shoreway Road and two full access driveways on Sem Lane. The existing driveway (driveway 1) and proposed new driveway near Sem Lane (driveway 2) on Shoreway Road would provide access to the surface parking lot in front of building 1 and the western entrance of the proposed parking garage. The project proposes to remove both the existing driveways on Sem Lane and add three full access driveways: one between the two existing driveways (driveway 3), one adjacent to the eastern existing driveway (driveway 4) and one on the eastern edge of the property (driveway 5). Driveway 1 would provide direct access to the parking garage and would also provide access to a rideshare drop off and pick up area and service access to building 1. The west side entrance for the parking garage would have one inbound lane, one outbound lane, and one reversible lane. The reversible lane would act as an inbound lane during the AM peak hours and an outbound left turn lane during the PM peak hours to serve the peak hour directional volumes. Driveway 2 is necessary to provide an exit from the rideshare drop-off/pick-up area. Driveway 3 would connect to driveway 4 and provide drop off and pick up area for ridesharing employees, access to the surface parking lot in front of building 2, and service access to building 2. Driveway 4 would provide vehicular access to both the surface parking lot and a loading area located in front of building 2. Driveway 5 would run parallel to the east side of the project and would provide access to the eastern entrance of the parking garage.

The driveways are projected to serve a maximum of 619 inbound and 84 outbound vehicles during the AM peak hour and a maximum of 113 inbound vehicles and 553 outbound vehicles during the PM peak hour. Since driveway 1 and 2 are located on Shoreway Road, it is expected that most of the vehicles would use these driveways to enter the proposed garage. The majority of traffic would use driveway 1 because it would lead directly to the parking garage. Driveway 2 would lead to a handful of parking spaces. Based on a LOS calculation at the driveways, the delay experienced by inbound left turns from Shoreway Road at driveway 1 would be 2.1 seconds, and driveway 2 would be 7.3 seconds during the AM peak hour and 0.6 seconds at driveway 1 and 3.8 seconds at driveway 2 during the PM peak hour. The delay experienced by the outbound vehicles turning left and right onto Shoreway Road from the project driveways would be 10.9 seconds at driveway 1 and 9.2 seconds at driveway 2 during the AM peak hour and 13.6 seconds at driveway 1 and 19.3 seconds at driveway 2 in the PM peak hour. The delay experienced by the vehicles at the driveways would not create an impact.

Driveway 2 would be located 100 feet south of the Shoreway Road/Sem lane intersection and would be for outbound traffic only. The driveway is necessary to provide an exit for the shuttle drop-off area and also acts as a fire engine turn around. The volume at driveway 2 would be relatively minor, so the spacing to the Sem Lane intersection would not be a problem.

Currently, on-street parking is not allowed on Shoreway Road or Sem Lane near the proposed driveways, and there are no roadway curves or tall structures that obstruct a driver’s ability to see down the road on Shoreway Road or Sem Lane. Sight distance triangles should be measured approximately 15 feet back from the traveled way. Sight distance requirements vary depending on the roadway

speeds. The speed limit along Sem Lane is 25 mph and Shoreway Road is 35 mph. The Caltrans recommended stopping sight distance on Sem Lane is 200 feet and on Shoreway Road is 305 feet. The project driveways should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with the City's standards.

All driveways should not be more than 25 feet wide and drive-aisle widths should be at least 24 feet to meet the City's requirement. All the standard parking stalls in the garage should be 18 feet in length and 8 feet 6 inches in width to meet the City's requirement.

Per the City of Belmont zoning ordinance, office buildings with more than 100,000 s.f. are required to provide a minimum of one loading space plus one for each additional 100,000 s.f. Loading spaces shall have a width of 12 feet by 25 feet in length, and a vertical clearance of no less than 14 feet. The project is required to provide a minimum of five loading spaces to meet the City's requirement. The site plan shows three loading spaces near the southwest side of Building 1 and two loading spaces near the northeast side of Building 2 (Figure 2), which meets the City's requirements.

Garbage Collection

The site plan shows two trash enclosures: one along Sem Lane between driveway 4 and 5 and one between the southwest side of building 1 and the parking structure. Since the trash enclosures would be located outside the building, adequate clearance would be provided for garbage trucks to empty the bins over the truck. Since the traffic along Sem Lane is low, garbage collection would not affect the traffic operations. The garbage collection would occur on-site at the second location, so traffic operations along Shoreway Road would not be affected.

Parking

Based on the City of Belmont's Zoning Ordinance, an office building requires a minimum of 3 spaces per 1,000 square feet to a maximum of 4 spaces per 1,000 s.f. Therefore, the project should provide 1,626 parking spaces. The project site plan shows 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in the parking garage, which meets the City's requirement.

Per the California Building Code (CBC) requirements, projects that include 1,001 parking spaces and up should provide at least 20 accessible spaces, plus 1 for each 100 spaces over 1,001. Therefore, the proposed project is required to provide 26 accessible parking spaces, including 5 van accessible parking spaces. As per the CALGREEN Clean Air Vehicle parking requirements (Table 5.106.5.2), parking facilities containing 201 or more spaces should provide at least 12 percent of the parking spaces for Clean Air Vehicles (CAV), including 10 percent for electric vehicles with charging stations. This requirement includes any combination of low-emitting, fuel-efficient and carpool/van pool vehicles. Therefore, the project should provide 195 CAV spaces, including 163 EV spaces. These 163 EV spaces include one ADA EV Van accessible space, four ADA EV parking spaces, and four ambulatory EV parking spaces as per CBC TABLE 11B-228.3.2.1. The proposed site plan includes 33 accessible parking spaces including two ADA EV Van accessible spaces, four ADA EV parking spaces, and four ambulatory EV parking spaces, which exceeds the requirement. The site plan proposes 144 EV charging spaces, which does not meet the CALGREEN Clean Air Vehicle parking requirements. Therefore, the project is required to include 19 more EV parking spaces and 32 CAV spaces to meet the CAV parking requirement.

Based on the Zoning Ordinance (8A.4) bicycle parking requirements, the project should provide a minimum of two short-term bicycle parking spaces plus one additional short-term space per 20,000 square feet and one long-term space per 5,000 square feet of office use. Therefore, the project is required to provide 29 short term bicycle parking spaces and 108 long term bicycle parking spaces to meet the City's requirement.

9. Conclusions

This report presents the results of the transportation impact analysis conducted for the office development located at 1301 Shoreway Road in Belmont, California. The project would demolish the existing office building on the site and construct two new office buildings comprising 543,410 s.f. of building area. Access to the project site would be provided from Shoreway Road and Sem Lane. The project proposes 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in a nine-floor parking garage.

VMT Analysis

According to the beta version of the C/CAG VMT Estimation Tool, the San Mateo County average daily VMT per employee is 17.21. The VMT threshold for new development is 15% below the Countywide average so the threshold is 14.63 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee is 15.8, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 7.4%, to a value of 14.63 daily VMT per employee.

Since the C/CAG VMT Estimation Tool is not yet fully adopted, Hexagon also used the C/CAG travel demand model for comparison. According to the C/CAG Travel Demand Model, the San Mateo County average daily VMT per employee is 17.9, so the threshold is 15.215 daily VMT per employee. The project is located in TAZ 1543, where the VMT per employee according to the model is 16.2, resulting in a significant VMT impact. Therefore, the project would need to provide mitigation measures to reduce its VMT by 6%, to a value of 15.215 daily VMT per employee, which is close to the VMT reduction calculated based on the C/CAG VMT estimation tool. Therefore, project is required to provide mitigation measures to reduce its VMT by 6-7.4%.

The VMT for the employee trips will need to be reduced in order to mitigate the potential VMT impact. This can be done by encouraging employees to use alternatives to single-occupant trips, such as carpooling, transit, and bicycling. The project should develop and submit a transportation demand management (TDM) and monitoring plan to describe what programs it would implement to reduce VMT and how those programs would be monitored for adherence.

The project is required to earn minimum of 18 TDM points, with TDM measures assigned values based on estimated benefit and cost, which would achieve a 15% trip reduction. According to the City of Belmont General Plan Goal 3.2, the project is required to achieve a 15 percent trip reduction. With the implementation of all of the potential TDM measures, the average VMT per employee would be reduced by 15% and would reduce the project impact to a less-than-significant level. This 15% trip

reduction goal exceeds the project level goal of 6-7.4% VMT reduction. The project's intent to reduce VMT by 15% would meet both C/CAG and the City of Belmont's VMT goals.

Project Trip Generation

The proposed project would generate 477 trips in the AM peak hour and 452 trips in the PM peak hour.

Intersection Levels of Service

The results of the intersection LOS analysis under existing plus project and background plus project conditions show that all the study intersections except El Camino Real/Ralston Avenue would operate at an acceptable level during both the AM and PM peak hours of traffic when measured against the applicable municipal and CMP level of service standards.

The addition of the project trips would result in LOS E operation at the El Camino Real/Ralston Avenue intersection with an increase in delay of 9-11 seconds and an increase in V/C of 0.03-0.06 during the AM peak hour, which would be considered an adverse effect based on the City of Belmont LOS standards. The City of Belmont General Plan identified the following planned improvements at the intersection of El Camino Real and Ralston Avenue – Conversion of two exclusive left turn lanes on eastbound Ralston Avenue into one left turn lane and one shared through and left turn lane. Conversion of the shared through and right turn lane into a through lane and the addition of an exclusive right turn lane. This would bring down the average delay to 62.8 seconds under existing plus project conditions and 69.4 seconds under background plus project conditions. However, the adverse effect would remain based on the City of Belmont LOS standards.

Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the planned improvement at El Camino Real and Ralston would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 8.7% of the cumulative traffic growth at this intersection. The fair share towards the cost of the improvement was estimated based on the Caltrans formula.

The General Plan EIR had the following to say about the intersections of El Camino Real/Ralston Avenue and Old County Road/Ralston Avenue. "It should be noted that any improvements at Ralston Avenue and El Camino Real would require coordination and approval from Caltrans and San Mateo County. Additional impacts resulting from the addition of turn lanes include non-compliance with policies contained within the Ralston Avenue Corridor Study and Improvement Plan, the City's Complete Streets initiatives, the General Plan vision and policy directives for safe and efficient active transportation. Therefore, the impacts of the Project would remain significant and unavoidable".

The results of the level of service analysis under cumulative and cumulative plus project conditions show that the El Camino Real/Ralston Avenue, Island Parkway/US 101 NB Off Ramp/Ralston Avenue and Shoreway Road/Airport Way/Holly Street (Redwood City) intersections would experience an adverse effect due to the project according to the Belmont and Redwood City criteria.

It should be noted that the intersection of El Camino Real/Ralston Avenue was identified as operating at LOS F in the General Plan EIR. Further improvements are not feasible due to right-of-way constraints. The adverse effect in the General Plan EIR was considered significant and unavoidable.

The addition of the project trips would result in LOS D operation at the Island Parkway/US 101 NB Off Ramp and Ralston Avenue intersection with an increase in delay of 4 to 13 seconds and an increase in V/C of 0.05-0.06 during the AM and PM peak hours, which would be considered an adverse effect based on the City of Belmont adverse LOS effect criteria. Based on the geometry of the intersection, with bridges connecting each approach, any widening to add a through lane to increase the intersection capacity would be difficult. The General Plan EIR identified queuing deficiencies at this intersection, but

widening was considered infeasible due to right-of-way constraints. The policies could partially mitigate the impacts by improving multimodal infrastructure, coordinating land use and transportation planning, and implementing Travel Demand Management measures, thereby reducing vehicle trips on the roadway network.

The operation of the Shoreway Road/Airport Way and Holly Street intersection located in Redwood City operate at LOS F during the PM peak hour under cumulative conditions, and the addition of the project trips would cause an increase in delay of 20 seconds. Changing the signal control for the Shoreway Road southbound right turn from permitted to permitted + overlap would result in acceptable LOS D (average delay 44.1 seconds) operation during the PM peak hour. This change would require modifications to the signal equipment. This change would disallow the east bound left turning vehicles from making U-turns at this intersection. However, there is very little U-turn demand at this intersection. The intersection level of service results for all scenarios are summarized in Table ES-1

Operational Analysis

A vehicle queuing analysis was conducted for the left-turn movements at intersections where the project would add maximum traffic to the left-turn queue. The left-turn queue on southbound El Camino Real at Ralston Avenue would exceed the capacity during the AM peak hour under existing, background and cumulative conditions. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 305 feet to a maximum of 355 feet during the AM peak hour. The project would increase the 95th percentile queue by three vehicles during the AM peak hour.

The left-turn queue on northbound Shoreway Road at Ralston Avenue exceeds capacity during the PM peak hour under existing, background, and cumulative conditions. Under existing, background and cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 125 feet to a maximum of 210 feet during the PM peak hour. The project would increase the 95th percentile queue by 8 vehicles during the PM peak hour. The 95th percentile queue of through and left turning vehicles on this approach under cumulative conditions is 40 vehicles during the PM peak hour. Although the painted left turn pocket could not accommodate the left turning queue, the entire street (approximately 700 feet) is available for storage since almost all vehicles turn left at the signal.

The added queue constitutes an adverse effect because the intersection would already have queues that exceed the turn lane capacity, and the project would increase the queue by at least 1%. It is not possible to increase the length of the turn lane. The deficiency at this intersection was identified in the General Plan EIR, and Belmont does not intend to make any improvements.

The left-turn queue on eastbound Holly Street at Shoreway Road would exceed capacity during the AM peak hour under cumulative conditions. Under cumulative conditions, the 95th percentile queue is expected to exceed the storage capacity by a minimum of 25 feet during the AM peak hour. The project would increase the 95th percentile queue by 4 vehicles during the AM peak hour under background and cumulative conditions. Extension of the eastbound left turning pocket up to 50 feet is possible by reducing the median width along Holly Street. This could accommodate two more vehicles. The 95th percentile queue length value indicates that the storage pocket would be exceeded only 5 percent of the time. Therefore, with the extension of the storage pocket, the project would not cause operational issues for eastbound traffic.

Signal Warrant Analysis

A peak hour signal warrant analysis (*MUTCD 2010 Edition,* Part 4, Warrant 3) was performed for the unsignalized study intersection to determine whether the project would produce an impact according to the City of Belmont potentially significant impact criteria. The peak-hour signal warrant was checked for existing, background and project conditions. The signal warrant analysis results show that the intersection at Elmer Street/Ralston Avenue is warranted for a traffic signal during the AM (background) and PM (existing and background) peak hour, with or without the project.

Proposed Mitigation

The *Final Ralston Avenue Corridor Study and Improvements Plan*, dated August 26, 2014, recommends the signalization of the intersection at Ralston Avenue and Elmer Street. Per the City of Belmont traffic impact guidelines, contribution of a fair share toward the cost of the traffic signal would address the adverse effect caused by the project. The project would add 161 trips during the AM peak hour and 152 trips during the PM peak hour, which represents an average of 37% of the cumulative traffic growth at this intersection.

Travel Demand Management Measures

The City has adopted a points-based system to evaluate proposed projects, which must achieve a points target based on their type and size. Institutional or Office land uses whose size is greater than 50,000 s.f. are required to achieve a minimum of 18 points. TDM measures are each worth a certain number of points, and new projects must include a combination of measures whose total points meet the target. The proposed TDM measures including improving condition for walking and biking, bicycle parking, shower and locker facilities, loading zones, location of preferential parking spaces, provision of carpool/vanpool matching programs, shuttle service contracts, guaranteed emergency ride programs and free transit passes (if proposed), participation in a TMA, assign a TDM liaison and allowing telecommuting and flexible work arrangements available to employees would help the project to achieve 18 TDM points. Consistent with Belmont General Plan Goal 3.2, the goal of these TDM measures is to achieve a 15 percent reduction. Regular monitoring is required to ensure that the implemented TDM measures are effective in meeting the trip reduction target. The program should be evaluated annually to assess the actual level of trip reduction achieved at the site and to identify any adjustments to the program necessary to ensure the TDM measures are successful. Though the shuttle program and transit passes are not required to achieve required TDM points as per City of Belmont TDM policies, but mandatory to be compliance with C/CAG TDM requirements. The C/CAG TDM measures checklist is included for the project for 33 TDM points to achieve 35% daily trip reduction as per C/CAG.

Project Impact on Bicycle, Pedestrian, and Transit Facilities

The project site is well served by existing bicycle facilities. Within the project area, continuous bike paths run parallel to Twin Dolphin Drive, Redwood Shores Parkway and Marine Parkway. Bike lanes are present along Holly Street/ Redwood Shores Parkway east of Industrial Road and Marine Parkway east of Shoreway Road. Twin Dolphin Drive, Shoreway Road and Shoreline Drive are designated as bike routes. Therefore, the project would not affect any existing or planned bicycle facilities, nor would it conflict with any bicycle plans.

Pedestrian activity could occur between the site and the closest bus stops and Caltrain Station. There are existing sidewalks on Shoreway Road and Ralston Avenue that connect the site to the bus stops and to the Caltrain station. Crosswalks with pedestrian signal heads and push buttons are located at most of the signalized intersections in the study area. There is no sidewalk available along the project

frontage on Sem Lane. The project would add sidewalk along Sem Lane, which would improve pedestrian circulation in the immediate vicinity. The city has requested that the project widen the sidewalk to 6.5 feet along its Shoreway Road frontage.

There is no existing transit service within walking distance of the site. Since the project is large and would create demand for transit, the project should provide shuttle service to Caltrain either individually or together with other nearby employers. The Twin Dolphin Shuttle service that connected the project site with the San Carlos Caltrain Station was suspended in July 2020 due to COVID-19 and the loss of the contributing employer partner and Shuttle Grant funding. The project should help to reinstate the Twin Dolphin Shuttle service or provide its own shuttle. Twin Dolphin shuttle service had a dedicated bus stop for the project location. The Twin Dolphin Drive shuttle schedule was coordinated with Caltrain arrivals in the morning and departures in the afternoon.

Site Access and On-Site Circulation

The existing project site has one full access driveway on Shoreway Road and two full access driveways on Sem Lane. The existing driveway (driveway 1) and proposed new driveway near Sem Lane (driveway 2) on Shoreway Road would provide access to the surface parking lot in front of building 1 and the western entrance of the proposed parking garage. The project proposes to remove both the existing driveways on Sem Lane and add three full access driveways: one between the two existing driveways (driveway 3), one adjacent to the eastern existing driveway (driveway 4) and one on the eastern edge of the property (driveway 5). Driveway 1 would provide direct access to the parking garage and would also provide access to a rideshare drop off and pick up area and service access to building 1. The west side entrance for the parking garage would have one inbound lane, one outbound lane, and one reversible lane. The reversible lane would act as an inbound lane during the AM peak hours and an outbound left turn lane during the PM peak hours to serve the peak hour directional volumes. Driveway 2 is necessary to provide an exit from the rideshare drop-off/pick-up area. Driveway 3 would connect to driveway 4 and provide drop off and pick up area for ridesharing employees, access to the surface parking lot in front of building 2, and service access to building 2. Driveway 4 would provide vehicular access to both the surface parking lot and a loading area located in front of building 2. Driveway 5 would run parallel to the east side of the project and would provide access to the eastern entrance of the parking garage.

The driveways are projected to serve a maximum of 619 inbound and 84 outbound vehicles during the AM peak hour and a maximum of 113 inbound vehicles and 553 outbound vehicles during the PM peak hour. Since driveway 1 and 2 are located on Shoreway Road, it is expected that most of the vehicles would use these driveways to enter the proposed garage. The majority of traffic would use driveway 1 because it would lead directly to the parking garage. Driveway 2 would lead to a handful of parking spaces. Based on a LOS calculation at the driveways, the delay experienced by inbound left turns from Shoreway Road at driveway 1 would be 2.1 seconds, and driveway 2 would be 7.3 seconds during the AM peak hour and 0.6 seconds at driveway 1 and 3.8 seconds at driveway 2 during the PM peak hour. The delay experienced by the outbound vehicles turning left and right onto Shoreway Road from the project driveways would be 10.9 seconds at driveway 1 and 9.2 seconds at driveway 2 during the AM peak hour and 13.6 seconds at driveway 1 and 19.3 seconds at driveway 2 in the PM peak hour. The delay experienced by the vehicles at the driveways would not create an impact.

Driveway 2 would be located 50 feet south of the Shoreway Road/Sem lane intersection. Normally greater spacing would be desirable. However, this driveway is necessary to provide an exit for the shuttle drop-off area and also acts as a fire engine turn around. The volume at driveway 2 would be relatively minor, so the spacing to the Sem Lane intersection would not be a problem.

Currently, on-street parking is not allowed on Shoreway Road or Sem Lane near the proposed driveways, and there are no roadway curves or tall structures that obstruct a driver's ability to see down the road on Shoreway Road or Sem Lane. Sight distance triangles should be measured approximately 15 feet back from the traveled way. Sight distance requirements vary depending on the roadway speeds. The speed limit along Sem Lane is 25 mph and Shoreway Road is 35 mph. The Caltrans recommended stopping sight distance on Sem Lane is 200 feet and on Shoreway Road is 305 feet. The project driveways should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with the City's standards.

All driveways should not be more than 25 feet wide and drive-aisle widths should be at least 24 feet to meet the City's requirement. All the standard parking stalls in the garage should be 18 feet in length and 8 feet 6 inches in width to meet the City's requirement.

Per the City of Belmont zoning ordinance, office buildings with more than 100,000 s.f. are required to provide a minimum of one loading space plus one for each additional 100,000 s.f. Loading spaces shall have a width of 12 feet by 25 feet in length, and a vertical clearance of no less than 14 feet. The project is required to provide a minimum of five loading spaces to meet the City's requirement. The site plan shows three loading spaces near the southwest side of Building 1 and two loading spaces near the northeast side of Building 2 (figure 2), which meets the City's requirements.

Garbage Collection

The site plan shows two trash enclosures: one along Sem Lane between driveway 4 and 5 and one between the southwest side of building 1 and the parking structure. Since the trash enclosures would be located outside the building, adequate clearance would be provided for garbage trucks to empty the bins over the truck. Since the traffic along Sem Lane is low, garbage collection would not affect the traffic operations. The garbage collection would occur on-site at the second location, so traffic operations along Shoreway Road would not be affected.

Parking

Based on the City of Belmont's Zoning Ordinance, an office building requires a minimum of 3 spaces per 1,000 square feet to a maximum of 4 spaces per 1,000 s.f. Therefore, the project should provide 1,626 parking spaces. The project site plan shows 1,626 parking spaces including 70 surface parking spaces, 124 valet parking spaces, and 1,432 parking spaces in the parking garage, which meets the City's requirement.

Per the California Building Code (CBC) requirements, projects that include 1,001 parking spaces and up should provide at least 20 accessible spaces, plus 1 for each 100 spaces over 1,001. Therefore, the proposed project is required to provide 26 accessible parking spaces, including 5 van accessible parking spaces. As per the CALGREEN Clean Air Vehicle parking requirements (Table 5.106.5.2), parking facilities containing 201 or more spaces should provide at least 12 percent of the parking spaces for Clean Air Vehicles (CAV), including 10 percent for electric vehicles with charging stations. This requirement includes any combination of low-emitting, fuel-efficient and carpool/van pool vehicles. Therefore, the project should provide 195 CAV spaces, including 163 EV spaces. These 163 EV spaces include one ADA EV Van accessible space, four ADA EV parking spaces, and four ambulatory EV parking spaces as per CBC TABLE 11B-228.3.2.1. The proposed site plan includes 33 accessible parking spaces including two ADA EV Van accessible spaces, four ADA EV parking spaces, and four ambulatory EV parking spaces, which exceeds the requirement. The site plan proposes 144 EV charging spaces, which does not meet the CALGREEN Clean Air Vehicle parking requirements.

Therefore, the project is required to include 19 more EV parking spaces and 32 CAV spaces to meet the CAV parking requirement.

Based on the Zoning Ordinance (8A.4) bicycle parking requirements, the project should provide a minimum of two short-term bicycle parking spaces plus one additional short-term space per 20,000 square feet and one long-term space per 5,000 square feet of office use. Therefore, the project is required to provide 29 short term bicycle parking spaces and 108 long term bicycle parking spaces to meet the City's requirement.

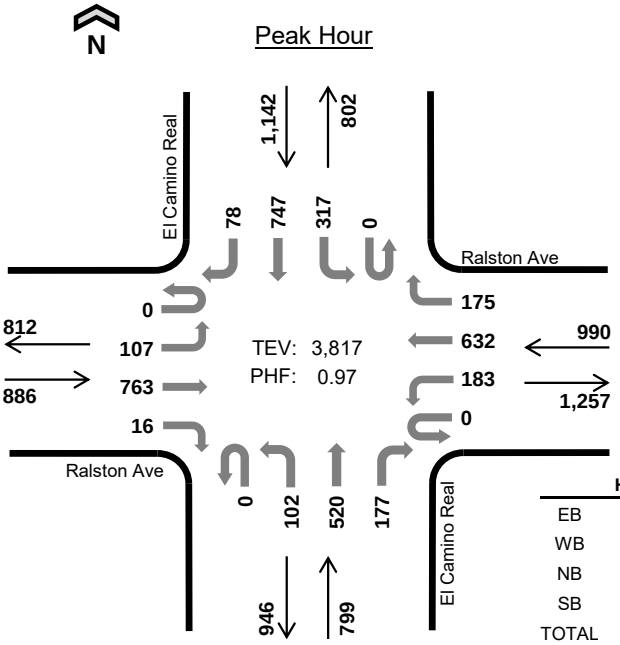
1301 Shoreway Road Office Development
TIA
Technical Appendices

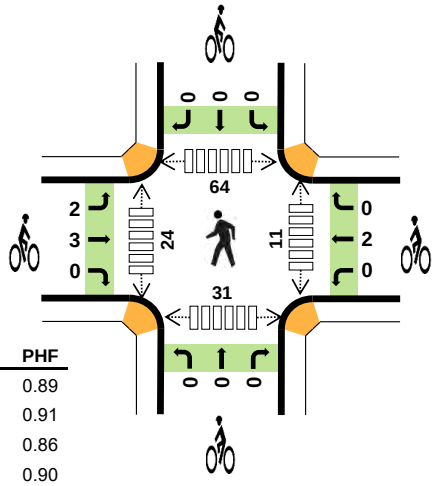
Appendix A

Traffic Counts

El Camino Real
Ralston Ave

Date: 01-14-2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	2.1%	0.89
WB	3.0%	0.91
NB	2.9%	0.86
SB	2.3%	0.90
TOTAL	2.6%	0.97

Two-Hour Count Summaries

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	19	132	7	0	30	52	28	0	11	49	20	0	68	127	18	561	0
7:15 AM	0	20	160	5	0	39	134	42	0	14	70	32	0	62	172	26	776	0
7:30 AM	**0**	**36**	**207**	**6**	**0**	**44**	**154**	**31**	**0**	**26**	**119**	**42**	**0**	**80**	**189**	**31**	**965**	0
7:45 AM	**0**	**22**	**194**	**3**	**0**	**45**	**173**	**45**	**0**	**29**	**128**	**31**	**0**	**89**	**212**	**16**	**987**	3,289
8:00 AM	**0**	**29**	**181**	**4**	**0**	**50**	**135**	**42**	**0**	**31**	**149**	**53**	**0**	**72**	**180**	**15**	**941**	3,669
8:15 AM	**0**	**20**	**181**	**3**	**0**	**44**	**170**	**57**	**0**	**16**	**124**	**51**	**0**	**76**	**166**	**16**	**924**	**3,817**
8:30 AM	0	23	197	11	0	53	178	39	0	22	123	36	0	73	170	17	942	3,794
8:45 AM	0	23	174	8	0	66	135	50	0	23	135	51	0	88	194	19	966	3,773
Count Total	0	192	1,426	47	0	371	1,131	334	0	172	897	316	0	608	1,410	158	7,062	0
Peak Hour All	**0**	**107**	**763**	**16**	**0**	**183**	**632**	**175**	**0**	**102**	**520**	**177**	**0**	**317**	**747**	**78**	**3,817**	**0**
Peak Hour HV	**0**	**5**	**11**	**3**	**0**	**4**	**17**	**9**	**0**	**2**	**21**	**0**	**0**	**4**	**22**	**0**	**98**	**0**
Peak Hour HV%	**-**	**5%**	**1%**	**19%**	**-**	**2%**	**3%**	**5%**	**-**	**2%**	**4%**	**0%**	**-**	**1%**	**3%**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	5	6	5	*18*	1	0	0	0	*1*	2	4	20	7	*33*
7:15 AM	1	9	6	4	*20*	1	1	0	0	*2*	2	2	9	2	*15*
7:30 AM	**8**	**12**	**8**	**7**	***35***	**2**	**0**	**0**	**0**	***2***	**3**	**2**	**13**	**9**	*27*
7:45 AM	**4**	**7**	**3**	**6**	***20***	**0**	**0**	**0**	**0**	***0***	**1**	**7**	**6**	**5**	*19*
8:00 AM	**3**	**6**	**6**	**8**	***23***	**2**	**1**	**0**	**0**	***3***	**2**	**11**	**17**	**8**	*38*
8:15 AM	**4**	**5**	**6**	**5**	***20***	**1**	**1**	**0**	**0**	***2***	**5**	**4**	**28**	**9**	***46***
8:30 AM	3	5	3	9	*20*	1	1	0	1	*3*	5	5	7	7	*24*
8:45 AM	3	12	8	11	*34*	3	0	0	0	*3*	5	13	28	16	*62*
Count Total	28	61	46	55	*190*	11	4	0	1	*16*	25	48	128	63	*264*
Peak Hour	**19**	**30**	**23**	**26**	***98***	**5**	**2**	**0**	**0**	***7***	**11**	**24**	**64**	**31**	***130***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	1	0	0	3	2	0	0	6	0	0	2	3	0	18	0
7:15 AM	0	0	1	0	0	1	5	3	0	1	4	1	0	0	3	1	20	0
7:30 AM	**0**	**4**	**3**	**1**	**0**	**1**	**8**	**3**	**0**	**0**	**8**	**0**	**0**	**0**	**7**	**0**	**35**	0
7:45 AM	**0**	**1**	**2**	**1**	**0**	**2**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**4**	**0**	**20**	93
8:00 AM	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**3**	**0**	**2**	**4**	**0**	**0**	**1**	**7**	**0**	**23**	98
8:15 AM	**0**	**0**	**3**	**1**	**0**	**0**	**2**	**3**	**0**	**0**	**6**	**0**	**0**	**1**	**4**	**0**	**20**	**98**
8:30 AM	0	1	2	0	0	1	2	2	0	0	2	1	0	1	7	1	20	83
8:45 AM	0	1	2	0	0	3	6	3	0	1	5	2	0	2	8	1	34	97
Count Total	0	8	16	4	0	9	33	19	0	4	38	4	0	9	43	3	190	0
Peak Hour	**0**	**5**	**11**	**3**	**0**	**4**	**17**	**9**	**0**	**2**	**21**	**0**	**0**	**4**	**22**	**0**	**98**	**0**

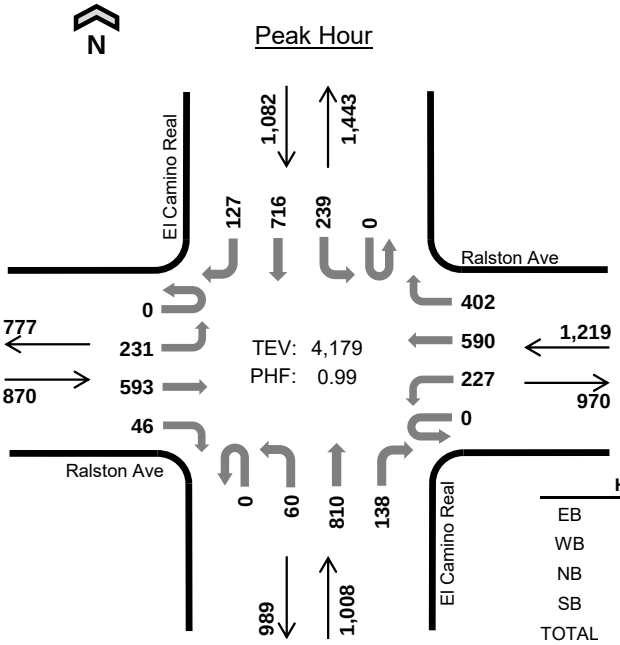
Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave Eastbound			Ralston Ave Westbound			El Camino Real Northbound			El Camino Real Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
7:30 AM	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:00 AM	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	7
8:15 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**
8:30 AM	0	1	0	0	1	0	0	0	0	0	1	0	3	8
8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	3	11
Count Total	2	9	0	0	4	0	0	0	0	0	1	0	16	0
Peak Hour	**2**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

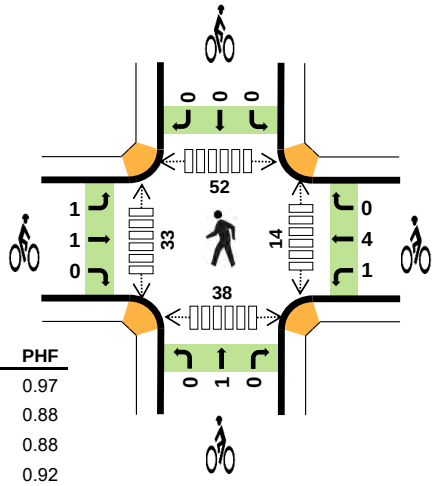
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

El Camino Real
Ralston Ave

Date: 01-14-2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.7%	0.97
WB	0.7%	0.88
NB	1.4%	0.88
SB	1.0%	0.92
TOTAL	0.9%	0.99



Two-Hour Count Summaries

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	39	136	10	0	45	140	92	0	45	195	50	0	63	168	29	1,012	0
4:15 PM	0	52	122	12	0	55	164	74	0	32	175	45	0	58	166	32	987	0
4:30 PM	0	67	158	15	0	50	135	110	0	27	188	42	0	60	150	25	1,027	0
4:45 PM	0	53	158	11	0	46	151	85	0	14	198	41	0	64	166	36	1,023	4,049
5:00 PM	**0**	**64**	**149**	**9**	**0**	**47**	**144**	**94**	**0**	**20**	**223**	**44**	**0**	**56**	**168**	**34**	**1,052**	4,089
5:15 PM	**0**	**52**	**146**	**12**	**0**	**66**	**177**	**105**	**0**	**14**	**182**	**34**	**0**	**58**	**174**	**32**	**1,052**	4,154
5:30 PM	**0**	**63**	**149**	**13**	**0**	**69**	**135**	**91**	**0**	**14**	**195**	**27**	**0**	**55**	**184**	**28**	**1,023**	4,150
5:45 PM	**0**	**52**	**149**	**12**	**0**	**45**	**134**	**112**	**0**	**12**	**210**	**33**	**0**	**70**	**190**	**33**	**1,052**	**4,179**
Count Total	0	442	1,167	94	0	423	1,180	763	0	178	1,566	316	0	484	1,366	249	8,228	0
Peak Hour All	**0**	**231**	**593**	**46**	**0**	**227**	**590**	**402**	**0**	**60**	**810**	**138**	**0**	**239**	**716**	**127**	**4,179**	**0**
Peak Hour HV	**0**	**0**	**6**	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**13**	**1**	**0**	**0**	**10**	**1**	**39**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**1%**	**-**	**0%**	**2%**	**1%**	**-**	**0%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	4	7	4	*17*	0	0	1	0	*1*	10	7	2	9	*28*
4:15 PM	1	2	3	3	*9*	0	0	0	0	*0*	2	15	12	9	*38*
4:30 PM	1	1	3	2	*7*	0	0	0	0	*0*	5	3	7	10	*25*
4:45 PM	0	2	8	4	*14*	0	2	0	0	*2*	7	8	15	12	*42*
5:00 PM	**1**	**2**	**4**	**1**	***8***	**1**	**0**	**0**	**0**	***1***	**3**	**8**	**14**	**8**	*33*
5:15 PM	**0**	**2**	**2**	**5**	***9***	**0**	**1**	**0**	**0**	***1***	**3**	**12**	**12**	**11**	*38*
5:30 PM	**3**	**3**	**6**	**2**	***14***	**1**	**0**	**1**	**0**	***2***	**8**	**7**	**9**	**14**	*38*
5:45 PM	**2**	**1**	**2**	**3**	***8***	**0**	**4**	**0**	**0**	***4***	**0**	**6**	**17**	**5**	***28***
Count Total	10	17	35	24	*86*	2	7	2	0	*11*	38	66	88	78	*270*
Peak Hour	**6**	**8**	**14**	**11**	***39***	**2**	**5**	**1**	**0**	***8***	**14**	**33**	**52**	**38**	***137***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	1	1	2	0	0	6	1	0	1	3	0	17	0
4:15 PM	0	0	1	0	0	0	2	0	0	0	3	0	0	0	3	0	9	0
4:30 PM	0	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	7	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	5	3	0	2	2	0	14	47
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**8**	38
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**4**	**1**	**9**	38
5:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**0**	**14**	45
5:45 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**8**	**39**
Count Total	0	0	10	0	0	2	7	8	0	1	29	5	0	3	20	1	86	0
Peak Hour	**0**	**0**	**6**	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**13**	**1**	**0**	**0**	**10**	**1**	**39**	**0**

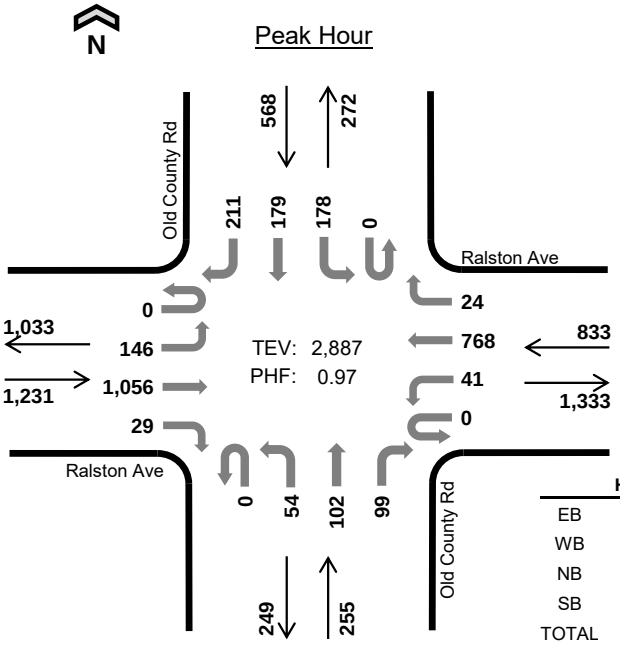
Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave Eastbound			Ralston Ave Westbound			El Camino Real Northbound			El Camino Real Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	3
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
5:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	6
5:45 PM	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**8**
Count Total	1	1	0	1	6	0	0	1	1	0	0	0	11	0
Peak Hour	**1**	**1**	**0**	**1**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**8**	**0**

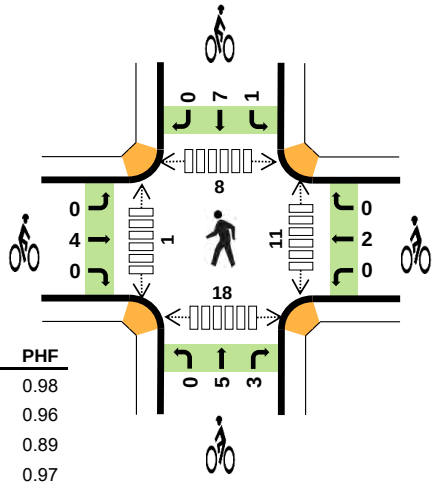
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old County Rd
Ralston Ave

Date: 01-14-2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.2%	0.98
WB	2.0%	0.96
NB	4.3%	0.89
SB	1.2%	0.97
TOTAL	1.7%	0.97



Two-Hour Count Summaries

Interval Start		Ralston Ave Eastbound				Ralston Ave Westbound				Old County Rd Northbound				Old County Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	15	195	7	0	11	82	6	0	14	9	15	0	34	28	27	443	0
7:15 AM		0	19	224	16	0	4	158	3	0	11	13	30	0	38	37	29	582	0
7:30 AM		0	26	294	13	0	6	187	8	0	8	17	32	0	44	33	43	711	0
7:45 AM		**0**	**29**	**273**	**7**	**0**	**10**	**200**	**4**	**0**	**12**	**23**	**23**	**0**	**45**	**49**	**47**	**722**	2,458
8:00 AM		**0**	**49**	**245**	**7**	**0**	**11**	**174**	**5**	**0**	**16**	**21**	**23**	**0**	**47**	**49**	**49**	**696**	2,711
8:15 AM		**0**	**44**	**254**	**8**	**0**	**12**	**195**	**4**	**0**	**14**	**32**	**26**	**0**	**44**	**39**	**52**	**724**	2,853
8:30 AM		**0**	**24**	**284**	**7**	**0**	**8**	**199**	**11**	**0**	**12**	**26**	**27**	**0**	**42**	**42**	**63**	**745**	**2,887**
8:45 AM		0	31	261	17	0	10	169	14	0	13	28	25	0	30	42	58	698	2,863
Count Total		0	237	2,030	82	0	72	1,364	55	0	100	169	201	0	324	319	368	5,321	0
Peak Hour	**All**	**0**	**146**	**1,056**	**29**	**0**	**41**	**768**	**24**	**0**	**54**	**102**	**99**	**0**	**178**	**179**	**211**	**2,887**	**0**
	HV	**0**	**1**	**13**	**1**	**0**	**0**	**17**	**0**	**0**	**1**	**4**	**6**	**0**	**2**	**1**	**4**	**50**	**0**
	HV%	**-**	**1%**	**1%**	**3%**	**-**	**0%**	**2%**	**0%**	**-**	**2%**	**4%**	**6%**	**-**	**1%**	**1%**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	8	4	2	*16*	1	0	1	0	*2*	2	0	11	2	*15*
7:15 AM	2	6	5	5	*18*	1	1	0	2	*4*	2	0	0	0	*2*
7:30 AM	3	9	3	2	*17*	1	0	1	2	*4*	2	0	9	6	*17*
7:45 AM	**4**	**4**	**2**	**1**	***11***	**1**	**0**	**1**	**2**	***4***	**5**	**0**	**0**	**3**	*8*
8:00 AM	**3**	**5**	**2**	**2**	***12***	**1**	**0**	**1**	**1**	***3***	**1**	**0**	**3**	**4**	*8*
8:15 AM	**5**	**4**	**5**	**2**	***16***	**1**	**1**	**3**	**3**	***8***	**0**	**0**	**2**	**7**	*9*
8:30 AM	**3**	**4**	**2**	**2**	***11***	**1**	**1**	**3**	**2**	**7**	**5**	**1**	**3**	**4**	***13***
8:45 AM	7	9	4	4	*24*	2	0	1	2	*5*	6	0	1	5	*12*
Count Total	29	49	27	20	*125*	9	3	11	14	*37*	23	1	29	31	*84*
Peak Hour	**15**	**17**	**11**	**7**	***50***	**4**	**2**	**8**	**8**	***22***	**11**	**1**	**8**	**18**	***38***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				Old County Rd Northbound				Old County Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	1	4	3	0	0	2	2	0	0	1	1	16	0
7:15 AM	0	0	2	0	0	0	6	0	0	1	0	4	0	1	2	2	18	0
7:30 AM	0	0	2	1	0	0	9	0	0	2	0	1	0	0	0	2	17	0
7:45 AM	**0**	**1**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**11**	62
8:00 AM	**0**	**0**	**2**	**1**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**12**	58
8:15 AM	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**2**	**0**	**1**	**0**	**1**	**16**	56
8:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**11**	**50**
8:45 AM	0	0	5	2	0	1	8	0	0	2	1	1	0	1	1	2	24	63
Count Total	0	1	24	4	0	2	44	3	0	6	7	14	0	4	5	11	125	0
Peak Hour	**0**	**1**	**13**	**1**	**0**	**0**	**17**	**0**	**0**	**1**	**4**	**6**	**0**	**2**	**1**	**4**	**50**	**0**

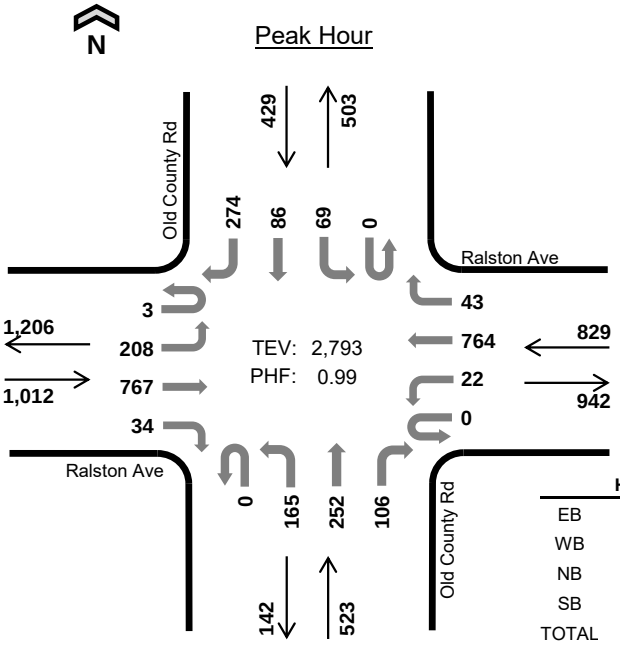
Two-Hour Count Summaries - Bikes

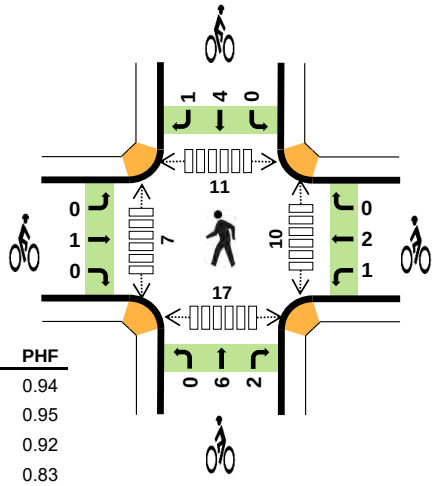
Interval Start	Ralston Ave Eastbound			Ralston Ave Westbound			Old County Rd Northbound			Old County Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	2	0
7:15 AM	1	0	0	0	1	0	0	0	0	0	2	0	4	0
7:30 AM	1	0	0	0	0	0	0	1	0	0	2	0	4	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**4**	14
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**3**	15
8:15 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**1**	**2**	**0**	**8**	19
8:30 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**7**	**22**
8:45 AM	2	0	0	0	0	0	0	1	0	1	1	0	5	23
Count Total	4	4	1	0	3	0	0	8	3	2	12	0	37	0
Peak Hour	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**5**	**3**	**1**	**7**	**0**	**22**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old County Rd
Ralston Ave

Date: 01-14-2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.8%	0.94
WB	0.6%	0.95
NB	0.6%	0.92
SB	0.7%	0.83
TOTAL	0.7%	0.99

Two-Hour Count Summaries

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				Old County Rd Northbound				Old County Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	43	193	14	0	5	204	14	0	31	62	28	0	18	20	44	676	0
4:15 PM	0	47	160	15	0	3	215	15	0	21	56	31	0	18	27	47	655	0
4:30 PM	**2**	**51**	**205**	**10**	**0**	**5**	**180**	**14**	**0**	**41**	**66**	**27**	**0**	**15**	**16**	**69**	**701**	0
4:45 PM	**0**	**54**	**203**	**6**	**0**	**2**	**193**	**14**	**0**	**36**	**61**	**25**	**0**	**13**	**24**	**56**	**687**	2,719
5:00 PM	**0**	**44**	**190**	**11**	**0**	**5**	**189**	**9**	**0**	**47**	**68**	**27**	**0**	**21**	**23**	**63**	**697**	2,740
5:15 PM	**1**	**59**	**169**	**7**	**0**	**10**	**202**	**6**	**0**	**41**	**57**	**27**	**0**	**20**	**23**	**86**	**708**	**2,793**
5:30 PM	0	41	188	10	0	5	173	7	0	26	41	12	0	16	32	109	660	2,752
5:45 PM	0	53	190	8	0	6	149	6	0	35	57	11	0	17	24	108	664	2,729
Count Total	3	392	1,498	81	0	41	1,505	85	0	278	468	188	0	138	189	582	5,448	0
Peak Hour All	**3**	**208**	**767**	**34**	**0**	**22**	**764**	**43**	**0**	**165**	**252**	**106**	**0**	**69**	**86**	**274**	**2,793**	**0**
Peak Hour HV	**0**	**1**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**2**	**19**	**0**
Peak Hour HV%	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**2%**	**-**	**0%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	3	2	3	*12*	0	2	3	0	*5*	0	1	10	1	*12*
4:15 PM	1	2	2	2	*7*	0	0	0	0	*0*	4	2	3	1	*10*
4:30 PM	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**4**	**2**	**3**	*11*
4:45 PM	**5**	**2**	**1**	**1**	***9***	**0**	**1**	**2**	**1**	***4***	**6**	**1**	**4**	**6**	*17*
5:00 PM	**1**	**0**	**0**	**2**	***3***	**1**	**1**	**3**	**3**	***8***	**1**	**2**	**3**	**5**	*11*
5:15 PM	**1**	**2**	**1**	**0**	***4***	**0**	**1**	**3**	**1**	***5***	**1**	**0**	**2**	**3**	***6***
5:30 PM	3	2	0	3	*8*	0	0	7	0	*7*	0	1	1	3	*5*
5:45 PM	2	0	0	2	*4*	0	2	2	2	*6*	3	0	0	8	*11*
Count Total	18	12	7	13	*50*	1	7	20	7	*35*	17	11	25	30	*83*
Peak Hour	**8**	**5**	**3**	**3**	***19***	**1**	**3**	**8**	**5**	***17***	**10**	**7**	**11**	**17**	***45***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave				Ralston Ave				Old County Rd				Old County Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	3	0	0	0	3	0	0	0	1	1	0	2	0	1	12	0
4:15 PM	0	0	1	0	0	0	2	0	0	0	1	1	0	0	2	0	7	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**9**	31
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	22
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**19**
5:30 PM	0	0	2	1	0	0	2	0	0	0	0	0	0	1	1	1	8	24
5:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	4	19
Count Total	0	2	14	2	0	0	12	0	0	0	3	4	0	4	4	5	50	0
Peak Hour	**0**	**1**	**7**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**2**	**19**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave			Ralston Ave			Old County Rd			Old County Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	1	1	2	0	0	0	0	5	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**4**	9
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**0**	**8**	12
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**5**	**17**
5:30 PM	0	0	0	0	0	0	0	6	1	0	0	0	7	24
5:45 PM	0	0	0	0	2	0	0	2	0	0	0	2	6	26
Count Total	0	1	0	1	5	1	1	16	3	0	4	3	35	0
Peak Hour	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**6**	**2**	**0**	**4**	**1**	**17**	**0**

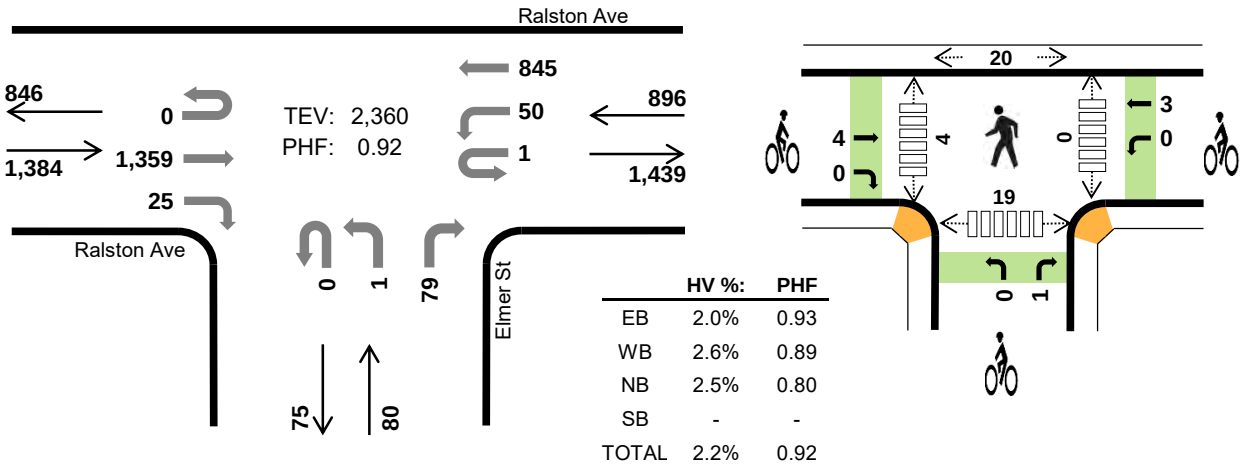
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Elmer St
Ralston Ave

N

Peak Hour

Date: 01-14-2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	2.0%	0.93
WB	2.6%	0.89
NB	2.5%	0.80
SB	-	-
TOTAL	2.2%	0.92

Two-Hour Count Summaries

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				Elmer St Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	238	2	0	11	106	0	0	0	0	8	0	0	0	0	365	0
7:15 AM	0	0	293	7	0	10	154	0	0	0	0	17	0	0	0	0	481	0
7:30 AM	**0**	**0**	**367**	**7**	**1**	**15**	**237**	**0**	**0**	**1**	**0**	**16**	**0**	**0**	**0**	**0**	**644**	0
7:45 AM	**0**	**0**	**359**	**6**	**0**	**16**	**209**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**608**	2,098
8:00 AM	**0**	**0**	**309**	**4**	**0**	**11**	**195**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**539**	2,272
8:15 AM	**0**	**0**	**324**	**8**	**0**	**8**	**204**	**0**	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**569**	**2,360**
8:30 AM	0	0	347	5	0	8	241	0	0	0	0	31	0	0	0	0	632	2,348
8:45 AM	0	0	327	8	1	7	199	0	0	1	0	26	0	0	0	0	569	2,309
Count Total	0	0	2,564	47	2	86	1,545	0	0	2	0	161	0	0	0	0	4,407	0
Peak Hour All	**0**	**0**	**1,359**	**25**	**1**	**50**	**845**	**0**	**0**	**1**	**0**	**79**	**0**	**0**	**0**	**0**	**2,360**	**0**
Peak Hour HV	**0**	**0**	**26**	**1**	**0**	**1**	**22**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**52**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**4%**	**0%**	**2%**	**3%**	**-**	**-**	**0%**	**-**	**3%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	10	0	0	*15*	0	0	0	0	*0*	0	2	12	2	*16*
7:15 AM	7	4	0	0	*11*	0	2	0	0	*2*	0	1	1	1	*3*
7:30 AM	**4**	**11**	**1**	**0**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**8**	**4**	*12*
7:45 AM	**9**	**3**	**0**	**0**	***12***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**1**	**3**	*4*
8:00 AM	**4**	**5**	**0**	**0**	***9***	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**4**	**4**	*8*
8:15 AM	**10**	**4**	**1**	**0**	***15***	**2**	**1**	**0**	**0**	***3***	**0**	**4**	**7**	**8**	***19***
8:30 AM	5	4	1	0	*10*	1	0	0	0	*1*	0	1	5	2	*8*
8:45 AM	10	9	2	0	*21*	1	0	0	0	*1*	0	0	5	3	*8*
Count Total	54	50	5	0	*109*	6	5	1	0	*12*	0	8	43	27	*78*
Peak Hr	**27**	**23**	**2**	**0**	***52***	**4**	**3**	**1**	**0**	***8***	**0**	**4**	**20**	**19**	***43***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave				Ralston Ave				Elmer St				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	15	0
7:15 AM	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	11	0
7:30 AM	**0**	**0**	**4**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**16**	0
7:45 AM	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	54
8:00 AM	**0**	**0**	**3**	**1**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	48
8:15 AM	**0**	**0**	**10**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**15**	**52**
8:30 AM	0	0	5	0	0	0	4	0	0	0	0	1	0	0	0	0	10	46
8:45 AM	0	0	10	0	0	0	9	0	0	0	0	2	0	0	0	0	21	55
Count Total	0	0	53	1	0	1	49	0	0	0	0	5	0	0	0	0	109	0
Peak Hour	**0**	**0**	**26**	**1**	**0**	**1**	**22**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**52**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave			Ralston Ave			Elmer St			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	4
8:00 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	7
8:15 AM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	9
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	8
Count Total	0	6	0	0	5	0	0	0	1	0	0	0	12	0
Peak Hour	**0**	**4**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**8**	**0**

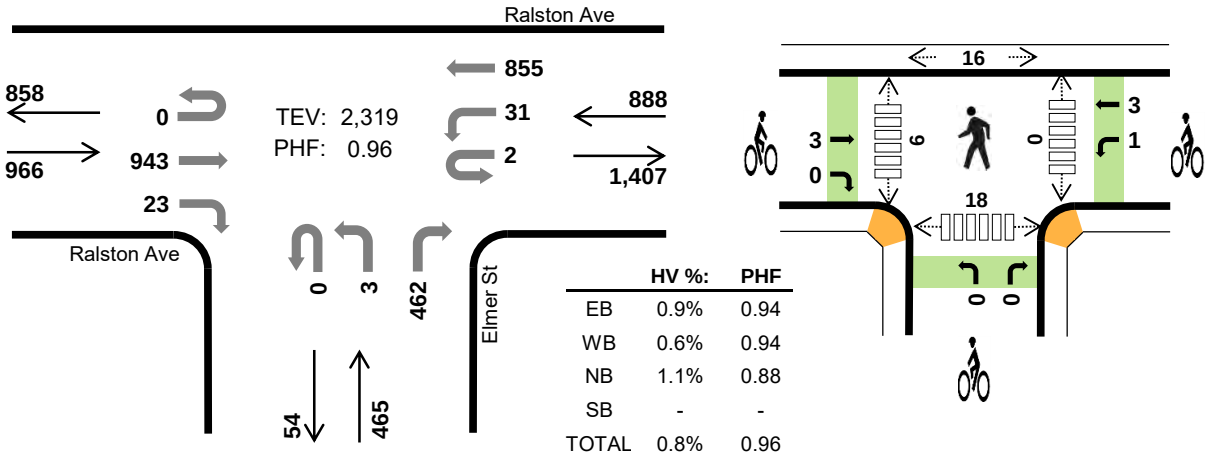
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Elmer St
Ralston Ave

N

Peak Hour

Date: 01-14-2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



Two-Hour Count Summaries

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				Elmer St Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	238	3	1	11	218	0	0	0	0	88	0	0	0	0	559	0
4:15 PM	0	0	209	3	0	5	220	0	0	0	0	75	0	0	0	0	512	0
4:30 PM	**0**	**0**	**250**	**6**	**2**	**5**	**230**	**0**	**0**	**0**	**0**	**113**	**0**	**0**	**0**	**0**	**606**	0
4:45 PM	**0**	**0**	**236**	**10**	**0**	**15**	**210**	**0**	**0**	**0**	**0**	**102**	**0**	**0**	**0**	**0**	**573**	2,250
5:00 PM	**0**	**0**	**237**	**3**	**0**	**3**	**205**	**0**	**0**	**2**	**0**	**130**	**0**	**0**	**0**	**0**	**580**	2,271
5:15 PM	**0**	**0**	**220**	**4**	**0**	**8**	**210**	**0**	**0**	**1**	**0**	**117**	**0**	**0**	**0**	**0**	**560**	**2,319**
5:30 PM	0	0	214	4	0	8	193	0	0	0	0	108	0	0	0	0	527	2,240
5:45 PM	0	0	209	7	0	6	160	0	0	0	0	120	0	0	0	0	502	2,169
Count Total	0	0	1,813	40	3	61	1,646	0	0	3	0	853	0	0	0	0	4,419	0
Peak Hour All	**0**	**0**	**943**	**23**	**2**	**31**	**855**	**0**	**0**	**3**	**0**	**462**	**0**	**0**	**0**	**0**	**2,319**	**0**
Peak Hour HV	**0**	**0**	**9**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**19**	**0**
Peak Hour HV%	**-**	**-**	**1%**	**0%**	**0%**	**0%**	**1%**	**-**	**-**	**0%**	**-**	**1%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	7	3	0	0	*10*	0	1	0	0	*1*	0	2	12	3	*17*
4:15 PM	2	3	0	0	*5*	0	0	2	0	*2*	0	3	9	2	*14*
4:30 PM	**2**	**1**	**0**	**0**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**6**	**5**	*13*
4:45 PM	**5**	**2**	**2**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**4**	**4**	*10*
5:00 PM	**1**	**0**	**1**	**0**	***2***	**2**	**1**	**0**	**0**	***3***	**0**	**1**	**2**	**6**	*9*
5:15 PM	**1**	**2**	**2**	**0**	***5***	**1**	**2**	**0**	**0**	***3***	**0**	**1**	**4**	**3**	***8***
5:30 PM	2	2	0	0	*4*	1	1	0	0	*2*	0	0	0	1	*1*
5:45 PM	3	0	0	0	*3*	0	2	0	0	*2*	0	0	3	7	*10*
Count Total	23	13	5	0	*41*	4	8	2	0	*14*	0	11	40	31	*82*
Peak Hr	**9**	**5**	**5**	**0**	***19***	**3**	**4**	**0**	**0**	***7***	**0**	**6**	**16**	**18**	***40***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave				Ralston Ave				Elmer St				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10	0
4:15 PM	0	0	2	0	0	1	2	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**9**	27
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	19
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**5**	**19**
5:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	20
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	14
Count Total	0	0	23	0	0	1	12	0	0	0	0	5	0	0	0	0	41	0
Peak Hour	**0**	**0**	**9**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**19**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave			Ralston Ave			Elmer St			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	2	0	0	0	2	0
4:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:00 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	6
5:15 PM	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**7**
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	8
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	10
Count Total	0	4	0	1	7	0	0	0	2	0	0	0	14	0
Peak Hour	**0**	**3**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

National Data and Surveying Services

City of Belmont
All Vehicles & Uturns On Unshifted
Peds & Bikes On Bank 1
Nothing On Bank 2

(323) 782-0090
info@ndsdata.com

File Name : 17-7878-012 Hiller St & Ralston Ave
Date : 10/26/2017

Unshifted Count = All Vehicles & Uturns

	Hiller St Southbound					Ralston Ave Westbound					Hiller St Northbound					Ralston Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:30	84	1	9	0	94	1	214	43	1	259	9	6	15	0	30	5	302	0	0	307	690	1
7:45	77	1	7	0	85	3	174	54	0	231	4	6	13	0	23	11	314	0	3	328	667	3
8:00	93	0	10	0	103	2	197	52	1	252	6	9	12	0	27	23	259	0	1	283	665	2
8:15	103	5	16	0	124	1	217	79	3	300	5	9	12	0	26	25	296	0	0	321	771	3
Total	357	7	42	0	406	7	802	228	5	1042	24	30	52	0	106	64	1171	0	4	1239	2793	9
8:30	101	1	24	0	126	3	205	35	0	243	6	2	11	0	19	12	335	0	3	350	738	3
8:45	82	2	18	0	102	3	170	40	1	214	7	2	15	0	24	7	336	0	4	347	687	5
9:00	83	1	5	0	89	0	158	22	0	180	5	2	16	0	23	8	303	0	2	313	605	2
9:15	65	1	13	0	79	0	149	18	4	171	7	2	9	0	18	5	265	0	2	272	540	6
Total	331	5	60	0	396	6	682	115	5	808	25	8	51	0	84	32	1239	0	11	1282	2570	16
14:00	57	0	9	0	66	3	224	71	4	302	3	4	11	0	18	14	243	0	4	261	647	8
14:15	55	0	9	0	64	4	217	50	3	274	5	1	7	0	13	20	214	0	3	237	588	6
14:30	51	0	16	0	67	3	224	52	3	282	3	4	8	0	15	14	266	0	5	285	649	8
14:45	66	2	9	0	77	3	236	72	2	313	3	5	7	0	15	20	239	0	1	260	665	3
Total	229	2	43	0	274	13	901	245	12	1171	14	14	33	0	61	68	962	0	13	1043	2549	25
15:00	51	1	17	0	69	5	231	88	4	328	1	6	9	0	16	15	272	0	1	288	701	5
15:15	83	2	14	0	99	6	218	71	2	297	2	4	5	0	11	24	289	0	3	316	723	5
15:30	65	2	16	0	83	1	220	71	1	293	6	0	13	0	19	18	282	1	5	306	701	6
15:45	58	2	10	0	70	7	260	96	4	367	4	4	9	0	17	19	267	0	2	288	742	6
Total	257	7	57	0	321	19	929	326	11	1285	13	14	36	0	63	76	1110	1	11	1198	2867	22
17:00	79	1	10	0	90	7	298	105	0	410	4	2	9	0	15	37	315	0	7	359	874	7
17:15	71	4	9	0	84	5	271	149	3	428	6	3	7	0	16	39	311	0	3	353	881	6
17:30	64	0	8	0	72	5	296	153	3	457	9	9	7	0	25	40	267	0	3	310	864	6
17:45	76	1	6	0	83	8	254	147	3	412	7	7	3	0	17	49	270	0	2	321	833	5
Total	290	6	33	0	329	25	1119	554	9	1707	26	21	26	0	73	165	1163	0	15	1343	3452	24
18:00	71	3	8	0	82	3	258	112	4	377	5	3	5	0	13	42	295	0	3	340	812	7
18:15	63	2	11	0	76	5	293	106	3	407	2	4	6	0	12	25	255	0	5	285	780	8
18:30	66	1	12	0	79	2	253	83	1	339	4	5	15	0	24	28	232	1	5	266	708	6
18:45	55	4	9	0	68	10	254	81	4	349	5	2	2	0	9	20	253	0	5	278	704	9
Total	255	10	40	0	305	20	1058	382	12	1472	16	14	28	0	58	115	1035	1	18	1169	3004	30
Grand Total	1719	37	275	0	2031	90	5491	1850	54	7485	118	101	226	0	445	520	6680	2	72	7274	17235	126
Apprch %	84.6%	1.8%	13.5%	0.0%		1.2%	73.4%	24.7%	0.7%		26.5%	22.7%	50.8%	0.0%		7.1%	91.8%	0.0%	1.0%			
Total %	10.0%	0.2%	1.6%	0.0%	11.8%	0.5%	31.9%	10.7%	0.3%	43.4%	0.7%	0.6%	1.3%	0.0%	2.6%	3.0%	38.8%	0.0%	0.4%	42.2%	100.0%	

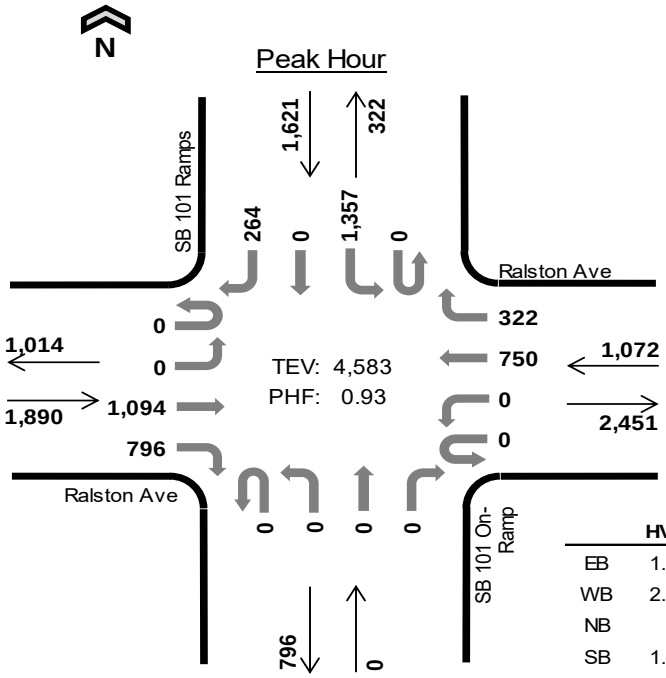
AM PEAK HOUR	Hiller St Southbound					Ralston Ave Westbound					Hiller St Northbound					Ralston Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	93	0	10	0	103	2	197	52	1	252	6	9	12	0	27	23	259	0	1	283	665
8:15	103	5	16	0	124	1	217	79	3	300	5	9	12	0	26	25	296	0	0	321	771
8:30	101	1	24	0	126	3	205	35	0	243	6	2	11	0	19	12	335	0	3	350	738
8:45	82	2	18	0	102	3	170	40	1	214	7	2	15	0	24	7	336	0	4	347	687
Total Volume	379	8	68	0	455	9	789	206	5	1009	24	22	50	0	96	67	1226	0	8	1301	2861
% App Total	83.3%	1.8%	14.9%	0.0%		0.9%	78.2%	20.4%	0.5%		25.0%	22.9%	52.1%	0.0%		5.1%	94.2%	0.0%	0.6%		
PHF	.920	.400	.708	.000	.903	.750	.909	.652	.417	.841	.857	.611	.833	.000	.889	.670	.912	.000	.500	.929	.928

NOON PEAK	Hiller St Southbound					Ralston Ave Westbound					Hiller St Northbound					Ralston Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 15:00 to 16:00																					
Peak Hour For Entire Intersection Begins at 15:00																					
15:00	51	1	17	0	69	5	231	88	4	328	1	6	9	0	16	15	272	0	1	288	701
15:15	83	2	14	0	99	6	218	71	2	297	2	4	5	0	11	24	289	0	3	316	723
15:30	65	2	16	0	83	1	220	71	1	293	6	0	13	0	19	18	282	1	5	306	701
15:45	58	2	10	0	70	7	260	96	4	367	4	4	9	0	17	19	267	0	2	288	742
Total Volume	257	7	57	0	321	19	929	326	11	1285	13	14	36	0	63	76	1110	1	11	1198	2867
% App Total	80.1%	2.2%	17.8%	0.0%		1.5%	72.3%	25.4%	0.9%		20.6%	22.2%	57.1%	0.0%		6.3%	92.7%	0.1%	0.9%		
PHF	.774	.875	.838	.000	.811	.679	.893	.849	.688	.875	.542	.583	.692	.000	.829	.792	.960	.250	.550	.948	.966

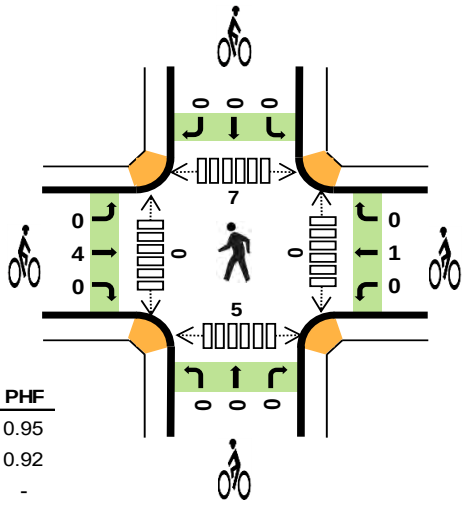
PM PEAK HOUR	Hiller St Southbound					Ralston Ave Westbound					Hiller St Northbound					Ralston Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	79	1	10	0	90	7	298	105	0	410	4	2	9	0	15	37	315	0	7	359	874
17:15	71	4	9	0	84	5	271	149	3	428	6	3	7	0	16	39	311	0	3	353	881
17:30	64	0	8	0	72	5	296	153	3	457	9	9	7	0	25	40	267	0	3	310	864
17:45	76	1	6	0	83	8	254	147	3	412	7	7	3	0	17	49	270	0	2	321	833
Total Volume	290	6	33	0	329	25	1119	554	9	1707	26	21	26	0	73	165	1163	0	15	1343	3452
% App Total	88.1%	1.8%	10.0%	0.0%		1.5%	65.6%	32.5%	0.5%		35.6%	28.8%	35.6%	0.0%		12.3%	86.6%	0.0%	1.1%		
PHF	.918	.375	.825	.000	.914	.781	.939	.905	.750	.934	.722	.583	.722	.000	.730	.842	.923	.000	.536	.935	.980

SB 101 On-Ramp
Ralston Ave

Date: 11-13-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.7%	0.95
WB	2.8%	0.92
NB	-	-
SB	1.6%	0.93
TOTAL	1.9%	0.93



Two-Hour Count Summaries

Interval Start		Ralston Ave Eastbound				Ralston Ave Westbound				SB 101 On-Ramp Northbound				SB 101 Ramps Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	145	199	0	0	113	50	0	0	0	0	0	142	0	62	711	0
7:15 AM		0	0	183	220	0	0	153	60	0	0	0	0	0	159	0	54	829	0
7:30 AM		0	0	214	235	0	0	187	79	0	0	0	0	0	195	0	55	965	0
7:45 AM		**0**	**0**	**254**	**208**	**0**	**0**	**215**	**55**	**0**	**0**	**0**	**0**	**0**	**304**	**0**	**71**	**1,107**	3,612
8:00 AM		**0**	**0**	**251**	**191**	**0**	**0**	**177**	**66**	**0**	**0**	**0**	**0**	**0**	**314**	**0**	**67**	**1,066**	3,967
8:15 AM		**0**	**0**	**289**	**209**	**0**	**0**	**186**	**106**	**0**	**0**	**0**	**0**	**0**	**374**	**0**	**63**	**1,227**	4,365
8:30 AM		**0**	**0**	**300**	**188**	**0**	**0**	**172**	**95**	**0**	**0**	**0**	**0**	**0**	**365**	**0**	**63**	**1,183**	**4,583**
8:45 AM		0	0	273	159	0	0	194	68	0	0	0	0	0	342	0	58	1,094	4,570
Count Total		0	0	1,909	1,609	0	0	1,397	579	0	0	0	0	0	2,195	0	493	8,182	0
Peak Hour	**All**	**0**	**0**	**1,094**	**796**	**0**	**0**	**750**	**322**	**0**	**0**	**0**	**0**	**0**	**1,357**	**0**	**264**	**4,583**	**0**
	HV	**0**	**0**	**29**	**4**	**0**	**0**	**23**	**7**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**6**	**89**	**0**
	HV%	**-**	**-**	**3%**	**1%**	**-**	**-**	**3%**	**2%**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	7	0	2	*12*	1	0	0	0	*1*	0	0	0	0	*0*
7:15 AM	4	9	0	1	*14*	1	1	0	0	*2*	0	0	0	0	*0*
7:30 AM	4	13	0	6	*23*	0	0	0	0	*0*	0	0	0	2	*2*
7:45 AM	**9**	**7**	**0**	**4**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**9**	**7**	**0**	**8**	***24***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**2**	**4**	*6*
8:15 AM	**6**	**9**	**0**	**7**	***22***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**4**	**0**	*4*
8:30 AM	**9**	**7**	**0**	**7**	***23***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***
8:45 AM	9	9	0	7	*25*	1	0	0	0	*1*	0	0	0	3	*3*
Count Total	53	68	0	42	*163*	7	2	0	0	*9*	0	0	7	10	*17*
Peak Hour	**33**	**30**	**0**	**26**	***89***	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**7**	**5**	***12***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave				Ralston Ave				SB 101 On-Ramp				SB 101 Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	2	0	0	4	3	0	0	0	0	0	1	0	1	12	0
7:15 AM	0	0	4	0	0	0	9	0	0	0	0	0	0	0	0	1	14	0
7:30 AM	0	0	3	1	0	0	9	4	0	0	0	0	0	3	0	3	23	0
7:45 AM	**0**	**0**	**8**	**1**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**20**	69
8:00 AM	**0**	**0**	**7**	**2**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**1**	**24**	81
8:15 AM	**0**	**0**	**5**	**1**	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**22**	89
8:30 AM	**0**	**0**	**9**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**23**	**89**
8:45 AM	0	0	7	2	0	0	4	5	0	0	0	0	0	4	0	3	25	94
Count Total	0	0	44	9	0	0	49	19	0	0	0	0	0	28	0	14	163	0
Peak Hour	**0**	**0**	**29**	**4**	**0**	**0**	**23**	**7**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**6**	**89**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave			Ralston Ave			SB 101 On-Ramp			SB 101 Ramps			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:00 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	4
8:15 AM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	5
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	6
Count Total	0	7	0	0	2	0	0	0	0	0	0	0	9	0
Peak Hour	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

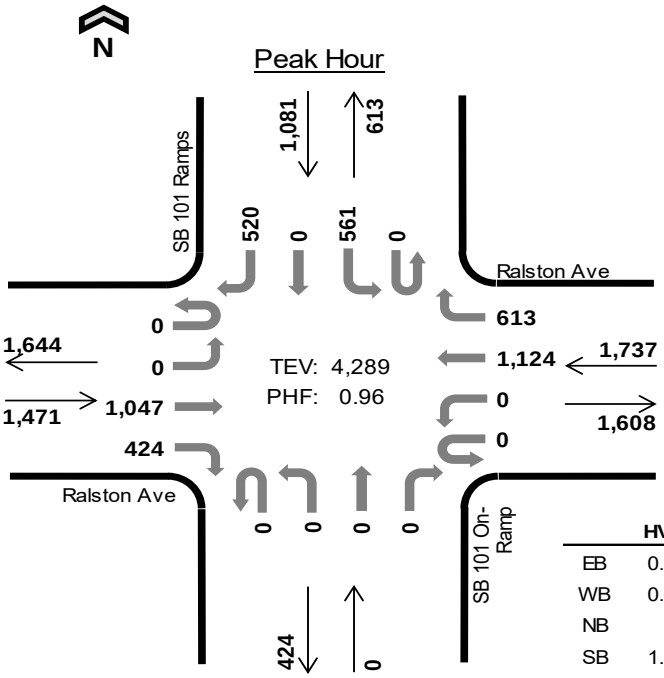
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

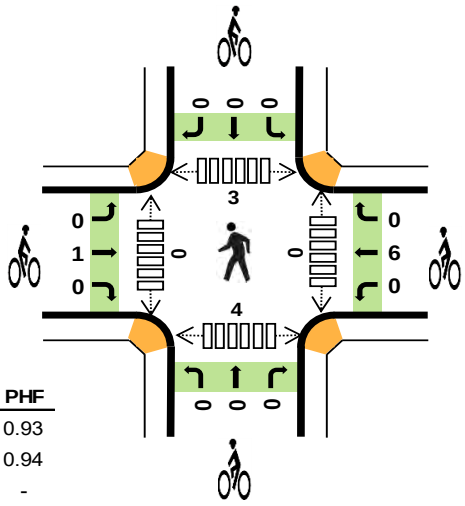
Two-Hour Count Summaries - RToR

Interval Start	Ralston Ave			Ralston Ave			SB 101 Off-Ramp Lane 1			SB 101 Off-Ramp Lane 2			15-min Total	Rolling One Hour
	Eastbound			Westbound			Southbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	-	-	0	-	-	0	-	-	3	-	-	32	35	0
7:15 AM	-	-	0	-	-	0	-	-	1	-	-	22	23	0
7:30 AM	-	-	0	-	-	0	-	-	0	-	-	24	24	0
7:45 AM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**1**	**-**	**-**	**22**	**23**	105
8:00 AM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**1**	**-**	**-**	**17**	**18**	88
8:15 AM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**20**	**20**	85
8:30 AM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**15**	**15**	**76**
8:45 AM	-	-	0	-	-	0	-	-	0	-	-	13	13	66
Count Total	-	-	0	-	-	0	-	-	6	-	-	165	171	-
Peak Hour	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**2**	**-**	**-**	**74**	**76**	**-**

SB 101 On-Ramp
Ralston Ave

Date: 11-13-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.9%	0.93
WB	0.7%	0.94
NB	-	-
SB	1.0%	0.96
TOTAL	0.8%	0.96

Two-Hour Count Summaries

Interval Start		Ralston Ave Eastbound				Ralston Ave Westbound				SB 101 On-Ramp Northbound				SB 101 Ramps Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	259	89	0	0	234	152	0	0	0	0	0	102	0	112	948	0
4:15 PM		0	0	237	88	0	0	236	146	0	0	0	0	0	102	0	101	910	0
4:30 PM		0	0	263	102	0	0	232	188	0	0	0	0	0	127	0	122	1,034	0
4:45 PM		**0**	**0**	**236**	**96**	**0**	**0**	**262**	**153**	**0**	**0**	**0**	**0**	**0**	**127**	**0**	**123**	**997**	3,889
5:00 PM		**0**	**0**	**270**	**124**	**0**	**0**	**283**	**168**	**0**	**0**	**0**	**0**	**0**	**132**	**0**	**138**	**1,115**	4,056
5:15 PM		**0**	**0**	**283**	**105**	**0**	**0**	**272**	**137**	**0**	**0**	**0**	**0**	**0**	**148**	**0**	**133**	**1,078**	4,224
5:30 PM		**0**	**0**	**258**	**99**	**0**	**0**	**307**	**155**	**0**	**0**	**0**	**0**	**0**	**154**	**0**	**126**	**1,099**	**4,289**
5:45 PM		0	0	249	94	0	0	241	124	0	0	0	0	0	118	0	112	938	4,230
Count Total		0	0	2,055	797	0	0	2,067	1,223	0	0	0	0	0	1,010	0	967	8,119	0
Peak Hour	**All**	**0**	**0**	**1,047**	**424**	**0**	**0**	**1,124**	**613**	**0**	**0**	**0**	**0**	**0**	**561**	**0**	**520**	**4,289**	**0**
	HV	**0**	**0**	**11**	**2**	**0**	**0**	**8**	**4**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**36**	**0**
	HV%	**-**	**-**	**1%**	**0%**	**-**	**-**	**1%**	**1%**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	8	2	0	3	*13*	0	0	0	0	*0*	0	0	0	1	*1*
4:15 PM	3	4	0	1	*8*	0	0	0	0	*0*	0	0	0	3	*3*
4:30 PM	5	4	0	3	*12*	1	0	0	0	*1*	0	0	3	0	*3*
4:45 PM	**5**	**5**	**0**	**3**	***13***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**5**	**3**	**0**	**6**	***14***	**1**	**3**	**0**	**0**	***4***	**0**	**0**	**2**	**1**	*3*
5:15 PM	**1**	**1**	**0**	**1**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**1**	**2**	*3*
5:30 PM	**2**	**3**	**0**	**1**	***6***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***
5:45 PM	3	2	0	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	32	24	0	19	*75*	2	6	0	0	*8*	0	0	6	8	*14*
Peak Hour	**13**	**12**	**0**	**11**	***36***	**1**	**6**	**0**	**0**	***7***	**0**	**0**	**3**	**4**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave Eastbound				Ralston Ave Westbound				SB 101 On-Ramp Northbound				SB 101 Ramps Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	4	0	0	1	1	0	0	0	0	0	1	0	2	13	0
4:15 PM	0	0	1	2	0	0	2	2	0	0	0	0	0	1	0	0	8	0
4:30 PM	0	0	4	1	0	0	3	1	0	0	0	0	0	2	0	1	12	0
4:45 PM	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**13**	46
5:00 PM	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**14**	47
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	42
5:30 PM	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**36**
5:45 PM	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	1	6	29
Count Total	0	0	23	9	0	0	15	9	0	0	0	0	0	12	0	7	75	0
Peak Hour	**0**	**0**	**11**	**2**	**0**	**0**	**8**	**4**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**36**	**0**

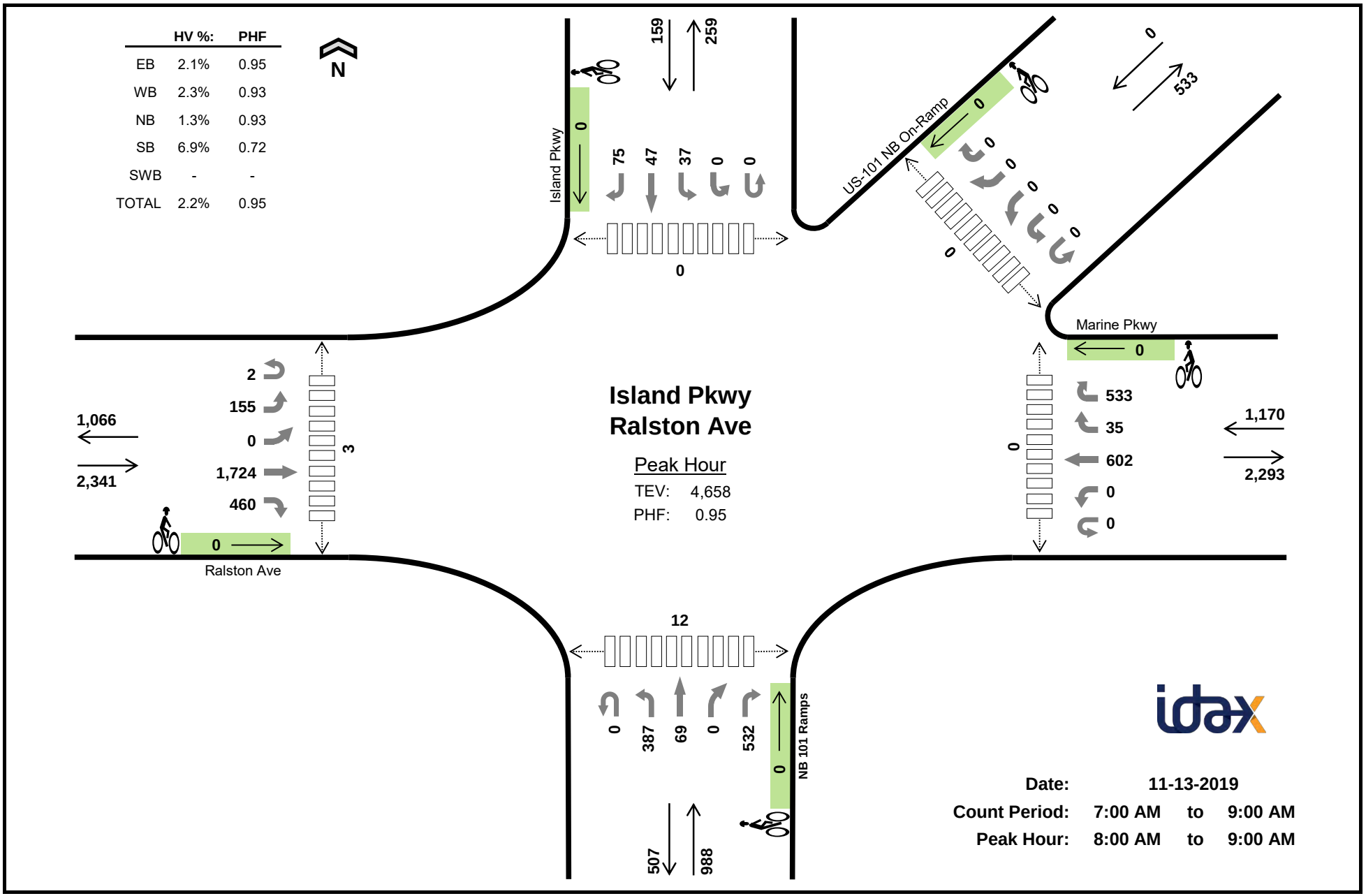
Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave Eastbound			Ralston Ave Westbound			SB 101 On-Ramp Northbound			SB 101 Ramps Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:00 PM	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	6
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	7
5:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	0	2	0	0	6	0	0	0	0	0	0	0	8	0
Peak Hour	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Two-Hour Count Summaries - RToR

Interval Start	Ralston Ave Eastbound			Ralston Ave Westbound			SB 101 Off-Ramp Lane 1 Northbound			SB 101 Off-Ramp Lane 2 Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	-	-	0	-	-	0	-	-	6	-	-	42	48	0
4:15 PM	-	-	0	-	-	0	-	-	6	-	-	41	47	0
4:30 PM	-	-	0	-	-	0	-	-	2	-	-	49	51	0
4:45 PM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**6**	**-**	**-**	**46**	**52**	198
5:00 PM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**5**	**-**	**-**	**33**	**38**	188
5:15 PM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**6**	**-**	**-**	**17**	**23**	164
5:30 PM	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**2**	**-**	**-**	**11**	**13**	**126**
5:45 PM	-	-	0	-	-	0	-	-	3	-	-	26	29	103
Count Total	-	-	0	-	-	0	-	-	36	-	-	265	301	-
nt Summaries	**-**	**-**	**0**	**-**	**-**	**0**	**-**	**-**	**19**	**-**	**-**	**107**	**126**	**-**


HV %: PHF
EB 2.1% 0.95
WB 2.3% 0.93
NB 1.3% 0.93
SB 6.9% 0.72
SWB - -
TOTAL 2.2% 0.95
N
Island Pkwy
159
259
0
75
47
37
0
0
0
US-101 NB On-Ramp
0
0
533
0
0
0
0
0
0
Marine Pkwy
0
533
35
602
0
0
1,170
2,293
0
1,066
2,341
2
155
0
1,724
460
3
0
Ralston Ave
Island Pkwy
Ralston Ave
Peak Hour
TEV: 4,658
PHF: 0.95
12
0
387
69
0
532
0
NB 101 Ramps
507
988
Date: 11-13-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

Two-Hour Count Summaries

Interval Start		Ralston Ave Eastbound					Marine Pkwy Westbound					NB 101 Ramps Northbound					Island Pkwy Southbound					US-101 NB On-Ramp Southwestbound					15-min Total	Rolling One Hour
		UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM		0	19	0	159	93	0	0	81	6	107	0	89	9	0	80	0	0	3	2	13	0	0	0	0	0	661	0
7:15 AM		0	24	0	215	107	0	0	93	3	119	0	100	8	0	88	0	0	4	6	15	0	0	0	0	0	782	0
7:30 AM		0	16	0	261	120	0	0	139	2	124	0	117	13	0	78	0	0	3	5	14	0	0	0	0	0	892	0
7:45 AM		1	30	0	373	99	0	0	116	5	113	0	113	17	0	107	0	0	7	10	23	0	0	0	0	0	1,014	3,349
8:00 AM		**2**	**25**	**0**	**377**	**116**	**0**	**0**	**122**	**9**	**139**	**0**	**98**	**11**	**0**	**104**	**0**	**0**	**16**	**19**	**20**	**0**	**0**	**0**	**0**	**0**	**1,058**	3,746
8:15 AM		**0**	**43**	**0**	**438**	**131**	**0**	**0**	**175**	**7**	**122**	**0**	**105**	**19**	**0**	**127**	**0**	**0**	**6**	**7**	**24**	**0**	**0**	**0**	**0**	**0**	**1,204**	4,168
8:30 AM		**0**	**41**	**0**	**452**	**124**	**0**	**0**	**168**	**6**	**140**	**0**	**91**	**24**	**0**	**152**	**0**	**0**	**6**	**9**	**15**	**0**	**0**	**0**	**0**	**0**	**1,228**	4,504
8:45 AM		**0**	**46**	**0**	**457**	**89**	**0**	**0**	**137**	**13**	**132**	**0**	**93**	**15**	**0**	**149**	**0**	**0**	**9**	**12**	**16**	**0**	**0**	**0**	**0**	**0**	**1,168**	**4,658**
Count Total		3	244	0	2,732	879	0	0	1,031	51	996	0	806	116	0	885	0	0	54	70	140	0	0	0	0	0	8,007	0
Peak Hour	**All**	**2**	**155**	**0**	**1,724**	**460**	**0**	**0**	**602**	**35**	**533**	**0**	**387**	**69**	**0**	**532**	**0**	**0**	**37**	**47**	**75**	**0**	**0**	**0**	**0**	**0**	**4,658**	**0**
	HV	**0**	**10**	**0**	**25**	**15**	**0**	**0**	**20**	**2**	**5**	**0**	**7**	**4**	**0**	**2**	**0**	**0**	**6**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**101**	**0**
	HV%	**0%**	**6%**	**-**	**1%**	**3%**	**-**	**-**	**3%**	**6%**	**1%**	**-**	**2%**	**6%**	**-**	**0%**	**-**	**-**	**16%**	**2%**	**5%**	**-**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

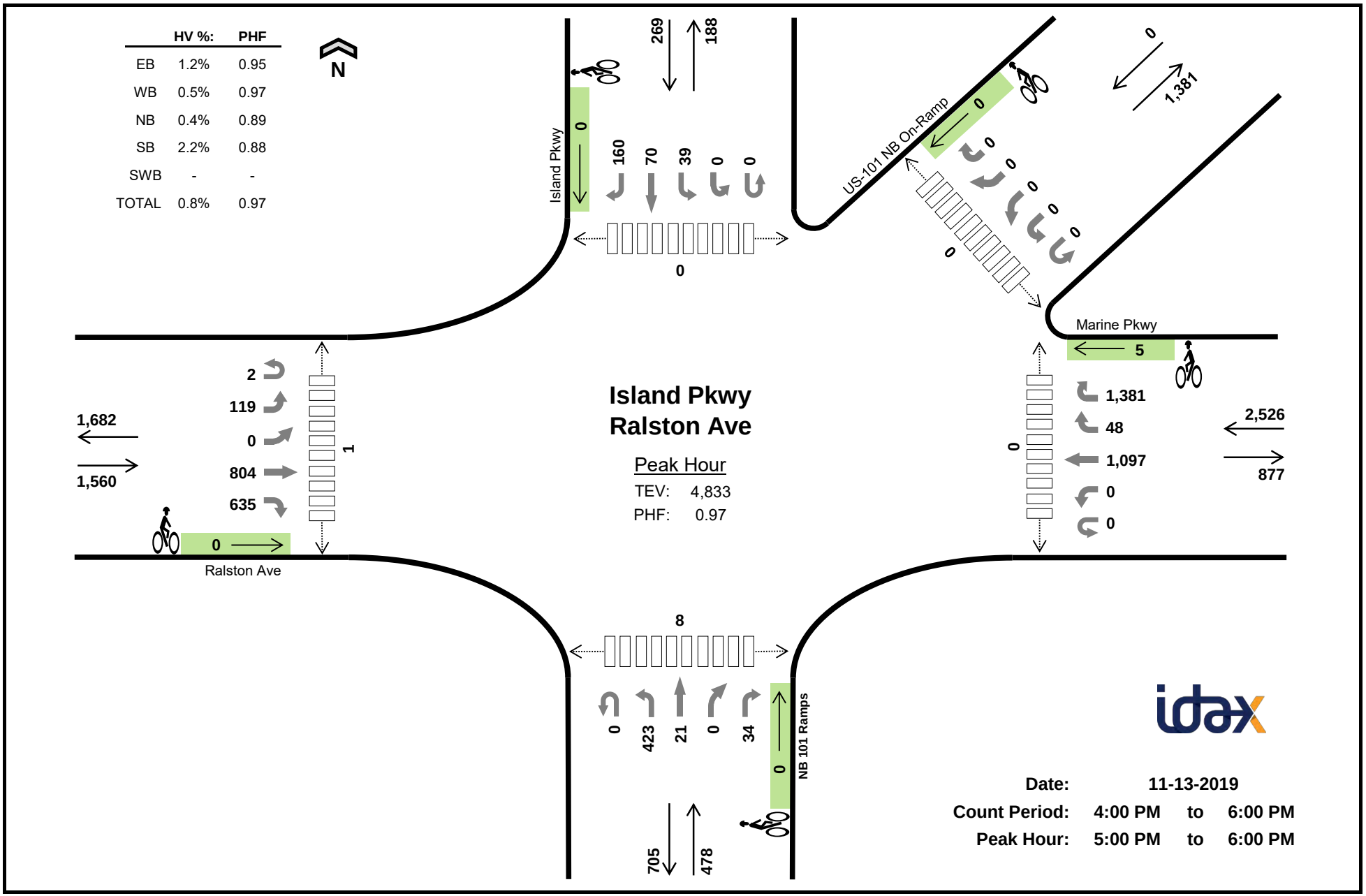
Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SWB	Total	EB	WB	NB	SB	SWB	Total	East	West	North	South	Northeast	Total
7:00 AM	2	2	6	1	0	*11*	0	0	0	0	0	*0*	0	0	0	1	0	*1*
7:15 AM	4	7	6	0	0	*17*	0	0	1	0	0	*1*	0	0	1	1	0	*2*
7:30 AM	6	8	4	2	0	*20*	0	0	0	0	0	*0*	0	0	0	1	0	*1*
7:45 AM	10	7	2	1	0	*20*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:00 AM	**14**	**5**	**2**	**2**	**0**	***23***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**5**	**0**	***7***
8:15 AM	**10**	**6**	**4**	**2**	**0**	***22***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**3**	**0**	***4***
8:30 AM	**13**	**5**	**6**	**4**	**0**	***28***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
8:45 AM	**13**	**11**	**1**	**3**	**0**	***28***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	**0**	***3***
Count Total	72	51	31	15	0	*169*	0	0	1	0	0	*1*	0	3	1	15	0	*19*
Peak Hr	**50**	**27**	**13**	**11**	**0**	***101***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**12**	**0**	*15*

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave					Marine Pkwy					NB 101 Ramps					Island Pkwy					US-101 NB On-Ramp					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Southwestbound						
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	0	2	0	0	0	2	0	0	0	5	1	0	0	0	0	1	0	0	0	0	0	0	0	11	0
7:15 AM	0	0	0	2	2	0	0	7	0	0	0	4	0	0	2	0	0	0	0	0	0	0	0	0	0	17	0
7:30 AM	0	0	0	4	2	0	0	7	0	1	0	2	2	0	0	0	0	1	0	1	0	0	0	0	0	20	0
7:45 AM	0	0	0	5	5	0	0	5	1	1	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	20	68
8:00 AM	**0**	**1**	**0**	**11**	**2**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**23**	80
8:15 AM	**0**	**3**	**0**	**3**	**4**	**0**	**0**	**5**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**22**	85
8:30 AM	**0**	**1**	**0**	**7**	**5**	**0**	**0**	**4**	**0**	**1**	**0**	**2**	**3**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	93
8:45 AM	**0**	**5**	**0**	**4**	**4**	**0**	**0**	**7**	**1**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**28**	**101**
Count Total	0	10	0	38	24	0	0	41	3	7	0	20	7	0	4	0	0	9	1	5	0	0	0	0	0	169	0
Peak Hour	**0**	**10**	**0**	**25**	**15**	**0**	**0**	**20**	**2**	**5**	**0**	**7**	**4**	**0**	**2**	**0**	**0**	**6**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	101	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Ralston Ave					Marine Pkwy					NB 101 Ramps					Island Pkwy					US-101 NB On-Ramp					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Southwestbound						
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**


HV %: PHF
EB 1.2% 0.95
WB 0.5% 0.97
NB 0.4% 0.89
SB 2.2% 0.88
SWB - -
TOTAL 0.8% 0.97
N
Island Pkwy
269
188
0
160
70
39
0
0
0
US-101 NB On-Ramp
0
0
1,381
0
0
0
0
0
0
Marine Pkwy
5
1,381
48
1,097
0
0
2,526
877
0
1,682
1,560
2
119
0
804
635
1
0
Ralston Ave
Island Pkwy
Ralston Ave
Peak Hour
TEV: 4,833
PHF: 0.97
8
0
423
21
0
34
0
NB 101 Ramps
705
478
idax
Date: 11-13-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Two-Hour Count Summaries

Interval Start		Ralston Ave Eastbound					Marine Pkwy Westbound					NB 101 Ramps Northbound					Island Pkwy Southbound					US-101 NB On-Ramp Southwestbound					15-min Total	Rolling One Hour
		UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM		1	27	0	148	173	0	0	216	6	224	0	140	4	0	14	0	0	8	17	36	0	0	0	0	0	1,014	0
4:15 PM		0	24	0	155	148	0	0	244	9	268	0	120	13	0	10	0	0	2	16	31	0	0	0	0	0	1,040	0
4:30 PM		0	20	0	188	170	0	0	287	6	289	0	102	4	0	12	0	0	12	17	42	0	0	0	0	0	1,149	0
4:45 PM		2	19	0	204	134	0	0	248	9	301	0	109	6	0	4	0	0	4	13	35	0	0	0	0	0	1,088	4,291
5:00 PM		**0**	**27**	**0**	**183**	**175**	**0**	**0**	**289**	**9**	**347**	**0**	**121**	**7**	**0**	**6**	**0**	**0**	**11**	**22**	**43**	**0**	**0**	**0**	**0**	**0**	**1,240**	4,517
5:15 PM		**0**	**37**	**0**	**199**	**173**	**0**	**0**	**286**	**14**	**342**	**0**	**115**	**5**	**0**	**9**	**0**	**0**	**11**	**19**	**37**	**0**	**0**	**0**	**0**	**0**	**1,247**	4,724
5:30 PM		**1**	**25**	**0**	**218**	**165**	**0**	**0**	**300**	**16**	**332**	**0**	**107**	**1**	**0**	**7**	**0**	**0**	**6**	**17**	**51**	**0**	**0**	**0**	**0**	**0**	**1,246**	4,821
5:45 PM		**1**	**30**	**0**	**204**	**122**	**0**	**0**	**222**	**9**	**360**	**0**	**80**	**8**	**0**	**12**	**0**	**0**	**11**	**12**	**29**	**0**	**0**	**0**	**0**	**0**	**1,100**	**4,833**
Count Total		5	209	0	1,499	1,260	0	0	2,092	78	2,463	0	894	48	0	74	0	0	65	133	304	0	0	0	0	0	9,124	0
Peak Hour	**All**	**2**	**119**	**0**	**804**	**635**	**0**	**0**	**1,097**	**48**	**1,381**	**0**	**423**	**21**	**0**	**34**	**0**	**0**	**39**	**70**	**160**	**0**	**0**	**0**	**0**	**0**	**4,833**	**0**
	HV	**0**	**1**	**0**	**12**	**5**	**0**	**0**	**7**	**2**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**38**	**0**
	HV%	**0%**	**1%**	**-**	**1%**	**1%**	**-**	**-**	**1%**	**4%**	**0%**	**-**	**0%**	**5%**	**-**	**0%**	**-**	**-**	**10%**	**1%**	**1%**	**-**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SWB	Total	EB	WB	NB	SB	SWB	Total	East	West	North	South	Northeast	Total
4:00 PM	6	4	0	2	0	*12*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
4:15 PM	1	6	1	3	0	*11*	0	1	0	0	0	*1*	0	0	0	3	0	*3*
4:30 PM	8	5	1	1	0	*15*	1	0	0	0	0	*1*	0	1	2	2	0	*5*
4:45 PM	6	3	1	1	0	*11*	0	1	0	0	0	*1*	0	0	0	0	0	*0*
5:00 PM	**11**	**2**	**1**	**2**	**0**	***16***	**0**	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**1**	**0**	***1***
5:15 PM	**2**	**3**	**0**	**3**	**0**	***8***	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**2**	**0**	***3***
5:30 PM	**2**	**5**	**0**	**1**	**0**	***8***	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**3**	**0**	***3***
5:45 PM	**3**	**2**	**1**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	**0**	***2***
Count Total	39	30	5	13	0	*87*	1	7	0	0	0	*8*	0	2	2	13	0	*17*
Peak Hr	**18**	**12**	**2**	**6**	**0**	***38***	**0**	**5**	**0**	**0**	**0**	***5***	**0**	**1**	**0**	**8**	**0**	*9*

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Ralston Ave					Marine Pkwy					NB 101 Ramps					Island Pkwy					US-101 NB On-Ramp					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Southwestbound						
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM	0	1	0	2	3	0	0	2	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	12	0
4:15 PM	0	0	0	0	1	0	0	2	1	3	0	0	1	0	0	0	0	1	0	2	0	0	0	0	0	11	0
4:30 PM	0	0	0	5	3	0	0	3	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	15	0
4:45 PM	0	1	0	3	2	0	0	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	11	49
5:00 PM	**0**	**1**	**0**	**8**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**16**	53
5:15 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	50
5:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	43
5:45 PM	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**38**
Count Total	0	3	0	22	14	0	0	17	6	7	0	3	2	0	0	0	0	8	1	4	0	0	0	0	0	87	0
Peak Hour	**0**	**1**	**0**	**12**	**5**	**0**	**0**	**7**	**2**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	38	**0**

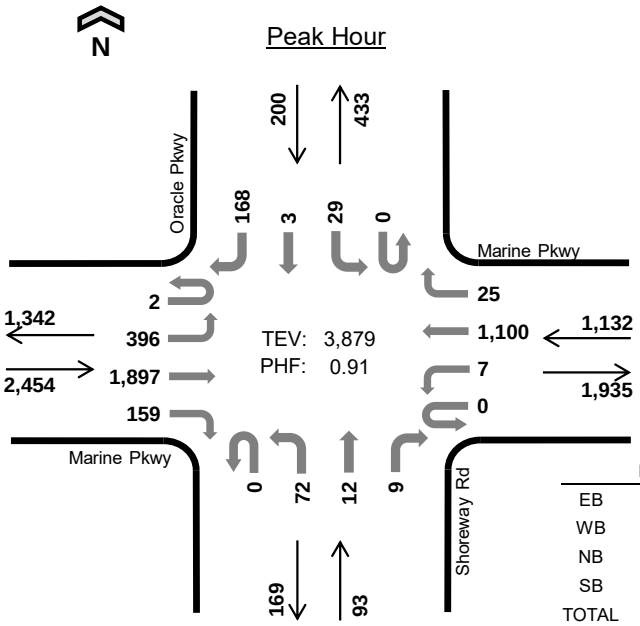
Two-Hour Count Summaries - Bikes

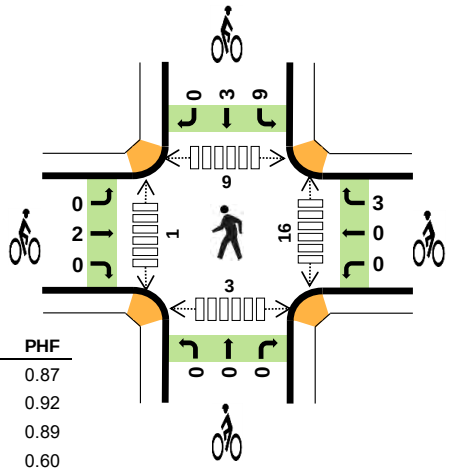
Interval Start	Ralston Ave					Marine Pkwy					NB 101 Ramps					Island Pkwy					US-101 NB On-Ramp					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Southwestbound						
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Count Total	0	0	0	0	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5	**0**

www

Shoreway Rd
Marine Pkwy

Date: 03-21-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	1.4%	0.87
WB	1.7%	0.92
NB	10.8%	0.89
SB	7.0%	0.60
TOTAL	2.0%	0.91

Two-Hour Count Summaries

Interval Start	Marine Pkwy Eastbound				Marine Pkwy Westbound				Shoreway Rd Northbound				Oracle Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	48	173	24	0	2	150	0	0	13	0	1	0	2	1	6	420	0
7:15 AM	0	36	210	29	1	0	162	0	0	16	0	1	0	1	2	5	463	0
7:30 AM	0	38	281	32	0	2	278	1	0	12	1	1	0	4	1	4	655	0
7:45 AM	0	59	348	46	0	1	253	2	0	14	0	4	0	2	0	14	743	2,281
8:00 AM	**1**	**69**	**434**	**35**	**0**	**1**	**260**	**3**	**0**	**18**	**7**	**1**	**0**	**3**	**0**	**10**	**842**	2,703
8:15 AM	**0**	**97**	**417**	**38**	**0**	**0**	**298**	**3**	**0**	**12**	**3**	**3**	**0**	**5**	**1**	**35**	**912**	3,152
8:30 AM	**1**	**120**	**493**	**40**	**0**	**4**	**297**	**8**	**0**	**21**	**1**	**2**	**0**	**13**	**1**	**69**	**1,070**	3,567
8:45 AM	**0**	**110**	**553**	**46**	**0**	**2**	**245**	**11**	**0**	**21**	**1**	**3**	**0**	**8**	**1**	**54**	**1,055**	**3,879**
Count Total	2	577	2,909	290	1	12	1,943	28	0	127	13	16	0	38	7	197	6,160	0
Peak Hour All	**2**	**396**	**1,897**	**159**	**0**	**7**	**1,100**	**25**	**0**	**72**	**12**	**9**	**0**	**29**	**3**	**168**	**3,879**	**0**
Peak Hour HV	**0**	**7**	**19**	**9**	**0**	**0**	**18**	**1**	**0**	**9**	**0**	**1**	**0**	**2**	**0**	**12**	**78**	**0**
Peak Hour HV%	**0%**	**2%**	**1%**	**6%**	**-**	**0%**	**2%**	**4%**	**-**	**13%**	**0%**	**11%**	**-**	**7%**	**0%**	**7%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	7	4	1	0	*12*	0	0	0	0	*0*	1	0	2	0	*3*
7:15 AM	5	3	2	1	*11*	0	0	0	2	*2*	3	0	2	0	*5*
7:30 AM	8	9	1	1	*19*	0	0	0	4	*4*	2	0	1	0	*3*
7:45 AM	6	5	3	0	*14*	0	1	0	1	*2*	3	0	1	0	*4*
8:00 AM	**13**	**6**	**4**	**0**	***23***	**0**	**1**	**0**	**2**	***3***	**4**	**0**	**5**	**0**	*9*
8:15 AM	**5**	**7**	**3**	**3**	***18***	**2**	**1**	**0**	**4**	***7***	**4**	**1**	**1**	**1**	*7*
8:30 AM	**11**	**2**	**1**	**4**	***18***	**0**	**1**	**0**	**4**	***5***	**6**	**0**	**3**	**1**	*10*
8:45 AM	**6**	**4**	**2**	**7**	***19***	**0**	**0**	**0**	**2**	***2***	**2**	**0**	**0**	**1**	***3***
Count Total	61	40	17	16	*134*	2	4	0	19	*25*	25	1	15	3	*44*
Peak Hour	**35**	**19**	**10**	**14**	***78***	**2**	**3**	**0**	**12**	***17***	**16**	**1**	**9**	**3**	***29***

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ww

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Marine Pkwy Eastbound				Marine Pkwy Westbound				Shoreway Rd Northbound				Oracle Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	3	2	0	0	4	0	0	1	0	0	0	0	0	0	12	0
7:15 AM	0	0	3	2	0	0	3	0	0	2	0	0	0	0	0	1	11	0
7:30 AM	0	2	4	2	0	0	9	0	0	1	0	0	0	1	0	0	19	0
7:45 AM	0	0	4	2	0	0	5	0	0	3	0	0	0	0	0	0	14	56
8:00 AM	**0**	**3**	**6**	**4**	**0**	**0**	**6**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	67
8:15 AM	**0**	**1**	**3**	**1**	**0**	**0**	**7**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**18**	74
8:30 AM	**0**	**2**	**7**	**2**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**18**	73
8:45 AM	**0**	**1**	**3**	**2**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**6**	**19**	**78**
Count Total	0	11	33	17	0	0	39	1	0	16	0	1	0	3	0	13	134	0
Peak Hour	**0**	**7**	**19**	**9**	**0**	**0**	**18**	**1**	**0**	**9**	**0**	**1**	**0**	**2**	**0**	**12**	**78**	**0**

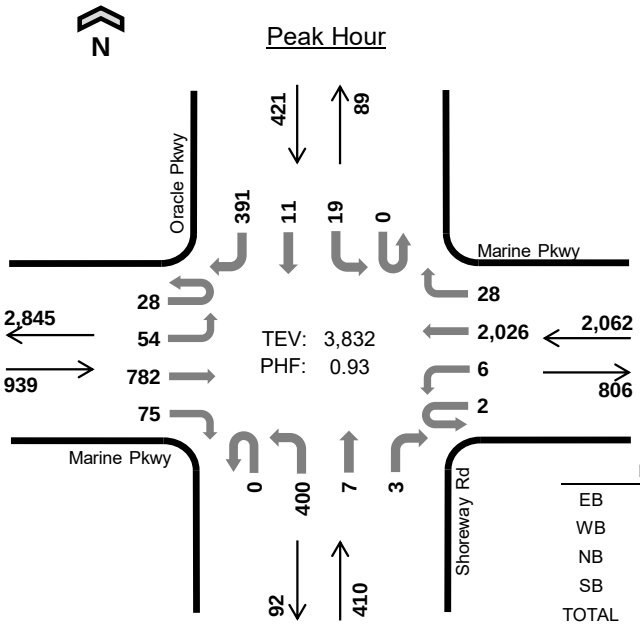
Two-Hour Count Summaries - Bikes

Interval Start	Marine Pkwy Eastbound			Marine Pkwy Westbound			Shoreway Rd Northbound			Oracle Pkwy Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	3	1	0	4	0
7:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	2	8
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**3**	11
8:15 AM	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**1**	**0**	**7**	16
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**0**	**5**	17
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**17**
Count Total	0	2	0	0	0	4	0	0	0	15	4	0	25	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**9**	**3**	**0**	**17**	**0**

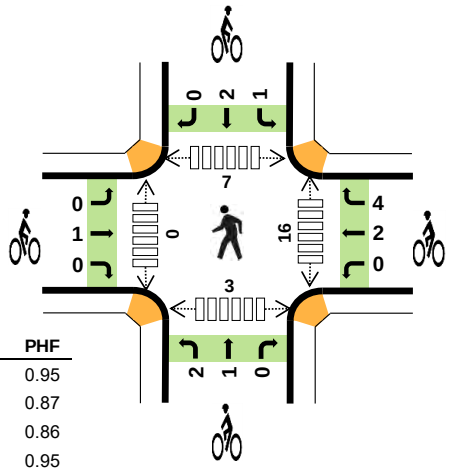
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

www

Shoreway Rd
Marine Pkwy



Date: 03-21-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.8%	0.95
WB	0.7%	0.87
NB	1.5%	0.86
SB	0.2%	0.95
TOTAL	1.0%	0.93

Two-Hour Count Summaries

Interval Start		Marine Pkwy Eastbound				Marine Pkwy Westbound				Shoreway Rd Northbound				Oracle Pkwy Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		3	16	164	18	0	0	463	4	0	39	1	0	0	8	1	122	839	0
4:15 PM		2	13	143	19	0	0	369	4	0	56	3	3	0	5	2	118	737	0
4:30 PM		8	12	159	10	1	2	469	8	0	66	2	2	1	8	2	108	858	0
4:45 PM		**8**	**14**	**176**	**21**	**0**	**3**	**436**	**10**	**0**	**70**	**0**	**1**	**0**	**3**	**1**	**107**	**850**	3,284
5:00 PM		**1**	**11**	**201**	**19**	**1**	**0**	**583**	**11**	**0**	**103**	**1**	**1**	**0**	**7**	**3**	**90**	**1,032**	3,477
5:15 PM		**9**	**17**	**195**	**21**	**0**	**1**	**524**	**2**	**0**	**114**	**4**	**1**	**0**	**5**	**3**	**94**	**990**	3,730
5:30 PM		**10**	**12**	**210**	**14**	**1**	**2**	**483**	**5**	**0**	**113**	**2**	**0**	**0**	**4**	**4**	**100**	**960**	**3,832**
5:45 PM		7	19	194	14	0	1	404	5	0	99	1	1	0	7	1	87	840	3,822
Count Total		48	114	1,442	136	3	9	3,731	49	0	660	14	9	1	47	17	826	7,106	0
Peak Hour	**All**	**28**	**54**	**782**	**75**	**2**	**6**	**2,026**	**28**	**0**	**400**	**7**	**3**	**0**	**19**	**11**	**391**	**3,832**	**0**
	HV	**0**	**5**	**7**	**5**	**0**	**0**	**14**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**38**	**0**
	HV%	**0%**	**9%**	**1%**	**7%**	**0%**	**0%**	**1%**	**0%**	**-**	**2%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	10	4	0	1	*15*	0	0	0	0	*0*	4	0	0	1	*5*
4:15 PM	6	9	3	0	*18*	0	1	1	0	*2*	7	0	0	1	*8*
4:30 PM	3	2	2	1	*8*	0	0	1	0	*1*	6	0	0	1	*7*
4:45 PM	**2**	**3**	**2**	**0**	***7***	**1**	**2**	**0**	**0**	***3***	**2**	**0**	**1**	**0**	*3*
5:00 PM	**7**	**3**	**1**	**1**	***12***	**0**	**0**	**1**	**2**	***3***	**5**	**0**	**0**	**0**	*5*
5:15 PM	**4**	**3**	**1**	**0**	***8***	**0**	**1**	**0**	**0**	***1***	**2**	**0**	**1**	**2**	*5*
5:30 PM	**4**	**5**	**2**	**0**	***11***	**0**	**3**	**2**	**1**	***6***	**7**	**0**	**5**	**1**	***13***
5:45 PM	0	2	3	0	*5*	0	1	0	0	*1*	2	0	0	1	*3*
Count Total	36	31	14	3	*84*	1	8	5	3	*17*	35	0	7	7	*49*
Peak Hour	**17**	**14**	**6**	**1**	***38***	**1**	**6**	**3**	**3**	***13***	**16**	**0**	**7**	**3**	***26***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Marine Pkwy Eastbound				Marine Pkwy Westbound				Shoreway Rd Northbound				Oracle Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	4	3	0	0	4	0	0	0	0	0	0	0	0	1	15	0
4:15 PM	0	1	0	5	0	0	9	0	0	3	0	0	0	0	0	0	18	0
4:30 PM	0	1	2	0	0	0	2	0	0	1	0	1	0	0	0	1	8	0
4:45 PM	**0**	**0**	**1**	**1**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	48
5:00 PM	**0**	**2**	**3**	**2**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**12**	45
5:15 PM	**0**	**2**	**1**	**1**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	35
5:30 PM	**0**	**1**	**2**	**1**	**0**	**0**	**5**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**38**
5:45 PM	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	5	36
Count Total	0	10	13	13	0	0	31	0	0	13	0	1	0	0	0	3	84	0
Peak Hour	**0**	**5**	**7**	**5**	**0**	**0**	**14**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**38**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Marine Pkwy Eastbound			Marine Pkwy Westbound			Shoreway Rd Northbound			Oracle Pkwy Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:30 PM	**0**	**0**	**0**	**0**	**1**	**2**	**1**	**1**	**0**	**1**	**0**	**0**	**6**	**13**
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	11
Count Total	0	1	0	0	3	5	2	3	0	1	2	0	17	0
Peak Hour	**0**	**1**	**0**	**0**	**2**	**4**	**2**	**1**	**0**	**1**	**2**	**0**	**13**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

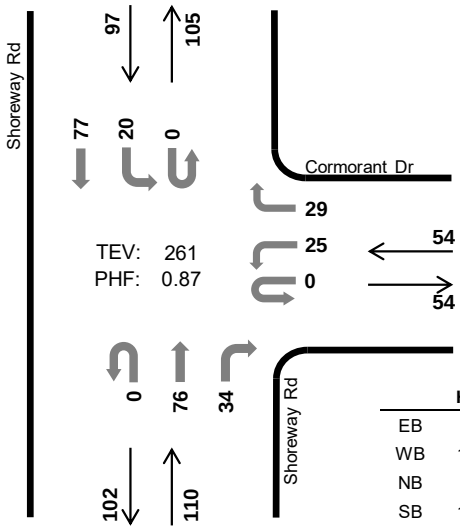
www

Shoreway Rd
Cormorant Dr

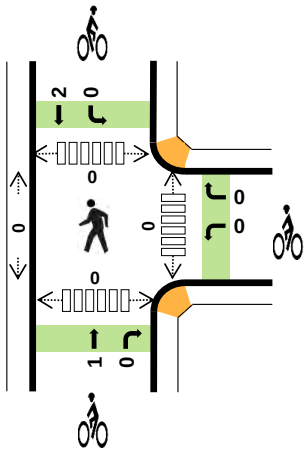
Date: 03-21-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	13.0%	0.71
NB	6.4%	0.95
SB	11.3%	0.90
TOTAL	9.6%	0.87



Two-Hour Count Summaries

Interval Start		0 Eastbound				Cormorant Dr Westbound				Shoreway Rd Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	1	3	0	5	0	0	9	6	0	2	8	0	34	0
7:15 AM		0	0	0	0	0	3	0	5	0	0	8	6	0	3	12	0	37	0
7:30 AM		0	0	0	0	0	8	0	3	0	0	11	5	0	2	13	0	42	0
7:45 AM		0	0	0	0	0	8	0	10	0	0	15	10	0	6	16	0	65	178
8:00 AM		**0**	**0**	**0**	**0**	**0**	**11**	**0**	**8**	**0**	**0**	**24**	**5**	**0**	**5**	**22**	**0**	**75**	219
8:15 AM		**0**	**0**	**0**	**0**	**0**	**3**	**0**	**6**	**0**	**0**	**21**	**8**	**0**	**6**	**12**	**0**	**56**	238
8:30 AM		**0**	**0**	**0**	**0**	**0**	**6**	**0**	**8**	**0**	**0**	**14**	**9**	**0**	**6**	**21**	**0**	**64**	260
8:45 AM		**0**	**0**	**0**	**0**	**0**	**5**	**0**	**7**	**0**	**0**	**17**	**12**	**0**	**3**	**22**	**0**	**66**	**261**
Count Total		0	0	0	0	1	47	0	52	0	0	119	61	0	33	126	0	439	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**29**	**0**	**0**	**76**	**34**	**0**	**20**	**77**	**0**	**261**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**0**	**0**	**5**	**2**	**0**	**0**	**11**	**0**	**25**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**20%**	**-**	**7%**	**-**	**-**	**7%**	**6%**	**-**	**0%**	**14%**	**-**	**10%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	1	2	*4*	0	0	1	0	*1*	0	0	0	0	*0*
7:30 AM	0	2	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	1	2	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**2**	**2**	**5**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**2**	**1**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:45 AM	**0**	**3**	**2**	**2**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	0	11	11	16	*38*	0	0	2	2	*4*	0	0	0	0	*0*
Peak Hr	**0**	**7**	**7**	**11**	***25***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

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WWW

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Cormorant Dr				Shoreway Rd				Shoreway Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	0	4	0
7:30 AM	0	0	0	0	0	2	0	0	0	0	0	1	0	1	1	0	5	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3	13
8:00 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**9**	21
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	21
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**5**	21
8:45 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**7**	**25**
Count Total	0	0	0	0	0	8	0	3	0	0	7	4	0	2	14	0	38	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**0**	**0**	**5**	**2**	**0**	**0**	**11**	**0**	**25**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			Cormorant Dr			Shoreway Rd			Shoreway Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**
Count Total	0	0	0	0	0	0	0	2	0	0	2	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

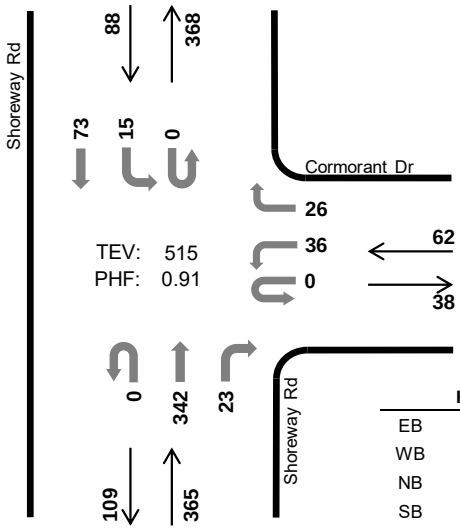
www

Shoreway Rd
Cormorant Dr

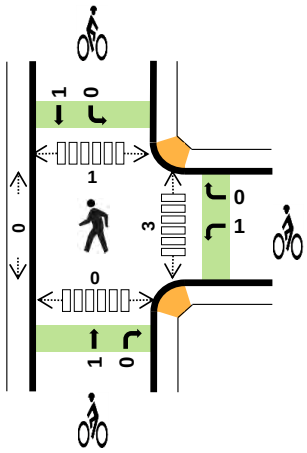
Date: 03-21-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	1.6%	0.78
NB	1.9%	0.91
SB	0.0%	0.71
TOTAL	1.6%	0.91



Two-Hour Count Summaries

Interval Start		0 Eastbound				Cormorant Dr Westbound				Shoreway Rd Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	9	0	5	0	0	27	4	0	6	11	0	62	0
4:15 PM		0	0	0	0	0	4	0	5	0	0	40	2	0	7	15	0	73	0
4:30 PM		0	0	0	0	0	5	0	8	0	0	44	4	0	5	18	0	84	0
4:45 PM		0	0	0	0	0	6	0	6	0	0	52	5	0	1	20	0	90	309
5:00 PM		**0**	**0**	**0**	**0**	**0**	**7**	**0**	**5**	**0**	**0**	**76**	**9**	**0**	**3**	**28**	**0**	**128**	375
5:15 PM		**0**	**0**	**0**	**0**	**0**	**13**	**0**	**7**	**0**	**0**	**96**	**4**	**0**	**6**	**16**	**0**	**142**	444
5:30 PM		**0**	**0**	**0**	**0**	**0**	**5**	**0**	**7**	**0**	**0**	**89**	**5**	**0**	**3**	**20**	**0**	**129**	489
5:45 PM		**0**	**0**	**0**	**0**	**0**	**11**	**0**	**7**	**0**	**0**	**81**	**5**	**0**	**3**	**9**	**0**	**116**	**515**
Count Total		0	0	0	0	0	60	0	50	0	0	505	38	0	34	137	0	824	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**36**	**0**	**26**	**0**	**0**	**342**	**23**	**0**	**15**	**73**	**0**	**515**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**8**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**0%**	**-**	**-**	**2%**	**0%**	**-**	**0%**	**0%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	2	1	*4*	0	0	1	1	*2*	0	0	0	0	*0*
4:30 PM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	2	1	1	*4*	0	0	0	1	*1*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	*3*
5:15 PM	**0**	**0**	**2**	**0**	***2***	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**0**	***1***	**1**	**0**	**0**	**0**	*1*
5:45 PM	**0**	**1**	**3**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	5	11	3	*19*	0	1	2	3	*6*	3	0	1	0	*4*
Peak Hr	**0**	**1**	**7**	**0**	***8***	**0**	**1**	**1**	**1**	***3***	**3**	**0**	**1**	**0**	***4***

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WWW

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Cormorant Dr				Shoreway Rd				Shoreway Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	0	4	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0
4:45 PM	0	0	0	0	0	1	0	1	0	0	1	0	0	0	1	0	4	11
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	**8**
Count Total	0	0	0	0	0	2	0	3	0	0	11	0	0	1	2	0	19	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

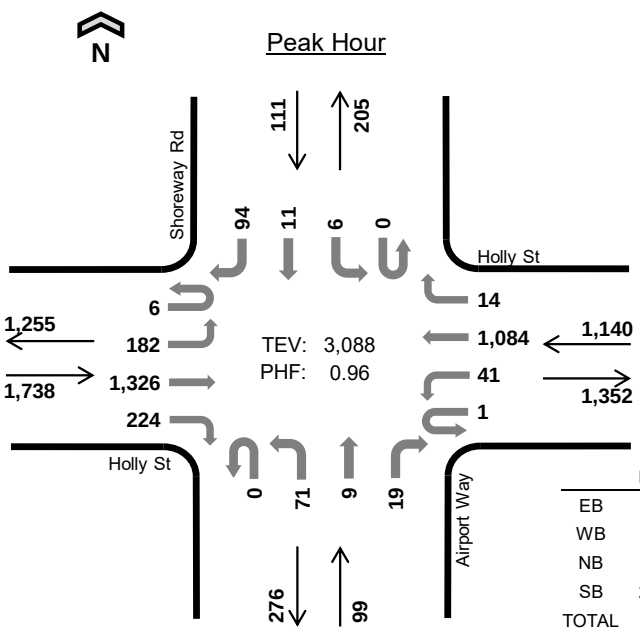
Two-Hour Count Summaries - Bikes

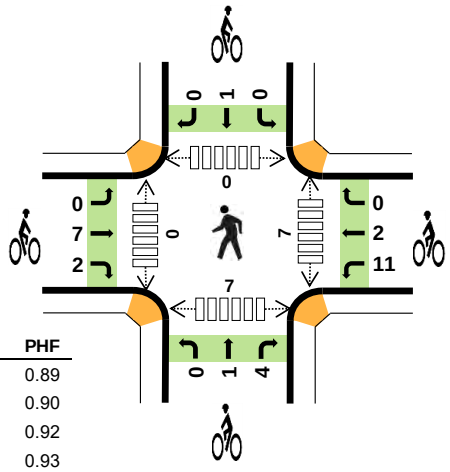
Interval Start	0			Cormorant Dr			Shoreway Rd			Shoreway Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	4
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Count Total	0	0	0	1	0	0	0	2	0	0	3	0	6	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

www

Shoreway Rd
Holly St





	HV %:	PHF
EB	3.5%	0.89
WB	1.6%	0.90
NB	9.1%	0.92
SB	23.4%	0.93
TOTAL	3.7%	0.96

Date: 03-21-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

Two-Hour Count Summaries

Interval Start		Holly St Eastbound				Holly St Westbound				Airport Way Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	30	150	38	0	4	200	2	0	28	0	2	0	0	1	19	474	0
7:15 AM		2	27	172	35	0	3	201	1	0	26	2	5	0	1	1	12	488	0
7:30 AM		1	45	229	31	0	0	261	1	0	13	0	5	0	2	0	13	601	0
7:45 AM		1	50	251	42	0	4	242	2	0	15	0	3	0	3	1	11	625	2,188
8:00 AM		**1**	**55**	**305**	**47**	**0**	**8**	**255**	**3**	**0**	**16**	**4**	**3**	**0**	**2**	**2**	**26**	**727**	2,441
8:15 AM		**1**	**48**	**306**	**50**	**0**	**12**	**303**	**3**	**0**	**21**	**2**	**4**	**0**	**2**	**4**	**22**	**778**	2,731
8:30 AM		**1**	**46**	**329**	**63**	**1**	**8**	**271**	**3**	**0**	**19**	**2**	**5**	**0**	**0**	**4**	**25**	**777**	2,907
8:45 AM		**3**	**33**	**386**	**64**	**0**	**13**	**255**	**5**	**0**	**15**	**1**	**7**	**0**	**2**	**1**	**21**	**806**	**3,088**
Count Total		10	334	2,128	370	1	52	1,988	20	0	153	11	34	0	12	14	149	5,276	0
Peak Hour	**All**	**6**	**182**	**1,326**	**224**	**1**	**41**	**1,084**	**14**	**0**	**71**	**9**	**19**	**0**	**6**	**11**	**94**	**3,088**	**0**
	HV	**0**	**22**	**19**	**20**	**0**	**4**	**13**	**1**	**0**	**7**	**1**	**1**	**0**	**0**	**0**	**26**	**114**	**0**
	HV%	**0%**	**12%**	**1%**	**9%**	**0%**	**10%**	**1%**	**7%**	**-**	**10%**	**11%**	**5%**	**-**	**0%**	**0%**	**28%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	12	2	8	9	*31*	1	3	0	0	*4*	0	0	0	2	*2*
7:15 AM	7	4	9	8	*28*	1	3	0	0	*4*	1	0	0	0	*1*
7:30 AM	12	5	3	6	*26*	3	3	2	0	*8*	5	0	0	2	*7*
7:45 AM	10	1	9	8	*28*	0	2	0	0	*2*	5	0	0	1	*6*
8:00 AM	**14**	**3**	**1**	**7**	***25***	**2**	**2**	**4**	**0**	***8***	**1**	**0**	**0**	**0**	*1*
8:15 AM	**18**	**7**	**4**	**6**	***35***	**2**	**3**	**1**	**1**	***7***	**6**	**0**	**0**	**4**	*10*
8:30 AM	**13**	**3**	**2**	**7**	***25***	**3**	**5**	**0**	**0**	***8***	**0**	**0**	**0**	**2**	*2*
8:45 AM	**16**	**5**	**2**	**6**	***29***	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**1**	***1***
Count Total	102	30	38	57	*227*	14	24	7	1	*46*	18	0	0	12	*30*
Peak Hour	**61**	**18**	**9**	**26**	***114***	**9**	**13**	**5**	**1**	***28***	**7**	**0**	**0**	**7**	***14***

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ww

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Holly St Eastbound				Holly St Westbound				Airport Way Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	7	3	2	0	0	2	0	0	7	0	1	0	0	1	8	31	0
7:15 AM	0	3	4	0	0	0	4	0	0	5	0	4	0	0	1	7	28	0
7:30 AM	0	6	6	0	0	0	4	1	0	3	0	0	0	0	0	6	26	0
7:45 AM	0	3	6	1	0	0	1	0	0	6	0	3	0	1	1	6	28	113
8:00 AM	**0**	**7**	**6**	**1**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**25**	107
8:15 AM	**0**	**3**	**6**	**9**	**0**	**1**	**5**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	**35**	114
8:30 AM	**0**	**5**	**3**	**5**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**7**	**25**	113
8:45 AM	**0**	**7**	**4**	**5**	**0**	**1**	**4**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**29**	**114**
Count Total	0	41	38	23	0	4	24	2	0	28	1	9	0	1	3	53	227	0
Peak Hour	**0**	**22**	**19**	**20**	**0**	**4**	**13**	**1**	**0**	**7**	**1**	**1**	**0**	**0**	**0**	**26**	**114**	**0**

Two-Hour Count Summaries - Bikes

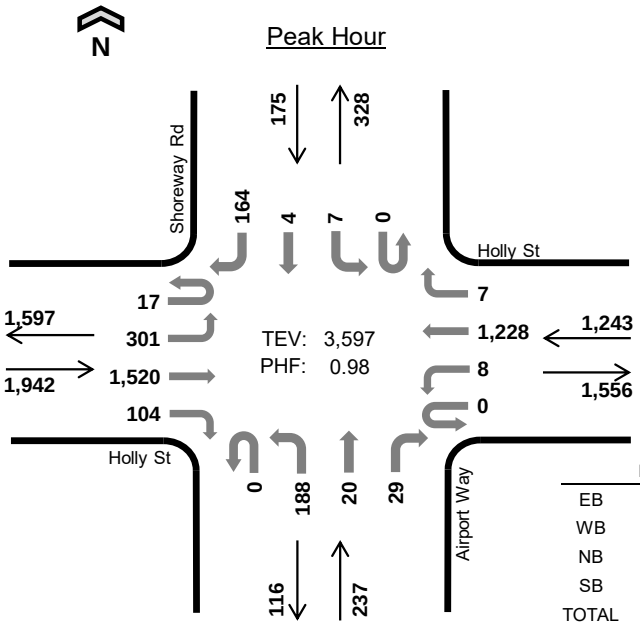
Interval Start	Holly St Eastbound			Holly St Westbound			Airport Way Northbound			Shoreway Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	1	3	0	0	0	0	0	0	0	0	4	0
7:15 AM	0	1	0	1	2	0	0	0	0	0	0	0	4	0
7:30 AM	1	2	0	3	0	0	0	0	2	0	0	0	8	0
7:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	2	18
8:00 AM	**0**	**1**	**1**	**1**	**1**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**8**	22
8:15 AM	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**7**	25
8:30 AM	**0**	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	25
8:45 AM	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**28**
Count Total	1	10	3	20	4	0	0	1	6	0	1	0	46	0
Peak Hour	**0**	**7**	**2**	**11**	**2**	**0**	**0**	**1**	**4**	**0**	**1**	**0**	**28**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

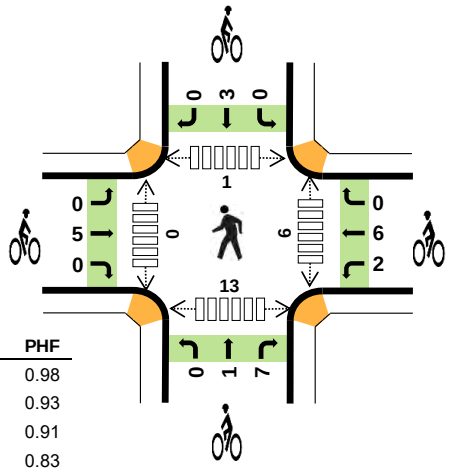
www

Shoreway Rd
Holly St

Date: 03-21-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.3%	0.98
WB	1.2%	0.93
NB	1.3%	0.91
SB	1.7%	0.83
TOTAL	1.3%	0.98



Two-Hour Count Summaries

Interval Start		Holly St Eastbound				Holly St Westbound				Airport Way Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		7	28	292	20	0	6	260	6	0	55	0	6	0	0	0	45	725	0
4:15 PM		5	36	266	31	1	6	253	2	0	42	2	3	0	4	0	35	686	0
4:30 PM		7	36	269	21	0	5	251	3	0	42	1	4	0	4	1	42	686	0
4:45 PM		11	48	361	26	0	2	252	4	0	40	3	12	0	0	0	35	794	2,891
5:00 PM		**6**	**69**	**367**	**22**	**0**	**1**	**332**	**1**	**0**	**48**	**7**	**10**	**0**	**2**	**2**	**49**	**916**	3,082
5:15 PM		**5**	**82**	**369**	**31**	**0**	**2**	**313**	**3**	**0**	**47**	**4**	**13**	**0**	**2**	**0**	**48**	**919**	3,315
5:30 PM		**4**	**88**	**373**	**29**	**0**	**3**	**303**	**3**	**0**	**51**	**5**	**3**	**0**	**3**	**1**	**32**	**898**	3,527
5:45 PM		**2**	**62**	**411**	**22**	**0**	**2**	**280**	**0**	**0**	**42**	**4**	**3**	**0**	**0**	**1**	**35**	**864**	**3,597**
Count Total		47	449	2,708	202	1	27	2,244	22	0	367	26	54	0	15	5	321	6,488	0
Peak Hour	**All**	**17**	**301**	**1,520**	**104**	**0**	**8**	**1,228**	**7**	**0**	**188**	**20**	**29**	**0**	**7**	**4**	**164**	**3,597**	**0**
	HV	**0**	**8**	**8**	**9**	**0**	**0**	**15**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**3**	**46**	**0**
	HV%	**0%**	**3%**	**1%**	**9%**	**-**	**0%**	**1%**	**0%**	**-**	**1%**	**0%**	**3%**	**-**	**0%**	**0%**	**2%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	10	7	1	1	*19*	1	0	1	0	*2*	2	0	0	0	*2*
4:15 PM	16	4	2	3	*25*	0	0	2	1	*3*	1	0	0	2	*3*
4:30 PM	3	4	0	1	*8*	1	1	0	0	*2*	0	0	0	2	*2*
4:45 PM	12	1	2	0	*15*	0	5	1	1	*7*	0	0	0	1	*1*
5:00 PM	**5**	**3**	**1**	**1**	***10***	**3**	**2**	**0**	**0**	***5***	**2**	**0**	**0**	**5**	*7*
5:15 PM	**8**	**5**	**1**	**1**	***15***	**0**	**1**	**1**	**3**	***5***	**3**	**0**	**0**	**2**	*5*
5:30 PM	**6**	**5**	**0**	**0**	***11***	**2**	**2**	**4**	**0**	***8***	**1**	**0**	**0**	**3**	*4*
5:45 PM	**6**	**2**	**1**	**1**	***10***	**0**	**3**	**3**	**0**	***6***	**0**	**0**	**1**	**3**	***4***
Count Total	66	31	8	8	*113*	7	14	12	5	*38*	9	0	1	18	*28*
Peak Hour	**25**	**15**	**3**	**3**	***46***	**5**	**8**	**8**	**3**	***24***	**6**	**0**	**1**	**13**	***20***

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WW

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Holly St Eastbound				Holly St Westbound				Airport Way Northbound				Shoreway Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	2	4	0	1	6	0	0	1	0	0	0	0	0	1	19	0
4:15 PM	0	1	7	8	0	0	4	0	0	1	0	1	0	0	0	3	25	0
4:30 PM	0	0	1	2	0	0	4	0	0	0	0	0	0	0	1	0	8	0
4:45 PM	0	2	4	6	0	0	1	0	0	1	0	1	0	0	0	0	15	67
5:00 PM	**0**	**3**	**1**	**1**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	58
5:15 PM	**0**	**4**	**2**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**15**	48
5:30 PM	**0**	**0**	**2**	**4**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	51
5:45 PM	**0**	**1**	**3**	**2**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	**46**
Count Total	0	15	22	29	0	1	30	0	0	5	0	3	0	0	1	7	113	0
Peak Hour	**0**	**8**	**8**	**9**	**0**	**0**	**15**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**3**	**46**	**0**

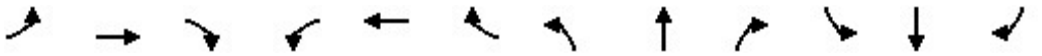
Two-Hour Count Summaries - Bikes

Interval Start	Holly St Eastbound			Holly St Westbound			Airport Way Northbound			Shoreway Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	2	0	1	0	3	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	5	0	0	0	1	0	1	0	7	14
5:00 PM	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	17
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**5**	19
5:30 PM	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**8**	25
5:45 PM	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**24**
Count Total	0	7	0	2	12	0	1	1	10	0	5	0	38	0
Peak Hour	**0**	**5**	**0**	**2**	**6**	**0**	**0**	**1**	**7**	**0**	**3**	**0**	**24**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

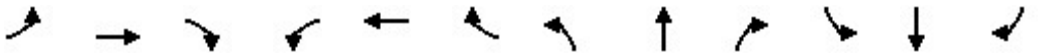
Appendix B

Intersection Level of Service Calculations



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Future Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86	0.86		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3014	3162		1595	3353	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3014	3162		1595	3353	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	110	873	16	201	691	193	105	536	212	357	770	80
RTOR Reduction (vph)	0	1	0	0	0	134	0	0	152	0	0	47
Lane Group Flow (vph)	99	899	0	181	711	59	105	536	60	357	770	33
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	37.0	37.0		31.0	31.0	31.0	16.0	31.7	31.7	29.3	45.0	45.0
Effective Green, g (s)	37.0	37.0		31.0	31.0	31.0	16.0	31.7	31.7	29.3	45.0	45.0
Actuated g/C Ratio	0.26	0.26		0.21	0.21	0.21	0.11	0.22	0.22	0.20	0.31	0.31
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	769	806		341	716	335	193	766	342	354	1087	486
v/s Ratio Prot	0.03	c0.28		0.11	c0.21		0.06	0.15		c0.20	c0.22	
v/s Ratio Perm						0.04			0.04			0.02
v/c Ratio	0.13	1.12		0.53	0.99	0.17	0.54	0.70	0.17	1.01	0.71	0.07
Uniform Delay, d1	41.6	54.0		50.6	56.9	46.6	61.0	52.3	46.0	57.9	44.2	35.2
Progression Factor	1.00	1.00		0.27	0.32	0.20	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	68.4		3.8	25.5	0.7	10.6	2.8	0.2	50.0	3.9	0.3
Delay (s)	41.9	122.4		17.4	43.9	10.1	71.6	55.1	46.3	107.8	48.1	35.5
Level of Service	D	F		B	D	B	E	E	D	F	D	D
Approach Delay (s)		114.5			33.5			54.9			64.9	
Approach LOS		F			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	66.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	1220	30	41	787	24	54	102	99	178	179	211
Future Volume (vph)	149	1220	30	41	787	24	54	102	99	178	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3526		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.47	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1770	3526		1770	3539	1583	874	1863	1583	1170	1863	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	154	1258	31	42	811	25	56	105	102	184	185	218
RTOR Reduction (vph)	0	1	0	0	0	19	0	0	79	0	0	117
Lane Group Flow (vph)	154	1288	0	42	811	6	56	105	23	184	185	101
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	62.6	62.6		37.4	37.4	37.4	33.0	33.0	33.0	33.0	33.0	33.0
Effective Green, g (s)	62.6	62.6		37.4	37.4	37.4	33.0	33.0	33.0	33.0	33.0	33.0
Actuated g/C Ratio	0.43	0.43		0.26	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	764	1522		456	912	408	198	423	360	266	423	360
v/s Ratio Prot	0.09	c0.37		0.02	c0.23			0.06			0.10	
v/s Ratio Perm						0.00	0.06		0.01	c0.16		0.06
v/c Ratio	0.20	0.85		0.09	0.89	0.02	0.28	0.25	0.06	0.69	0.44	0.28
Uniform Delay, d1	25.6	36.9		40.9	51.8	40.1	46.2	45.8	43.9	51.3	48.0	46.2
Progression Factor	0.54	0.52		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.7		0.1	10.6	0.0	3.5	1.4	0.3	13.8	3.3	1.9
Delay (s)	14.1	20.7		41.0	62.4	40.1	49.8	47.2	44.2	65.1	51.3	48.1
Level of Service	B	C		D	E	D	D	D	D	E	D	D
Approach Delay (s)		20.0			60.7			46.6			54.5	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1501	25	51	864	1	79
Future Volume (Veh/h)	1501	25	51	864	1	79
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1632	27	55	939	1	86
Pedestrians	4				19	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			730		
pX, platoon unblocked			0.67		0.76	0.67
vC, conflicting volume			1678		2248	848
vC1, stage 1 conf vol					1664	
vC2, stage 2 conf vol					584	
vCu, unblocked vol			1022		889	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			88		100	88
cM capacity (veh/h)			443		202	712

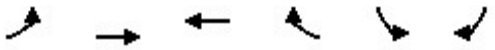
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	1088	571	55	470	470	87
Volume Left	0	0	55	0	0	1
Volume Right	0	27	0	0	0	86
cSH	1700	1700	443	1700	1700	692
Volume to Capacity	0.64	0.34	0.12	0.28	0.28	0.13
Queue Length 95th (ft)	0	0	11	0	0	11
Control Delay (s)	0.0	0.0	14.3	0.0	0.0	11.0
Lane LOS			B			B
Approach Delay (s)	0.0		0.8			11.0
Approach LOS						B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1540	0	14	812	207	27	25	57	432	9	78
Future Volume (vph)	86	1540	0	14	812	207	27	25	57	432	9	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1752	3505		1752	3505	1470		1798	1568		1759	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.65	1.00		0.69	1.00
Satd. Flow (perm)	1752	3505		1752	3505	1470		1201	1568		1272	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	92	1656	0	15	873	223	29	27	61	465	10	84
RTOR Reduction (vph)	0	0	0	0	0	133	0	0	37	0	0	51
Lane Group Flow (vph)	92	1656	0	15	873	90	0	56	24	0	475	33
Confl. Peds. (#/hr)	12					12						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	14.7	65.9		1.2	52.4	52.4		50.9	50.9		50.9	50.9
Effective Green, g (s)	14.7	65.9		1.2	52.4	52.4		50.9	50.9		50.9	50.9
Actuated g/C Ratio	0.11	0.51		0.01	0.40	0.40		0.39	0.39		0.39	0.39
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	198	1776		16	1412	592		470	613		498	613
v/s Ratio Prot	0.05	c0.47		0.01	c0.25							
v/s Ratio Perm						0.06		0.05	0.02		c0.37	0.02
v/c Ratio	0.46	0.93		0.94	0.62	0.15		0.12	0.04		0.95	0.05
Uniform Delay, d1	54.0	30.0		64.4	30.8	24.7		25.2	24.4		38.4	24.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	7.6	10.4		191.7	2.0	0.5		0.1	0.0		28.8	0.0
Delay (s)	61.6	40.4		256.1	32.9	25.2		25.4	24.5		67.2	24.6
Level of Service	E	D		F	C	C		C	C		E	C
Approach Delay (s)		41.5			34.4			24.9			60.8	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

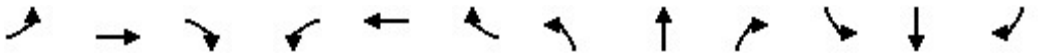
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1241	769	330	1489	264
Future Volume (vph)	0	1241	769	330	1489	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5036	3323		4945	1348
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5036	3323		4945	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1306	809	347	1567	278
RTOR Reduction (vph)	0	0	66	0	2	67
Lane Group Flow (vph)	0	1306	1090	0	1593	183
Confl. Bikes (#/hr)				5		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		34.0	34.0		28.3	28.3
Effective Green, g (s)		34.0	34.0		28.3	28.3
Actuated g/C Ratio		0.47	0.47		0.39	0.39
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2378	1569		1943	529
v/s Ratio Prot		0.26	c0.33		c0.32	
v/s Ratio Perm						0.14
v/c Ratio		0.55	0.69		0.82	0.35
Uniform Delay, d1		13.5	14.9		19.6	15.3
Progression Factor		1.00	1.31		1.00	1.00
Incremental Delay, d2		0.9	1.9		2.8	0.4
Delay (s)		14.5	21.4		22.4	15.7
Level of Service		B	C		C	B
Approach Delay (s)		14.5	21.4		21.5	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	2113	460	0	637	35	387	69	632	40	47	75
Future Volume (vph)	157	2113	460	0	637	35	387	69	632	40	47	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.93	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4949			3539	1583	1610	2751	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4949			3539	1583	1610	2751	2723	1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	171	2297	500	0	692	38	421	75	687	43	51	82
RTOR Reduction (vph)	0	15	0	0	0	24	0	86	395	0	0	77
Lane Group Flow (vph)	171	2782	0	0	692	14	248	389	65	43	51	5
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6			8			7
Actuated Green, G (s)	40.7	99.5			54.8	54.8	20.4	20.4	20.4	9.3	9.3	9.3
Effective Green, g (s)	40.7	99.5			54.8	54.8	20.4	20.4	20.4	9.3	9.3	9.3
Actuated g/C Ratio	0.28	0.69			0.38	0.38	0.14	0.14	0.14	0.06	0.06	0.06
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	500	3419			1346	602	228	389	385	114	120	102
v/s Ratio Prot	0.10	c0.56			0.20		c0.15	0.14		0.02	c0.03	
v/s Ratio Perm						0.01			0.02			0.00
v/c Ratio	0.34	0.81			0.51	0.02	1.09	1.00	0.17	0.38	0.42	0.05
Uniform Delay, d1	41.0	15.7			34.3	27.9	61.8	61.8	54.3	64.6	64.8	63.2
Progression Factor	1.06	1.13			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.7			1.4	0.1	85.0	45.7	0.2	2.1	2.4	0.2
Delay (s)	43.8	19.5			35.8	28.0	146.8	107.5	54.6	66.7	67.2	63.4
Level of Service	D	B			D	C	F	F	D	E	E	E
Approach Delay (s)		20.9			35.3			95.2			65.3	
Approach LOS		C			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	42	139	34	22	86
Future Volume (Veh/h)	25	42	139	34	22	86
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	29	48	160	39	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	328	180			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	328	180			199	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	95	94			98	
cM capacity (veh/h)	638	843			1327	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	29	48	199	124
Volume Left	29	0	0	25
Volume Right	0	48	39	0
cSH	638	843	1700	1327
Volume to Capacity	0.05	0.06	0.12	0.02
Queue Length 95th (ft)	4	5	0	1
Control Delay (s)	10.9	9.5	0.0	1.7
Lane LOS	B	A		A
Approach Delay (s)	10.1		0.0	1.7
Approach LOS	B			

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1897	159	7	1100	25	72	12	9	29	3	168
Future Volume (veh/h)	398	1897	159	7	1100	25	72	12	9	29	3	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	437	2085	175	8	1209	27	88	0	10	32	3	185
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	567	2709	226	18	2676	60	218	0	97	164	15	281
Arrive On Green	0.16	0.57	0.57	0.01	0.41	0.41	0.06	0.00	0.06	0.10	0.10	0.10
Sat Flow, veh/h	3442	4784	398	1774	6498	145	3548	0	1583	1629	153	2787
Grp Volume(v), veh/h	437	1473	787	8	894	342	88	0	10	35	0	185
Grp Sat Flow(s),veh/h/ln	1721	1695	1792	1774	1602	1837	1774	0	1583	1781	0	1393
Q Serve(g_s), s	8.4	23.0	23.4	0.3	9.3	9.3	1.6	0.0	0.4	1.2	0.0	4.4
Cycle Q Clear(g_c), s	8.4	23.0	23.4	0.3	9.3	9.3	1.6	0.0	0.4	1.2	0.0	4.4
Prop In Lane	1.00		0.22	1.00		0.08	1.00		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	567	1920	1015	18	1979	756	218	0	97	180	0	281
V/C Ratio(X)	0.77	0.77	0.78	0.44	0.45	0.45	0.40	0.00	0.10	0.19	0.00	0.66
Avail Cap(c_a), veh/h	884	2066	1092	129	2043	781	2419	0	1080	465	0	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.5	11.5	11.6	33.9	14.6	14.7	31.1	0.0	30.6	28.4	0.0	29.8
Incr Delay (d2), s/veh	2.2	1.7	3.3	15.6	0.2	0.4	1.2	0.0	0.5	0.5	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	11.1	12.3	0.2	4.1	4.7	0.8	0.0	0.2	0.6	0.0	1.8
LnGrp Delay(d),s/veh	29.8	13.1	14.9	49.5	14.8	15.1	32.3	0.0	31.0	28.9	0.0	32.5
LnGrp LOS	C	B	B	D	B	B	C		C	C		C
Approach Vol, veh/h		2697			1244			98			220	
Approach Delay, s/veh		16.3			15.1			32.2			31.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		8.7	5.2	43.5		11.4	15.9	32.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.0	5.0	42.0		18.0	17.7	29.3
Max Q Clear Time (g_c+I1), s		3.6	2.3	25.4		6.4	10.4	11.3
Green Ext Time (p_c), s		0.3	0.0	13.6		0.6	1.0	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

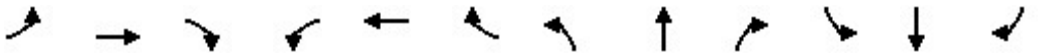
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	1326	224	42	1084	14	71	9	19	6	11	94
Future Volume (veh/h)	188	1326	224	42	1084	14	71	9	19	6	11	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1900	1827	1900	1900	1827	1827
Adj Flow Rate, veh/h	196	1381	233	44	1129	15	74	9	20	6	11	98
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	246	2114	356	74	1959	610	102	12	28	61	112	150
Arrive On Green	0.14	0.49	0.49	0.04	0.39	0.39	0.08	0.08	0.08	0.10	0.10	0.10
Sat Flow, veh/h	1740	4299	725	1740	4988	1553	1226	149	331	634	1162	1553
Grp Volume(v), veh/h	196	1068	546	44	1129	15	103	0	0	17	0	98
Grp Sat Flow(s),veh/h/ln	1740	1663	1699	1740	1663	1553	1707	0	0	1795	0	1553
Q Serve(g_s), s	6.9	15.1	15.2	1.6	11.2	0.4	3.7	0.0	0.0	0.5	0.0	3.8
Cycle Q Clear(g_c), s	6.9	15.1	15.2	1.6	11.2	0.4	3.7	0.0	0.0	0.5	0.0	3.8
Prop In Lane	1.00		0.43	1.00		1.00	0.72		0.19	0.35		1.00
Lane Grp Cap(c), veh/h	246	1635	836	74	1959	610	142	0	0	173	0	150
V/C Ratio(X)	0.80	0.65	0.65	0.59	0.58	0.02	0.73	0.00	0.00	0.10	0.00	0.65
Avail Cap(c_a), veh/h	492	2293	1172	149	2457	765	955	0	0	513	0	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.1	12.0	12.0	29.6	15.0	11.7	28.2	0.0	0.0	25.9	0.0	27.4
Incr Delay (d2), s/veh	5.8	0.4	0.9	7.3	0.3	0.0	6.9	0.0	0.0	0.2	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.9	7.2	0.9	5.2	0.2	2.0	0.0	0.0	0.3	0.0	1.8
LnGrp Delay(d),s/veh	31.9	12.4	12.9	36.9	15.3	11.7	35.1	0.0	0.0	26.2	0.0	32.2
LnGrp LOS	C	B	B	D	B	B	D			C		C
Approach Vol, veh/h		1810			1188			103			115	
Approach Delay, s/veh		14.7			16.0			35.1			31.3	
Approach LOS		B			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.7	7.2	35.5		10.6	13.4	29.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		35.2	5.4	43.4		18.0	17.8	31.0
Max Q Clear Time (g_c+I1), s		5.7	3.6	17.2		5.8	8.9	13.2
Green Ext Time (p_c), s		0.6	0.0	13.8		0.2	0.3	7.8

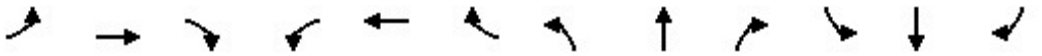
Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	619	46	227	590	402	60	810	144	249	716	127
Future Volume (vph)	231	619	46	227	590	402	60	810	144	249	716	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.92	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3487		1610	3384	1451	1770	3539	1532	1770	3539	1502
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3487		1610	3384	1451	1770	3539	1532	1770	3539	1502
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	233	625	46	229	596	406	61	818	145	252	723	128
RTOR Reduction (vph)	0	4	0	0	0	288	0	0	72	0	0	65
Lane Group Flow (vph)	233	667	0	206	619	118	61	818	73	252	723	63
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	34.8	34.8		30.4	30.4	30.4	14.4	38.0	38.0	25.8	49.4	49.4
Effective Green, g (s)	34.8	34.8		30.4	30.4	30.4	14.4	38.0	38.0	25.8	49.4	49.4
Actuated g/C Ratio	0.24	0.24		0.21	0.21	0.21	0.10	0.26	0.26	0.18	0.34	0.34
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	823	836		337	709	304	175	927	401	314	1205	511
v/s Ratio Prot	0.07	c0.19		0.13	c0.18		0.03	c0.23		c0.14	0.20	
v/s Ratio Perm						0.08			0.05			0.04
v/c Ratio	0.28	0.80		0.61	0.87	0.39	0.35	0.88	0.18	0.80	0.60	0.12
Uniform Delay, d1	44.9	51.8		51.9	55.4	49.3	60.9	51.4	41.4	57.2	39.6	32.9
Progression Factor	1.00	1.00		0.54	0.57	1.22	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	7.8		2.7	9.6	0.7	1.2	11.9	1.0	19.2	2.2	0.5
Delay (s)	45.8	59.6		30.8	41.2	61.0	62.1	63.3	42.4	76.3	41.8	33.4
Level of Service	D	E		C	D	E	E	E	D	E	D	C
Approach Delay (s)		56.1			46.0			60.2			48.7	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	52.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	767	34	22	774	43	167	252	106	69	86	278
Future Volume (vph)	211	767	34	22	774	43	167	252	106	69	86	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3506		1770	3539	1498	1755	1863	1540	1757	1863	1549
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.67	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	1770	3506		1770	3539	1498	1243	1863	1540	696	1863	1549
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	213	775	34	22	782	43	169	255	107	70	87	281
RTOR Reduction (vph)	0	2	0	0	0	25	0	0	52	0	0	209
Lane Group Flow (vph)	213	807	0	22	782	18	169	255	55	70	87	72
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	46.0	46.0		50.0	50.0	50.0	37.0	37.0	37.0	37.0	37.0	37.0
Effective Green, g (s)	46.0	46.0		50.0	50.0	50.0	37.0	37.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.32	0.32		0.34	0.34	0.34	0.26	0.26	0.26	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	561	1112		610	1220	516	317	475	392	177	475	395
v/s Ratio Prot	0.12	c0.23		0.01	c0.22			c0.14			0.05	
v/s Ratio Perm						0.01	0.14		0.04	0.10		0.05
v/c Ratio	0.38	0.73		0.04	0.64	0.04	0.53	0.54	0.14	0.40	0.18	0.18
Uniform Delay, d1	38.4	43.9		31.5	40.0	31.5	46.6	46.6	41.7	44.7	42.2	42.2
Progression Factor	0.52	0.48		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	2.8		0.1	2.6	0.1	6.3	4.3	0.7	6.5	0.8	1.0
Delay (s)	21.4	23.9		31.6	42.5	31.6	52.8	50.9	42.5	51.2	43.0	43.2
Level of Service	C	C		C	D	C	D	D	D	D	D	D
Approach Delay (s)		23.4			41.7			49.8			44.4	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

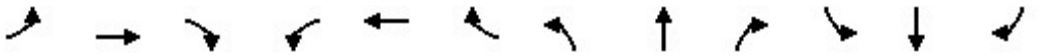
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	943	23	33	855	3	462
Future Volume (Veh/h)	943	23	33	855	3	462
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	982	24	34	891	3	481
Pedestrians	6				18	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			728		
pX, platoon unblocked			0.80		0.88	0.80
vC, conflicting volume			1024		1532	521
vC1, stage 1 conf vol					1012	
vC2, stage 2 conf vol					520	
vCu, unblocked vol			525		298	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			96		99	43
cM capacity (veh/h)			814		470	851

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	655	351	34	446	446	484
Volume Left	0	0	34	0	0	3
Volume Right	0	24	0	0	0	481
cSH	1700	1700	814	1700	1700	847
Volume to Capacity	0.39	0.21	0.04	0.26	0.26	0.57
Queue Length 95th (ft)	0	0	3	0	0	93
Control Delay (s)	0.0	0.0	9.6	0.0	0.0	14.8
Lane LOS			A			B
Approach Delay (s)	0.0		0.4			14.8
Approach LOS						B

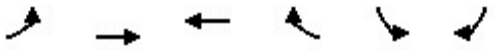
Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1163	0	34	1119	554	26	21	26	290	6	33
Future Volume (vph)	180	1163	0	34	1119	554	26	21	26	290	6	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1519		1813	1541		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.68	1.00		0.69	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1519		1269	1541		1291	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	1264	0	37	1216	602	28	23	28	315	7	36
RTOR Reduction (vph)	0	0	0	0	0	253	0	0	20	0	0	26
Lane Group Flow (vph)	196	1264	0	37	1216	349	0	51	8	0	322	10
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	18.3	76.4		4.8	62.9	62.9		36.8	36.8		36.8	36.8
Effective Green, g (s)	18.3	76.4		4.8	62.9	62.9		36.8	36.8		36.8	36.8
Actuated g/C Ratio	0.14	0.59		0.04	0.48	0.48		0.28	0.28		0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	249	2079		65	1712	734		359	436		365	448
v/s Ratio Prot	c0.11	0.36		0.02	c0.34							
v/s Ratio Perm						0.23		0.04	0.01		c0.25	0.01
v/c Ratio	0.79	0.61		0.57	0.71	0.48		0.14	0.02		0.88	0.02
Uniform Delay, d1	54.0	17.2		61.6	26.4	22.5		34.8	33.6		44.5	33.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	15.1	1.3		10.9	2.5	2.2		0.2	0.0		21.3	0.0
Delay (s)	69.0	18.5		72.5	28.9	24.7		35.0	33.6		65.8	33.6
Level of Service	E	B		E	C	C		C	C		E	C
Approach Delay (s)		25.3			28.4			34.5			62.6	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

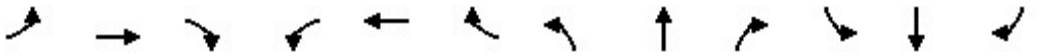
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1061	1167	613	561	540
Future Volume (vph)	0	1061	1167	613	561	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		0.95	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5085	3322		4782	1335
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5085	3322		4782	1335
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1105	1216	639	584	562
RTOR Reduction (vph)	0	0	95	0	36	36
Lane Group Flow (vph)	0	1105	1760	0	830	245
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		38.9	38.9		23.4	23.4
Effective Green, g (s)		38.9	38.9		23.4	23.4
Actuated g/C Ratio		0.54	0.54		0.32	0.32
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2747	1794		1554	433
v/s Ratio Prot		0.22	c0.53		0.17	
v/s Ratio Perm						c0.18
v/c Ratio		0.40	0.98		0.53	0.57
Uniform Delay, d1		9.7	16.2		19.8	20.1
Progression Factor		1.00	1.08		1.00	1.00
Incremental Delay, d2		0.4	14.6		1.3	5.3
Delay (s)		10.2	32.1		21.2	25.4
Level of Service		B	C		C	C
Approach Delay (s)		10.2	32.1		22.2	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	866	635	0	1162	48	448	21	34	39	70	170
Future Volume (vph)	121	866	635	0	1162	48	448	21	34	39	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4763			3539	1583	1610	2880	2671	1770	1863	1560
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4763			3539	1583	1610	2880	2671	1770	1863	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	126	902	661	0	1210	50	467	22	35	41	73	177
RTOR Reduction (vph)	0	68	0	0	0	26	0	1	25	0	0	146
Lane Group Flow (vph)	126	1495	0	0	1210	24	233	259	6	41	73	31
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6			2		8	8		4	4	
Permitted Phases						2			8			4
Actuated Green, G (s)	16.1	89.9			69.8	69.8	27.2	27.2	27.2	12.1	12.1	12.1
Effective Green, g (s)	16.1	89.9			69.8	69.8	27.2	27.2	27.2	12.1	12.1	12.1
Actuated g/C Ratio	0.11	0.62			0.48	0.48	0.19	0.19	0.19	0.08	0.08	0.08
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	197	2973			1715	767	304	544	504	148	156	131
v/s Ratio Prot	c0.07	0.31			c0.34		c0.14	0.09		0.02	c0.04	
v/s Ratio Perm						0.02			0.00			0.02
v/c Ratio	0.64	0.50			0.71	0.03	0.77	0.48	0.01	0.28	0.47	0.24
Uniform Delay, d1	61.2	14.8			29.1	19.4	55.4	52.1	47.5	61.8	62.9	61.6
Progression Factor	0.98	0.88			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.6			2.5	0.1	11.0	0.7	0.0	1.0	2.2	0.9
Delay (s)	66.1	13.6			31.5	19.5	66.4	52.7	47.5	62.9	65.1	62.6
Level of Service	E	B			C	B	E	D	D	E	E	E
Approach Delay (s)		17.5			31.0			58.5			63.3	
Approach LOS		B			C			E			E	

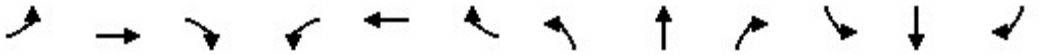
Intersection Summary			
HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	36	26	342	23	15	73
Future Volume (Veh/h)	36	26	342	23	15	73
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	40	29	376	25	16	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	500	388			401	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	500	388			401	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	96			99	
cM capacity (veh/h)	523	660			1158	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	40	29	401	96
Volume Left	40	0	0	16
Volume Right	0	29	25	0
cSH	523	660	1700	1158
Volume to Capacity	0.08	0.04	0.24	0.01
Queue Length 95th (ft)	6	3	0	1
Control Delay (s)	12.5	10.7	0.0	1.5
Lane LOS	B	B		A
Approach Delay (s)	11.7		0.0	1.5
Approach LOS	B			

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	29.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	782	75	8	2026	28	400	7	3	19	11	391
Future Volume (veh/h)	82	782	75	8	2026	28	400	7	3	19	11	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	88	841	81	9	2178	30	436	0	3	20	12	420
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	2226	213	20	2859	39	554	0	247	197	118	486
Arrive On Green	0.05	0.47	0.47	0.01	0.44	0.44	0.16	0.00	0.16	0.17	0.17	0.17
Sat Flow, veh/h	3442	4720	453	1774	6562	90	3548	0	1583	1129	677	2787
Grp Volume(v), veh/h	88	603	319	9	1595	613	436	0	3	32	0	420
Grp Sat Flow(s),veh/h/ln	1721	1695	1783	1774	1602	1847	1774	0	1583	1806	0	1393
Q Serve(g_s), s	2.4	11.0	11.1	0.5	27.0	27.0	11.4	0.0	0.2	1.4	0.0	14.1
Cycle Q Clear(g_c), s	2.4	11.0	11.1	0.5	27.0	27.0	11.4	0.0	0.2	1.4	0.0	14.1
Prop In Lane	1.00		0.25	1.00		0.05	1.00		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	162	1599	841	20	2094	805	554	0	247	315	0	486
V/C Ratio(X)	0.54	0.38	0.38	0.46	0.76	0.76	0.79	0.00	0.01	0.10	0.00	0.87
Avail Cap(c_a), veh/h	182	1600	841	92	2262	869	1737	0	775	366	0	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.8	16.3	16.4	47.3	22.9	22.9	39.1	0.0	34.3	33.4	0.0	38.6
Incr Delay (d2), s/veh	2.8	0.1	0.3	15.6	1.5	3.7	2.5	0.0	0.0	0.1	0.0	11.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.1	5.5	0.3	12.1	14.5	5.8	0.0	0.1	0.7	0.0	6.2
LnGrp Delay(d),s/veh	47.7	16.5	16.6	62.9	24.4	26.7	41.6	0.0	34.4	33.5	0.0	50.5
LnGrp LOS	D	B	B	E	C	C	D		C	C		D
Approach Vol, veh/h		1010			2217			439			452	
Approach Delay, s/veh		19.3			25.2			41.6			49.3	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.5	5.6	49.9		21.3	9.0	46.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.1	5.0	45.4		19.5	5.1	45.3
Max Q Clear Time (g_c+I1), s		13.4	2.5	13.1		16.1	4.4	29.0
Green Ext Time (p_c), s		1.6	0.0	7.2		0.7	0.0	12.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.1
HCM 2010 LOS	C

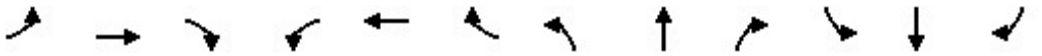
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	318	1520	104	8	1228	7	188	20	29	7	4	164
Future Volume (veh/h)	318	1520	104	8	1228	7	188	20	29	7	4	164
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	324	1551	106	8	1253	7	192	20	30	7	4	167
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	362	2368	162	18	1490	464	239	25	37	146	84	201
Arrive On Green	0.20	0.49	0.49	0.01	0.29	0.29	0.17	0.17	0.17	0.13	0.13	0.13
Sat Flow, veh/h	1774	4862	332	1774	5085	1583	1392	145	218	1149	656	1583
Grp Volume(v), veh/h	324	1081	576	8	1253	7	242	0	0	11	0	167
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1755	0	0	1805	0	1583
Q Serve(g_s), s	15.7	21.2	21.2	0.4	20.4	0.3	11.7	0.0	0.0	0.5	0.0	9.1
Cycle Q Clear(g_c), s	15.7	21.2	21.2	0.4	20.4	0.3	11.7	0.0	0.0	0.5	0.0	9.1
Prop In Lane	1.00		0.18	1.00		1.00	0.79		0.12	0.64		1.00
Lane Grp Cap(c), veh/h	362	1651	879	18	1490	464	301	0	0	230	0	201
V/C Ratio(X)	0.90	0.65	0.66	0.45	0.84	0.02	0.80	0.00	0.00	0.05	0.00	0.83
Avail Cap(c_a), veh/h	419	1669	888	101	1592	496	709	0	0	369	0	323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.2	17.0	17.0	43.4	29.2	22.1	35.1	0.0	0.0	33.8	0.0	37.5
Incr Delay (d2), s/veh	19.4	0.9	1.7	16.5	4.0	0.0	5.0	0.0	0.0	0.1	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	10.1	11.0	0.3	10.1	0.1	6.1	0.0	0.0	0.2	0.0	4.5
LnGrp Delay(d),s/veh	53.6	18.0	18.8	59.8	33.3	22.1	40.1	0.0	0.0	33.9	0.0	46.9
LnGrp LOS	D	B	B	E	C	C	D			C		D
Approach Vol, veh/h		1981			1268			242			178	
Approach Delay, s/veh		24.0			33.4			40.1			46.1	
Approach LOS		C			C			D			D	

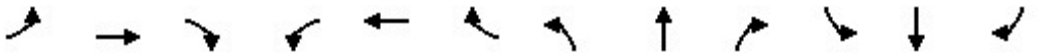
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.6	5.4	47.4		15.7	22.5	30.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		35.6	5.0	43.4		18.0	20.8	27.6
Max Q Clear Time (g_c+I1), s		13.7	2.4	23.2		11.1	17.7	22.4
Green Ext Time (p_c), s		1.5	0.0	11.6		0.3	0.3	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Future Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1595	3346		1595	3353	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1595	3346		1595	3353	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	110	873	16	201	691	193	105	536	212	357	770	80
RTOR Reduction (vph)	0	1	0	0	0	134	0	0	152	0	0	46
Lane Group Flow (vph)	99	899	0	181	711	59	105	536	60	357	770	34
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	35.0	35.0		31.0	31.0	31.0	16.0	31.7	31.7	31.3	47.0	47.0
Effective Green, g (s)	35.0	35.0		31.0	31.0	31.0	16.0	31.7	31.7	31.3	47.0	47.0
Actuated g/C Ratio	0.24	0.24		0.21	0.21	0.21	0.11	0.22	0.22	0.22	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	385	807		341	716	335	193	766	342	378	1136	508
v/s Ratio Prot	0.06	c0.27		0.11	c0.21		0.06	0.15		c0.20	c0.22	
v/s Ratio Perm						0.04			0.04			0.02
v/c Ratio	0.26	1.11		0.53	0.99	0.17	0.54	0.70	0.17	0.94	0.68	0.07
Uniform Delay, d1	44.5	55.0		50.6	56.9	46.6	61.0	52.3	46.0	56.0	42.4	33.9
Progression Factor	1.00	1.00		0.27	0.32	0.20	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	67.9		3.8	25.5	0.7	10.6	2.8	0.2	34.2	3.3	0.3
Delay (s)	46.1	122.9		17.4	43.9	10.1	71.6	55.1	46.3	90.2	45.7	34.1
Level of Service	D	F		B	D	B	E	E	D	F	D	C
Approach Delay (s)		115.3			33.5			54.9			58.1	
Approach LOS		F			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	64.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	1220	30	41	787	24	54	102	99	178	179	211
Future Volume (vph)	149	1220	30	41	787	24	54	102	99	178	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3526		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.47	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1770	3526		1770	3539	1583	874	1863	1583	1170	1863	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	154	1258	31	42	811	25	56	105	102	184	185	218
RTOR Reduction (vph)	0	1	0	0	0	19	0	0	79	0	0	117
Lane Group Flow (vph)	154	1288	0	42	811	6	56	105	23	184	185	101
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	62.6	62.6		37.4	37.4	37.4	33.0	33.0	33.0	33.0	33.0	33.0
Effective Green, g (s)	62.6	62.6		37.4	37.4	37.4	33.0	33.0	33.0	33.0	33.0	33.0
Actuated g/C Ratio	0.43	0.43		0.26	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	764	1522		456	912	408	198	423	360	266	423	360
v/s Ratio Prot	0.09	c0.37		0.02	c0.23			0.06			0.10	
v/s Ratio Perm						0.00	0.06		0.01	c0.16		0.06
v/c Ratio	0.20	0.85		0.09	0.89	0.02	0.28	0.25	0.06	0.69	0.44	0.28
Uniform Delay, d1	25.6	36.9		40.9	51.8	40.1	46.2	45.8	43.9	51.3	48.0	46.2
Progression Factor	0.55	0.53		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.9		0.1	10.6	0.0	3.5	1.4	0.3	13.8	3.3	1.9
Delay (s)	14.3	21.5		41.0	62.4	40.1	49.8	47.2	44.2	65.1	51.3	48.1
Level of Service	B	C		D	E	D	D	D	D	E	D	D
Approach Delay (s)		20.7			60.7			46.6			54.5	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

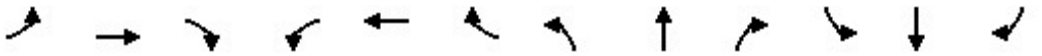
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1501	25	51	864	1	79
Future Volume (Veh/h)	1501	25	51	864	1	79
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1632	27	55	939	1	86
Pedestrians	4				19	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			730		
pX, platoon unblocked			0.67		0.76	0.67
vC, conflicting volume			1678		2248	848
vC1, stage 1 conf vol					1664	
vC2, stage 2 conf vol					584	
vCu, unblocked vol			1022		889	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			88		100	88
cM capacity (veh/h)			443		202	712

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	1088	571	55	470	470	87
Volume Left	0	0	55	0	0	1
Volume Right	0	27	0	0	0	86
cSH	1700	1700	443	1700	1700	692
Volume to Capacity	0.64	0.34	0.12	0.28	0.28	0.13
Queue Length 95th (ft)	0	0	11	0	0	11
Control Delay (s)	0.0	0.0	14.3	0.0	0.0	11.0
Lane LOS			B			B
Approach Delay (s)	0.0		0.8			11.0
Approach LOS						B

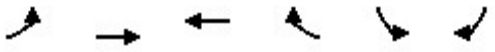
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1540	0	14	812	207	27	25	57	432	9	78
Future Volume (vph)	86	1540	0	14	812	207	27	25	57	432	9	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1752	3505		1752	3505	1470		1798	1568		1759	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.65	1.00		0.69	1.00
Satd. Flow (perm)	1752	3505		1752	3505	1470		1201	1568		1272	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	92	1656	0	15	873	223	29	27	61	465	10	84
RTOR Reduction (vph)	0	0	0	0	0	133	0	0	37	0	0	51
Lane Group Flow (vph)	92	1656	0	15	873	90	0	56	24	0	475	33
Confl. Peds. (#/hr)	12					12						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	14.7	65.9		1.2	52.4	52.4		50.9	50.9		50.9	50.9
Effective Green, g (s)	14.7	65.9		1.2	52.4	52.4		50.9	50.9		50.9	50.9
Actuated g/C Ratio	0.11	0.51		0.01	0.40	0.40		0.39	0.39		0.39	0.39
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	198	1776		16	1412	592		470	613		498	613
v/s Ratio Prot	0.05	c0.47		0.01	c0.25							
v/s Ratio Perm						0.06		0.05	0.02		c0.37	0.02
v/c Ratio	0.46	0.93		0.94	0.62	0.15		0.12	0.04		0.95	0.05
Uniform Delay, d1	54.0	30.0		64.4	30.8	24.7		25.2	24.4		38.4	24.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	7.6	10.4		191.7	2.0	0.5		0.1	0.0		28.8	0.0
Delay (s)	61.6	40.4		256.1	32.9	25.2		25.4	24.5		67.2	24.6
Level of Service	E	D		F	C	C		C	C		E	C
Approach Delay (s)		41.5			34.4			24.9			60.8	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

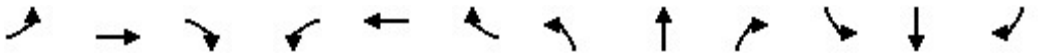
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1241	769	330	1489	264
Future Volume (vph)	0	1241	769	330	1489	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5036	3323		4945	1348
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5036	3323		4945	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1306	809	347	1567	278
RTOR Reduction (vph)	0	0	66	0	2	67
Lane Group Flow (vph)	0	1306	1090	0	1593	183
Confl. Bikes (#/hr)				5		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		34.0	34.0		28.3	28.3
Effective Green, g (s)		34.0	34.0		28.3	28.3
Actuated g/C Ratio		0.47	0.47		0.39	0.39
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2378	1569		1943	529
v/s Ratio Prot		0.26	c0.33		c0.32	
v/s Ratio Perm						0.14
v/c Ratio		0.55	0.69		0.82	0.35
Uniform Delay, d1		13.5	14.9		19.6	15.3
Progression Factor		1.00	1.31		1.00	1.00
Incremental Delay, d2		0.9	1.9		2.8	0.4
Delay (s)		14.5	21.4		22.4	15.7
Level of Service		B	C		C	B
Approach Delay (s)		14.5	21.4		21.5	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	2113	460	0	637	35	387	69	632	40	47	75
Future Volume (vph)	157	2113	460	0	637	35	387	69	632	40	47	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.93	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4949			3539	1583	1610	2751	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4949			3539	1583	1610	2751	2723	1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	171	2297	500	0	692	38	421	75	687	43	51	82
RTOR Reduction (vph)	0	15	0	0	0	24	0	86	395	0	0	77
Lane Group Flow (vph)	171	2782	0	0	692	14	248	389	65	43	51	5
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6			8			7
Actuated Green, G (s)	40.7	99.5			54.8	54.8	20.4	20.4	20.4	9.3	9.3	9.3
Effective Green, g (s)	40.7	99.5			54.8	54.8	20.4	20.4	20.4	9.3	9.3	9.3
Actuated g/C Ratio	0.28	0.69			0.38	0.38	0.14	0.14	0.14	0.06	0.06	0.06
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	500	3419			1346	602	228	389	385	114	120	102
v/s Ratio Prot	0.10	c0.56			0.20		c0.15	0.14		0.02	c0.03	
v/s Ratio Perm						0.01			0.02			0.00
v/c Ratio	0.34	0.81			0.51	0.02	1.09	1.00	0.17	0.38	0.42	0.05
Uniform Delay, d1	41.0	15.7			34.3	27.9	61.8	61.8	54.3	64.6	64.8	63.2
Progression Factor	1.06	1.13			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.7			1.4	0.1	85.0	45.7	0.2	2.1	2.4	0.2
Delay (s)	43.8	19.5			35.8	28.0	146.8	107.5	54.6	66.7	67.2	63.4
Level of Service	D	B			D	C	F	F	D	E	E	E
Approach Delay (s)		20.9			35.3			95.2			65.3	
Approach LOS		C			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	42	139	34	22	86
Future Volume (Veh/h)	25	42	139	34	22	86
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	29	48	160	39	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	328	180			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	328	180			199	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	95	94			98	
cM capacity (veh/h)	638	843			1327	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	29	48	199	124
Volume Left	29	0	0	25
Volume Right	0	48	39	0
cSH	638	843	1700	1327
Volume to Capacity	0.05	0.06	0.12	0.02
Queue Length 95th (ft)	4	5	0	1
Control Delay (s)	10.9	9.5	0.0	1.7
Lane LOS	B	A		A
Approach Delay (s)	10.1		0.0	1.7
Approach LOS	B			

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1897	490	20	1100	25	116	12	11	29	3	168
Future Volume (veh/h)	398	1897	490	20	1100	25	116	12	11	29	3	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	437	2085	538	22	1209	27	136	0	12	32	3	185
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	556	2308	566	44	2788	62	240	0	107	161	15	275
Arrive On Green	0.16	0.57	0.57	0.02	0.43	0.43	0.07	0.00	0.07	0.10	0.10	0.10
Sat Flow, veh/h	3442	4077	999	1774	6498	145	3548	0	1583	1629	153	2787
Grp Volume(v), veh/h	437	1715	908	22	894	342	136	0	12	35	0	185
Grp Sat Flow(s),veh/h/ln	1721	1695	1686	1774	1602	1837	1774	0	1583	1781	0	1393
Q Serve(g_s), s	9.0	32.9	37.5	0.9	9.7	9.7	2.8	0.0	0.5	1.3	0.0	4.7
Cycle Q Clear(g_c), s	9.0	32.9	37.5	0.9	9.7	9.7	2.8	0.0	0.5	1.3	0.0	4.7
Prop In Lane	1.00		0.59	1.00		0.08	1.00		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	556	1919	955	44	2062	788	240	0	107	176	0	275
V/C Ratio(X)	0.79	0.89	0.95	0.50	0.43	0.43	0.57	0.00	0.11	0.20	0.00	0.67
Avail Cap(c_a), veh/h	823	1923	957	120	2062	788	2252	0	1005	433	0	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	14.1	15.1	35.7	14.8	14.8	33.5	0.0	32.4	30.7	0.0	32.2
Incr Delay (d2), s/veh	3.1	5.8	18.4	8.7	0.1	0.4	2.1	0.0	0.5	0.5	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	16.8	22.0	0.6	4.2	4.9	1.4	0.0	0.2	0.7	0.0	1.9
LnGrp Delay(d),s/veh	32.9	20.0	33.5	44.4	15.0	15.2	35.6	0.0	32.9	31.2	0.0	35.1
LnGrp LOS	C	B	C	D	B	B	D		C	C		D
Approach Vol, veh/h		3060			1258			148			220	
Approach Delay, s/veh		25.8			15.6			35.3			34.5	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.5	6.3	46.4		11.8	16.5	36.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.0	5.0	42.0		18.0	17.7	29.3
Max Q Clear Time (g_c+I1), s		4.8	2.9	39.5		6.7	11.0	11.7
Green Ext Time (p_c), s		0.5	0.0	2.4		0.6	0.9	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

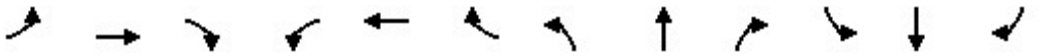
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	1326	224	42	1084	14	71	9	19	6	11	103
Future Volume (veh/h)	251	1326	224	42	1084	14	71	9	19	6	11	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1900	1827	1900	1900	1827	1827
Adj Flow Rate, veh/h	261	1381	233	44	1129	15	74	9	20	6	11	107
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	316	2099	354	74	1741	542	102	12	28	65	119	159
Arrive On Green	0.18	0.49	0.49	0.04	0.35	0.35	0.08	0.08	0.08	0.10	0.10	0.10
Sat Flow, veh/h	1740	4299	725	1740	4988	1553	1226	149	331	634	1162	1553
Grp Volume(v), veh/h	261	1068	546	44	1129	15	103	0	0	17	0	107
Grp Sat Flow(s),veh/h/ln	1740	1663	1699	1740	1663	1553	1707	0	0	1795	0	1553
Q Serve(g_s), s	9.2	15.4	15.4	1.6	12.1	0.4	3.7	0.0	0.0	0.5	0.0	4.2
Cycle Q Clear(g_c), s	9.2	15.4	15.4	1.6	12.1	0.4	3.7	0.0	0.0	0.5	0.0	4.2
Prop In Lane	1.00		0.43	1.00		1.00	0.72		0.19	0.35		1.00
Lane Grp Cap(c), veh/h	316	1624	830	74	1741	542	142	0	0	184	0	159
V/C Ratio(X)	0.83	0.66	0.66	0.59	0.65	0.03	0.73	0.00	0.00	0.09	0.00	0.67
Avail Cap(c_a), veh/h	535	2250	1150	140	2242	698	969	0	0	510	0	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	12.2	12.2	29.8	17.4	13.6	28.4	0.0	0.0	25.8	0.0	27.4
Incr Delay (d2), s/veh	5.4	0.5	0.9	7.4	0.4	0.0	6.9	0.0	0.0	0.2	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	7.1	7.3	0.9	5.6	0.2	2.0	0.0	0.0	0.3	0.0	2.0
LnGrp Delay(d),s/veh	30.4	12.7	13.1	37.2	17.8	13.6	35.3	0.0	0.0	26.0	0.0	32.3
LnGrp LOS	C	B	B	D	B	B	D			C		C
Approach Vol, veh/h		1875			1188			103			124	
Approach Delay, s/veh		15.3			18.5			35.3			31.5	
Approach LOS		B			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.8	7.2	35.5		11.0	16.0	26.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		36.0	5.1	42.9		18.0	19.5	28.5
Max Q Clear Time (g_c+I1), s		5.7	3.6	17.4		6.2	11.2	14.1
Green Ext Time (p_c), s		0.6	0.0	13.6		0.3	0.5	6.9

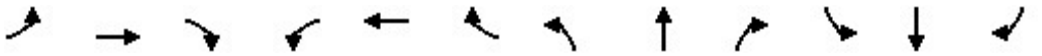
Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	634	46	253	665	428	60	810	149	254	716	127
Future Volume (vph)	231	634	46	253	665	428	60	810	149	254	716	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.92	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3488		1610	3384	1451	1770	3539	1532	1770	3539	1502
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3488		1610	3384	1451	1770	3539	1532	1770	3539	1502
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	233	640	46	256	672	432	61	818	151	257	723	128
RTOR Reduction (vph)	0	4	0	0	0	276	0	0	72	0	0	65
Lane Group Flow (vph)	233	682	0	230	698	156	61	818	79	257	723	63
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	30.6	30.6		33.6	33.6	33.6	14.4	38.0	38.0	26.8	50.4	50.4
Effective Green, g (s)	30.6	30.6		33.6	33.6	33.6	14.4	38.0	38.0	26.8	50.4	50.4
Actuated g/C Ratio	0.21	0.21		0.23	0.23	0.23	0.10	0.26	0.26	0.18	0.35	0.35
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	724	736		373	784	336	175	927	401	327	1230	522
v/s Ratio Prot	0.07	c0.20		0.14	c0.21		0.03	c0.23		c0.15	0.20	
v/s Ratio Perm						0.11			0.05			0.04
v/c Ratio	0.32	0.93		0.62	0.89	0.46	0.35	0.88	0.20	0.79	0.59	0.12
Uniform Delay, d1	48.4	56.1		49.9	53.9	48.0	60.9	51.4	41.6	56.4	38.8	32.2
Progression Factor	1.00	1.00		0.48	0.51	0.83	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	19.5		2.3	9.7	0.8	1.2	11.9	1.1	17.2	2.1	0.5
Delay (s)	49.6	75.6		26.1	37.4	40.5	62.1	63.3	42.7	73.5	40.8	32.7
Level of Service	D	E		C	D	D	E	E	D	E	D	C
Approach Delay (s)		69.0			36.5			60.2			47.5	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	792	34	22	901	43	167	252	106	69	86	278
Future Volume (vph)	211	792	34	22	901	43	167	252	106	69	86	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3507		1770	3539	1498	1755	1863	1540	1757	1863	1549
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.67	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	1770	3507		1770	3539	1498	1236	1863	1540	662	1863	1549
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	213	800	34	22	910	43	169	255	107	70	87	281
RTOR Reduction (vph)	0	2	0	0	0	24	0	0	52	0	0	213
Lane Group Flow (vph)	213	832	0	22	910	19	169	255	55	70	87	68
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	46.0	46.0		52.0	52.0	52.0	35.0	35.0	35.0	35.0	35.0	35.0
Effective Green, g (s)	46.0	46.0		52.0	52.0	52.0	35.0	35.0	35.0	35.0	35.0	35.0
Actuated g/C Ratio	0.32	0.32		0.36	0.36	0.36	0.24	0.24	0.24	0.24	0.24	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	561	1112		634	1269	537	298	449	371	159	449	373
v/s Ratio Prot	0.12	c0.24		0.01	c0.26			c0.14			0.05	
v/s Ratio Perm						0.01	0.14		0.04	0.11		0.04
v/c Ratio	0.38	0.75		0.03	0.72	0.03	0.57	0.57	0.15	0.44	0.19	0.18
Uniform Delay, d1	38.4	44.3		30.2	40.1	30.2	48.3	48.4	43.3	46.7	43.8	43.6
Progression Factor	0.53	0.49		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	2.7		0.1	3.5	0.1	7.6	5.1	0.8	8.6	1.0	1.1
Delay (s)	21.5	24.5		30.3	43.6	30.3	56.0	53.5	44.1	55.3	44.7	44.7
Level of Service	C	C		C	D	C	E	D	D	E	D	D
Approach Delay (s)		23.9			42.8			52.4			46.4	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	38.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

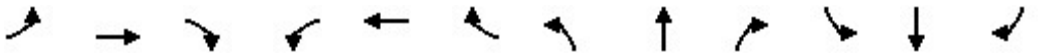
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	968	23	33	982	3	462
Future Volume (Veh/h)	968	23	33	982	3	462
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1008	24	34	1023	3	481
Pedestrians	6				18	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			728		
pX, platoon unblocked			0.79		0.83	0.79
vC, conflicting volume			1050		1624	534
vC1, stage 1 conf vol					1038	
vC2, stage 2 conf vol					586	
vCu, unblocked vol			531		210	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			96		100	43
cM capacity (veh/h)			802		610	842

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	672	360	34	512	512	484
Volume Left	0	0	34	0	0	3
Volume Right	0	24	0	0	0	481
cSH	1700	1700	802	1700	1700	840
Volume to Capacity	0.40	0.21	0.04	0.30	0.30	0.58
Queue Length 95th (ft)	0	0	3	0	0	94
Control Delay (s)	0.0	0.0	9.7	0.0	0.0	15.0
Lane LOS			A			B
Approach Delay (s)	0.0		0.3			15.0
Approach LOS						B

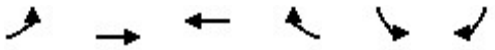
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1188	0	34	1246	554	26	21	26	290	6	33
Future Volume (vph)	180	1188	0	34	1246	554	26	21	26	290	6	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1519		1813	1540		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.67	1.00		0.69	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1519		1241	1540		1291	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	1291	0	37	1354	602	28	23	28	315	7	36
RTOR Reduction (vph)	0	0	0	0	0	238	0	0	20	0	0	26
Lane Group Flow (vph)	196	1291	0	37	1354	364	0	51	8	0	322	10
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	17.8	77.4		4.8	64.4	64.4		35.8	35.8		35.8	35.8
Effective Green, g (s)	17.8	77.4		4.8	64.4	64.4		35.8	35.8		35.8	35.8
Actuated g/C Ratio	0.14	0.60		0.04	0.50	0.50		0.28	0.28		0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	242	2107		65	1753	752		341	424		355	435
v/s Ratio Prot	c0.11	0.36		0.02	c0.38							
v/s Ratio Perm						0.24		0.04	0.01		c0.25	0.01
v/c Ratio	0.81	0.61		0.57	0.77	0.48		0.15	0.02		0.91	0.02
Uniform Delay, d1	54.5	16.8		61.6	26.8	21.8		35.6	34.3		45.5	34.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	17.8	1.3		10.9	3.4	2.2		0.2	0.0		25.7	0.0
Delay (s)	72.3	18.1		72.5	30.2	24.0		35.8	34.3		71.2	34.4
Level of Service	E	B		E	C	C		D	C		E	C
Approach Delay (s)		25.2			29.1			35.3			67.5	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

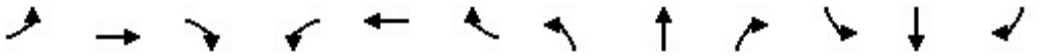
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1086	1294	669	584	540
Future Volume (vph)	0	1086	1294	669	584	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		0.95	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5085	3325		4785	1334
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5085	3325		4785	1334
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1131	1348	697	608	562
RTOR Reduction (vph)	0	0	92	0	34	34
Lane Group Flow (vph)	0	1131	1953	0	856	247
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		41.9	41.9		20.4	20.4
Effective Green, g (s)		41.9	41.9		20.4	20.4
Actuated g/C Ratio		0.58	0.58		0.28	0.28
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2959	1934		1355	377
v/s Ratio Prot		0.22	c0.59		0.18	
v/s Ratio Perm						c0.18
v/c Ratio		0.38	1.01		0.63	0.65
Uniform Delay, d1		8.1	15.1		22.5	22.7
Progression Factor		1.00	1.09		1.00	1.00
Incremental Delay, d2		0.4	19.0		2.2	8.6
Delay (s)		8.5	35.3		24.8	31.3
Level of Service		A	D		C	C
Approach Delay (s)		8.5	35.3		26.3	
Approach LOS		A	D		C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	914	635	0	1345	48	448	21	45	39	70	170
Future Volume (vph)	121	914	635	0	1345	48	448	21	45	39	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4773			3539	1583	1610	2879	2672	1770	1863	1560
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4773			3539	1583	1610	2879	2672	1770	1863	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	126	952	661	0	1401	50	467	22	47	41	73	177
RTOR Reduction (vph)	0	65	0	0	0	26	0	1	34	0	0	120
Lane Group Flow (vph)	126	1548	0	0	1401	24	233	260	8	41	73	57
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6			2		8	8		4	4	
Permitted Phases						2			8			4
Actuated Green, G (s)	17.1	89.0			67.9	67.9	27.5	27.5	27.5	12.7	12.7	12.7
Effective Green, g (s)	17.1	89.0			67.9	67.9	27.5	27.5	27.5	12.7	12.7	12.7
Actuated g/C Ratio	0.12	0.62			0.47	0.47	0.19	0.19	0.19	0.09	0.09	0.09
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	2949			1668	746	307	549	510	156	164	137
v/s Ratio Prot	c0.07	0.32			c0.40		c0.14	0.09		0.02	c0.04	
v/s Ratio Perm						0.01			0.00			0.04
v/c Ratio	0.60	0.52			0.84	0.03	0.76	0.47	0.02	0.26	0.45	0.41
Uniform Delay, d1	60.2	15.5			33.3	20.4	55.1	51.8	47.3	61.3	62.3	62.1
Progression Factor	0.96	0.85			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	0.6			5.3	0.1	10.3	0.6	0.0	0.9	1.9	2.0
Delay (s)	61.6	13.8			38.6	20.5	65.4	52.5	47.3	62.2	64.2	64.1
Level of Service	E	B			D	C	E	D	D	E	E	E
Approach Delay (s)		17.2			37.9			57.7			63.9	
Approach LOS		B			D			E			E	

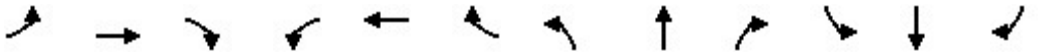
Intersection Summary			
HCM 2000 Control Delay	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	36	29	354	23	26	130
Future Volume (Veh/h)	36	29	354	23	26	130
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	40	32	389	25	29	143
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	602	402			414	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	602	402			414	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	95			97	
cM capacity (veh/h)	451	649			1145	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	40	32	414	172
Volume Left	40	0	0	29
Volume Right	0	32	25	0
cSH	451	649	1700	1145
Volume to Capacity	0.09	0.05	0.24	0.03
Queue Length 95th (ft)	7	4	0	2
Control Delay (s)	13.8	10.8	0.0	1.6
Lane LOS	B	B		A
Approach Delay (s)	12.5		0.0	1.6
Approach LOS	B			

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	782	134	11	2026	28	696	7	14	19	11	391
Future Volume (veh/h)	82	782	134	11	2026	28	696	7	14	19	11	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	88	841	144	12	2178	30	754	0	15	20	12	420
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	1814	309	25	2541	35	876	0	391	188	113	465
Arrive On Green	0.04	0.41	0.41	0.01	0.39	0.39	0.25	0.00	0.25	0.17	0.17	0.17
Sat Flow, veh/h	3442	4376	745	1774	6562	90	3548	0	1583	1129	677	2787
Grp Volume(v), veh/h	88	650	335	12	1595	613	754	0	15	32	0	420
Grp Sat Flow(s),veh/h/ln	1721	1695	1731	1774	1602	1847	1774	0	1583	1806	0	1393
Q Serve(g_s), s	2.9	15.8	16.0	0.8	34.7	34.7	23.1	0.0	0.8	1.7	0.0	16.8
Cycle Q Clear(g_c), s	2.9	15.8	16.0	0.8	34.7	34.7	23.1	0.0	0.8	1.7	0.0	16.8
Prop In Lane	1.00		0.43	1.00		0.05	1.00		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	142	1405	718	25	1861	715	876	0	391	301	0	465
V/C Ratio(X)	0.62	0.46	0.47	0.49	0.86	0.86	0.86	0.00	0.04	0.11	0.00	0.90
Avail Cap(c_a), veh/h	154	1405	718	78	1911	734	1467	0	655	309	0	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	24.2	24.2	55.8	32.0	32.0	41.0	0.0	32.6	40.3	0.0	46.6
Incr Delay (d2), s/veh	6.6	0.2	0.5	14.2	4.0	9.7	2.9	0.0	0.0	0.2	0.0	20.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.5	7.7	0.5	16.1	19.6	11.7	0.0	0.4	0.9	0.0	7.8
LnGrp Delay(d),s/veh	60.3	24.4	24.7	69.9	36.1	41.8	43.9	0.0	32.7	40.4	0.0	66.7
LnGrp LOS	E	C	C	E	D	D	D		C	D		E
Approach Vol, veh/h		1073			2220			769			452	
Approach Delay, s/veh		27.4			37.8			43.7			64.9	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.6	6.1	51.7		23.5	9.2	48.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.1	5.0	45.4		19.5	5.1	45.3
Max Q Clear Time (g_c+I1), s		25.1	2.8	18.0		18.8	4.9	36.7
Green Ext Time (p_c), s		3.0	0.0	7.5		0.1	0.0	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	39.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1520	104	8	1228	7	188	20	29	7	4	221
Future Volume (veh/h)	330	1520	104	8	1228	7	188	20	29	7	4	221
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	337	1551	106	8	1253	7	192	20	30	7	4	226
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	2286	156	18	1386	431	235	25	37	186	107	257
Arrive On Green	0.21	0.47	0.47	0.01	0.27	0.27	0.17	0.17	0.17	0.16	0.16	0.16
Sat Flow, veh/h	1774	4862	332	1774	5085	1583	1392	145	218	1149	656	1583
Grp Volume(v), veh/h	337	1081	576	8	1253	7	242	0	0	11	0	226
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1755	0	0	1805	0	1583
Q Serve(g_s), s	17.7	23.7	23.7	0.4	22.7	0.3	12.7	0.0	0.0	0.5	0.0	13.3
Cycle Q Clear(g_c), s	17.7	23.7	23.7	0.4	22.7	0.3	12.7	0.0	0.0	0.5	0.0	13.3
Prop In Lane	1.00		0.18	1.00		1.00	0.79		0.12	0.64		1.00
Lane Grp Cap(c), veh/h	368	1594	848	18	1386	431	297	0	0	293	0	257
V/C Ratio(X)	0.91	0.68	0.68	0.45	0.90	0.02	0.82	0.00	0.00	0.04	0.00	0.88
Avail Cap(c_a), veh/h	381	1594	848	93	1411	439	680	0	0	340	0	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.0	19.7	19.7	47.0	33.5	25.4	38.2	0.0	0.0	33.7	0.0	39.1
Incr Delay (d2), s/veh	25.7	1.2	2.2	16.8	8.5	0.0	5.4	0.0	0.0	0.1	0.0	22.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	11.2	12.2	0.3	11.6	0.1	6.6	0.0	0.0	0.2	0.0	7.4
LnGrp Delay(d),s/veh	62.7	20.9	21.9	63.8	42.0	25.4	43.7	0.0	0.0	33.8	0.0	61.5
LnGrp LOS	E	C	C	E	D	C	D			C		E
Approach Vol, veh/h		1994			1268			242			237	
Approach Delay, s/veh		28.2			42.0			43.7			60.2	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.6	5.5	49.4		20.0	24.3	30.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		37.0	5.0	42.0		18.0	20.5	26.5
Max Q Clear Time (g_c+I1), s		14.7	2.4	25.7		15.3	19.7	24.7
Green Ext Time (p_c), s		1.5	0.0	10.1		0.2	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	61	116	101	456	99
Future Volume (Veh/h)	14	61	116	101	456	99
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	15	64	121	105	475	103
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1226	174			226	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1226	174			226	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	93			65	
cM capacity (veh/h)	127	870			1342	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	79	226	578
Volume Left	15	0	475
Volume Right	64	105	0
cSH	413	1700	1342
Volume to Capacity	0.19	0.13	0.35
Queue Length 95th (ft)	17	0	40
Control Delay (s)	15.8	0.0	8.1
Lane LOS	C		A
Approach Delay (s)	15.8	0.0	8.1
Approach LOS	C		

Intersection Summary			
Average Delay	6.7		
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	61	116	101	456	99
Future Volume (Veh/h)	14	61	116	101	456	99
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	15	64	121	105	475	103
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1226	174			226	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1226	174			226	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	93			65	
cM capacity (veh/h)	127	870			1342	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	15	64	226	578
Volume Left	15	0	0	475
Volume Right	0	64	105	0
cSH	127	870	1700	1342
Volume to Capacity	0.12	0.07	0.13	0.35
Queue Length 95th (ft)	10	6	0	40
Control Delay (s)	37.0	9.5	0.0	8.1
Lane LOS	E	A		A
Approach Delay (s)	14.7		0.0	8.1
Approach LOS	B			

Intersection Summary			
Average Delay	6.6		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	408	370	20	82	98
Future Volume (Veh/h)	90	408	370	20	82	98
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	94	425	385	21	85	102
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	668	396			406	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	668	396			406	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	35			93	
cM capacity (veh/h)	392	654			1153	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	519	406	187
Volume Left	94	0	85
Volume Right	425	21	0
cSH	583	1700	1153
Volume to Capacity	0.89	0.24	0.07
Queue Length 95th (ft)	262	0	6
Control Delay (s)	41.9	0.0	4.2
Lane LOS	E		A
Approach Delay (s)	41.9	0.0	4.2
Approach LOS	E		

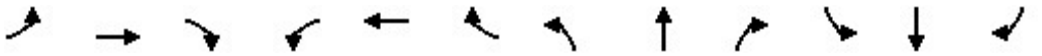
Intersection Summary			
Average Delay	20.3		
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	408	370	20	82	98
Future Volume (Veh/h)	90	408	370	20	82	98
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	94	425	385	21	85	102
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	668	396			406	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	668	396			406	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	35			93	
cM capacity (veh/h)	392	654			1153	

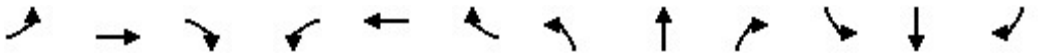
Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	94	425	406	187
Volume Left	94	0	0	85
Volume Right	0	425	21	0
cSH	392	654	1700	1153
Volume to Capacity	0.24	0.65	0.24	0.07
Queue Length 95th (ft)	23	119	0	6
Control Delay (s)	17.0	20.1	0.0	4.2
Lane LOS	C	C		A
Approach Delay (s)	19.6		0.0	4.2
Approach LOS	C			

Intersection Summary			
Average Delay	9.8		
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		



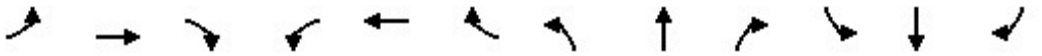
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Future Volume (vph)	107	847	16	195	670	187	102	520	206	346	747	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1595	3355	1568	1595	3353	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1595	3355	1568	1595	3353	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	110	873	16	201	691	193	105	536	212	357	770	80
RTOR Reduction (vph)	0	0	12	0	0	134	0	0	152	0	0	46
Lane Group Flow (vph)	99	884	4	181	711	59	105	536	60	357	770	34
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	35.0	35.0	35.0	31.0	31.0	31.0	16.0	31.7	31.7	31.3	47.0	47.0
Effective Green, g (s)	35.0	35.0	35.0	31.0	31.0	31.0	16.0	31.7	31.7	31.3	47.0	47.0
Actuated g/C Ratio	0.24	0.24	0.24	0.21	0.21	0.21	0.11	0.22	0.22	0.22	0.32	0.32
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	385	809	378	341	716	335	193	766	342	378	1136	508
v/s Ratio Prot	0.06	c0.26		0.11	c0.21		0.06	0.15		c0.20	c0.22	
v/s Ratio Perm			0.00			0.04			0.04			0.02
v/c Ratio	0.26	1.09	0.01	0.53	0.99	0.17	0.54	0.70	0.17	0.94	0.68	0.07
Uniform Delay, d1	44.5	55.0	41.8	50.6	56.9	46.6	61.0	52.3	46.0	56.0	42.4	33.9
Progression Factor	1.00	1.00	1.00	0.27	0.32	0.20	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	60.0	0.0	3.8	25.5	0.7	10.6	2.8	0.2	34.2	3.3	0.3
Delay (s)	46.1	115.0	41.9	17.4	43.9	10.1	71.6	55.1	46.3	90.2	45.7	34.1
Level of Service	D	F	D	B	D	B	E	E	D	F	D	C
Approach Delay (s)		107.0			33.5			54.9			58.1	
Approach LOS		F			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	62.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	803	33	208	697	193	112	564	203	341	814	78
Future Volume (vph)	109	803	33	208	697	193	112	564	203	341	814	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3484		1595	3353	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	3484		1595	3353	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	112	828	34	214	719	199	115	581	209	352	839	80
RTOR Reduction (vph)	0	2	0	0	0	134	0	0	138	0	0	46
Lane Group Flow (vph)	112	860	0	193	740	65	115	581	71	352	839	34
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	34.0	34.0		31.0	31.0	31.0	17.0	32.6	32.6	31.4	47.0	47.0
Effective Green, g (s)	34.0	34.0		31.0	31.0	31.0	17.0	32.6	32.6	31.4	47.0	47.0
Actuated g/C Ratio	0.23	0.23		0.21	0.21	0.21	0.12	0.22	0.22	0.22	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	797	816		341	716	335	205	788	352	379	1136	508
v/s Ratio Prot	0.03	c0.25		0.12	c0.22		0.07	0.17		c0.20	c0.24	
v/s Ratio Perm						0.04			0.05			0.02
v/c Ratio	0.14	1.05		0.57	1.03	0.20	0.56	0.74	0.20	0.93	0.74	0.07
Uniform Delay, d1	43.9	55.5		51.0	57.0	46.8	60.5	52.2	45.6	55.7	43.5	33.9
Progression Factor	1.00	1.00		0.31	0.35	0.21	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	46.6		4.4	36.2	0.8	10.6	3.6	0.3	31.3	4.3	0.3
Delay (s)	44.3	102.1		20.0	56.3	10.7	71.1	55.8	45.9	87.0	47.9	34.1
Level of Service	D	F		B	E	B	E	E	D	F	D	C
Approach Delay (s)		95.4			42.1			55.5			57.8	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	1151	39	56	790	28	74	106	105	190	188	234
Future Volume (vph)	157	1151	39	56	790	28	74	106	105	190	188	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3522		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.47	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1770	3522		1770	3539	1583	870	1863	1583	1166	1863	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	162	1187	40	58	814	29	76	109	108	196	194	241
RTOR Reduction (vph)	0	2	0	0	0	21	0	0	82	0	0	124
Lane Group Flow (vph)	162	1225	0	58	814	8	76	109	26	196	194	117
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	60.4	60.4		37.6	37.6	37.6	35.0	35.0	35.0	35.0	35.0	35.0
Effective Green, g (s)	60.4	60.4		37.6	37.6	37.6	35.0	35.0	35.0	35.0	35.0	35.0
Actuated g/C Ratio	0.42	0.42		0.26	0.26	0.26	0.24	0.24	0.24	0.24	0.24	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	737	1467		458	917	410	210	449	382	281	449	382
v/s Ratio Prot	0.09	c0.35		0.03	c0.23			0.06			0.10	
v/s Ratio Perm						0.00	0.09		0.02	c0.17		0.07
v/c Ratio	0.22	0.84		0.13	0.89	0.02	0.36	0.24	0.07	0.70	0.43	0.31
Uniform Delay, d1	27.2	37.8		41.1	51.7	40.0	45.7	44.3	42.4	50.2	46.6	45.1
Progression Factor	0.55	0.54		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	2.3		0.1	10.4	0.0	4.8	1.3	0.3	13.4	3.0	2.1
Delay (s)	15.3	22.8		41.3	62.1	40.0	50.5	45.6	42.8	63.6	49.6	47.1
Level of Service	B	C		D	E	D	D	D	D	E	D	D
Approach Delay (s)		21.9			60.0			45.8			53.0	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

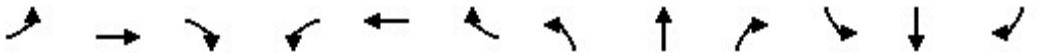
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1437	38	102	886	1	107
Future Volume (Veh/h)	1437	38	102	886	1	107
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1562	41	111	963	1	116
Pedestrians	4				19	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			730		
pX, platoon unblocked			0.69		0.80	0.69
vC, conflicting volume			1622		2309	820
vC1, stage 1 conf vol					1602	
vC2, stage 2 conf vol					708	
vCu, unblocked vol			990		843	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			76		100	84
cM capacity (veh/h)			467		218	730

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	1041	562	111	482	482	117
Volume Left	0	0	111	0	0	1
Volume Right	0	41	0	0	0	116
cSH	1700	1700	467	1700	1700	716
Volume to Capacity	0.61	0.33	0.24	0.28	0.28	0.16
Queue Length 95th (ft)	0	0	23	0	0	15
Control Delay (s)	0.0	0.0	15.1	0.0	0.0	11.0
Lane LOS			C			B
Approach Delay (s)	0.0		1.6			11.0
Approach LOS						B

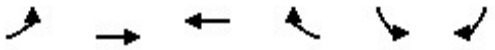
Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	1503	0	14	881	218	28	25	57	470	9	83
Future Volume (vph)	87	1503	0	14	881	218	28	25	57	470	9	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1752	3505		1752	3505	1470		1797	1568		1758	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.61	1.00		0.69	1.00
Satd. Flow (perm)	1752	3505		1752	3505	1470		1120	1568		1270	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	94	1616	0	15	947	234	30	27	61	505	10	89
RTOR Reduction (vph)	0	0	0	0	0	153	0	0	37	0	0	53
Lane Group Flow (vph)	94	1616	0	15	947	81	0	57	24	0	515	36
Confl. Peds. (#/hr)	12					12						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	21.1	64.8		1.2	44.9	44.9		52.0	52.0		52.0	52.0
Effective Green, g (s)	21.1	64.8		1.2	44.9	44.9		52.0	52.0		52.0	52.0
Actuated g/C Ratio	0.16	0.50		0.01	0.35	0.35		0.40	0.40		0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	284	1747		16	1210	507		448	627		508	627
v/s Ratio Prot	0.05	c0.46		0.01	c0.27							
v/s Ratio Perm						0.05		0.05	0.02		c0.41	0.02
v/c Ratio	0.33	0.93		0.94	0.78	0.16		0.13	0.04		1.01	0.06
Uniform Delay, d1	48.2	30.3		64.4	38.2	29.5		24.7	23.8		39.0	24.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	3.1	9.8		191.7	3.4	0.1		0.1	0.0		43.4	0.0
Delay (s)	51.3	40.2		256.1	41.5	29.6		24.8	23.8		82.4	24.0
Level of Service	D	D		F	D	C		C	C		F	C
Approach Delay (s)		40.8			41.9			24.3			73.8	
Approach LOS		D			D			C			E	

Intersection Summary			
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		

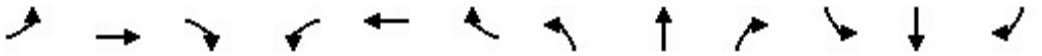
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1210	834	322	1416	279
Future Volume (vph)	0	1210	834	322	1416	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5036	3336		4945	1348
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5036	3336		4945	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1274	878	339	1491	294
RTOR Reduction (vph)	0	0	56	0	3	62
Lane Group Flow (vph)	0	1274	1161	0	1517	203
Confl. Bikes (#/hr)				5		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		35.2	35.2		27.1	27.1
Effective Green, g (s)		35.2	35.2		27.1	27.1
Actuated g/C Ratio		0.49	0.49		0.38	0.38
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2462	1630		1861	507
v/s Ratio Prot		0.25	c0.35		c0.31	
v/s Ratio Perm						0.15
v/c Ratio		0.52	0.71		0.82	0.40
Uniform Delay, d1		12.6	14.4		20.2	16.5
Progression Factor		1.00	1.14		1.00	1.00
Incremental Delay, d2		0.8	1.9		2.9	0.5
Delay (s)		13.4	18.3		23.1	17.0
Level of Service		B	B		C	B
Approach Delay (s)		13.4	18.3		22.2	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	1947	518	0	636	35	445	69	569	40	47	75
Future Volume (vph)	161	1947	518	0	636	35	445	69	569	40	47	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.95	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4925			3539	1583	1610	2787	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4925			3539	1583	1610	2787	2723	1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	2116	563	0	691	38	484	75	618	43	51	82
RTOR Reduction (vph)	0	21	0	0	0	23	0	35	379	0	0	77
Lane Group Flow (vph)	175	2658	0	0	691	15	252	445	66	43	51	5
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6			8			7
Actuated Green, G (s)	39.0	98.5			55.5	55.5	21.4	21.4	21.4	9.3	9.3	9.3
Effective Green, g (s)	39.0	98.5			55.5	55.5	21.4	21.4	21.4	9.3	9.3	9.3
Actuated g/C Ratio	0.27	0.68			0.39	0.39	0.15	0.15	0.15	0.06	0.06	0.06
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	479	3368			1363	610	239	414	404	114	120	102
v/s Ratio Prot	0.10	c0.54			0.20		0.16	c0.16		0.02	c0.03	
v/s Ratio Perm						0.01			0.02			0.00
v/c Ratio	0.37	0.79			0.51	0.02	1.05	1.08	0.16	0.38	0.42	0.05
Uniform Delay, d1	42.5	15.6			33.8	27.4	61.3	61.3	53.5	64.6	64.8	63.2
Progression Factor	1.10	1.21			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	1.5			1.3	0.1	73.3	65.8	0.2	2.1	2.4	0.2
Delay (s)	46.9	20.5			35.1	27.5	134.6	127.1	53.7	66.7	67.2	63.4
Level of Service	D	C			D	C	F	F	D	E	E	E
Approach Delay (s)		22.1			34.8			100.9			65.3	
Approach LOS		C			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	44.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	42	76	71	103	77
Future Volume (Veh/h)	30	42	76	71	103	77
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	34	48	87	82	118	89
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	453	128			169	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	453	128			169	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	93	95			91	
cM capacity (veh/h)	502	901			1361	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	34	48	169	207
Volume Left	34	0	0	118
Volume Right	0	48	82	0
cSH	502	901	1700	1361
Volume to Capacity	0.07	0.05	0.10	0.09
Queue Length 95th (ft)	5	4	0	7
Control Delay (s)	12.7	9.2	0.0	4.8
Lane LOS	B	A		A
Approach Delay (s)	10.7		0.0	4.8
Approach LOS	B			

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	31.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1916	242	7	1121	25	85	12	9	29	3	168
Future Volume (veh/h)	398	1916	242	7	1121	25	85	12	9	29	3	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	437	2105	266	8	1232	27	102	0	10	32	3	185
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	564	2616	325	18	2713	59	224	0	100	163	15	279
Arrive On Green	0.16	0.57	0.57	0.01	0.42	0.42	0.06	0.00	0.06	0.10	0.10	0.10
Sat Flow, veh/h	3442	4582	570	1774	6501	142	3548	0	1583	1629	153	2787
Grp Volume(v), veh/h	437	1549	822	8	910	349	102	0	10	35	0	185
Grp Sat Flow(s),veh/h/ln	1721	1695	1762	1774	1602	1838	1774	0	1583	1781	0	1393
Q Serve(g_s), s	8.6	25.4	26.4	0.3	9.6	9.6	2.0	0.0	0.4	1.3	0.0	4.5
Cycle Q Clear(g_c), s	8.6	25.4	26.4	0.3	9.6	9.6	2.0	0.0	0.4	1.3	0.0	4.5
Prop In Lane	1.00		0.32	1.00		0.08	1.00		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	564	1935	1006	18	2006	767	224	0	100	178	0	279
V/C Ratio(X)	0.77	0.80	0.82	0.44	0.45	0.45	0.46	0.00	0.10	0.20	0.00	0.66
Avail Cap(c_a), veh/h	865	2022	1051	126	2006	767	2368	0	1057	455	0	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.2	11.9	12.2	34.6	14.7	14.8	31.8	0.0	31.1	29.1	0.0	30.5
Incr Delay (d2), s/veh	2.4	2.3	5.0	15.7	0.2	0.4	1.4	0.0	0.4	0.5	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	12.2	14.0	0.2	4.2	4.9	1.0	0.0	0.2	0.6	0.0	1.8
LnGrp Delay(d),s/veh	30.6	14.2	17.1	50.3	14.9	15.2	33.3	0.0	31.5	29.6	0.0	33.2
LnGrp LOS	C	B	B	D	B	B	C		C	C		C
Approach Vol, veh/h		2808			1267			112			220	
Approach Delay, s/veh		17.6			15.2			33.1			32.7	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		8.9	5.2	44.7		11.6	16.0	33.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.0	5.0	42.0		18.0	17.7	29.3
Max Q Clear Time (g_c+I1), s		4.0	2.3	28.4		6.5	10.6	11.6
Green Ext Time (p_c), s		0.4	0.0	11.8		0.6	1.0	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

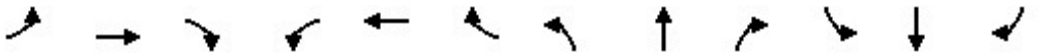
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	1346	224	42	1088	14	71	9	19	6	11	99
Future Volume (veh/h)	225	1346	224	42	1088	14	71	9	19	6	11	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1900	1827	1900	1900	1827	1827
Adj Flow Rate, veh/h	234	1402	233	44	1133	15	74	9	20	6	11	103
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	287	2121	352	74	1843	574	102	12	28	63	116	154
Arrive On Green	0.17	0.49	0.49	0.04	0.37	0.37	0.08	0.08	0.08	0.10	0.10	0.10
Sat Flow, veh/h	1740	4310	716	1740	4988	1553	1226	149	331	634	1162	1553
Grp Volume(v), veh/h	234	1081	554	44	1133	15	103	0	0	17	0	103
Grp Sat Flow(s),veh/h/ln	1740	1663	1701	1740	1663	1553	1707	0	0	1795	0	1553
Q Serve(g_s), s	8.3	15.6	15.6	1.6	11.8	0.4	3.7	0.0	0.0	0.5	0.0	4.1
Cycle Q Clear(g_c), s	8.3	15.6	15.6	1.6	11.8	0.4	3.7	0.0	0.0	0.5	0.0	4.1
Prop In Lane	1.00		0.42	1.00		1.00	0.72		0.19	0.35		1.00
Lane Grp Cap(c), veh/h	287	1637	837	74	1843	574	142	0	0	179	0	154
V/C Ratio(X)	0.81	0.66	0.66	0.60	0.61	0.03	0.73	0.00	0.00	0.10	0.00	0.67
Avail Cap(c_a), veh/h	506	2241	1146	139	2312	720	966	0	0	508	0	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	12.2	12.2	29.9	16.4	12.8	28.5	0.0	0.0	26.1	0.0	27.6
Incr Delay (d2), s/veh	5.6	0.5	0.9	7.4	0.3	0.0	6.9	0.0	0.0	0.2	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.2	7.4	0.9	5.4	0.2	2.0	0.0	0.0	0.3	0.0	2.0
LnGrp Delay(d),s/veh	31.2	12.6	13.1	37.4	16.7	12.8	35.4	0.0	0.0	26.3	0.0	32.5
LnGrp LOS	C	B	B	D	B	B	D			C		C
Approach Vol, veh/h		1869			1192			103			120	
Approach Delay, s/veh		15.1			17.4			35.4			31.6	
Approach LOS		B			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.8	7.2	35.8		10.8	15.0	28.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		36.0	5.1	42.9		18.0	18.5	29.5
Max Q Clear Time (g_c+I1), s		5.7	3.6	17.6		6.1	10.3	13.8
Green Ext Time (p_c), s		0.6	0.0	13.7		0.3	0.4	7.3

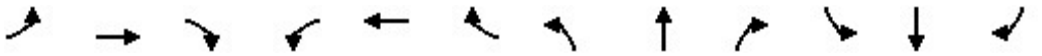
Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	647	55	245	642	420	83	889	160	263	775	127
Future Volume (vph)	238	647	55	245	642	420	83	889	160	263	775	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3479		1610	3384	1451	1770	3539	1533	1770	3539	1502
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3479		1610	3384	1451	1770	3539	1533	1770	3539	1502
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	240	654	56	247	648	424	84	898	162	266	783	128
RTOR Reduction (vph)	0	5	0	0	0	267	0	0	71	0	0	64
Lane Group Flow (vph)	240	705	0	222	673	157	84	898	91	266	783	64
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	32.1	32.1		31.9	31.9	31.9	18.0	40.0	40.0	25.0	47.0	47.0
Effective Green, g (s)	32.1	32.1		31.9	31.9	31.9	18.0	40.0	40.0	25.0	47.0	47.0
Actuated g/C Ratio	0.22	0.22		0.22	0.22	0.22	0.12	0.28	0.28	0.17	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	759	770		354	744	319	219	976	422	305	1147	486
v/s Ratio Prot	0.07	c0.20		0.14	c0.20		0.05	c0.25		c0.15	0.22	
v/s Ratio Perm						0.11			0.06			0.04
v/c Ratio	0.32	0.92		0.63	0.90	0.49	0.38	0.92	0.22	0.87	0.68	0.13
Uniform Delay, d1	47.3	55.1		51.2	55.1	49.5	58.4	50.9	40.4	58.4	42.5	34.6
Progression Factor	1.00	1.00		0.52	0.56	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	17.4		2.6	11.6	0.9	1.1	15.0	1.2	27.3	3.3	0.6
Delay (s)	48.4	72.6		29.4	42.2	45.7	59.5	65.9	41.6	85.7	45.8	35.2
Level of Service	D	E		C	D	D	E	E	D	F	D	D
Approach Delay (s)		66.5			41.2			62.0			53.7	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	796	55	31	834	55	193	272	125	76	107	280
Future Volume (vph)	219	796	55	31	834	55	193	272	125	76	107	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3488		1770	3539	1497	1756	1863	1540	1757	1863	1549
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.64	1.00	1.00	0.35	1.00	1.00
Satd. Flow (perm)	1770	3488		1770	3539	1497	1176	1863	1540	653	1863	1549
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	221	804	56	31	842	56	195	275	126	77	108	283
RTOR Reduction (vph)	0	3	0	0	0	25	0	0	57	0	0	209
Lane Group Flow (vph)	221	857	0	31	842	31	195	275	69	77	108	74
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	46.0	46.0		49.0	49.0	49.0	38.0	38.0	38.0	38.0	38.0	38.0
Effective Green, g (s)	46.0	46.0		49.0	49.0	49.0	38.0	38.0	38.0	38.0	38.0	38.0
Actuated g/C Ratio	0.32	0.32		0.34	0.34	0.34	0.26	0.26	0.26	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	561	1106		598	1195	505	308	488	403	171	488	405
v/s Ratio Prot	0.12	c0.25		0.02	c0.24			0.15			0.06	
v/s Ratio Perm						0.02	c0.17		0.04	0.12		0.05
v/c Ratio	0.39	0.77		0.05	0.70	0.06	0.63	0.56	0.17	0.45	0.22	0.18
Uniform Delay, d1	38.6	44.8		32.3	41.7	32.4	47.3	46.3	41.3	44.8	41.9	41.5
Progression Factor	0.51	0.46		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	3.0		0.2	3.5	0.2	9.5	4.7	0.9	8.3	1.0	1.0
Delay (s)	20.7	23.6		32.5	45.2	32.7	56.9	51.0	42.3	53.1	43.0	42.5
Level of Service	C	C		C	D	C	E	D	D	D	D	D
Approach Delay (s)		23.0			44.0			51.1			44.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

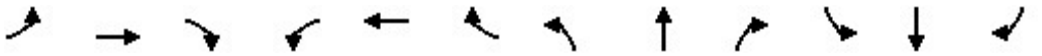
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	997	24	62	929	10	536
Future Volume (Veh/h)	997	24	62	929	10	536
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1039	25	65	968	10	558
Pedestrians	6				18	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			728		
pX, platoon unblocked			0.78		0.86	0.78
vC, conflicting volume			1082		1690	550
vC1, stage 1 conf vol					1070	
vC2, stage 2 conf vol					620	
vCu, unblocked vol			544		318	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			92		98	33
cM capacity (veh/h)			784		429	832

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	693	371	65	484	484	568
Volume Left	0	0	65	0	0	10
Volume Right	0	25	0	0	0	558
cSH	1700	1700	784	1700	1700	819
Volume to Capacity	0.41	0.22	0.08	0.28	0.28	0.69
Queue Length 95th (ft)	0	0	7	0	0	144
Control Delay (s)	0.0	0.0	10.0	0.0	0.0	18.7
Lane LOS			B			C
Approach Delay (s)	0.0		0.6			18.7
Approach LOS						C

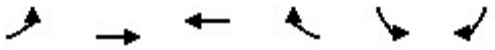
Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1290	0	34	1221	566	27	21	26	285	6	31
Future Volume (vph)	180	1290	0	34	1221	566	27	21	26	285	6	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1519		1812	1540		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.66	1.00		0.69	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1519		1229	1540		1290	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	1402	0	37	1327	615	29	23	28	310	7	34
RTOR Reduction (vph)	0	0	0	0	0	247	0	0	20	0	0	25
Lane Group Flow (vph)	196	1402	0	37	1327	368	0	52	8	0	317	9
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	17.8	77.7		4.8	64.7	64.7		35.5	35.5		35.5	35.5
Effective Green, g (s)	17.8	77.7		4.8	64.7	64.7		35.5	35.5		35.5	35.5
Actuated g/C Ratio	0.14	0.60		0.04	0.50	0.50		0.27	0.27		0.27	0.27
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	242	2115		65	1761	755		335	420		352	432
v/s Ratio Prot	c0.11	0.40		0.02	c0.37							
v/s Ratio Perm						0.24		0.04	0.00		c0.25	0.01
v/c Ratio	0.81	0.66		0.57	0.75	0.49		0.16	0.02		0.90	0.02
Uniform Delay, d1	54.5	17.4		61.6	26.2	21.7		35.9	34.5		45.5	34.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	17.8	1.7		10.9	3.0	2.2		0.2	0.0		25.0	0.0
Delay (s)	72.3	19.1		72.5	29.3	23.9		36.1	34.5		70.5	34.6
Level of Service	E	B		E	C	C		D	C		E	C
Approach Delay (s)		25.6			28.4			35.5			67.0	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

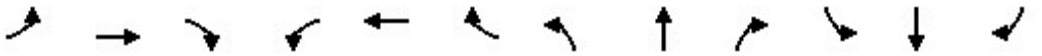
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1172	1248	613	569	573
Future Volume (vph)	0	1172	1248	613	569	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		0.95	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5085	3332		4773	1334
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5085	3332		4773	1334
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1221	1300	639	593	597
RTOR Reduction (vph)	0	0	84	0	39	39
Lane Group Flow (vph)	0	1221	1855	0	853	259
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		41.9	41.9		20.4	20.4
Effective Green, g (s)		41.9	41.9		20.4	20.4
Actuated g/C Ratio		0.58	0.58		0.28	0.28
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2959	1939		1352	377
v/s Ratio Prot		0.24	c0.56		0.18	
v/s Ratio Perm						c0.19
v/c Ratio		0.41	0.96		0.63	0.69
Uniform Delay, d1		8.3	14.2		22.5	23.0
Progression Factor		1.00	1.09		1.00	1.00
Incremental Delay, d2		0.4	9.9		2.2	9.8
Delay (s)		8.7	25.3		24.8	32.8
Level of Service		A	C		C	C
Approach Delay (s)		8.7	25.3		26.8	
Approach LOS		A	C		C	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	902	718	0	1209	48	482	21	34	39	70	170
Future Volume (vph)	121	902	718	0	1209	48	482	21	34	39	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.93			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4747			3539	1583	1610	2880	2673	1770	1863	1560
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4747			3539	1583	1610	2880	2673	1770	1863	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	126	940	748	0	1259	50	502	22	35	41	73	177
RTOR Reduction (vph)	0	78	0	0	0	27	0	1	25	0	0	132
Lane Group Flow (vph)	126	1610	0	0	1259	23	251	276	6	41	73	45
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6			2		8	8		4	4	
Permitted Phases						2			8			4
Actuated Green, G (s)	15.8	86.9			67.1	67.1	29.9	29.9	29.9	12.4	12.4	12.4
Effective Green, g (s)	15.8	86.9			67.1	67.1	29.9	29.9	29.9	12.4	12.4	12.4
Actuated g/C Ratio	0.11	0.60			0.47	0.47	0.21	0.21	0.21	0.09	0.09	0.09
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	194	2864			1649	737	334	598	555	152	160	134
v/s Ratio Prot	c0.07	0.34			c0.36		c0.16	0.10		0.02	c0.04	
v/s Ratio Perm						0.01			0.00			0.03
v/c Ratio	0.65	0.56			0.76	0.03	0.75	0.46	0.01	0.27	0.46	0.34
Uniform Delay, d1	61.4	17.1			31.9	20.8	53.6	50.0	45.3	61.6	62.6	61.9
Progression Factor	0.96	0.84			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.7			3.4	0.1	9.2	0.6	0.0	1.0	2.1	1.5
Delay (s)	65.4	15.2			35.3	20.9	62.7	50.6	45.3	62.5	64.7	63.4
Level of Service	E	B			D	C	E	D	D	E	E	E
Approach Delay (s)		18.6			34.7			55.7			63.6	
Approach LOS		B			C			E			E	

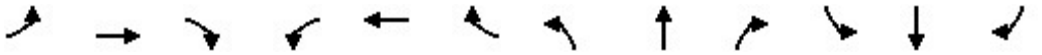
Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	107	342	29	28	73
Future Volume (Veh/h)	70	107	342	29	28	73
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	77	118	376	32	31	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	534	392			408	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	534	392			408	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	84	82			97	
cM capacity (veh/h)	493	657			1151	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	77	118	408	111
Volume Left	77	0	0	31
Volume Right	0	118	32	0
cSH	493	657	1700	1151
Volume to Capacity	0.16	0.18	0.24	0.03
Queue Length 95th (ft)	14	16	0	2
Control Delay (s)	13.6	11.7	0.0	2.5
Lane LOS	B	B		A
Approach Delay (s)	12.5		0.0	2.5
Approach LOS	B			

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	805	88	8	2043	28	481	7	3	19	11	391
Future Volume (veh/h)	82	805	88	8	2043	28	481	7	3	19	11	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	88	866	95	9	2197	30	523	0	3	20	12	420
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	2129	233	20	2778	38	643	0	287	194	117	480
Arrive On Green	0.05	0.46	0.46	0.01	0.42	0.42	0.18	0.00	0.18	0.17	0.17	0.17
Sat Flow, veh/h	3442	4655	509	1774	6563	90	3548	0	1583	1129	677	2787
Grp Volume(v), veh/h	88	630	331	9	1609	618	523	0	3	32	0	420
Grp Sat Flow(s),veh/h/ln	1721	1695	1773	1774	1602	1847	1774	0	1583	1806	0	1393
Q Serve(g_s), s	2.5	12.5	12.6	0.5	29.3	29.3	14.3	0.0	0.2	1.5	0.0	14.8
Cycle Q Clear(g_c), s	2.5	12.5	12.6	0.5	29.3	29.3	14.3	0.0	0.2	1.5	0.0	14.8
Prop In Lane	1.00		0.29	1.00		0.05	1.00		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	156	1551	811	20	2034	782	643	0	287	311	0	480
V/C Ratio(X)	0.56	0.41	0.41	0.46	0.79	0.79	0.81	0.00	0.01	0.10	0.00	0.88
Avail Cap(c_a), veh/h	174	1551	811	88	2156	828	1655	0	738	349	0	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.2	18.3	18.3	49.6	25.3	25.3	39.7	0.0	33.9	35.2	0.0	40.8
Incr Delay (d2), s/veh	3.3	0.2	0.3	15.8	2.0	5.0	2.6	0.0	0.0	0.1	0.0	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.9	6.2	0.3	13.3	16.0	7.2	0.0	0.1	0.8	0.0	6.6
LnGrp Delay(d),s/veh	50.6	18.4	18.6	65.5	27.2	30.2	42.3	0.0	33.9	35.4	0.0	54.7
LnGrp LOS	D	B	B	E	C	C	D		C	D		D
Approach Vol, veh/h		1049			2236			526			452	
Approach Delay, s/veh		21.2			28.2			42.2			53.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.8	5.6	50.7		21.9	9.1	47.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.1	5.0	45.4		19.5	5.1	45.3
Max Q Clear Time (g_c+I1), s		16.3	2.5	14.6		16.8	4.5	31.3
Green Ext Time (p_c), s		2.0	0.0	7.5		0.5	0.0	11.4

Intersection Summary	
HCM 2010 Ctrl Delay	30.9
HCM 2010 LOS	C

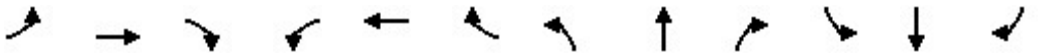
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	1523	104	8	1250	7	188	20	29	7	4	198
Future Volume (veh/h)	324	1523	104	8	1250	7	188	20	29	7	4	198
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	331	1554	106	8	1276	7	192	20	30	7	4	202
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2333	159	18	1447	450	236	25	37	170	97	235
Arrive On Green	0.21	0.48	0.48	0.01	0.28	0.28	0.17	0.17	0.17	0.15	0.15	0.15
Sat Flow, veh/h	1774	4863	332	1774	5085	1583	1392	145	218	1149	656	1583
Grp Volume(v), veh/h	331	1083	577	8	1276	7	242	0	0	11	0	202
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1755	0	0	1805	0	1583
Q Serve(g_s), s	17.0	22.8	22.9	0.4	22.4	0.3	12.4	0.0	0.0	0.5	0.0	11.7
Cycle Q Clear(g_c), s	17.0	22.8	22.9	0.4	22.4	0.3	12.4	0.0	0.0	0.5	0.0	11.7
Prop In Lane	1.00		0.18	1.00		1.00	0.79		0.12	0.64		1.00
Lane Grp Cap(c), veh/h	364	1627	866	18	1447	450	298	0	0	267	0	235
V/C Ratio(X)	0.91	0.67	0.67	0.45	0.88	0.02	0.81	0.00	0.00	0.04	0.00	0.86
Avail Cap(c_a), veh/h	389	1627	866	95	1495	465	675	0	0	347	0	305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	18.6	18.6	46.0	32.0	24.1	37.4	0.0	0.0	34.1	0.0	38.9
Incr Delay (d2), s/veh	23.8	1.0	2.0	16.7	6.4	0.0	5.4	0.0	0.0	0.1	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.9	11.8	0.3	11.4	0.1	6.4	0.0	0.0	0.2	0.0	6.2
LnGrp Delay(d),s/veh	60.1	19.6	20.6	62.8	38.4	24.1	42.8	0.0	0.0	34.2	0.0	56.4
LnGrp LOS	E	B	C	E	D	C	D			C		E
Approach Vol, veh/h		1991			1291			242			213	
Approach Delay, s/veh		26.6			38.4			42.8			55.3	
Approach LOS		C			D			D			E	

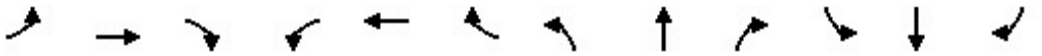
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.4	5.4	49.4		18.4	23.7	31.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		36.0	5.0	43.0		18.0	20.5	27.5
Max Q Clear Time (g_c+I1), s		14.4	2.4	24.9		13.7	19.0	24.4
Green Ext Time (p_c), s		1.5	0.0	10.9		0.3	0.2	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	887	33	212	708	197	112	564	232	370	814	78
Future Volume (vph)	109	887	33	212	708	197	112	564	232	370	814	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3486		1595	3352	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	3486		1595	3352	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	112	914	34	219	730	203	115	581	239	381	839	80
RTOR Reduction (vph)	0	2	0	0	0	134	0	0	157	0	0	46
Lane Group Flow (vph)	112	946	0	197	752	69	115	581	82	381	839	34
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	35.0	35.0		31.0	31.0	31.0	17.0	32.7	32.7	30.3	46.0	46.0
Effective Green, g (s)	35.0	35.0		31.0	31.0	31.0	17.0	32.7	32.7	30.3	46.0	46.0
Actuated g/C Ratio	0.24	0.24		0.21	0.21	0.21	0.12	0.23	0.23	0.21	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	820	841		341	716	335	205	790	353	366	1111	497
v/s Ratio Prot	0.03	c0.27		0.12	c0.22		0.07	0.17		c0.22	c0.24	
v/s Ratio Perm						0.04			0.05			0.02
v/c Ratio	0.14	1.13		0.58	1.05	0.20	0.56	0.74	0.23	1.04	0.76	0.07
Uniform Delay, d1	43.1	55.0		51.1	57.0	46.9	60.5	52.1	45.9	57.4	44.4	34.5
Progression Factor	1.00	1.00		0.29	0.33	0.19	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	71.6		4.2	40.3	0.8	10.6	3.6	0.3	58.1	4.8	0.3
Delay (s)	43.5	126.6		19.0	59.2	9.8	71.1	55.7	46.2	115.4	49.2	34.8
Level of Service	D	F		B	E	A	E	E	D	F	D	C
Approach Delay (s)		117.8			43.7			55.2			67.8	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	70.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	1293	39	56	809	28	74	106	105	190	188	234
Future Volume (vph)	157	1293	39	56	809	28	74	106	105	190	188	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3524		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.45	1.00	1.00	0.62	1.00	1.00
Satd. Flow (perm)	1770	3524		1770	3539	1583	842	1863	1583	1154	1863	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	162	1333	40	58	834	29	76	109	108	196	194	241
RTOR Reduction (vph)	0	2	0	0	0	22	0	0	83	0	0	124
Lane Group Flow (vph)	162	1371	0	58	834	7	76	109	25	196	194	117
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	62.7	62.7		37.3	37.3	37.3	33.0	33.0	33.0	33.0	33.0	33.0
Effective Green, g (s)	62.7	62.7		37.3	37.3	37.3	33.0	33.0	33.0	33.0	33.0	33.0
Actuated g/C Ratio	0.43	0.43		0.26	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	765	1523		455	910	407	191	423	360	262	423	360
v/s Ratio Prot	0.09	c0.39		0.03	c0.24			0.06			0.10	
v/s Ratio Perm						0.00	0.09		0.02	c0.17		0.07
v/c Ratio	0.21	0.90		0.13	0.92	0.02	0.40	0.26	0.07	0.75	0.46	0.33
Uniform Delay, d1	25.7	38.2		41.4	52.3	40.2	47.6	45.9	43.9	52.1	48.3	46.7
Progression Factor	0.56	0.58		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	2.4		0.1	13.6	0.0	6.1	1.5	0.4	17.7	3.6	2.4
Delay (s)	14.7	24.4		41.5	66.0	40.2	53.7	47.4	44.3	69.8	51.8	49.1
Level of Service	B	C		D	E	D	D	D	D	E	D	D
Approach Delay (s)		23.3			63.6			47.9			56.4	
Approach LOS		C			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

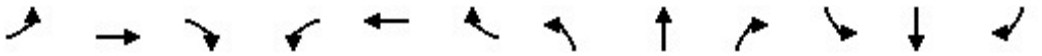
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1579	38	102	905	1	107
Future Volume (Veh/h)	1579	38	102	905	1	107
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1716	41	111	984	1	116
Pedestrians	4				19	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			730		
pX, platoon unblocked			0.63		0.73	0.63
vC, conflicting volume			1776		2474	898
vC1, stage 1 conf vol					1756	
vC2, stage 2 conf vol					718	
vCu, unblocked vol			1066		1034	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			72		99	83
cM capacity (veh/h)			404		183	674

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	1144	613	111	492	492	117
Volume Left	0	0	111	0	0	1
Volume Right	0	41	0	0	0	116
cSH	1700	1700	404	1700	1700	659
Volume to Capacity	0.67	0.36	0.28	0.29	0.29	0.18
Queue Length 95th (ft)	0	0	28	0	0	16
Control Delay (s)	0.0	0.0	17.3	0.0	0.0	11.6
Lane LOS			C			B
Approach Delay (s)	0.0		1.8			11.6
Approach LOS						B

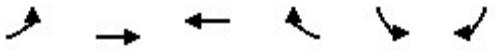
Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	1645	0	14	900	218	28	25	57	470	9	83
Future Volume (vph)	87	1645	0	14	900	218	28	25	57	470	9	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1752	3505		1752	3505	1470		1797	1568		1758	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.58	1.00		0.69	1.00
Satd. Flow (perm)	1752	3505		1752	3505	1470		1075	1568		1270	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	94	1769	0	15	968	234	30	27	61	505	10	89
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	38	0	0	53
Lane Group Flow (vph)	94	1769	0	15	968	102	0	57	23	0	515	36
Confl. Peds. (#/hr)	12					12						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	11.4	66.8		1.2	56.6	56.6		50.0	50.0		50.0	50.0
Effective Green, g (s)	11.4	66.8		1.2	56.6	56.6		50.0	50.0		50.0	50.0
Actuated g/C Ratio	0.09	0.51		0.01	0.44	0.44		0.38	0.38		0.38	0.38
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	153	1801		16	1526	640		413	603		488	603
v/s Ratio Prot	0.05	c0.50		0.01	c0.28							
v/s Ratio Perm						0.07		0.05	0.01		c0.41	0.02
v/c Ratio	0.61	0.98		0.94	0.63	0.16		0.14	0.04		1.06	0.06
Uniform Delay, d1	57.2	31.0		64.4	28.6	22.3		26.0	25.0		40.0	25.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	17.1	17.4		191.7	2.0	0.5		0.2	0.0		56.1	0.0
Delay (s)	74.2	48.4		256.1	30.6	22.8		26.1	25.0		96.1	25.2
Level of Service	E	D		F	C	C		C	C		F	C
Approach Delay (s)		49.7			31.9			25.6			85.7	
Approach LOS		D			C			C			F	

Intersection Summary			
HCM 2000 Control Delay	49.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

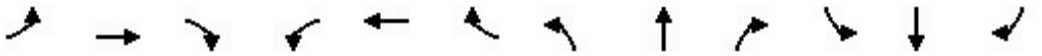
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1352	853	330	1542	279
Future Volume (vph)	0	1352	853	330	1542	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5036	3336		4945	1348
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5036	3336		4945	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1423	898	347	1623	294
RTOR Reduction (vph)	0	0	56	0	2	52
Lane Group Flow (vph)	0	1423	1189	0	1650	213
Confl. Bikes (#/hr)				5		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		34.1	34.1		28.2	28.2
Effective Green, g (s)		34.1	34.1		28.2	28.2
Actuated g/C Ratio		0.47	0.47		0.39	0.39
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2385	1579		1936	527
v/s Ratio Prot		0.28	c0.36		c0.33	
v/s Ratio Perm						0.16
v/c Ratio		0.60	0.75		0.85	0.40
Uniform Delay, d1		13.9	15.5		20.0	15.8
Progression Factor		1.00	1.27		1.00	1.00
Incremental Delay, d2		1.1	2.3		3.8	0.5
Delay (s)		15.0	22.0		23.8	16.3
Level of Service		B	C		C	B
Approach Delay (s)		15.0	22.0		22.8	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	2215	518	0	663	35	445	69	632	40	47	75
Future Volume (vph)	161	2215	518	0	663	35	445	69	632	40	47	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.94	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4941			3539	1583	1610	2767	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4941			3539	1583	1610	2767	2723	1770	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	2408	563	0	721	38	484	75	687	43	51	82
RTOR Reduction (vph)	0	17	0	0	0	23	0	54	404	0	0	77
Lane Group Flow (vph)	175	2954	0	0	721	15	266	452	70	43	51	5
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6			8			7
Actuated Green, G (s)	39.0	98.5			55.5	55.5	21.4	21.4	21.4	9.3	9.3	9.3
Effective Green, g (s)	39.0	98.5			55.5	55.5	21.4	21.4	21.4	9.3	9.3	9.3
Actuated g/C Ratio	0.27	0.68			0.39	0.39	0.15	0.15	0.15	0.06	0.06	0.06
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	479	3379			1363	610	239	411	404	114	120	102
v/s Ratio Prot	0.10	c0.60			0.20		c0.17	0.16		0.02	c0.03	
v/s Ratio Perm						0.01			0.03			0.00
v/c Ratio	0.37	0.87			0.53	0.02	1.11	1.10	0.17	0.38	0.42	0.05
Uniform Delay, d1	42.5	17.9			34.2	27.4	61.3	61.3	53.6	64.6	64.8	63.2
Progression Factor	1.08	1.17			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	2.5			1.5	0.1	91.9	74.4	0.2	2.1	2.4	0.2
Delay (s)	46.0	23.5			35.6	27.5	153.2	135.7	53.8	66.7	67.2	63.4
Level of Service	D	C			D	C	F	F	D	E	E	E
Approach Delay (s)		24.7			35.2			108.3			65.3	
Approach LOS		C			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	47.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	55	139	71	105	86
Future Volume (Veh/h)	30	55	139	71	105	86
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	34	63	160	82	121	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	542	201			242	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	542	201			242	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	92	92			91	
cM capacity (veh/h)	442	820			1279	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	34	63	242	220
Volume Left	34	0	0	121
Volume Right	0	63	82	0
cSH	442	820	1700	1279
Volume to Capacity	0.08	0.08	0.14	0.09
Queue Length 95th (ft)	6	6	0	8
Control Delay (s)	13.8	9.8	0.0	4.8
Lane LOS	B	A		A
Approach Delay (s)	11.2		0.0	4.8
Approach LOS	B			

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	1916	573	20	1121	25	129	12	11	29	3	168
Future Volume (veh/h)	398	1916	573	20	1121	25	129	12	11	29	3	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	437	2105	630	22	1232	27	151	0	12	32	3	185
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	555	2226	621	44	2771	61	259	0	116	160	15	274
Arrive On Green	0.16	0.56	0.56	0.02	0.43	0.43	0.07	0.00	0.07	0.10	0.10	0.10
Sat Flow, veh/h	3442	3955	1103	1774	6501	142	3548	0	1583	1629	153	2787
Grp Volume(v), veh/h	437	1782	953	22	910	349	151	0	12	35	0	185
Grp Sat Flow(s),veh/h/ln	1721	1695	1668	1774	1602	1838	1774	0	1583	1781	0	1393
Q Serve(g_s), s	9.1	36.2	42.0	0.9	10.0	10.0	3.1	0.0	0.5	1.3	0.0	4.8
Cycle Q Clear(g_c), s	9.1	36.2	42.0	0.9	10.0	10.0	3.1	0.0	0.5	1.3	0.0	4.8
Prop In Lane	1.00		0.66	1.00		0.08	1.00		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	555	1908	939	44	2048	783	259	0	116	175	0	274
V/C Ratio(X)	0.79	0.93	1.01	0.51	0.44	0.45	0.58	0.00	0.10	0.20	0.00	0.67
Avail Cap(c_a), veh/h	816	1908	939	119	2048	783	2235	0	997	430	0	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.1	15.0	16.3	35.9	15.2	15.2	33.5	0.0	32.3	30.9	0.0	32.5
Incr Delay (d2), s/veh	3.2	9.1	33.1	8.8	0.2	0.4	2.1	0.0	0.4	0.6	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	19.0	27.7	0.6	4.4	5.1	1.6	0.0	0.2	0.7	0.0	1.9
LnGrp Delay(d),s/veh	33.2	24.2	49.5	44.7	15.3	15.6	35.6	0.0	32.7	31.5	0.0	35.4
LnGrp LOS	C	C	F	D	B	B	D		C	C		D
Approach Vol, veh/h		3172			1281			163			220	
Approach Delay, s/veh		33.0			15.9			35.3			34.8	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.9	6.3	46.5		11.8	16.5	36.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.0	5.0	42.0		18.0	17.7	29.3
Max Q Clear Time (g_c+I1), s		5.1	2.9	44.0		6.8	11.1	12.0
Green Ext Time (p_c), s		0.6	0.0	0.0		0.6	0.9	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

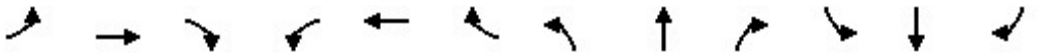
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	1346	224	42	1088	14	71	9	19	6	11	108
Future Volume (veh/h)	288	1346	224	42	1088	14	71	9	19	6	11	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1900	1827	1900	1900	1827	1827
Adj Flow Rate, veh/h	300	1402	233	44	1133	15	74	9	20	6	11	112
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	353	2133	354	73	1666	519	102	12	27	66	121	162
Arrive On Green	0.20	0.49	0.49	0.04	0.33	0.33	0.08	0.08	0.08	0.10	0.10	0.10
Sat Flow, veh/h	1740	4310	716	1740	4988	1553	1226	149	331	634	1162	1553
Grp Volume(v), veh/h	300	1081	554	44	1133	15	103	0	0	17	0	112
Grp Sat Flow(s),veh/h/ln	1740	1663	1701	1740	1663	1553	1707	0	0	1795	0	1553
Q Serve(g_s), s	10.8	15.9	15.9	1.6	12.8	0.4	3.8	0.0	0.0	0.6	0.0	4.5
Cycle Q Clear(g_c), s	10.8	15.9	15.9	1.6	12.8	0.4	3.8	0.0	0.0	0.6	0.0	4.5
Prop In Lane	1.00		0.42	1.00		1.00	0.72		0.19	0.35		1.00
Lane Grp Cap(c), veh/h	353	1645	842	73	1666	519	142	0	0	188	0	162
V/C Ratio(X)	0.85	0.66	0.66	0.60	0.68	0.03	0.73	0.00	0.00	0.09	0.00	0.69
Avail Cap(c_a), veh/h	493	2184	1117	136	2253	701	941	0	0	495	0	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.1	12.3	12.4	30.7	18.7	14.6	29.2	0.0	0.0	26.4	0.0	28.2
Incr Delay (d2), s/veh	9.8	0.5	0.9	7.7	0.5	0.0	6.9	0.0	0.0	0.2	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	7.3	7.6	0.9	5.8	0.2	2.1	0.0	0.0	0.3	0.0	2.2
LnGrp Delay(d),s/veh	34.8	12.8	13.2	38.4	19.2	14.6	36.2	0.0	0.0	26.6	0.0	33.4
LnGrp LOS	C	B	B	D	B	B	D			C		C
Approach Vol, veh/h		1935			1192			103			129	
Approach Delay, s/veh		16.3			19.9			36.2			32.5	
Approach LOS		B			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.9	7.2	36.8		11.3	17.7	26.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		36.0	5.1	42.9		18.0	18.5	29.5
Max Q Clear Time (g_c+I1), s		5.8	3.6	17.9		6.5	12.8	14.8
Green Ext Time (p_c), s		0.6	0.0	13.6		0.3	0.5	7.0

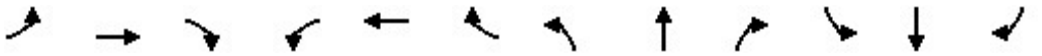
Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	662	55	271	717	446	83	889	165	268	775	127
Future Volume (vph)	238	662	55	271	717	446	83	889	165	268	775	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3481		1610	3384	1451	1770	3539	1532	1770	3539	1502
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3481		1610	3384	1451	1770	3539	1532	1770	3539	1502
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	240	669	56	274	724	451	84	898	167	271	783	128
RTOR Reduction (vph)	0	5	0	0	0	263	0	0	72	0	0	63
Lane Group Flow (vph)	240	720	0	247	751	188	84	898	95	271	783	65
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	33.0	33.0		34.0	34.0	34.0	18.0	38.0	38.0	24.0	44.0	44.0
Effective Green, g (s)	33.0	33.0		34.0	34.0	34.0	18.0	38.0	38.0	24.0	44.0	44.0
Actuated g/C Ratio	0.23	0.23		0.23	0.23	0.23	0.12	0.26	0.26	0.17	0.30	0.30
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	781	792		377	793	340	219	927	401	292	1073	455
v/s Ratio Prot	0.07	c0.21		0.15	c0.22		0.05	c0.25		c0.15	c0.22	
v/s Ratio Perm						0.13			0.06			0.04
v/c Ratio	0.31	0.91		0.66	0.95	0.55	0.38	0.97	0.24	0.93	0.73	0.14
Uniform Delay, d1	46.5	54.5		50.2	54.6	48.8	58.4	52.9	42.1	59.6	45.2	36.8
Progression Factor	1.00	1.00		0.47	0.51	0.69	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	16.3		2.9	15.7	1.4	1.1	22.9	1.4	37.1	4.4	0.7
Delay (s)	47.5	70.9		26.5	43.4	35.2	59.5	75.8	43.5	96.7	49.6	37.4
Level of Service	D	E		C	D	D	E	E	D	F	D	D
Approach Delay (s)		65.1			38.0			69.9			59.1	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	56.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	109.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	821	55	31	961	55	193	272	125	76	107	280
Future Volume (vph)	219	821	55	31	961	55	193	272	125	76	107	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3489		1770	3539	1498	1756	1863	1540	1757	1863	1549
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.63	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	1770	3489		1770	3539	1498	1171	1863	1540	635	1863	1549
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	221	829	56	31	971	56	195	275	126	77	108	283
RTOR Reduction (vph)	0	3	0	0	0	24	0	0	57	0	0	211
Lane Group Flow (vph)	221	882	0	31	971	32	195	275	69	77	108	72
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	44.0	44.0		52.0	52.0	52.0	37.0	37.0	37.0	37.0	37.0	37.0
Effective Green, g (s)	44.0	44.0		52.0	52.0	52.0	37.0	37.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.30	0.30		0.36	0.36	0.36	0.26	0.26	0.26	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	537	1058		634	1269	537	298	475	392	162	475	395
v/s Ratio Prot	0.12	c0.25		0.02	c0.27			0.15			0.06	
v/s Ratio Perm						0.02	c0.17		0.05	0.12		0.05
v/c Ratio	0.41	0.83		0.05	0.77	0.06	0.65	0.58	0.18	0.48	0.23	0.18
Uniform Delay, d1	40.2	47.1		30.4	41.1	30.5	48.3	47.2	42.1	45.8	42.7	42.2
Progression Factor	0.52	0.48		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	4.3		0.1	4.4	0.2	10.7	5.1	1.0	9.7	1.1	1.0
Delay (s)	22.2	26.9		30.5	45.5	30.7	59.0	52.3	43.1	55.4	43.8	43.2
Level of Service	C	C		C	D	C	E	D	D	E	D	D
Approach Delay (s)		26.0			44.3			52.5			45.4	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		

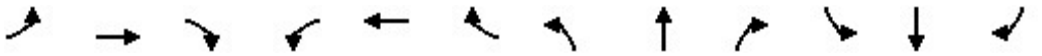
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1022	24	62	1056	10	536
Future Volume (Veh/h)	1022	24	62	1056	10	536
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1065	25	65	1100	10	558
Pedestrians	6				18	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				2	
Right turn flare (veh)						
Median type	TWLTL			None		
Median storage veh)	2					
Upstream signal (ft)	397			728		
pX, platoon unblocked			0.77		0.81	0.77
vC, conflicting volume			1108		1782	563
vC1, stage 1 conf vol					1096	
vC2, stage 2 conf vol					686	
vCu, unblocked vol			535		199	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			92		98	32
cM capacity (veh/h)			776		583	818

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	710	380	65	550	550	568
Volume Left	0	0	65	0	0	10
Volume Right	0	25	0	0	0	558
cSH	1700	1700	776	1700	1700	812
Volume to Capacity	0.42	0.22	0.08	0.32	0.32	0.70
Queue Length 95th (ft)	0	0	7	0	0	146
Control Delay (s)	0.0	0.0	10.1	0.0	0.0	19.1
Lane LOS			B			C
Approach Delay (s)	0.0		0.6			19.1
Approach LOS						C

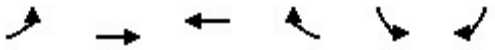
Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1315	0	34	1348	566	27	21	26	285	6	31
Future Volume (vph)	180	1315	0	34	1348	566	27	21	26	285	6	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1519		1812	1539		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.65	1.00		0.69	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1519		1212	1539		1290	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	1429	0	37	1465	615	29	23	28	310	7	34
RTOR Reduction (vph)	0	0	0	0	0	229	0	0	20	0	0	25
Lane Group Flow (vph)	196	1429	0	37	1465	386	0	52	8	0	317	9
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	17.0	78.3		4.8	66.1	66.1		34.9	34.9		34.9	34.9
Effective Green, g (s)	17.0	78.3		4.8	66.1	66.1		34.9	34.9		34.9	34.9
Actuated g/C Ratio	0.13	0.60		0.04	0.51	0.51		0.27	0.27		0.27	0.27
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	231	2131		65	1799	772		325	413		346	424
v/s Ratio Prot	c0.11	0.40		0.02	c0.41							
v/s Ratio Perm						0.25		0.04	0.00		c0.25	0.01
v/c Ratio	0.85	0.67		0.57	0.81	0.50		0.16	0.02		0.92	0.02
Uniform Delay, d1	55.2	17.2		61.6	26.8	21.1		36.3	35.0		46.1	35.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	24.0	1.7		10.9	4.2	2.3		0.2	0.0		28.0	0.0
Delay (s)	79.3	18.9		72.5	31.0	23.4		36.6	35.0		74.1	35.0
Level of Service	E	B		E	C	C		D	C		E	D
Approach Delay (s)		26.2			29.5			36.0			70.3	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

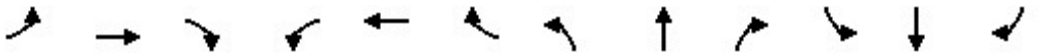
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1197	1375	669	592	573
Future Volume (vph)	0	1197	1375	669	592	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1	5.1		4.6	4.6
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.95		0.95	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5085	3334		4773	1331
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5085	3334		4773	1331
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1247	1432	697	617	597
RTOR Reduction (vph)	0	0	82	0	41	41
Lane Group Flow (vph)	0	1247	2047	0	875	257
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		46.1	46.1		16.2	16.2
Effective Green, g (s)		46.1	46.1		16.2	16.2
Actuated g/C Ratio		0.64	0.64		0.22	0.22
Clearance Time (s)		5.1	5.1		4.6	4.6
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3255	2134		1073	299
v/s Ratio Prot		0.25	c0.61		0.18	
v/s Ratio Perm						c0.19
v/c Ratio		0.38	0.96		0.82	0.86
Uniform Delay, d1		6.2	12.1		26.5	26.8
Progression Factor		1.00	1.67		1.00	1.00
Incremental Delay, d2		0.3	8.9		4.9	21.0
Delay (s)		6.5	29.1		31.4	47.8
Level of Service		A	C		C	D
Approach Delay (s)		6.5	29.1		35.4	
Approach LOS		A	C		D	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	950	718	0	1392	48	482	21	45	39	70	170
Future Volume (vph)	121	950	718	0	1392	48	482	21	45	39	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4757			3539	1583	1610	2879	2673	1770	1863	1561
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4757			3539	1583	1610	2879	2673	1770	1863	1561
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	126	990	748	0	1450	50	502	22	47	41	73	177
RTOR Reduction (vph)	0	75	0	0	0	25	0	1	33	0	0	106
Lane Group Flow (vph)	126	1663	0	0	1450	25	251	277	9	41	73	71
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6			2		8	8		4	4	
Permitted Phases						2			8			4
Actuated Green, G (s)	10.0	86.1			72.1	72.1	29.8	29.8	29.8	13.3	13.3	13.3
Effective Green, g (s)	10.0	86.1			72.1	72.1	29.8	29.8	29.8	13.3	13.3	13.3
Actuated g/C Ratio	0.07	0.60			0.50	0.50	0.21	0.21	0.21	0.09	0.09	0.09
Clearance Time (s)	4.0	5.1			5.1	5.1	4.6	4.6	4.6	5.1	5.1	5.1
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	122	2844			1771	792	333	595	553	163	172	144
v/s Ratio Prot	c0.07	0.35			c0.41		c0.16	0.10		0.02	0.04	
v/s Ratio Perm						0.02			0.00			c0.05
v/c Ratio	1.03	0.58			0.82	0.03	0.75	0.47	0.02	0.25	0.42	0.49
Uniform Delay, d1	67.0	17.9			30.4	18.2	53.7	50.1	45.4	60.7	61.7	62.1
Progression Factor	0.98	0.91			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	84.6	0.8			4.4	0.1	9.3	0.6	0.0	0.8	1.7	2.6
Delay (s)	150.2	17.0			34.8	18.3	63.0	50.7	45.4	61.5	63.4	64.8
Level of Service	F	B			C	B	E	D	D	E	E	E
Approach Delay (s)		26.0			34.2			55.7			64.0	
Approach LOS		C			C			E			E	

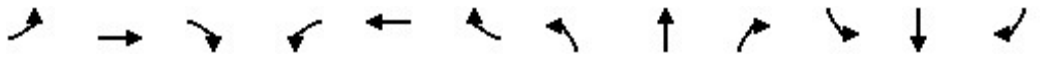
Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	110	354	29	39	130
Future Volume (Veh/h)	70	110	354	29	39	130
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	77	121	389	32	43	143
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	634	405			421	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	634	405			421	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	82	81			96	
cM capacity (veh/h)	426	646			1138	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	77	121	421	186
Volume Left	77	0	0	43
Volume Right	0	121	32	0
cSH	426	646	1700	1138
Volume to Capacity	0.18	0.19	0.25	0.04
Queue Length 95th (ft)	16	17	0	3
Control Delay (s)	15.3	11.9	0.0	2.2
Lane LOS	C	B		A
Approach Delay (s)	13.2		0.0	2.2
Approach LOS	B			

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	805	147	11	2043	28	777	7	14	19	11	391
Future Volume (veh/h)	82	805	147	11	2043	28	777	7	14	19	11	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	88	866	158	12	2197	30	841	0	15	20	12	420
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1735	315	24	2460	34	960	0	428	185	111	456
Arrive On Green	0.04	0.40	0.40	0.01	0.37	0.37	0.27	0.00	0.27	0.16	0.16	0.16
Sat Flow, veh/h	3442	4329	786	1774	6563	90	3548	0	1583	1129	677	2787
Grp Volume(v), veh/h	88	677	347	12	1609	618	841	0	15	32	0	420
Grp Sat Flow(s),veh/h/ln	1721	1695	1724	1774	1602	1847	1774	0	1583	1806	0	1393
Q Serve(g_s), s	3.0	17.8	18.0	0.8	37.5	37.5	27.0	0.0	0.8	1.8	0.0	17.7
Cycle Q Clear(g_c), s	3.0	17.8	18.0	0.8	37.5	37.5	27.0	0.0	0.8	1.8	0.0	17.7
Prop In Lane	1.00		0.46	1.00		0.05	1.00		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	137	1359	691	24	1802	692	960	0	428	296	0	456
V/C Ratio(X)	0.64	0.50	0.50	0.49	0.89	0.89	0.88	0.00	0.04	0.11	0.00	0.92
Avail Cap(c_a), veh/h	147	1359	691	74	1827	702	1403	0	626	296	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	26.7	26.8	58.3	35.0	35.0	41.5	0.0	32.0	42.4	0.0	49.1
Incr Delay (d2), s/veh	8.3	0.3	0.6	14.5	6.0	13.7	4.6	0.0	0.0	0.2	0.0	24.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.3	8.7	0.5	17.5	21.7	13.8	0.0	0.4	0.9	0.0	8.3
LnGrp Delay(d),s/veh	64.7	27.0	27.3	72.8	41.0	48.7	46.1	0.0	32.0	42.6	0.0	73.1
LnGrp LOS	E	C	C	E	D	D	D		C	D		E
Approach Vol, veh/h		1112			2239			856			452	
Approach Delay, s/veh		30.1			43.3			45.8			70.9	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		36.7	6.1	52.3		24.0	9.2	49.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		47.1	5.0	45.4		19.5	5.1	45.3
Max Q Clear Time (g_c+I1), s		29.0	2.8	20.0		19.7	5.0	39.5
Green Ext Time (p_c), s		3.2	0.0	7.7		0.0	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

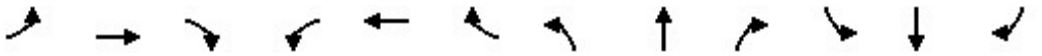
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1523	104	8	1250	7	188	20	29	7	4	255
Future Volume (veh/h)	336	1523	104	8	1250	7	188	20	29	7	4	255
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	343	1554	106	8	1276	7	192	20	30	7	4	260
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	2223	152	18	1366	425	234	24	37	208	119	287
Arrive On Green	0.20	0.46	0.46	0.01	0.27	0.27	0.17	0.17	0.17	0.18	0.18	0.18
Sat Flow, veh/h	1774	4863	332	1774	5085	1583	1392	145	218	1149	656	1583
Grp Volume(v), veh/h	343	1083	577	8	1276	7	242	0	0	11	0	260
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1755	0	0	1805	0	1583
Q Serve(g_s), s	18.9	25.0	25.1	0.4	24.1	0.3	13.1	0.0	0.0	0.5	0.0	15.8
Cycle Q Clear(g_c), s	18.9	25.0	25.1	0.4	24.1	0.3	13.1	0.0	0.0	0.5	0.0	15.8
Prop In Lane	1.00		0.18	1.00		1.00	0.79		0.12	0.64		1.00
Lane Grp Cap(c), veh/h	352	1550	825	18	1366	425	295	0	0	327	0	287
V/C Ratio(X)	0.97	0.70	0.70	0.45	0.93	0.02	0.82	0.00	0.00	0.03	0.00	0.91
Avail Cap(c_a), veh/h	352	1550	825	90	1371	427	679	0	0	331	0	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.1	21.3	21.3	48.4	35.1	26.4	39.4	0.0	0.0	33.1	0.0	39.4
Incr Delay (d2), s/veh	40.9	1.4	2.6	16.9	11.9	0.0	5.6	0.0	0.0	0.0	0.0	29.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	12.0	13.1	0.3	12.7	0.1	6.8	0.0	0.0	0.2	0.0	9.3
LnGrp Delay(d),s/veh	80.1	22.7	23.9	65.3	46.9	26.4	45.0	0.0	0.0	33.2	0.0	69.1
LnGrp LOS	F	C	C	E	D	C	D			C		E
Approach Vol, veh/h		2003			1291			242			271	
Approach Delay, s/veh		32.9			46.9			45.0			67.6	
Approach LOS		C			D			D			E	

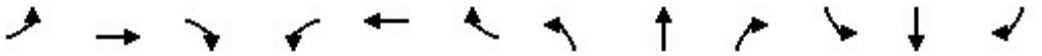
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	5.5	49.4		22.3	24.0	30.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		38.0	5.0	41.0		18.0	19.5	26.5
Max Q Clear Time (g_c+I1), s		15.1	2.4	27.1		17.8	20.9	26.1
Green Ext Time (p_c), s		1.5	0.0	9.1		0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	887	33	212	708	197	112	564	232	370	814	78
Future Volume (vph)	109	887	33	212	708	197	112	564	232	370	814	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1595	3355	1568	1595	3352	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1595	3355	1568	1595	3352	1568	1752	3505	1568	1752	3505	1568
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	112	914	34	219	730	203	115	581	239	381	839	80
RTOR Reduction (vph)	0	0	26	0	0	134	0	0	157	0	0	46
Lane Group Flow (vph)	101	925	8	197	752	69	115	581	82	381	839	34
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	36.0	36.0	36.0	31.0	31.0	31.0	14.1	32.7	32.7	29.3	47.9	47.9
Effective Green, g (s)	36.0	36.0	36.0	31.0	31.0	31.0	14.1	32.7	32.7	29.3	47.9	47.9
Actuated g/C Ratio	0.25	0.25	0.25	0.21	0.21	0.21	0.10	0.23	0.23	0.20	0.33	0.33
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	832	389	341	716	335	170	790	353	354	1157	517
v/s Ratio Prot	0.06	c0.28		0.12	c0.22		0.07	c0.17		c0.22	0.24	
v/s Ratio Perm			0.01			0.04			0.05			0.02
v/c Ratio	0.26	1.11	0.02	0.58	1.05	0.20	0.68	0.74	0.23	1.08	0.73	0.07
Uniform Delay, d1	43.7	54.5	41.2	51.1	57.0	46.9	63.2	52.1	45.9	57.9	42.8	33.2
Progression Factor	1.00	1.00	1.00	0.29	0.33	0.19	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	66.6	0.1	1.4	40.3	0.2	10.2	3.6	0.3	69.7	2.3	0.1
Delay (s)	45.3	121.1	41.3	16.2	59.2	9.2	73.4	55.7	46.2	127.5	45.0	33.3
Level of Service	D	F	D	B	E	A	E	E	D	F	D	C
Approach Delay (s)		111.3			43.1			55.5			68.5	
Approach LOS		F			D			E			E	

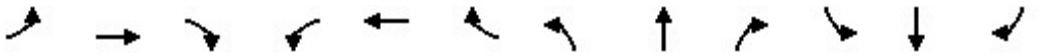
Intersection Summary			
HCM 2000 Control Delay	69.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1136	98	191	728	289	260	1224	177	317	826	78
Future Volume (vph)	120	1136	98	191	728	289	260	1224	177	317	826	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1610	3388	1583	1610	3386	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1610	3388	1583	1610	3386	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	120	1136	98	191	728	289	260	1224	177	317	826	78
RTOR Reduction (vph)	0	0	72	0	0	208	0	0	58	0	0	54
Lane Group Flow (vph)	108	1148	26	172	747	81	260	1224	119	317	826	24
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	35.0	35.0	35.0	26.0	26.0	26.0	21.3	40.0	40.0	17.0	35.7	35.7
Effective Green, g (s)	35.0	35.0	35.0	26.0	26.0	26.0	21.3	40.0	40.0	17.0	35.7	35.7
Actuated g/C Ratio	0.26	0.26	0.26	0.19	0.19	0.19	0.16	0.30	0.30	0.13	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	884	413	312	656	307	281	1056	472	224	942	421
v/s Ratio Prot	0.07	c0.34		0.11	c0.22		0.15	c0.35		c0.18	0.23	
v/s Ratio Perm			0.02			0.05			0.08			0.02
v/c Ratio	0.26	1.30	0.06	0.55	1.14	0.26	0.93	1.16	0.25	1.42	0.88	0.06
Uniform Delay, d1	39.2	49.5	37.2	48.7	54.0	45.9	55.6	47.0	35.7	58.5	47.0	36.6
Progression Factor	0.36	0.52	0.50	0.52	0.57	1.69	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	140.5	0.0	1.1	72.5	0.2	34.3	82.4	1.3	211.1	9.2	0.1
Delay (s)	14.4	166.3	18.7	26.3	103.0	77.9	89.8	129.4	37.0	269.6	56.3	36.7
Level of Service	B	F	B	C	F	E	F	F	D	F	E	D
Approach Delay (s)		143.5			86.1			113.3			110.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	114.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	117.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1078	226	41	893	39	86	142	143	352	179	211
Future Volume (vph)	190	1078	226	41	893	39	86	142	143	352	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3447		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.55	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1770	3447		1770	3539	1583	1017	1863	1583	1121	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	190	1078	226	41	893	39	86	142	143	352	179	211
RTOR Reduction (vph)	0	13	0	0	0	29	0	0	99	0	0	127
Lane Group Flow (vph)	190	1291	0	41	893	10	86	142	44	352	179	84
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	5		6	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	48.0	48.0		33.0	33.0	33.0	41.0	41.0	41.0	41.0	41.0	41.0
Effective Green, g (s)	48.0	48.0		33.0	33.0	33.0	41.0	41.0	41.0	41.0	41.0	41.0
Actuated g/C Ratio	0.36	0.36		0.25	0.25	0.25	0.31	0.31	0.31	0.31	0.31	0.31
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	634	1234		435	871	389	311	570	484	342	570	484
v/s Ratio Prot	0.11	c0.37		0.02	c0.25			0.08			0.10	
v/s Ratio Perm						0.01	0.08		0.03	c0.31		0.05
v/c Ratio	0.30	1.05		0.09	1.03	0.02	0.28	0.25	0.09	1.03	0.31	0.17
Uniform Delay, d1	30.9	43.0		39.0	50.5	38.3	35.3	34.9	33.2	46.5	35.7	34.1
Progression Factor	0.23	0.32		1.26	0.90	2.04	0.72	0.71	0.76	1.05	1.03	1.34
Incremental Delay, d2	0.1	23.3		0.0	26.9	0.0	0.5	0.2	0.1	54.2	0.3	0.2
Delay (s)	7.2	37.0		49.3	72.2	78.1	25.8	24.9	25.1	103.1	36.9	46.0
Level of Service	A	D		D	E	E	C	C	C	F	D	D
Approach Delay (s)		33.2			71.5			25.2			70.9	
Approach LOS		C			E			C			E	

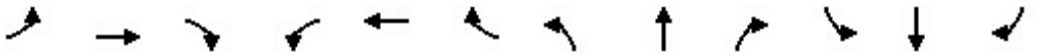
Intersection Summary			
HCM 2000 Control Delay	50.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



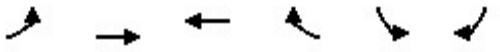
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1525	37	62	970	12	87
Future Volume (vph)	1525	37	62	970	12	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3519		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3519		1770	3539	1770	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1525	37	62	970	12	87
RTOR Reduction (vph)	1	0	0	0	0	82
Lane Group Flow (vph)	1561	0	62	970	12	5
Confl. Peds. (#/hr)		19	19		4	
Turn Type	NA		Split	NA	Prot	Perm
Protected Phases	5		6	6	8	
Permitted Phases						8
Actuated Green, G (s)	74.7		40.1	40.1	7.2	7.2
Effective Green, g (s)	74.7		40.1	40.1	7.2	7.2
Actuated g/C Ratio	0.56		0.30	0.30	0.05	0.05
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1961		529	1059	95	85
v/s Ratio Prot	c0.44		0.04	c0.27	c0.01	
v/s Ratio Perm						0.00
v/c Ratio	0.80		0.12	0.92	0.13	0.05
Uniform Delay, d1	23.6		34.1	45.3	60.4	60.2
Progression Factor	0.29		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0		0.1	12.0	0.6	0.3
Delay (s)	7.9		34.2	57.4	61.0	60.4
Level of Service	A		C	E	E	E
Approach Delay (s)	7.9			56.0	60.5	
Approach LOS	A			E	E	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



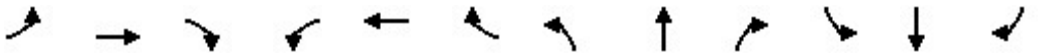
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	1398	0	18	1039	282	40	28	57	464	13	78
Future Volume (vph)	141	1398	0	18	1039	282	40	28	57	464	13	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1484		1810	1583		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.60	1.00		0.68	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1484		1119	1583		1271	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	141	1398	0	18	1039	282	40	28	57	464	13	78
RTOR Reduction (vph)	0	0	0	0	0	157	0	0	33	0	0	45
Lane Group Flow (vph)	141	1398	0	18	1039	125	0	68	24	0	477	33
Confl. Peds. (#/hr)	12					12						
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	14.0	60.0		3.0	49.0	49.0		55.0	55.0		55.0	55.0
Effective Green, g (s)	14.0	60.0		3.0	49.0	49.0		55.0	55.0		55.0	55.0
Actuated g/C Ratio	0.11	0.46		0.02	0.38	0.38		0.42	0.42		0.42	0.42
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	190	1633		40	1333	559		473	669		537	669
v/s Ratio Prot	0.08	c0.40		0.01	c0.29							
v/s Ratio Perm						0.08		0.06	0.02		c0.38	0.02
v/c Ratio	0.74	0.86		0.45	0.78	0.22		0.14	0.04		0.89	0.05
Uniform Delay, d1	56.2	31.2		62.7	35.7	27.6		23.0	22.0		34.7	22.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	22.8	6.0		32.5	4.6	0.9		0.1	0.0		19.3	0.1
Delay (s)	79.0	37.2		95.2	40.3	28.5		23.2	22.0		53.9	22.2
Level of Service	E	D		F	D	C		C	C		D	C
Approach Delay (s)		41.0			38.5			22.6			49.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1307	1064	322	1413	278
Future Volume (vph)	0	1307	1064	322	1413	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5085	3397		4993	1362
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5085	3397		4993	1362
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1307	1064	322	1413	278
RTOR Reduction (vph)	0	0	36	0	3	50
Lane Group Flow (vph)	0	1307	1350	0	1438	200
Confl. Bikes (#/hr)				5		
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		43.0	43.0		29.0	29.0
Effective Green, g (s)		43.0	43.0		29.0	29.0
Actuated g/C Ratio		0.54	0.54		0.36	0.36
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2733	1825		1809	493
v/s Ratio Prot		0.26	c0.40		c0.29	
v/s Ratio Perm						0.15
v/c Ratio		0.48	0.74		0.80	0.41
Uniform Delay, d1		11.5	14.2		22.8	19.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.6	2.7		3.7	2.5
Delay (s)		12.1	16.9		26.6	21.5
Level of Service		B	B		C	C
Approach Delay (s)		12.1	16.9		25.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	461	1962	460	0	706	62	502	319	1185	54	102	153
Future Volume (vph)	461	1962	460	0	706	62	502	319	1185	54	102	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.93	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4940			3539	1583	1610	2780	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4940			3539	1583	1610	2780	2723	1770	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	461	1962	460	0	706	62	502	319	1185	54	102	153
RTOR Reduction (vph)	0	29	0	0	0	46	0	30	52	0	0	47
Lane Group Flow (vph)	461	2393	0	0	706	16	417	765	742	54	102	106
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2		8	8		4	4	1
Permitted Phases						2			8			4
Actuated Green, G (s)	36.9	75.0			34.1	34.1	39.0	39.0	39.0	8.0	8.0	44.9
Effective Green, g (s)	36.9	75.0			34.1	34.1	39.0	39.0	39.0	8.0	8.0	44.9
Actuated g/C Ratio	0.28	0.56			0.25	0.25	0.29	0.29	0.29	0.06	0.06	0.34
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	487	2764			900	402	468	809	792	105	111	530
v/s Ratio Prot	c0.26	c0.48			0.20		0.26	c0.28		0.03	c0.05	0.06
v/s Ratio Perm						0.01			0.27			0.01
v/c Ratio	0.95	0.87			0.78	0.04	0.89	0.95	0.94	0.51	0.92	0.20
Uniform Delay, d1	47.6	25.2			46.5	37.6	45.5	46.5	46.3	61.1	62.7	31.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.6	3.9			6.8	0.2	18.7	19.5	18.3	4.2	59.7	0.2
Delay (s)	75.2	29.1			53.3	37.8	64.2	66.0	64.6	65.3	122.4	31.9
Level of Service	E	C			D	D	E	E	E	E	F	C
Approach Delay (s)		36.5			52.1			65.1			67.6	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	29	235	47	20	159
Future Volume (Veh/h)	26	29	235	47	20	159
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	26	29	235	47	20	159
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	458	258			282	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	458	258			282	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	96			98	
cM capacity (veh/h)	552	780			1280	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	26	29	282	179
Volume Left	26	0	0	20
Volume Right	0	29	47	0
cSH	552	780	1700	1280
Volume to Capacity	0.05	0.04	0.17	0.02
Queue Length 95th (ft)	4	3	0	1
Control Delay (s)	11.8	9.8	0.0	1.0
Lane LOS	B	A		A
Approach Delay (s)	10.8		0.0	1.0
Approach LOS	B			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	413	2610	179	10	1278	31	72	138	45	34	45	169
Future Volume (veh/h)	413	2610	179	10	1278	31	72	138	45	34	45	169
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	413	2610	179	10	1278	31	72	138	45	34	45	169
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	0	1	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1045	3088	208	22	1751	42	184	194	164	68	90	242
Arrive On Green	0.30	0.63	0.63	0.01	0.34	0.34	0.10	0.10	0.10	0.09	0.09	0.09
Sat Flow, veh/h	3442	4867	328	1774	5107	124	1774	1863	1583	785	1039	2787
Grp Volume(v), veh/h	413	1803	986	10	848	461	72	138	45	79	0	169
Grp Sat Flow(s),veh/h/ln	1721	1695	1805	1774	1695	1841	1774	1863	1583	1824	0	1393
Q Serve(g_s), s	9.3	40.8	43.2	0.6	21.6	21.6	3.7	7.0	2.6	4.1	0.0	5.8
Cycle Q Clear(g_c), s	9.3	40.8	43.2	0.6	21.6	21.6	3.7	7.0	2.6	4.1	0.0	5.8
Prop In Lane	1.00		0.18	1.00		0.07	1.00		1.00	0.43		1.00
Lane Grp Cap(c), veh/h	1045	2151	1145	22	1162	631	184	194	164	158	0	242
V/C Ratio(X)	0.40	0.84	0.86	0.46	0.73	0.73	0.39	0.71	0.27	0.50	0.00	0.70
Avail Cap(c_a), veh/h	1045	2208	1175	90	1656	899	848	891	757	334	0	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	14.0	14.5	48.2	28.3	28.3	41.1	42.6	40.6	42.8	0.0	43.6
Incr Delay (d2), s/veh	0.2	3.0	6.6	14.7	1.0	1.8	1.3	4.8	0.9	2.4	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	19.7	23.4	0.4	10.2	11.2	1.9	3.9	1.2	2.1	0.0	2.3
LnGrp Delay(d),s/veh	27.3	17.0	21.0	62.9	29.3	30.1	42.5	47.4	41.5	45.3	0.0	47.3
LnGrp LOS	C	B	C	E	C	C	D	D	D	D		D
Approach Vol, veh/h		3202			1319			255			248	
Approach Delay, s/veh		19.6			29.8			45.0			46.6	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.2	5.2	66.3		12.5	33.8	37.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	5.0	64.0		18.0	21.0	48.0
Max Q Clear Time (g_c+I1), s		9.0	2.6	45.2		7.8	11.3	23.6
Green Ext Time (p_c), s		1.2	0.0	17.1		0.7	1.1	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.9
HCM 2010 LOS	C

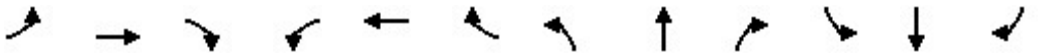
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	1662	224	42	1084	14	71	10	19	34	11	148
Future Volume (veh/h)	366	1662	224	42	1084	14	71	10	19	34	11	148
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	366	1662	224	42	1084	14	71	10	19	34	11	148
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	419	2355	316	69	1637	510	97	14	26	167	54	195
Arrive On Green	0.24	0.52	0.52	0.04	0.32	0.32	0.08	0.08	0.08	0.12	0.12	0.12
Sat Flow, veh/h	1774	4536	609	1774	5085	1583	1237	174	331	1356	439	1583
Grp Volume(v), veh/h	366	1241	645	42	1084	14	100	0	0	45	0	148
Grp Sat Flow(s),veh/h/ln	1774	1695	1755	1774	1695	1583	1742	0	0	1795	0	1583
Q Serve(g_s), s	14.9	20.8	21.0	1.7	13.8	0.5	4.2	0.0	0.0	1.7	0.0	6.8
Cycle Q Clear(g_c), s	14.9	20.8	21.0	1.7	13.8	0.5	4.2	0.0	0.0	1.7	0.0	6.8
Prop In Lane	1.00		0.35	1.00		1.00	0.71		0.19	0.76		1.00
Lane Grp Cap(c), veh/h	419	1760	911	69	1637	510	137	0	0	221	0	195
V/C Ratio(X)	0.87	0.70	0.71	0.61	0.66	0.03	0.73	0.00	0.00	0.20	0.00	0.76
Avail Cap(c_a), veh/h	628	2168	1122	121	1799	560	837	0	0	431	0	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.5	13.7	13.7	35.4	21.9	17.4	33.7	0.0	0.0	29.6	0.0	31.8
Incr Delay (d2), s/veh	8.9	0.8	1.6	8.4	0.8	0.0	7.2	0.0	0.0	0.5	0.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.8	10.4	1.0	6.5	0.2	2.3	0.0	0.0	0.9	0.0	3.3
LnGrp Delay(d),s/veh	36.4	14.5	15.3	43.8	22.7	17.4	40.9	0.0	0.0	30.0	0.0	37.8
LnGrp LOS	D	B	B	D	C	B	D			C		D
Approach Vol, veh/h		2252			1140			100			193	
Approach Delay, s/veh		18.3			23.4			40.9			36.0	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.4	7.4	43.4		13.7	22.2	28.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		36.0	5.1	47.9		18.0	26.5	26.5
Max Q Clear Time (g_c+I1), s		6.2	3.7	23.0		8.8	16.9	15.8
Green Ext Time (p_c), s		0.5	0.0	15.9		0.4	0.8	5.5

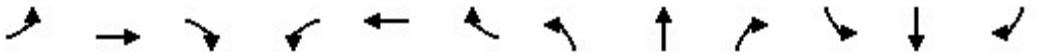
Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	671	336	227	931	402	142	850	144	368	1402	207
Future Volume (vph)	268	671	336	227	931	402	142	850	144	368	1402	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.90	1.00	1.00	0.87	1.00	1.00	0.95	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1610	3384	1429	1610	3386	1381	1770	3539	1509	1770	3539	1446
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1610	3384	1429	1610	3386	1381	1770	3539	1509	1770	3539	1446
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	268	671	336	227	931	402	142	850	144	368	1402	207
RTOR Reduction (vph)	0	0	162	0	0	223	0	0	66	0	0	61
Lane Group Flow (vph)	241	698	174	204	954	179	142	850	78	368	1402	146
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	31.0	31.0	31.0	31.0	31.0	31.0	18.0	39.0	39.0	19.0	40.0	40.0
Effective Green, g (s)	31.0	31.0	31.0	31.0	31.0	31.0	18.0	39.0	39.0	19.0	40.0	40.0
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.23	0.13	0.29	0.29	0.14	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	771	325	366	771	314	234	1014	432	247	1040	425
v/s Ratio Prot	0.15	c0.21		0.13	c0.28		0.08	0.24		c0.21	c0.40	
v/s Ratio Perm			0.12			0.13			0.05			0.10
v/c Ratio	0.66	0.91	0.53	0.56	1.24	0.57	0.61	0.84	0.18	1.49	1.35	0.34
Uniform Delay, d1	47.7	51.1	46.2	46.4	52.5	46.6	55.7	45.5	36.5	58.5	48.0	37.7
Progression Factor	0.46	0.49	0.57	0.49	0.55	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	9.7	3.3	1.3	114.6	1.6	4.4	8.3	0.9	240.7	163.1	2.2
Delay (s)	26.8	34.8	29.8	24.2	143.4	25.3	60.1	53.8	37.4	299.2	211.1	39.9
Level of Service	C	C	C	C	F	C	E	D	D	F	F	D
Approach Delay (s)		32.0			97.4			52.5			209.6	
Approach LOS		C			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	112.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	105.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	767	86	56	781	178	381	465	150	95	94	317
Future Volume (vph)	306	767	86	56	781	178	381	465	150	95	94	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3461		1770	3539	1498	1756	1863	1542	1763	1863	1550
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.68	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)	1770	3461		1770	3539	1498	1264	1863	1542	409	1863	1550
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	306	767	86	56	781	178	381	465	150	95	94	317
RTOR Reduction (vph)	0	6	0	0	0	71	0	0	43	0	0	205
Lane Group Flow (vph)	306	847	0	56	781	107	381	465	107	95	94	112
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	40.0	40.0		36.0	36.0	36.0	48.0	48.0	48.0	48.0	48.0	48.0
Effective Green, g (s)	40.0	40.0		36.0	36.0	36.0	48.0	48.0	48.0	48.0	48.0	48.0
Actuated g/C Ratio	0.29	0.29		0.26	0.26	0.26	0.35	0.35	0.35	0.35	0.35	0.35
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	520	1017		468	936	396	446	657	544	144	657	547
v/s Ratio Prot	0.17	c0.24		0.03	c0.22			0.25			0.05	
v/s Ratio Perm						0.07	c0.30		0.07	0.23		0.07
v/c Ratio	0.59	0.83		0.12	0.83	0.27	0.85	0.71	0.20	0.66	0.14	0.20
Uniform Delay, d1	41.0	44.9		38.0	47.2	39.6	40.8	38.0	30.6	37.1	30.0	30.7
Progression Factor	0.55	0.53		0.38	0.36	0.33	0.80	0.80	0.73	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.8		0.3	5.3	1.0	17.7	6.0	0.8	21.3	0.5	0.8
Delay (s)	23.1	24.5		14.8	22.4	14.1	50.2	36.5	23.1	58.4	30.4	31.5
Level of Service	C	C		B	C	B	D	D	C	E	C	C
Approach Delay (s)		24.2			20.6			39.7			36.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.4%	ICU Level of Service	G
Analysis Period (min)	15		

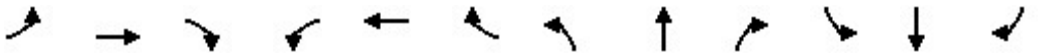
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	943	34	43	1015	20	474
Future Volume (vph)	943	34	43	1015	20	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3510		1770	3539	1770	1560
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3510		1770	3539	1770	1560
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	943	34	43	1015	20	474
RTOR Reduction (vph)	2	0	0	0	0	436
Lane Group Flow (vph)	975	0	43	1015	20	38
Confl. Peds. (#/hr)		18	18		6	
Confl. Bikes (#/hr)						1
Turn Type	NA		Split	NA	Prot	Perm
Protected Phases	4		8	8	5	
Permitted Phases						2
Actuated Green, G (s)	67.3		45.9	45.9	10.8	10.8
Effective Green, g (s)	67.3		45.9	45.9	10.8	10.8
Actuated g/C Ratio	0.49		0.34	0.34	0.08	0.08
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1736		597	1194	140	123
v/s Ratio Prot	c0.28		0.02	c0.29	0.01	
v/s Ratio Perm						c0.02
v/c Ratio	0.56		0.07	0.85	0.14	0.31
Uniform Delay, d1	24.0		30.6	41.9	58.3	59.1
Progression Factor	0.45		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9		0.1	6.0	0.5	1.4
Delay (s)	11.7		30.6	47.8	58.8	60.5
Level of Service	B		C	D	E	E
Approach Delay (s)	11.7			47.1	60.4	
Approach LOS	B			D	E	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

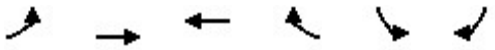
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1254	7	51	1186	554	56	72	26	341	6	66
Future Volume (vph)	221	1254	7	51	1186	554	56	72	26	341	6	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00		0.95	1.00
Satd. Flow (prot)	1770	3536		1770	3539	1522		1823	1542		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.61	1.00		0.62	1.00
Satd. Flow (perm)	1770	3536		1770	3539	1522		1140	1542		1147	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	221	1254	7	51	1186	554	56	72	26	341	6	66
RTOR Reduction (vph)	0	0	0	0	0	331	0	0	18	0	0	46
Lane Group Flow (vph)	221	1261	0	51	1186	223	0	128	8	0	347	20
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	15.7	49.8		4.2	38.3	38.3		29.0	29.0		29.0	29.0
Effective Green, g (s)	15.7	49.8		4.2	38.3	38.3		29.0	29.0		29.0	29.0
Actuated g/C Ratio	0.17	0.52		0.04	0.40	0.40		0.31	0.31		0.31	0.31
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	292	1853		78	1426	613		348	470		350	483
v/s Ratio Prot	c0.12	0.36		0.03	c0.34							
v/s Ratio Perm						0.15		0.11	0.01		c0.30	0.01
v/c Ratio	0.76	0.68		0.65	0.83	0.36		0.37	0.02		0.99	0.04
Uniform Delay, d1	37.8	16.7		44.7	25.5	19.8		25.8	23.0		32.9	23.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	10.7	2.0		18.0	5.8	1.7		3.0	0.1		45.6	0.0
Delay (s)	48.5	18.8		62.7	31.3	21.5		28.8	23.1		78.5	23.3
Level of Service	D	B		E	C	C		C	C		E	C
Approach Delay (s)		23.2			29.1			27.8			69.7	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

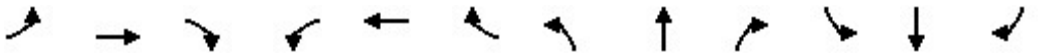
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1312	1231	887	660	540
Future Volume (vph)	0	1312	1231	887	660	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.94		0.96	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5085	3273		4806	1331
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5085	3273		4806	1331
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1312	1231	887	660	540
RTOR Reduction (vph)	0	0	87	0	47	82
Lane Group Flow (vph)	0	1312	2031	0	872	199
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		106.0	106.0		36.0	36.0
Effective Green, g (s)		106.0	106.0		36.0	36.0
Actuated g/C Ratio		0.71	0.71		0.24	0.24
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3593	2312		1153	319
v/s Ratio Prot		0.26	c0.62		c0.18	
v/s Ratio Perm						0.15
v/c Ratio		0.37	0.88		0.76	0.62
Uniform Delay, d1		8.7	17.0		52.9	50.9
Progression Factor		1.00	0.52		1.00	1.00
Incremental Delay, d2		0.3	1.4		4.6	8.9
Delay (s)		9.0	10.2		57.6	59.8
Level of Service		A	B		E	E
Approach Delay (s)		9.0	10.2		58.1	
Approach LOS		A	B		E	

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	1151	635	0	1615	89	448	100	76	88	450	392
Future Volume (vph)	272	1151	635	0	1615	89	448	100	76	88	450	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4814			3539	1583	1610	2907	2668	1770	1863	1571
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4814			3539	1583	1610	2907	2668	1770	1863	1571
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	272	1151	635	0	1615	89	448	100	76	88	450	392
RTOR Reduction (vph)	0	64	0	0	0	39	0	1	57	0	0	24
Lane Group Flow (vph)	272	1722	0	0	1615	50	224	331	11	88	450	368
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2		8	8		4	4	1
Permitted Phases						2			8			4
Actuated Green, G (s)	19.9	84.9			61.0	61.0	24.1	24.1	24.1	29.0	29.0	48.9
Effective Green, g (s)	19.9	84.9			61.0	61.0	24.1	24.1	24.1	29.0	29.0	48.9
Actuated g/C Ratio	0.13	0.57			0.41	0.41	0.16	0.16	0.16	0.19	0.19	0.33
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	234	2724			1439	643	258	467	428	342	360	512
v/s Ratio Prot	c0.15	0.36			c0.46		c0.14	0.11		0.05	c0.24	0.10
v/s Ratio Perm						0.03			0.00			0.14
v/c Ratio	1.16	0.63			1.12	0.08	0.87	0.91dl	0.03	0.26	1.25	0.72
Uniform Delay, d1	65.0	22.0			44.5	27.3	61.4	59.6	53.1	51.4	60.5	44.5
Progression Factor	1.00	0.73			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	106.7	1.0			64.8	0.2	25.1	4.9	0.0	0.4	133.6	4.8
Delay (s)	172.1	17.1			109.3	27.5	86.5	64.5	53.1	51.8	194.1	49.3
Level of Service	F	B			F	C	F	E	D	D	F	D
Approach Delay (s)		37.5			105.0			71.2			119.6	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	77.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	109.1%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

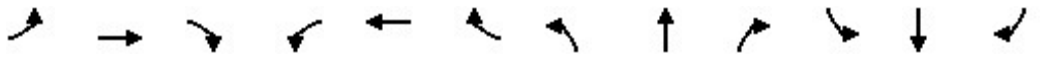
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	26	439	23	15	310
Future Volume (Veh/h)	61	26	439	23	15	310
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	61	26	439	23	15	310
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	790	450			462	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	790	450			462	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	83	96			99	
cM capacity (veh/h)	354	609			1099	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	61	26	462	325
Volume Left	61	0	0	15
Volume Right	0	26	23	0
cSH	354	609	1700	1099
Volume to Capacity	0.17	0.04	0.27	0.01
Queue Length 95th (ft)	15	3	0	1
Control Delay (s)	17.3	11.2	0.0	0.5
Lane LOS	C	B		A
Approach Delay (s)	15.5		0.0	0.5
Approach LOS	C			

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1104	90	103	2659	44	445	33	3	50	138	403
Future Volume (veh/h)	123	1104	90	103	2659	44	445	33	3	50	138	403
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	123	1104	90	103	2659	44	469	0	3	50	138	403
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	2269	185	128	3245	54	565	0	252	80	220	454
Arrive On Green	0.05	0.47	0.47	0.07	0.50	0.50	0.16	0.00	0.16	0.16	0.16	0.16
Sat Flow, veh/h	3442	4794	390	1774	6541	108	3548	0	1583	489	1349	2787
Grp Volume(v), veh/h	123	781	413	103	1953	750	469	0	3	188	0	403
Grp Sat Flow(s),veh/h/ln	1721	1695	1794	1774	1602	1844	1774	0	1583	1838	0	1393
Q Serve(g_s), s	4.3	19.1	19.1	6.9	41.7	41.8	15.5	0.0	0.2	11.5	0.0	17.1
Cycle Q Clear(g_c), s	4.3	19.1	19.1	6.9	41.7	41.8	15.5	0.0	0.2	11.5	0.0	17.1
Prop In Lane	1.00		0.22	1.00		0.06	1.00		1.00	0.27		1.00
Lane Grp Cap(c), veh/h	171	1605	849	128	2384	915	565	0	252	299	0	454
V/C Ratio(X)	0.72	0.49	0.49	0.80	0.82	0.82	0.83	0.00	0.01	0.63	0.00	0.89
Avail Cap(c_a), veh/h	171	1605	849	235	2384	915	1379	0	615	319	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.6	21.8	21.8	55.3	25.9	25.9	49.3	0.0	42.8	47.2	0.0	49.5
Incr Delay (d2), s/veh	13.8	0.2	0.4	11.0	3.3	8.2	3.2	0.0	0.0	3.5	0.0	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.9	9.5	3.8	19.2	23.3	7.9	0.0	0.1	6.1	0.0	7.7
LnGrp Delay(d),s/veh	70.4	22.0	22.2	66.2	29.2	34.1	52.5	0.0	42.9	50.7	0.0	66.8
LnGrp LOS	E	C	C	E	C	C	D		D	D		E
Approach Vol, veh/h		1317			2806			472			591	
Approach Delay, s/veh		26.6			31.8			52.4			61.7	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.3	12.7	61.3		23.7	10.0	64.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	16.0	50.0		21.0	6.0	60.0
Max Q Clear Time (g_c+I1), s		17.5	8.9	21.1		19.1	6.3	43.8
Green Ext Time (p_c), s		1.8	0.1	9.7		0.6	0.0	14.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

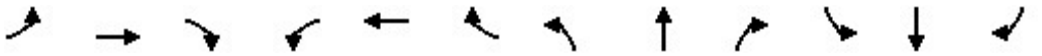
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	409	1520	104	8	1670	7	188	27	29	7	13	419
Future Volume (veh/h)	409	1520	104	8	1670	7	188	27	29	7	13	419
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	409	1520	104	8	1670	7	188	27	29	7	13	419
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	2815	193	17	1761	548	216	31	33	85	159	211
Arrive On Green	0.24	0.58	0.58	0.01	0.35	0.35	0.16	0.16	0.16	0.13	0.13	0.13
Sat Flow, veh/h	1774	4862	333	1774	5085	1583	1355	195	209	641	1190	1583
Grp Volume(v), veh/h	409	1060	564	8	1670	7	244	0	0	20	0	419
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1758	0	0	1831	0	1583
Q Serve(g_s), s	30.6	25.8	25.8	0.6	43.1	0.4	18.3	0.0	0.0	1.3	0.0	18.0
Cycle Q Clear(g_c), s	30.6	25.8	25.8	0.6	43.1	0.4	18.3	0.0	0.0	1.3	0.0	18.0
Prop In Lane	1.00		0.18	1.00		1.00	0.77		0.12	0.35		1.00
Lane Grp Cap(c), veh/h	430	1963	1045	17	1761	548	280	0	0	244	0	211
V/C Ratio(X)	0.95	0.54	0.54	0.47	0.95	0.01	0.87	0.00	0.00	0.08	0.00	1.98
Avail Cap(c_a), veh/h	434	1963	1045	66	1771	551	469	0	0	244	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.3	17.4	17.4	66.5	42.9	29.0	55.4	0.0	0.0	51.2	0.0	58.5
Incr Delay (d2), s/veh	30.9	0.3	0.6	18.8	11.4	0.0	9.2	0.0	0.0	0.1	0.0	459.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.7	12.2	13.0	0.4	22.0	0.2	9.6	0.0	0.0	0.7	0.0	34.8
LnGrp Delay(d),s/veh	81.3	17.7	18.0	85.2	54.4	29.0	64.6	0.0	0.0	51.4	0.0	517.8
LnGrp LOS	F	B	B	F	D	C	E			D		F
Approach Vol, veh/h		2033			1685			244			439	
Approach Delay, s/veh		30.6			54.4			64.6			496.5	
Approach LOS		C			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.5	5.3	82.1		22.0	36.7	50.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0	5.0	75.0		18.0	33.0	47.0
Max Q Clear Time (g_c+I1), s		20.3	2.6	27.8		20.0	32.6	45.1
Green Ext Time (p_c), s		1.2	0.0	17.7		0.0	0.1	1.6

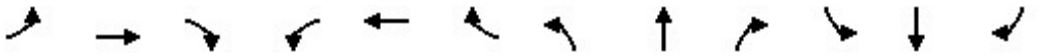
Intersection Summary	
HCM 2010 Ctrl Delay	88.1
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1220	98	195	739	293	260	1224	206	346	826	78
Future Volume (vph)	120	1220	98	195	739	293	260	1224	206	346	826	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1610	3389	1583	1610	3386	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1610	3389	1583	1610	3386	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	120	1220	98	195	739	293	260	1224	206	346	826	78
RTOR Reduction (vph)	0	0	53	0	0	208	0	0	67	0	0	54
Lane Group Flow (vph)	108	1232	45	175	759	85	260	1224	139	346	826	24
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	36.0	36.0	36.0	26.0	26.0	26.0	20.9	39.0	39.0	17.0	35.1	35.1
Effective Green, g (s)	36.0	36.0	36.0	26.0	26.0	26.0	20.9	39.0	39.0	17.0	35.1	35.1
Actuated g/C Ratio	0.27	0.27	0.27	0.19	0.19	0.19	0.16	0.29	0.29	0.13	0.26	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	432	910	425	312	656	307	276	1030	460	224	927	414
v/s Ratio Prot	0.07	c0.36		0.11	c0.22		c0.15	c0.35		c0.20	0.23	
v/s Ratio Perm			0.03			0.05			0.09			0.02
v/c Ratio	0.25	1.35	0.10	0.56	1.16	0.28	0.94	1.19	0.30	1.54	0.89	0.06
Uniform Delay, d1	38.4	49.0	36.9	48.8	54.0	46.0	56.0	47.5	36.9	58.5	47.6	37.1
Progression Factor	0.37	0.53	0.28	0.30	0.35	0.31	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	164.6	0.1	1.2	79.6	0.2	38.6	94.6	1.7	266.1	10.7	0.1
Delay (s)	14.6	190.6	10.3	15.7	98.4	14.5	94.6	142.1	38.6	324.6	58.3	37.1
Level of Service	B	F	B	B	F	B	F	F	D	F	E	D
Approach Delay (s)		165.1			66.6			122.2			130.7	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	122.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	121.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1220	226	41	912	39	86	142	143	352	179	211
Future Volume (vph)	190	1220	226	41	912	39	86	142	143	352	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3456		1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.51	1.00	1.00	0.58	1.00	1.00
Satd. Flow (perm)	1770	3456		1770	3539	1583	952	1863	1583	1075	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	190	1220	226	41	912	39	86	142	143	352	179	211
RTOR Reduction (vph)	0	11	0	0	0	29	0	0	107	0	0	127
Lane Group Flow (vph)	190	1435	0	41	912	10	86	142	36	352	179	84
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	5		6	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	54.0	54.0		34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Effective Green, g (s)	54.0	54.0		34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.40	0.40		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	713	1392		449	897	401	241	472	401	272	472	401
v/s Ratio Prot	0.11	c0.42		0.02	c0.26			0.08			0.10	
v/s Ratio Perm						0.01	0.09		0.02	c0.33		0.05
v/c Ratio	0.27	1.03		0.09	1.02	0.02	0.36	0.30	0.09	1.29	0.38	0.21
Uniform Delay, d1	26.8	40.0		38.2	50.0	37.5	41.0	40.4	38.2	50.0	41.3	39.4
Progression Factor	0.44	0.37		0.15	0.36	0.43	1.22	1.23	2.44	0.97	0.94	1.01
Incremental Delay, d2	0.1	17.0		0.0	21.4	0.0	0.9	0.4	0.1	155.1	0.5	0.2
Delay (s)	11.9	31.6		5.9	39.5	16.1	50.8	49.9	93.3	203.6	39.4	40.2
Level of Service	B	C		A	D	B	D	D	F	F	D	D
Approach Delay (s)		29.3			37.2			66.8			117.5	
Approach LOS		C			D			E			F	

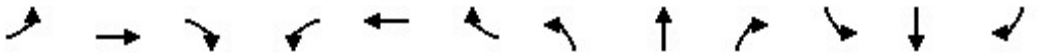
Intersection Summary			
HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



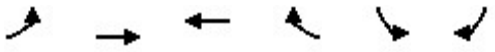
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1667	37	62	989	12	87
Future Volume (vph)	1667	37	62	989	12	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3521		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3521		1770	3539	1770	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1667	37	62	989	12	87
RTOR Reduction (vph)	1	0	0	0	0	82
Lane Group Flow (vph)	1703	0	62	989	12	5
Confl. Peds. (#/hr)		19	19		4	
Turn Type	NA		Split	NA	Prot	Perm
Protected Phases	5		6	6	8	
Permitted Phases						8
Actuated Green, G (s)	75.8		39.0	39.0	7.2	7.2
Effective Green, g (s)	75.8		39.0	39.0	7.2	7.2
Actuated g/C Ratio	0.57		0.29	0.29	0.05	0.05
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1991		515	1030	95	85
v/s Ratio Prot	c0.48		0.04	c0.28	c0.01	
v/s Ratio Perm						0.00
v/c Ratio	0.86		0.12	0.96	0.13	0.05
Uniform Delay, d1	24.5		34.9	46.7	60.4	60.2
Progression Factor	0.47		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5		0.1	19.1	0.6	0.3
Delay (s)	11.9		35.0	65.8	61.0	60.4
Level of Service	B		D	E	E	E
Approach Delay (s)	11.9			64.0	60.5	
Approach LOS	B			E	E	

Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



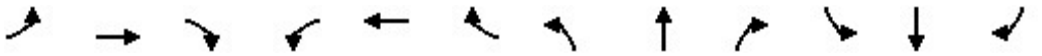
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	1540	0	18	1058	282	40	28	57	464	13	78
Future Volume (vph)	141	1540	0	18	1058	282	40	28	57	464	13	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1484		1810	1583		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.57	1.00		0.68	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1484		1063	1583		1271	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	141	1540	0	18	1058	282	40	28	57	464	13	78
RTOR Reduction (vph)	0	0	0	0	0	157	0	0	34	0	0	47
Lane Group Flow (vph)	141	1540	0	18	1058	125	0	68	23	0	477	31
Confl. Peds. (#/hr)	12					12						
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	15.6	64.2		1.8	50.4	50.4		52.0	52.0		52.0	52.0
Effective Green, g (s)	15.6	64.2		1.8	50.4	50.4		52.0	52.0		52.0	52.0
Actuated g/C Ratio	0.12	0.49		0.01	0.39	0.39		0.40	0.40		0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	212	1747		24	1372	575		425	633		508	633
v/s Ratio Prot	0.08	c0.44		0.01	c0.30							
v/s Ratio Perm						0.08		0.06	0.01		c0.38	0.02
v/c Ratio	0.67	0.88		0.75	0.77	0.22		0.16	0.04		0.94	0.05
Uniform Delay, d1	54.7	29.5		63.9	34.8	26.6		25.0	23.7		37.5	23.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	15.3	6.8		80.1	4.2	0.9		0.2	0.0		27.3	0.1
Delay (s)	70.0	36.3		144.0	39.0	27.5		25.2	23.8		64.8	24.0
Level of Service	E	D		F	D	C		C	C		E	C
Approach Delay (s)		39.1			38.0			24.5			59.1	
Approach LOS		D			D			C			E	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1449	1083	330	1539	278
Future Volume (vph)	0	1449	1083	330	1539	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5085	3396		4994	1362
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5085	3396		4994	1362
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1449	1083	330	1539	278
RTOR Reduction (vph)	0	0	36	0	3	44
Lane Group Flow (vph)	0	1449	1377	0	1564	206
Confl. Bikes (#/hr)				5		
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		42.4	42.4		29.6	29.6
Effective Green, g (s)		42.4	42.4		29.6	29.6
Actuated g/C Ratio		0.53	0.53		0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2695	1799		1847	503
v/s Ratio Prot		0.28	c0.41		c0.31	
v/s Ratio Perm						0.15
v/c Ratio		0.54	0.77		0.85	0.41
Uniform Delay, d1		12.4	14.9		23.1	18.7
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.8	3.2		3.8	0.5
Delay (s)		13.1	18.0		26.9	19.3
Level of Service		B	B		C	B
Approach Delay (s)		13.1	18.0		25.9	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	461	2230	460	0	733	62	502	319	1248	54	102	153
Future Volume (vph)	461	2230	460	0	733	62	502	319	1248	54	102	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.92	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4955			3539	1583	1610	2774	2723	1770	1863	1583
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4955			3539	1583	1610	2774	2723	1770	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	461	2230	460	0	733	62	502	319	1248	54	102	153
RTOR Reduction (vph)	0	23	0	0	0	46	0	20	51	0	0	50
Lane Group Flow (vph)	461	2667	0	0	733	16	422	791	785	54	102	103
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2			6		8	8		4	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	37.0	75.0			34.0	34.0	40.0	40.0	40.0	7.0	7.0	44.0
Effective Green, g (s)	37.0	75.0			34.0	34.0	40.0	40.0	40.0	7.0	7.0	44.0
Actuated g/C Ratio	0.28	0.56			0.25	0.25	0.30	0.30	0.30	0.05	0.05	0.33
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	488	2773			897	401	480	828	812	92	97	519
v/s Ratio Prot	0.26	c0.54			0.21		0.26	0.29		0.03	c0.05	0.05
v/s Ratio Perm						0.01			c0.29			0.01
v/c Ratio	0.94	0.96			0.82	0.04	0.88	0.95	0.97	0.59	1.05	0.20
Uniform Delay, d1	47.5	28.1			47.1	37.7	44.7	46.1	46.3	62.1	63.5	32.3
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	29.1	10.2			8.2	0.2	16.6	20.9	23.4	9.2	106.0	0.2
Delay (s)	76.6	38.4			55.2	37.9	61.3	67.0	69.8	71.3	169.5	32.5
Level of Service	E	D			E	D	E	E	E	E	F	C
Approach Delay (s)		43.9			53.9			66.9			84.5	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		

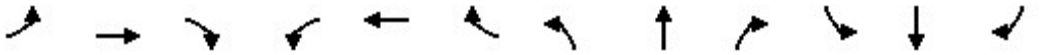
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	42	298	47	22	168
Future Volume (Veh/h)	26	42	298	47	22	168
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	26	42	298	47	22	168
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	534	322			345	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	534	322			345	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	94			98	
cM capacity (veh/h)	498	719			1214	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	26	42	345	190
Volume Left	26	0	0	22
Volume Right	0	42	47	0
cSH	498	719	1700	1214
Volume to Capacity	0.05	0.06	0.20	0.02
Queue Length 95th (ft)	4	5	0	1
Control Delay (s)	12.6	10.3	0.0	1.1
Lane LOS	B	B		A
Approach Delay (s)	11.2		0.0	1.1
Approach LOS	B			

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	413	2610	510	23	1278	31	116	138	47	34	45	169
Future Volume (veh/h)	413	2610	510	23	1278	31	116	138	47	34	45	169
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	413	2610	510	23	1278	31	116	138	47	34	45	169
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	0	1	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1081	2717	500	42	1729	42	185	194	165	67	89	239
Arrive On Green	0.31	0.63	0.63	0.02	0.34	0.34	0.10	0.10	0.10	0.09	0.09	0.09
Sat Flow, veh/h	3442	4319	794	1774	5107	124	1774	1863	1583	785	1039	2787
Grp Volume(v), veh/h	413	2014	1106	23	848	461	116	138	47	79	0	169
Grp Sat Flow(s),veh/h/ln	1721	1695	1723	1774	1695	1841	1774	1863	1583	1824	0	1393
Q Serve(g_s), s	9.5	55.2	64.0	1.3	22.5	22.5	6.4	7.3	2.8	4.2	0.0	6.0
Cycle Q Clear(g_c), s	9.5	55.2	64.0	1.3	22.5	22.5	6.4	7.3	2.8	4.2	0.0	6.0
Prop In Lane	1.00		0.46	1.00		0.07	1.00		1.00	0.43		1.00
Lane Grp Cap(c), veh/h	1081	2133	1084	42	1147	623	185	194	165	157	0	239
V/C Ratio(X)	0.38	0.94	1.02	0.55	0.74	0.74	0.63	0.71	0.29	0.50	0.00	0.71
Avail Cap(c_a), veh/h	1081	2133	1084	87	1600	869	820	861	732	323	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	17.2	18.9	49.1	29.7	29.7	43.7	44.1	42.1	44.4	0.0	45.2
Incr Delay (d2), s/veh	0.2	9.4	32.7	10.9	1.2	2.1	3.5	4.8	0.9	2.5	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	28.2	39.9	0.8	10.7	11.8	3.3	4.0	1.3	2.2	0.0	2.4
LnGrp Delay(d),s/veh	27.4	26.7	51.5	60.0	30.8	31.8	47.1	48.8	43.0	46.9	0.0	49.0
LnGrp LOS	C	C	F	E	C	C	D	D	D	D		D
Approach Vol, veh/h		3533			1332			301			248	
Approach Delay, s/veh		34.5			31.7			47.3			48.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.6	6.4	68.0		12.7	36.0	38.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	5.0	64.0		18.0	21.0	48.0
Max Q Clear Time (g_c+I1), s		9.3	3.3	66.0		8.0	11.5	24.5
Green Ext Time (p_c), s		1.3	0.0	0.0		0.7	1.1	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

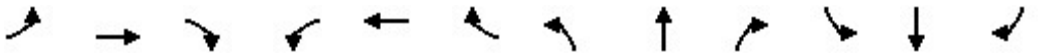
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	429	1662	224	42	1084	14	71	10	19	34	11	157
Future Volume (veh/h)	429	1662	224	42	1084	14	71	10	19	34	11	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	429	1662	224	42	1084	14	71	10	19	34	11	157
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	482	2348	315	69	1448	451	97	14	26	174	56	203
Arrive On Green	0.27	0.52	0.52	0.04	0.28	0.28	0.08	0.08	0.08	0.13	0.13	0.13
Sat Flow, veh/h	1774	4536	609	1774	5085	1583	1237	174	331	1356	439	1583
Grp Volume(v), veh/h	429	1241	645	42	1084	14	100	0	0	45	0	157
Grp Sat Flow(s),veh/h/ln	1774	1695	1755	1774	1695	1583	1742	0	0	1795	0	1583
Q Serve(g_s), s	17.6	21.1	21.3	1.8	14.7	0.5	4.3	0.0	0.0	1.7	0.0	7.3
Cycle Q Clear(g_c), s	17.6	21.1	21.3	1.8	14.7	0.5	4.3	0.0	0.0	1.7	0.0	7.3
Prop In Lane	1.00		0.35	1.00		1.00	0.71		0.19	0.76		1.00
Lane Grp Cap(c), veh/h	482	1755	908	69	1448	451	137	0	0	230	0	203
V/C Ratio(X)	0.89	0.71	0.71	0.61	0.75	0.03	0.73	0.00	0.00	0.20	0.00	0.77
Avail Cap(c_a), veh/h	666	2160	1118	119	1674	521	814	0	0	425	0	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.6	13.9	14.0	35.9	24.7	19.6	34.2	0.0	0.0	29.6	0.0	32.0
Incr Delay (d2), s/veh	11.0	0.8	1.6	8.5	1.6	0.0	7.3	0.0	0.0	0.4	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.0	10.6	1.0	7.0	0.2	2.3	0.0	0.0	0.9	0.0	3.5
LnGrp Delay(d),s/veh	37.6	14.8	15.6	44.5	26.3	19.6	41.5	0.0	0.0	30.0	0.0	38.2
LnGrp LOS	D	B	B	D	C	B	D			C		D
Approach Vol, veh/h		2315			1140			100			202	
Approach Delay, s/veh		19.2			26.9			41.5			36.4	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.5	7.4	43.8		14.2	25.1	26.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		35.5	5.1	48.4		18.0	28.5	25.0
Max Q Clear Time (g_c+I1), s		6.3	3.8	23.3		9.3	19.6	16.7
Green Ext Time (p_c), s		0.5	0.0	16.0		0.4	1.0	4.6

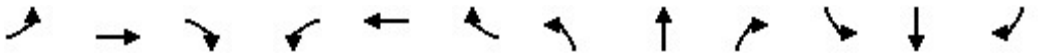
Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	686	336	253	1006	428	142	850	149	373	1402	207
Future Volume (vph)	268	686	336	253	1006	428	142	850	149	373	1402	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	0.91	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.90	1.00	1.00	0.87	1.00	1.00	0.95	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1610	3384	1429	1610	3386	1381	1770	3539	1509	1770	3539	1446
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1610	3384	1429	1610	3386	1381	1770	3539	1509	1770	3539	1446
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	268	686	336	253	1006	428	142	850	149	373	1402	207
RTOR Reduction (vph)	0	0	159	0	0	220	0	0	69	0	0	61
Lane Group Flow (vph)	241	713	177	228	1031	208	142	850	80	373	1402	146
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4			6			2
Actuated Green, G (s)	31.0	31.0	31.0	32.0	32.0	32.0	18.0	37.0	37.0	20.0	39.0	39.0
Effective Green, g (s)	31.0	31.0	31.0	32.0	32.0	32.0	18.0	37.0	37.0	20.0	39.0	39.0
Actuated g/C Ratio	0.23	0.23	0.23	0.24	0.24	0.24	0.13	0.27	0.27	0.15	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	771	325	378	796	324	234	962	410	260	1014	414
v/s Ratio Prot	0.15	c0.21		0.14	c0.30		0.08	0.24		c0.21	c0.40	
v/s Ratio Perm			0.12			0.15			0.05			0.10
v/c Ratio	0.66	0.92	0.54	0.60	1.30	0.64	0.61	0.88	0.19	1.43	1.38	0.35
Uniform Delay, d1	47.7	51.4	46.3	46.3	52.0	46.8	55.7	47.4	38.0	58.0	48.5	38.5
Progression Factor	0.46	0.49	0.56	0.48	0.53	0.46	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	11.4	3.5	1.7	138.8	2.7	4.4	11.6	1.1	216.2	178.4	2.4
Delay (s)	26.8	36.7	29.4	23.9	166.4	24.3	60.1	59.1	39.1	274.2	226.9	40.9
Level of Service	C	D	C	C	F	C	E	E	D	F	F	D
Approach Delay (s)		33.0			111.1			56.6			216.4	
Approach LOS		C			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	118.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	792	86	56	908	178	381	465	150	95	94	317
Future Volume (vph)	306	792	86	56	908	178	381	465	150	95	94	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3463		1770	3539	1499	1756	1863	1542	1763	1863	1550
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.68	1.00	1.00	0.21	1.00	1.00
Satd. Flow (perm)	1770	3463		1770	3539	1499	1262	1863	1542	392	1863	1550
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	306	792	86	56	908	178	381	465	150	95	94	317
RTOR Reduction (vph)	0	6	0	0	0	61	0	0	43	0	0	207
Lane Group Flow (vph)	306	872	0	56	908	117	381	465	107	95	94	110
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	8	8		4	4			2			6	
Permitted Phases						4	2		2	6		6
Actuated Green, G (s)	38.0	38.0		39.0	39.0	39.0	47.0	47.0	47.0	47.0	47.0	47.0
Effective Green, g (s)	38.0	38.0		39.0	39.0	39.0	47.0	47.0	47.0	47.0	47.0	47.0
Actuated g/C Ratio	0.28	0.28		0.29	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.35
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	494	967		507	1014	429	436	643	532	135	643	535
v/s Ratio Prot	0.17	c0.25		0.03	c0.26			0.25			0.05	
v/s Ratio Perm						0.08	c0.30		0.07	0.24		0.07
v/c Ratio	0.62	0.90		0.11	0.90	0.27	0.87	0.72	0.20	0.70	0.15	0.20
Uniform Delay, d1	42.7	47.2		35.7	46.5	37.5	41.7	38.8	31.3	38.5	30.7	31.3
Progression Factor	0.62	0.59		0.24	0.33	0.19	0.83	0.84	0.81	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.5		0.2	7.0	0.8	20.1	6.6	0.8	26.4	0.5	0.9
Delay (s)	27.2	29.4		8.7	22.2	7.9	54.9	39.2	26.0	64.9	31.1	32.2
Level of Service	C	C		A	C	A	D	D	C	E	C	C
Approach Delay (s)		28.9			19.3			43.2			38.1	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.0%	ICU Level of Service	G
Analysis Period (min)	15		

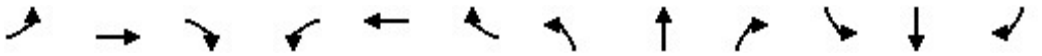
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	968	34	43	1142	20	474
Future Volume (vph)	968	34	43	1142	20	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3511		1770	3539	1770	1560
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3511		1770	3539	1770	1560
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	968	34	43	1142	20	474
RTOR Reduction (vph)	2	0	0	0	0	436
Lane Group Flow (vph)	1000	0	43	1142	20	38
Confl. Peds. (#/hr)		18	18		6	
Confl. Bikes (#/hr)						1
Turn Type	NA		Split	NA	Prot	Perm
Protected Phases	4		8	8	5	
Permitted Phases						2
Actuated Green, G (s)	62.8		50.4	50.4	10.8	10.8
Effective Green, g (s)	62.8		50.4	50.4	10.8	10.8
Actuated g/C Ratio	0.46		0.37	0.37	0.08	0.08
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1621		655	1311	140	123
v/s Ratio Prot	c0.28		0.02	c0.32	0.01	
v/s Ratio Perm						c0.02
v/c Ratio	0.62		0.07	0.87	0.14	0.31
Uniform Delay, d1	27.6		27.6	39.8	58.3	59.1
Progression Factor	0.39		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0		0.0	6.6	0.5	1.4
Delay (s)	11.8		27.7	46.4	58.8	60.5
Level of Service	B		C	D	E	E
Approach Delay (s)	11.8			45.7	60.4	
Approach LOS	B			D	E	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	136.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

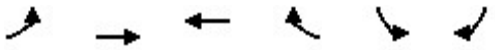
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1279	7	51	1313	554	56	72	26	341	6	66
Future Volume (vph)	221	1279	7	51	1313	554	56	72	26	341	6	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96		1.00	0.97		1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00		0.95	1.00
Satd. Flow (prot)	1770	3536		1770	3539	1522		1823	1542		1776	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.61	1.00		0.62	1.00
Satd. Flow (perm)	1770	3536		1770	3539	1522		1140	1542		1147	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	221	1279	7	51	1313	554	56	72	26	341	6	66
RTOR Reduction (vph)	0	0	0	0	0	321	0	0	18	0	0	46
Lane Group Flow (vph)	221	1286	0	51	1313	233	0	128	8	0	347	20
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	15.7	49.8		4.2	38.3	38.3		29.0	29.0		29.0	29.0
Effective Green, g (s)	15.7	49.8		4.2	38.3	38.3		29.0	29.0		29.0	29.0
Actuated g/C Ratio	0.17	0.52		0.04	0.40	0.40		0.31	0.31		0.31	0.31
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	292	1853		78	1426	613		348	470		350	483
v/s Ratio Prot	0.12	c0.36		0.03	c0.37							
v/s Ratio Perm						0.15		0.11	0.01		c0.30	0.01
v/c Ratio	0.76	0.69		0.65	0.92	0.38		0.37	0.02		0.99	0.04
Uniform Delay, d1	37.8	16.9		44.7	26.9	20.0		25.8	23.0		32.9	23.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	10.7	2.2		18.0	11.2	1.8		0.7	0.0		45.6	0.0
Delay (s)	48.5	19.1		62.7	38.1	21.8		26.5	23.1		78.5	23.3
Level of Service	D	B		E	D	C		C	C		E	C
Approach Delay (s)		23.4			34.0			25.9			69.7	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

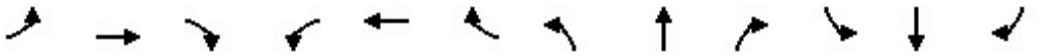
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1337	1358	943	683	540
Future Volume (vph)	0	1337	1358	943	683	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.95		0.94	0.86
Frpb, ped/bikes		1.00	0.99		0.99	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.94		0.96	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5085	3279		4811	1330
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5085	3279		4811	1330
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1337	1358	943	683	540
RTOR Reduction (vph)	0	0	83	0	45	73
Lane Group Flow (vph)	0	1337	2218	0	892	213
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		110.0	110.0		32.0	32.0
Effective Green, g (s)		110.0	110.0		32.0	32.0
Actuated g/C Ratio		0.73	0.73		0.21	0.21
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3729	2404		1026	283
v/s Ratio Prot		0.26	c0.68		c0.19	
v/s Ratio Perm						0.16
v/c Ratio		0.36	0.92		0.87	0.75
Uniform Delay, d1		7.2	16.5		57.0	55.3
Progression Factor		1.00	0.67		1.00	1.00
Incremental Delay, d2		0.3	0.8		10.0	16.8
Delay (s)		7.5	11.7		67.0	72.1
Level of Service		A	B		E	E
Approach Delay (s)		7.5	11.7		68.2	
Approach LOS		A	B		E	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	1199	635	0	1798	89	448	100	87	88	450	392
Future Volume (vph)	272	1199	635	0	1798	89	448	100	87	88	450	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.95	1.00	0.91	0.81	0.86	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4821			3539	1583	1610	2906	2668	1770	1863	1572
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	4821			3539	1583	1610	2906	2668	1770	1863	1572
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	272	1199	635	0	1798	89	448	100	87	88	450	392
RTOR Reduction (vph)	0	62	0	0	0	37	0	1	65	0	0	25
Lane Group Flow (vph)	272	1772	0	0	1798	52	224	332	13	88	450	367
Confl. Bikes (#/hr)									6			1
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2		8	8		4	4	1
Permitted Phases						2			8			4
Actuated Green, G (s)	18.9	87.9			65.0	65.0	24.1	24.1	24.1	26.0	26.0	44.9
Effective Green, g (s)	18.9	87.9			65.0	65.0	24.1	24.1	24.1	26.0	26.0	44.9
Actuated g/C Ratio	0.13	0.59			0.43	0.43	0.16	0.16	0.16	0.17	0.17	0.30
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	223	2825			1533	685	258	466	428	306	322	470
v/s Ratio Prot	c0.15	0.37			c0.51		c0.14	0.11		0.05	c0.24	0.10
v/s Ratio Perm						0.03			0.00			0.14
v/c Ratio	1.22	0.63			1.17	0.08	0.87	0.91dl	0.03	0.29	1.40	0.78
Uniform Delay, d1	65.5	20.3			42.5	24.9	61.4	59.7	53.1	53.9	62.0	48.0
Progression Factor	1.00	0.79			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	128.8	0.9			85.1	0.2	25.1	5.1	0.0	0.5	196.7	8.2
Delay (s)	194.4	17.0			127.6	25.1	86.5	64.8	53.1	54.5	258.7	56.2
Level of Service	F	B			F	C	F	E	D	D	F	E
Approach Delay (s)		39.9			122.7			71.0			154.1	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	90.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	114.2%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

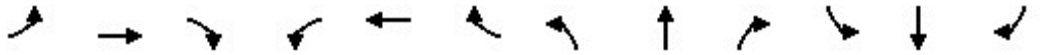
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	29	451	23	26	367
Future Volume (Veh/h)	61	29	451	23	26	367
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	61	29	451	23	26	367
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	882	462			474	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	882	462			474	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	80	95			98	
cM capacity (veh/h)	309	599			1088	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total	61	29	474	393
Volume Left	61	0	0	26
Volume Right	0	29	23	0
cSH	309	599	1700	1088
Volume to Capacity	0.20	0.05	0.28	0.02
Queue Length 95th (ft)	18	4	0	2
Control Delay (s)	19.5	11.3	0.0	0.8
Lane LOS	C	B		A
Approach Delay (s)	16.8		0.0	0.8
Approach LOS	C			

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1104	149	106	2659	44	741	33	14	50	138	403
Future Volume (veh/h)	123	1104	149	106	2659	44	741	33	14	50	138	403
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	123	1104	149	106	2659	44	765	0	14	50	138	403
Adj No. of Lanes	2	3	0	1	4	0	2	0	1	0	1	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1867	252	130	2883	48	864	0	385	75	208	430
Arrive On Green	0.04	0.41	0.41	0.07	0.44	0.44	0.24	0.00	0.24	0.15	0.15	0.15
Sat Flow, veh/h	3442	4534	611	1774	6541	108	3548	0	1583	489	1349	2787
Grp Volume(v), veh/h	123	825	428	106	1953	750	765	0	14	188	0	403
Grp Sat Flow(s),veh/h/ln	1721	1695	1755	1774	1602	1844	1774	0	1583	1838	0	1393
Q Serve(g_s), s	4.8	25.8	25.8	8.0	52.1	52.3	28.3	0.0	0.9	13.1	0.0	19.5
Cycle Q Clear(g_c), s	4.8	25.8	25.8	8.0	52.1	52.3	28.3	0.0	0.9	13.1	0.0	19.5
Prop In Lane	1.00		0.35	1.00		0.06	1.00		1.00	0.27		1.00
Lane Grp Cap(c), veh/h	152	1396	723	130	2118	813	864	0	385	284	0	430
V/C Ratio(X)	0.81	0.59	0.59	0.82	0.92	0.92	0.89	0.00	0.04	0.66	0.00	0.94
Avail Cap(c_a), veh/h	152	1396	723	208	2118	813	1225	0	547	284	0	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.5	31.1	31.1	62.2	35.9	35.9	49.7	0.0	39.3	54.2	0.0	56.9
Incr Delay (d2), s/veh	27.2	0.7	1.3	12.4	8.2	17.7	5.9	0.0	0.0	5.7	0.0	28.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	12.2	12.7	4.4	24.6	30.5	14.6	0.0	0.4	7.1	0.0	9.2
LnGrp Delay(d),s/veh	91.7	31.8	32.4	74.6	44.0	53.6	55.6	0.0	39.3	59.9	0.0	85.2
LnGrp LOS	F	C	C	E	D	D	E		D	E		F
Approach Vol, veh/h		1376			2809			779			591	
Approach Delay, s/veh		37.4			47.7			55.3			77.2	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		37.1	13.9	60.1		25.0	10.0	64.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	16.0	50.0		21.0	6.0	60.0
Max Q Clear Time (g_c+I1), s		30.3	10.0	27.8		21.5	6.8	54.3
Green Ext Time (p_c), s		2.8	0.1	9.3		0.0	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	49.4
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	1520	104	8	1670	7	188	27	29	7	13	476
Future Volume (veh/h)	421	1520	104	8	1670	7	188	27	29	7	13	476
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	421	1520	104	8	1670	7	188	27	29	7	13	476
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	442	2817	193	17	1729	538	216	31	33	85	158	211
Arrive On Green	0.25	0.58	0.58	0.01	0.34	0.34	0.16	0.16	0.16	0.13	0.13	0.13
Sat Flow, veh/h	1774	4862	333	1774	5085	1583	1355	195	209	641	1190	1583
Grp Volume(v), veh/h	421	1060	564	8	1670	7	244	0	0	20	0	476
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1758	0	0	1831	0	1583
Q Serve(g_s), s	31.6	25.8	25.9	0.6	43.6	0.4	18.3	0.0	0.0	1.3	0.0	18.0
Cycle Q Clear(g_c), s	31.6	25.8	25.9	0.6	43.6	0.4	18.3	0.0	0.0	1.3	0.0	18.0
Prop In Lane	1.00		0.18	1.00		1.00	0.77		0.12	0.35		1.00
Lane Grp Cap(c), veh/h	442	1964	1045	17	1729	538	280	0	0	244	0	211
V/C Ratio(X)	0.95	0.54	0.54	0.47	0.97	0.01	0.87	0.00	0.00	0.08	0.00	2.26
Avail Cap(c_a), veh/h	446	1964	1045	66	1731	539	468	0	0	244	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.0	17.4	17.4	66.6	43.8	29.6	55.4	0.0	0.0	51.3	0.0	58.6
Incr Delay (d2), s/veh	30.7	0.3	0.6	18.8	14.4	0.0	9.3	0.0	0.0	0.1	0.0	580.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	12.2	13.0	0.4	22.7	0.2	9.6	0.0	0.0	0.7	0.0	41.9
LnGrp Delay(d),s/veh	80.7	17.7	17.9	85.3	58.2	29.6	64.7	0.0	0.0	51.5	0.0	639.2
LnGrp LOS	F	B	B	F	E	C	E			D		F
Approach Vol, veh/h		2045			1685			244			496	
Approach Delay, s/veh		30.7			58.2			64.7			615.5	
Approach LOS		C			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.5	5.3	82.3		22.0	37.7	50.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0	5.0	75.0		18.0	34.0	46.0
Max Q Clear Time (g_c+I1), s		20.3	2.6	27.9		20.0	33.6	45.6
Green Ext Time (p_c), s		1.2	0.0	17.7		0.0	0.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	107.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	1520	104	8	1670	7	188	27	29	7	13	476
Future Volume (veh/h)	421	1520	104	8	1670	7	188	27	29	7	13	476
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	421	1520	104	8	1670	7	188	27	29	7	13	476
Adj No. of Lanes	1	3	0	1	3	1	0	1	0	0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	441	2831	194	17	1746	544	215	31	33	85	157	602
Arrive On Green	0.25	0.58	0.58	0.01	0.34	0.34	0.16	0.16	0.16	0.13	0.13	0.13
Sat Flow, veh/h	1774	4862	333	1774	5085	1583	1355	195	209	641	1190	1583
Grp Volume(v), veh/h	421	1060	564	8	1670	7	244	0	0	20	0	476
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1583	1758	0	0	1831	0	1583
Q Serve(g_s), s	31.9	25.9	25.9	0.6	43.8	0.4	18.5	0.0	0.0	1.3	0.0	18.0
Cycle Q Clear(g_c), s	31.9	25.9	25.9	0.6	43.8	0.4	18.5	0.0	0.0	1.3	0.0	18.0
Prop In Lane	1.00		0.18	1.00		1.00	0.77		0.12	0.35		1.00
Lane Grp Cap(c), veh/h	441	1974	1051	17	1746	544	279	0	0	242	0	602
V/C Ratio(X)	0.95	0.54	0.54	0.47	0.96	0.01	0.87	0.00	0.00	0.08	0.00	0.79
Avail Cap(c_a), veh/h	442	1974	1051	65	1752	545	451	0	0	242	0	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.5	17.3	17.3	67.2	43.8	29.5	56.0	0.0	0.0	52.0	0.0	37.4
Incr Delay (d2), s/veh	31.3	0.3	0.5	18.8	12.7	0.0	10.5	0.0	0.0	0.1	0.0	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.5	12.1	13.0	0.4	22.5	0.2	9.8	0.0	0.0	0.7	0.0	17.0
LnGrp Delay(d),s/veh	81.8	17.6	17.9	86.1	56.5	29.6	66.6	0.0	0.0	52.1	0.0	44.5
LnGrp LOS	F	B	B	F	E	C	E			D		D
Approach Vol, veh/h		2045			1685			244			496	
Approach Delay, s/veh		30.9			56.6			66.6			44.8	
Approach LOS		C			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.7	5.3	83.5		22.0	37.9	50.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		35.0	5.0	76.0		18.0	34.0	47.0
Max Q Clear Time (g_c+I1), s		20.5	2.6	27.9		20.0	33.9	45.8
Green Ext Time (p_c), s		1.2	0.0	17.8		0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	99	900	181	711	193	105	536	212	357	770	80
v/c Ratio	0.13	1.12	0.53	0.99	0.41	0.54	0.70	0.43	1.01	0.71	0.15
Control Delay	42.2	117.0	17.6	46.0	3.6	72.4	57.4	10.4	107.0	48.5	11.0
Queue Delay	0.0	0.2	4.4	36.7	2.2	0.0	2.4	0.3	30.5	0.0	0.0
Total Delay	42.2	117.2	22.0	82.7	5.8	72.4	59.9	10.7	137.5	48.5	11.0
Queue Length 50th (ft)	42	~566	84	367	9	95	252	13	336	338	8
Queue Length 95th (ft)	70	#718	m112	m#492	m11	161	301	81	#612	413	48
Internal Link Dist (ft)		532		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	769	807	341	717	469	193	894	545	353	1087	533
Starvation Cap Reductn	0	0	98	104	163	0	232	82	0	0	0
Spillback Cap Reductn	0	30	0	0	0	0	0	41	44	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	1.16	0.74	1.16	0.63	0.54	0.81	0.46	1.16	0.71	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	154	1289	42	811	25	56	105	102	184	185	218
v/c Ratio	0.20	0.85	0.09	0.89	0.06	0.28	0.25	0.23	0.69	0.44	0.46
Control Delay	14.6	21.3	40.6	64.2	5.9	50.9	47.7	9.2	66.2	51.9	18.6
Queue Delay	1.9	47.8	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	69.1	40.6	81.6	5.9	50.9	47.7	9.2	66.2	51.9	18.6
Queue Length 50th (ft)	51	232	30	384	0	44	82	0	161	151	51
Queue Length 95th (ft)	m50	m211	63	467	15	88	138	50	254	228	132
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	763	1522	476	951	453	198	423	439	266	423	477
Starvation Cap Reductn	473	384	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	150	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	1.13	0.09	1.01	0.06	0.28	0.25	0.23	0.69	0.44	0.46

Intersection Summary

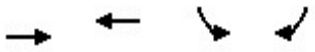
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	92	1656	15	873	223	56	61	475	84
v/c Ratio	0.40	0.90	0.38	0.65	0.32	0.14	0.11	0.95	0.13
Control Delay	58.9	36.7	87.9	35.5	4.6	25.9	3.8	69.0	5.3
Queue Delay	0.0	0.0	0.0	2.5	0.0	0.0	0.0	51.5	1.9
Total Delay	58.9	36.7	87.9	38.0	4.6	25.9	3.8	120.6	7.2
Queue Length 50th (ft)	74	631	13	314	0	29	0	374	0
Queue Length 95th (ft)	131	#894	#42	387	52	59	20	#593	32
Internal Link Dist (ft)		650		410		46		105	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	230	1840	40	1348	702	489	684	518	689
Starvation Cap Reductn	0	0	0	338	0	0	0	239	493
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.90	0.38	0.86	0.32	0.11	0.09	1.70	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1306	1156	1595	250
v/c Ratio	0.55	0.71	0.82	0.42
Control Delay	14.8	19.6	23.7	10.9
Queue Delay	0.4	0.0	0.0	0.0
Total Delay	15.2	19.6	23.7	10.9
Queue Length 50th (ft)	151	403	207	45
Queue Length 95th (ft)	183	m403	273	111
Internal Link Dist (ft)	266	838	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2409	1654	1989	608
Starvation Cap Reductn	568	0	0	0
Spillback Cap Reductn	111	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.71	0.70	0.80	0.41

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	171	2797	692	38	248	475	460	43	51	82
v/c Ratio	0.34	0.81	0.51	0.06	1.09	1.00	0.59	0.38	0.42	0.44
Control Delay	47.0	20.0	35.7	0.2	141.0	89.4	7.9	72.8	74.5	17.7
Queue Delay	0.0	0.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	20.3	43.2	0.2	141.0	89.4	7.9	72.8	74.5	17.7
Queue Length 50th (ft)	135	688	262	0	~286	225	0	39	47	0
Queue Length 95th (ft)	m207	925	311	0	#483	#370	55	79	91	46
Internal Link Dist (ft)		838	322			225			414	
Turn Bay Length (ft)										
Base Capacity (vph)	499	3432	1347	658	228	475	780	430	452	452
Starvation Cap Reductn	0	204	605	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.87	0.93	0.06	1.09	1.00	0.59	0.10	0.11	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

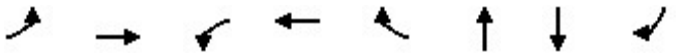
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	437	2260	8	1236	46	46	10	35	185
v/c Ratio	0.60	0.75	0.07	0.56	0.28	0.27	0.04	0.14	0.48
Control Delay	33.2	15.9	40.4	22.8	39.8	39.6	0.2	33.6	37.4
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	16.4	40.4	22.8	39.8	39.6	0.2	33.6	37.4
Queue Length 50th (ft)	103	270	4	148	23	23	0	16	50
Queue Length 95th (ft)	167	#563	19	203	60	60	0	44	89
Internal Link Dist (ft)		431		724		548		293	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	797	3010	116	2459	1037	1053	1025	421	658
Starvation Cap Reductn	0	334	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.84	0.07	0.50	0.04	0.04	0.01	0.08	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	196	1614	44	1129	15	103	17	98
v/c Ratio	0.58	0.58	0.33	0.61	0.02	0.44	0.11	0.38
Control Delay	37.5	13.5	45.2	21.6	0.1	36.7	38.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	13.5	45.2	21.6	0.1	36.7	38.2	7.6
Queue Length 50th (ft)	93	200	22	159	0	45	8	0
Queue Length 95th (ft)	168	283	58	236	0	95	29	25
Internal Link Dist (ft)		390		249		320	142	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	437	3009	132	2215	765	860	457	497
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.54	0.33	0.51	0.02	0.12	0.04	0.20

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	233	671	206	619	406	61	818	145	252	723	128
v/c Ratio	0.28	0.78	0.61	0.87	0.69	0.32	0.88	0.31	0.83	0.60	0.22
Control Delay	45.6	58.2	35.0	43.8	14.6	63.0	63.4	17.1	80.1	43.5	11.7
Queue Delay	0.0	0.1	8.7	49.8	5.4	0.0	49.3	0.0	1.7	0.0	0.0
Total Delay	45.6	58.3	43.6	93.6	20.0	63.0	112.7	17.1	81.8	43.5	11.7
Queue Length 50th (ft)	93	313	201	318	203	53	392	34	233	312	19
Queue Length 95th (ft)	132	388	302	#413	320	101	#498	95	#375	383	70
Internal Link Dist (ft)		523		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	842	859	344	723	597	219	927	473	305	1205	577
Starvation Cap Reductn	0	0	102	172	134	0	325	0	0	0	0
Spillback Cap Reductn	0	6	0	0	0	0	0	6	10	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.79	0.85	1.12	0.88	0.28	1.36	0.31	0.85	0.60	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	213	809	22	782	43	169	255	107	70	87	281
v/c Ratio	0.38	0.73	0.04	0.64	0.08	0.53	0.54	0.24	0.40	0.18	0.47
Control Delay	21.7	24.0	31.9	42.9	11.3	53.9	51.5	18.2	52.7	43.5	7.2
Queue Delay	2.3	2.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	24.0	26.8	31.9	44.9	11.3	53.9	51.5	18.2	52.7	43.5	7.3
Queue Length 50th (ft)	80	160	14	326	3	139	209	27	55	65	0
Queue Length 95th (ft)	m111	201	34	398	31	220	302	79	108	113	73
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	561	1114	610	1220	541	316	475	445	177	475	604
Starvation Cap Reductn	229	197	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	285	0	0	0	0	0	0	22
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.88	0.04	0.84	0.08	0.53	0.54	0.24	0.40	0.18	0.48

Intersection Summary

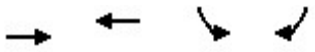
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	196	1264	37	1216	602	51	28	322	36
v/c Ratio	0.79	0.60	0.46	0.71	0.61	0.16	0.06	0.88	0.07
Control Delay	75.6	19.9	79.4	31.1	8.2	33.7	0.3	69.2	0.3
Queue Delay	0.0	0.0	0.0	6.0	0.6	0.0	0.0	61.1	0.7
Total Delay	75.6	19.9	79.4	37.1	8.9	33.7	0.3	130.3	1.0
Queue Length 50th (ft)	159	360	31	433	54	32	0	256	0
Queue Length 95th (ft)	#261	482	70	569	190	62	0	357	2
Internal Link Dist (ft)		648		423		74		76	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	276	2102	81	1713	987	429	573	436	586
Starvation Cap Reductn	0	0	0	440	134	0	0	224	410
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.60	0.46	0.96	0.71	0.12	0.05	1.52	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1105	1855	866	281
v/c Ratio	0.40	0.98	0.54	0.60
Control Delay	10.3	31.0	20.2	22.6
Queue Delay	0.5	0.0	0.0	0.0
Total Delay	10.8	31.0	20.2	22.6
Queue Length 50th (ft)	97	558	103	96
Queue Length 95th (ft)	126	#397	139	186
Internal Link Dist (ft)	248	853	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2747	1888	1589	469
Starvation Cap Reductn	1067	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.66	0.98	0.54	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	1563	1210	50	233	260	31	41	73	177
v/c Ratio	0.64	0.51	0.71	0.06	0.77	0.48	0.05	0.28	0.47	0.64
Control Delay	73.4	12.9	33.9	1.7	71.4	53.8	0.2	65.6	72.1	22.9
Queue Delay	0.0	0.0	31.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	12.9	64.9	1.7	71.4	53.8	0.2	65.6	72.1	22.9
Queue Length 50th (ft)	110	123	462	0	229	134	0	37	67	16
Queue Length 95th (ft)	188	187	661	9	316	177	0	75	117	91
Internal Link Dist (ft)		853	351			248			414	
Turn Bay Length (ft)										
Base Capacity (vph)	199	3042	1715	808	323	581	605	405	426	480
Starvation Cap Reductn	0	0	568	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.51	1.05	0.06	0.72	0.45	0.05	0.10	0.17	0.37

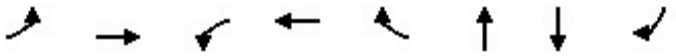
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	88	922	9	2208	219	219	3	32	420
v/c Ratio	0.54	0.37	0.11	0.82	0.72	0.71	0.01	0.10	0.83
Control Delay	64.4	18.4	55.0	31.3	54.8	54.6	0.0	39.9	58.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.4	18.4	55.0	31.3	54.8	54.6	0.0	39.9	58.6
Queue Length 50th (ft)	30	130	6	378	150	150	0	18	159
Queue Length 95th (ft)	#65	224	24	495	235	235	0	50	#277
Internal Link Dist (ft)		403		821		298		508	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	163	2489	82	2697	736	739	741	327	505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.37	0.11	0.82	0.30	0.30	0.00	0.10	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	324	1657	8	1253	7	242	11	167
v/c Ratio	0.80	0.58	0.08	0.81	0.01	0.71	0.08	0.60
Control Delay	51.3	15.9	46.8	35.7	0.0	46.0	41.7	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	15.9	46.8	35.7	0.0	46.0	41.7	16.5
Queue Length 50th (ft)	173	191	4	236	0	126	6	0
Queue Length 95th (ft)	#375	400	21	#386	0	219	24	61
Internal Link Dist (ft)		405		348		375	540	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	404	2840	97	1543	575	693	357	447
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.58	0.08	0.81	0.01	0.35	0.03	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	99	900	181	711	193	105	536	212	357	770	80
v/c Ratio	0.26	1.12	0.53	0.99	0.41	0.54	0.70	0.43	0.95	0.68	0.14
Control Delay	46.7	117.8	17.6	46.0	3.6	72.4	57.4	10.4	90.2	46.1	10.5
Queue Delay	0.0	0.2	4.4	36.7	2.2	0.0	2.4	0.3	43.5	0.0	0.0
Total Delay	46.7	118.0	22.0	82.7	5.8	72.4	59.9	10.7	133.7	46.1	10.5
Queue Length 50th (ft)	83	~535	84	367	9	95	252	13	330	331	8
Queue Length 95th (ft)	143	#678	m112	m#492	m11	161	301	81	#588	405	47
Internal Link Dist (ft)		532		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	385	807	341	717	469	193	894	545	377	1136	554
Starvation Cap Reductn	0	0	98	104	163	0	232	82	0	0	0
Spillback Cap Reductn	0	32	0	0	0	0	0	42	53	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	1.16	0.74	1.16	0.63	0.54	0.81	0.46	1.10	0.68	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	154	1289	42	811	25	56	105	102	184	185	218
v/c Ratio	0.20	0.85	0.09	0.89	0.06	0.28	0.25	0.23	0.69	0.44	0.46
Control Delay	14.7	22.1	40.6	64.2	5.9	50.9	47.7	9.2	66.2	51.9	18.6
Queue Delay	1.9	47.8	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	69.8	40.6	81.6	5.9	50.9	47.7	9.2	66.2	51.9	18.6
Queue Length 50th (ft)	51	231	30	384	0	44	82	0	161	151	51
Queue Length 95th (ft)	m49	m211	63	467	15	88	138	50	254	228	132
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	763	1522	476	951	453	198	423	439	266	423	477
Starvation Cap Reductn	472	371	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	150	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	1.12	0.09	1.01	0.06	0.28	0.25	0.23	0.69	0.44	0.46

Intersection Summary

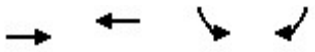
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	92	1656	15	873	223	56	61	475	84
v/c Ratio	0.40	0.90	0.38	0.65	0.32	0.14	0.11	0.95	0.13
Control Delay	58.9	36.7	87.9	35.5	4.6	25.9	3.8	69.0	5.3
Queue Delay	0.0	0.0	0.0	2.5	0.0	0.0	0.0	51.5	1.9
Total Delay	58.9	36.7	87.9	38.0	4.6	25.9	3.8	120.6	7.2
Queue Length 50th (ft)	74	631	13	314	0	29	0	374	0
Queue Length 95th (ft)	131	#894	#42	387	52	59	20	#593	32
Internal Link Dist (ft)		650		410		46		105	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	230	1840	40	1348	702	489	684	518	689
Starvation Cap Reductn	0	0	0	338	0	0	0	239	493
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.90	0.38	0.86	0.32	0.11	0.09	1.70	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1306	1156	1595	250
v/c Ratio	0.55	0.71	0.82	0.42
Control Delay	14.8	19.6	23.7	10.9
Queue Delay	0.4	0.0	0.0	0.0
Total Delay	15.2	19.6	23.7	10.9
Queue Length 50th (ft)	151	403	207	45
Queue Length 95th (ft)	183	m403	273	111
Internal Link Dist (ft)	266	838	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2409	1654	1989	608
Starvation Cap Reductn	568	0	0	0
Spillback Cap Reductn	111	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.71	0.70	0.80	0.41

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	171	2797	692	38	248	475	460	43	51	82
v/c Ratio	0.34	0.81	0.51	0.06	1.09	1.00	0.59	0.38	0.42	0.44
Control Delay	47.0	20.0	35.7	0.2	141.0	89.4	7.9	72.8	74.5	17.7
Queue Delay	0.0	0.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	20.3	43.2	0.2	141.0	89.4	7.9	72.8	74.5	17.7
Queue Length 50th (ft)	135	688	262	0	~286	225	0	39	47	0
Queue Length 95th (ft)	m207	925	311	0	#483	#370	55	79	91	46
Internal Link Dist (ft)		838	322			225			414	
Turn Bay Length (ft)										
Base Capacity (vph)	499	3432	1347	658	228	475	780	430	452	452
Starvation Cap Reductn	0	204	605	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.87	0.93	0.06	1.09	1.00	0.59	0.10	0.11	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

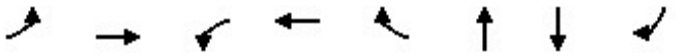
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	437	2623	22	1236	70	70	12	35	185
v/c Ratio	0.61	0.93	0.19	0.56	0.37	0.36	0.04	0.14	0.49
Control Delay	34.2	26.2	44.0	23.6	41.1	40.9	0.3	34.4	38.3
Queue Delay	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.2	39.4	44.0	23.6	41.1	40.9	0.3	34.4	38.3
Queue Length 50th (ft)	105	382	11	153	35	35	0	16	51
Queue Length 95th (ft)	172	#754	37	210	82	82	0	45	92
Internal Link Dist (ft)		431		724		548		293	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	785	2827	114	2422	1021	1033	1011	414	648
Starvation Cap Reductn	0	257	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.02	0.19	0.51	0.07	0.07	0.01	0.08	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	261	1614	44	1129	15	103	17	107
v/c Ratio	0.63	0.57	0.38	0.64	0.02	0.46	0.11	0.42
Control Delay	36.5	13.1	48.0	24.3	0.1	37.8	38.0	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.5	13.1	48.0	24.3	0.1	37.8	38.0	9.6
Queue Length 50th (ft)	121	198	22	176	0	45	8	0
Queue Length 95th (ft)	#218	284	#60	246	0	95	28	31
Internal Link Dist (ft)		390		249		320	142	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	448	2874	117	1884	671	824	428	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.56	0.38	0.60	0.02	0.13	0.04	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	233	686	230	698	432	61	818	151	257	723	128
v/c Ratio	0.31	0.90	0.62	0.89	0.71	0.32	0.88	0.32	0.81	0.59	0.22
Control Delay	49.3	71.1	29.8	39.9	13.2	63.0	63.4	18.0	77.2	42.5	11.2
Queue Delay	0.0	2.7	10.6	48.7	6.3	0.0	49.3	0.8	0.5	0.0	0.0
Total Delay	49.3	73.9	40.4	88.6	19.5	63.0	112.7	18.8	77.7	42.5	11.2
Queue Length 50th (ft)	96	334	202	357	234	53	392	39	236	308	18
Queue Length 95th (ft)	137	#448	295	#462	360	101	#498	102	#373	379	69
Internal Link Dist (ft)		523		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	743	759	377	793	615	219	927	473	317	1229	587
Starvation Cap Reductn	0	0	117	186	134	0	325	135	0	0	0
Spillback Cap Reductn	0	28	0	0	0	0	0	6	4	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.94	0.88	1.15	0.90	0.28	1.36	0.45	0.82	0.59	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	213	834	22	910	43	169	255	107	70	87	281
v/c Ratio	0.38	0.75	0.03	0.72	0.08	0.57	0.57	0.25	0.44	0.19	0.48
Control Delay	21.8	24.6	30.6	44.0	10.8	56.9	54.1	19.4	56.9	45.2	7.6
Queue Delay	3.1	10.8	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	24.9	35.4	30.6	47.4	10.8	56.9	54.1	19.4	56.9	45.2	7.7
Queue Length 50th (ft)	78	162	13	389	3	142	214	28	57	66	0
Queue Length 95th (ft)	m95	m186	34	468	31	224	308	81	111	115	75
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	561	1114	634	1269	561	298	449	424	159	449	587
Starvation Cap Reductn	251	260	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	259	0	0	0	0	0	0	20
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.98	0.03	0.90	0.08	0.57	0.57	0.25	0.44	0.19	0.50

Intersection Summary

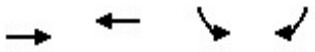
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	196	1291	37	1354	602	51	28	322	36
v/c Ratio	0.81	0.61	0.46	0.77	0.61	0.17	0.06	0.90	0.07
Control Delay	79.4	19.1	79.4	31.9	8.3	35.4	0.3	74.0	0.3
Queue Delay	0.0	0.0	0.0	19.2	0.7	0.0	0.0	61.7	1.2
Total Delay	79.4	19.1	79.4	51.1	9.0	35.4	0.3	135.8	1.5
Queue Length 50th (ft)	159	375	31	517	65	32	0	255	0
Queue Length 95th (ft)	#273	462	70	622	191	65	0	#403	2
Internal Link Dist (ft)		648		423		74		76	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	261	2127	81	1753	989	381	527	397	539
Starvation Cap Reductn	0	0	0	431	141	0	0	218	398
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.61	0.46	1.02	0.71	0.13	0.05	1.80	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1131	2045	890	281
v/c Ratio	0.38	1.01	0.64	0.68
Control Delay	8.6	34.3	23.8	28.9
Queue Delay	0.5	0.0	0.0	0.0
Total Delay	9.0	34.3	23.8	28.9
Queue Length 50th (ft)	89	~693	115	105
Queue Length 95th (ft)	115	#650	154	#224
Internal Link Dist (ft)	248	853	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2959	2026	1389	412
Starvation Cap Reductn	1220	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.65	1.01	0.64	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	1613	1401	50	233	261	42	41	73	177
v/c Ratio	0.60	0.54	0.84	0.06	0.76	0.47	0.07	0.26	0.45	0.69
Control Delay	69.0	13.4	40.2	1.6	70.2	53.4	0.2	64.0	69.9	32.2
Queue Delay	0.0	0.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.0	13.4	88.2	1.6	70.2	53.4	0.2	64.0	69.9	32.2
Queue Length 50th (ft)	115	239	593	0	229	135	0	37	67	41
Queue Length 95th (ft)	#229	347	#860	9	314	176	0	74	114	117
Internal Link Dist (ft)		853	351			248			414	
Turn Bay Length (ft)										
Base Capacity (vph)	209	3013	1667	788	327	586	610	405	426	459
Starvation Cap Reductn	0	0	515	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.54	1.22	0.06	0.71	0.45	0.07	0.10	0.17	0.39

Intersection Summary

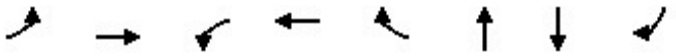
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	88	985	12	2208	381	375	15	32	420
v/c Ratio	0.62	0.47	0.17	0.93	0.81	0.80	0.03	0.11	0.94
Control Delay	78.2	27.6	65.9	45.6	55.3	53.9	0.1	48.4	82.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.2	27.6	65.9	45.6	55.3	53.9	0.1	48.4	82.2
Queue Length 50th (ft)	35	184	9	479	294	288	0	22	188
Queue Length 95th (ft)	#80	302	33	#674	416	407	0	57	#344
Internal Link Dist (ft)		403		821		298		508	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	143	2112	72	2378	649	651	664	289	446
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.47	0.17	0.93	0.59	0.58	0.02	0.11	0.94

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	337	1657	8	1253	7	242	11	226
v/c Ratio	0.83	0.59	0.08	0.83	0.01	0.71	0.07	0.67
Control Delay	54.1	16.4	46.4	36.9	0.0	45.4	40.5	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.1	16.4	46.4	36.9	0.0	45.4	40.5	16.0
Queue Length 50th (ft)	178	189	4	234	0	123	6	0
Queue Length 95th (ft)	#402	411	21	#400	0	219	23	69
Internal Link Dist (ft)		405		348		375	540	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	404	2802	98	1502	563	729	362	498
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.59	0.08	0.83	0.01	0.33	0.03	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	112	862	193	740	199	115	581	209	352	839	80
v/c Ratio	0.14	1.05	0.57	1.03	0.43	0.56	0.74	0.43	0.93	0.74	0.14
Control Delay	44.6	98.5	20.2	58.3	4.0	71.8	58.3	12.2	86.6	48.3	10.5
Queue Delay	0.0	18.7	5.7	25.9	2.3	0.0	6.1	0.5	30.3	0.0	0.0
Total Delay	44.6	117.2	25.9	84.2	6.3	71.8	64.4	12.7	116.8	48.3	10.5
Queue Length 50th (ft)	43	~465	94	~413	10	104	273	24	326	371	8
Queue Length 95th (ft)	71	#602	m132	m#526	m14	173	326	92	#572	450	47
Internal Link Dist (ft)		532		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	797	819	341	717	468	205	894	532	379	1136	554
Starvation Cap Reductn	0	0	97	103	160	0	255	95	0	0	0
Spillback Cap Reductn	0	50	0	0	0	0	0	38	46	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	1.12	0.79	1.21	0.65	0.56	0.91	0.48	1.06	0.74	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	1227	58	814	29	76	109	108	196	194	241
v/c Ratio	0.22	0.84	0.13	0.89	0.07	0.36	0.24	0.23	0.70	0.43	0.48
Control Delay	15.7	23.3	41.3	64.0	8.1	51.7	46.1	8.6	64.7	50.2	18.9
Queue Delay	2.0	48.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.7	71.3	41.3	87.9	8.1	51.7	46.1	8.6	64.7	50.2	18.9
Queue Length 50th (ft)	54	266	42	386	0	60	84	0	170	156	59
Queue Length 95th (ft)	m55	m214	80	470	20	112	140	50	266	235	145
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	737	1467	476	951	453	210	449	464	281	449	505
Starvation Cap Reductn	441	357	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	164	0	0	0	0	0	0	7
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	1.11	0.12	1.03	0.06	0.36	0.24	0.23	0.70	0.43	0.48

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

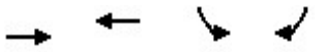


Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	94	1616	15	947	234	57	61	515	89
v/c Ratio	0.33	0.89	0.38	0.78	0.35	0.15	0.11	1.02	0.13
Control Delay	54.5	36.2	87.9	42.8	4.7	26.8	3.9	82.9	5.5
Queue Delay	0.0	0.0	0.0	1.8	0.0	0.0	0.0	34.5	2.0
Total Delay	54.5	36.2	87.9	44.6	4.7	26.8	3.9	117.5	7.5
Queue Length 50th (ft)	72	592	13	371	0	30	0	~444	1
Queue Length 95th (ft)	135	#846	#42	417	51	61	21	#676	34
Internal Link Dist (ft)		650		410		46		105	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	284	1811	40	1402	728	448	672	507	680
Starvation Cap Reductn	0	0	0	284	0	0	0	220	480
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.89	0.38	0.85	0.32	0.13	0.09	1.79	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1274	1217	1520	265
v/c Ratio	0.52	0.72	0.82	0.47
Control Delay	13.7	17.1	24.4	13.3
Queue Delay	0.4	0.0	0.0	0.0
Total Delay	14.1	17.1	24.4	13.3
Queue Length 50th (ft)	138	372	203	58
Queue Length 95th (ft)	172	m375	262	132
Internal Link Dist (ft)	266	838	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2484	1700	1905	579
Starvation Cap Reductn	657	0	0	0
Spillback Cap Reductn	99	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.70	0.72	0.80	0.46

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	2679	691	38	252	480	445	43	51	82
v/c Ratio	0.37	0.79	0.51	0.06	1.05	1.07	0.57	0.38	0.42	0.44
Control Delay	50.3	20.7	35.1	0.2	130.6	114.7	7.7	72.8	74.5	17.7
Queue Delay	0.0	0.3	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.3	21.0	42.1	0.2	130.6	114.7	7.7	72.8	74.5	17.7
Queue Length 50th (ft)	147	698	259	0	~283	~285	0	39	47	0
Queue Length 95th (ft)	m218	850	309	0	#481	#424	55	79	91	46
Internal Link Dist (ft)		838	322			225			414	
Turn Bay Length (ft)										
Base Capacity (vph)	478	3386	1364	665	239	448	783	444	468	464
Starvation Cap Reductn	0	198	618	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.84	0.93	0.06	1.05	1.07	0.57	0.10	0.11	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

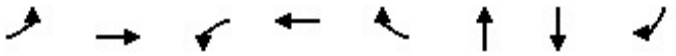
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	437	2371	8	1259	53	53	10	35	185
v/c Ratio	0.61	0.79	0.07	0.56	0.31	0.30	0.04	0.14	0.49
Control Delay	33.8	17.2	40.9	23.0	40.4	40.2	0.2	34.0	37.9
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	18.1	40.9	23.0	40.4	40.2	0.2	34.0	37.9
Queue Length 50th (ft)	106	300	4	153	27	27	0	16	51
Queue Length 95th (ft)	169	#622	19	209	66	66	0	45	90
Internal Link Dist (ft)		431		724		548		293	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	790	2997	115	2437	1027	1043	1017	417	652
Starvation Cap Reductn	0	339	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.89	0.07	0.52	0.05	0.05	0.01	0.08	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	234	1635	44	1133	15	103	17	103
v/c Ratio	0.61	0.58	0.37	0.63	0.02	0.45	0.11	0.40
Control Delay	36.8	13.3	47.2	23.1	0.1	37.2	38.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	13.3	47.2	23.1	0.1	37.2	38.0	8.7
Queue Length 50th (ft)	109	202	22	172	0	45	8	0
Queue Length 95th (ft)	195	287	#59	241	0	94	29	28
Internal Link Dist (ft)		390		249		320	142	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	436	2903	120	2005	705	845	439	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.56	0.37	0.57	0.02	0.12	0.04	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	240	710	222	673	424	84	898	162	266	783	128
v/c Ratio	0.32	0.92	0.63	0.91	0.72	0.38	0.92	0.33	0.87	0.68	0.23
Control Delay	48.7	72.0	33.5	44.8	16.0	64.1	66.0	18.9	85.8	46.2	12.4
Queue Delay	0.0	0.1	14.0	48.0	10.4	0.0	47.5	0.9	2.4	0.0	0.0
Total Delay	48.7	72.1	47.5	92.8	26.4	64.1	113.5	19.8	88.2	46.2	12.4
Queue Length 50th (ft)	98	345	218	352	224	74	435	46	248	338	22
Queue Length 95th (ft)	139	#461	324	#463	362	131	#558	110	#406	412	73
Internal Link Dist (ft)		523		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	760	775	355	746	586	219	976	493	305	1147	550
Starvation Cap Reductn	0	0	112	191	135	0	349	153	0	0	0
Spillback Cap Reductn	0	1	0	0	0	0	0	6	9	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.92	0.91	1.21	0.94	0.38	1.43	0.48	0.90	0.68	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	860	31	842	56	195	275	126	77	108	283
v/c Ratio	0.39	0.78	0.05	0.70	0.11	0.63	0.56	0.27	0.45	0.22	0.46
Control Delay	20.9	23.7	32.8	45.6	14.7	57.9	51.6	19.3	54.8	43.4	7.0
Queue Delay	2.7	5.9	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	23.7	29.6	32.8	51.1	14.7	57.9	51.6	19.3	54.8	43.4	7.1
Queue Length 50th (ft)	83	170	20	363	11	164	226	36	61	80	0
Queue Length 95th (ft)	m98	m194	45	440	44	256	324	92	118	135	74
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	561	1109	598	1195	531	308	488	460	171	488	614
Starvation Cap Reductn	234	197	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	290	0	0	0	0	0	0	22
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.94	0.05	0.93	0.11	0.63	0.56	0.27	0.45	0.22	0.48

Intersection Summary

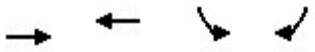
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	196	1402	37	1327	615	52	28	317	34
v/c Ratio	0.81	0.66	0.46	0.75	0.61	0.18	0.07	0.90	0.07
Control Delay	79.4	20.2	79.4	31.0	8.0	35.7	0.3	73.5	0.3
Queue Delay	0.0	0.0	0.0	14.1	0.7	0.0	0.0	61.9	1.1
Total Delay	79.4	20.2	79.4	45.1	8.7	35.7	0.3	135.4	1.4
Queue Length 50th (ft)	159	423	31	496	60	32	0	251	0
Queue Length 95th (ft)	#273	526	70	603	187	66	0	#395	0
Internal Link Dist (ft)		648		423		74		76	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	261	2137	81	1762	1002	378	527	397	539
Starvation Cap Reductn	0	0	0	443	142	0	0	216	395
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.66	0.46	1.01	0.72	0.14	0.05	1.75	0.24

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1221	1939	892	298
v/c Ratio	0.41	0.96	0.64	0.72
Control Delay	8.8	24.4	23.7	30.5
Queue Delay	0.5	0.0	0.0	0.0
Total Delay	9.4	24.4	23.7	30.5
Queue Length 50th (ft)	98	583	114	112
Queue Length 95th (ft)	126	#384	154	#243
Internal Link Dist (ft)	248	853	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2959	2023	1391	416
Starvation Cap Reductn	1190	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.69	0.96	0.64	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	1688	1259	50	251	277	31	41	73	177
v/c Ratio	0.65	0.57	0.76	0.06	0.75	0.46	0.05	0.27	0.46	0.67
Control Delay	73.0	14.4	37.2	1.7	67.3	51.4	0.2	64.8	71.1	27.7
Queue Delay	0.0	0.0	48.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.0	14.4	86.0	1.7	67.3	51.4	0.2	64.8	71.1	27.7
Queue Length 50th (ft)	117	252	514	0	243	140	0	37	67	30
Queue Length 95th (ft)	#225	280	#727	9	332	183	0	74	115	105
Internal Link Dist (ft)		853	351			248			414	
Turn Bay Length (ft)										
Base Capacity (vph)	194	2946	1650	781	343	616	637	405	426	469
Starvation Cap Reductn	0	0	525	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.57	1.12	0.06	0.73	0.45	0.05	0.10	0.17	0.38

Intersection Summary

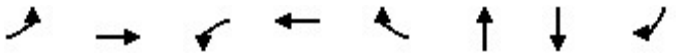
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	88	961	9	2227	264	261	3	32	420
v/c Ratio	0.56	0.40	0.11	0.85	0.76	0.75	0.01	0.10	0.86
Control Delay	67.7	20.3	57.4	34.6	55.5	54.6	0.0	42.0	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	20.3	57.4	34.6	55.5	54.6	0.0	42.0	63.4
Queue Length 50th (ft)	32	149	6	412	187	185	0	19	167
Queue Length 95th (ft)	#69	250	25	534	283	278	0	52	#294
Internal Link Dist (ft)		403		821		298		508	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	157	2408	79	2612	713	716	721	317	489
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.40	0.11	0.85	0.37	0.36	0.00	0.10	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	331	1660	8	1276	7	242	11	202
v/c Ratio	0.83	0.59	0.08	0.83	0.01	0.71	0.07	0.64
Control Delay	54.2	16.1	46.8	36.3	0.0	46.0	41.2	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.2	16.1	46.8	36.3	0.0	46.0	41.2	16.3
Queue Length 50th (ft)	177	190	4	240	0	125	6	0
Queue Length 95th (ft)	#394	409	21	#403	0	219	24	65
Internal Link Dist (ft)		405		348		375	540	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	399	2827	97	1542	574	702	358	476
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.59	0.08	0.83	0.01	0.34	0.03	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	112	948	197	752	203	115	581	239	381	839	80
v/c Ratio	0.14	1.12	0.58	1.05	0.43	0.56	0.73	0.47	1.04	0.76	0.15
Control Delay	43.7	120.3	19.3	61.4	3.8	71.8	58.0	12.3	112.9	49.6	10.7
Queue Delay	0.0	0.3	6.3	20.4	2.5	0.0	6.1	0.5	21.3	0.0	0.0
Total Delay	43.7	120.7	25.6	81.7	6.3	71.8	64.1	12.8	134.2	49.6	10.7
Queue Length 50th (ft)	43	~543	87	~426	11	104	273	27	~368	374	8
Queue Length 95th (ft)	70	#681	m121	m#507	m13	173	326	102	#646	454	47
Internal Link Dist (ft)		532		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	820	843	341	717	469	205	894	551	365	1111	543
Starvation Cap Reductn	0	0	97	103	163	0	255	93	0	0	0
Spillback Cap Reductn	0	50	0	0	0	0	0	44	50	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	1.20	0.81	1.22	0.66	0.56	0.91	0.52	1.21	0.76	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	1373	58	834	29	76	109	108	196	194	241
v/c Ratio	0.21	0.90	0.13	0.92	0.07	0.40	0.26	0.24	0.75	0.46	0.50
Control Delay	15.0	24.9	41.9	67.8	8.3	54.9	47.9	9.0	70.6	52.4	20.4
Queue Delay	2.3	46.7	0.0	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	71.6	41.9	106.4	8.3	54.9	47.9	9.0	70.6	52.4	20.4
Queue Length 50th (ft)	53	703	42	402	0	62	85	0	174	159	63
Queue Length 95th (ft)	m51	m218	81	#515	20	115	143	51	#291	240	151
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	765	1526	463	927	442	191	423	443	262	423	483
Starvation Cap Reductn	481	365	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	154	0	0	0	0	0	0	6
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	1.18	0.13	1.08	0.07	0.40	0.26	0.24	0.75	0.46	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

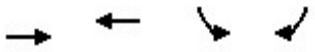


Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	94	1769	15	968	234	57	61	515	89
v/c Ratio	0.51	0.95	0.38	0.66	0.31	0.17	0.11	1.06	0.14
Control Delay	65.2	41.1	87.9	33.2	4.0	28.3	4.1	95.1	6.1
Queue Delay	0.0	0.0	0.0	4.2	0.0	0.0	0.0	22.2	2.1
Total Delay	65.2	41.1	87.9	37.4	4.0	28.3	4.1	117.4	8.2
Queue Length 50th (ft)	76	680	13	341	0	31	0	~474	2
Queue Length 95th (ft)	135	#961	#42	416	49	63	21	#693	37
Internal Link Dist (ft)		650		410		46		105	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	185	1865	40	1461	749	413	649	488	656
Starvation Cap Reductn	0	0	0	404	0	0	0	209	458
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.95	0.38	0.92	0.31	0.14	0.09	1.85	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1423	1245	1652	265
v/c Ratio	0.60	0.76	0.85	0.46
Control Delay	15.3	20.6	25.3	13.6
Queue Delay	0.8	0.0	0.0	0.0
Total Delay	16.1	20.6	25.3	13.6
Queue Length 50th (ft)	162	407	229	62
Queue Length 95th (ft)	205	m84	287	134
Internal Link Dist (ft)	266	838	640	
Turn Bay Length (ft)				
Base Capacity (vph)	2403	1647	1971	588
Starvation Cap Reductn	607	0	0	0
Spillback Cap Reductn	262	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.79	0.76	0.84	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	2971	721	38	266	506	474	43	51	82
v/c Ratio	0.37	0.87	0.53	0.06	1.11	1.09	0.59	0.38	0.42	0.44
Control Delay	49.3	24.0	35.6	0.2	146.3	117.2	7.7	72.8	74.5	17.7
Queue Delay	0.0	1.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	25.0	45.6	0.2	146.3	117.2	7.7	72.8	74.5	17.7
Queue Length 50th (ft)	146	954	273	0	~313	~296	0	39	47	0
Queue Length 95th (ft)	m210	1035	324	0	#514	#437	55	79	91	46
Internal Link Dist (ft)		838	322			225			414	
Turn Bay Length (ft)										
Base Capacity (vph)	478	3396	1364	664	239	464	808	430	452	452
Starvation Cap Reductn	0	197	611	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.93	0.96	0.06	1.11	1.09	0.59	0.10	0.11	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

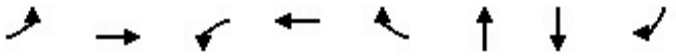
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	437	2735	22	1259	77	78	12	35	185
v/c Ratio	0.63	1.01	0.20	0.60	0.40	0.40	0.04	0.15	0.50
Control Delay	35.6	41.1	44.9	24.9	42.1	42.1	0.3	34.9	39.3
Queue Delay	0.0	35.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	76.1	44.9	24.9	42.1	42.1	0.3	34.9	39.3
Queue Length 50th (ft)	109	425	11	157	41	41	0	17	52
Queue Length 95th (ft)	173	#813	37	218	88	89	0	45	93
Internal Link Dist (ft)		431		724		548		293	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	745	2705	108	2297	968	979	965	393	615
Starvation Cap Reductn	0	261	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	1.12	0.20	0.55	0.08	0.08	0.01	0.09	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	300	1635	44	1133	15	103	17	113
v/c Ratio	0.72	0.57	0.38	0.65	0.02	0.46	0.11	0.44
Control Delay	41.4	13.3	48.5	24.2	0.1	37.9	37.9	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	13.3	48.5	24.2	0.1	37.9	37.9	10.9
Queue Length 50th (ft)	145	202	22	173	0	45	8	0
Queue Length 95th (ft)	#295	294	#60	245	0	95	28	36
Internal Link Dist (ft)		390		249		320	142	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	418	2860	115	1920	681	812	422	468
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.57	0.38	0.59	0.02	0.13	0.04	0.24

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	240	725	247	751	451	84	898	167	271	783	128
v/c Ratio	0.31	0.91	0.66	0.95	0.75	0.38	0.97	0.35	0.93	0.73	0.25
Control Delay	47.8	70.5	30.2	45.8	14.8	64.1	75.5	20.5	96.3	49.9	14.0
Queue Delay	0.0	4.9	17.9	44.4	11.1	0.0	42.8	0.9	6.0	0.0	0.0
Total Delay	47.8	75.5	48.1	90.2	25.9	64.1	118.3	21.4	102.3	49.9	14.0
Queue Length 50th (ft)	97	351	213	392	252	74	444	51	255	348	25
Queue Length 95th (ft)	138	#465	m289	#521	394	131	#583	119	#428	426	78
Internal Link Dist (ft)		523		191			251			645	
Turn Bay Length (ft)	150							170	245		180
Base Capacity (vph)	781	796	377	793	603	219	927	473	292	1073	519
Starvation Cap Reductn	0	0	117	184	129	0	315	133	0	0	0
Spillback Cap Reductn	0	42	0	0	0	0	0	7	11	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.96	0.95	1.23	0.95	0.38	1.47	0.49	0.96	0.73	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	885	31	971	56	195	275	126	77	108	283
v/c Ratio	0.41	0.83	0.05	0.77	0.10	0.65	0.58	0.28	0.48	0.23	0.47
Control Delay	22.5	27.0	30.8	45.9	13.8	59.9	52.9	20.0	57.2	44.3	7.2
Queue Delay	3.2	15.2	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	25.7	42.3	30.8	55.7	13.8	59.9	52.9	20.0	57.2	44.3	7.3
Queue Length 50th (ft)	84	175	19	425	11	166	229	37	62	81	0
Queue Length 95th (ft)	m98	m198	43	510	42	258	327	94	120	136	75
Internal Link Dist (ft)		191		317			792			226	
Turn Bay Length (ft)			130		130	100		100	85		75
Base Capacity (vph)	537	1062	634	1269	561	299	475	449	162	475	606
Starvation Cap Reductn	222	181	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	275	0	0	0	0	0	0	21
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	1.00	0.05	0.98	0.10	0.65	0.58	0.28	0.48	0.23	0.48

Intersection Summary

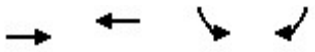
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	196	1429	37	1465	615	52	28	317	34
v/c Ratio	0.84	0.66	0.46	0.82	0.62	0.18	0.07	0.91	0.07
Control Delay	85.0	19.9	79.4	32.6	8.5	36.8	0.3	76.8	0.3
Queue Delay	0.0	0.0	0.0	42.2	0.8	0.0	0.0	61.7	1.5
Total Delay	85.0	19.9	79.4	74.8	9.3	36.8	0.3	138.5	1.7
Queue Length 50th (ft)	162	438	31	566	76	32	0	251	0
Queue Length 95th (ft)	#284	521	70	674	201	67	0	#412	0
Internal Link Dist (ft)		648		423		74		76	
Turn Bay Length (ft)	140		140						
Base Capacity (vph)	245	2152	81	1797	999	353	504	377	516
Starvation Cap Reductn	0	0	0	449	156	0	0	212	388
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.66	0.46	1.09	0.73	0.15	0.06	1.92	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1247	2129	916	298
v/c Ratio	0.38	0.96	0.82	0.88
Control Delay	6.6	27.3	32.5	50.7
Queue Delay	0.5	0.0	0.0	0.0
Total Delay	7.1	27.3	32.5	50.7
Queue Length 50th (ft)	84	788	129	123
Queue Length 95th (ft)	108	#940	#176	#283
Internal Link Dist (ft)	248	853	640	
Turn Bay Length (ft)				
Base Capacity (vph)	3258	2217	1127	344
Starvation Cap Reductn	1388	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.96	0.81	0.87

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	1738	1450	50	251	278	42	41	73	177
v/c Ratio	1.03	0.60	0.82	0.06	0.75	0.47	0.07	0.25	0.42	0.71
Control Delay	146.8	16.5	36.6	0.8	67.4	51.5	0.2	62.7	68.1	37.9
Queue Delay	0.0	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	146.8	16.5	84.6	0.8	67.4	51.5	0.2	62.7	68.1	37.9
Queue Length 50th (ft)	~127	241	580	0	243	141	0	37	67	55
Queue Length 95th (ft)	m#238	410	#910	5	332	183	0	73	113	131
Internal Link Dist (ft)		853	351			248			414	
Turn Bay Length (ft)										
Base Capacity (vph)	122	2915	1769	836	343	615	643	405	426	448
Starvation Cap Reductn	0	0	555	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.60	1.19	0.06	0.73	0.45	0.07	0.10	0.17	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

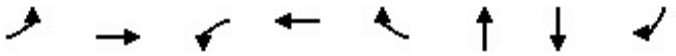
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	88	1024	12	2227	417	426	15	32	420
v/c Ratio	0.63	0.50	0.17	0.96	0.83	0.85	0.03	0.11	0.97
Control Delay	81.5	29.6	67.6	51.8	55.9	57.4	0.1	49.9	89.7
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.5	30.1	67.6	51.8	55.9	57.4	0.1	49.9	89.7
Queue Length 50th (ft)	37	209	10	520	331	341	0	23	197
Queue Length 95th (ft)	#80	315	33	#684	465	476	0	57	#344
Internal Link Dist (ft)		403		821		298		508	
Turn Bay Length (ft)	375		200		90		90		
Base Capacity (vph)	139	2052	70	2313	631	633	647	281	433
Starvation Cap Reductn	0	514	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.67	0.17	0.96	0.66	0.67	0.02	0.11	0.97

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	343	1660	8	1276	7	242	11	260
v/c Ratio	0.88	0.60	0.08	0.84	0.01	0.71	0.07	0.70
Control Delay	60.8	16.7	46.0	36.8	0.0	44.9	39.7	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	16.7	46.0	36.8	0.0	44.9	39.7	15.9
Queue Length 50th (ft)	181	189	4	234	0	121	6	0
Queue Length 95th (ft)	#421	417	21	#410	0	218	23	73
Internal Link Dist (ft)		405		348		375	540	
Turn Bay Length (ft)	250		225		100			
Base Capacity (vph)	389	2777	99	1518	539	757	366	528
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.60	0.08	0.84	0.01	0.32	0.03	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
1: El Camino Real & Ralston Ave

01/14/2024

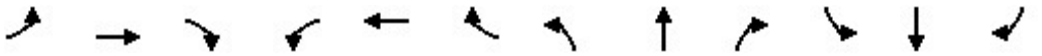
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1136	98	191	728	289	260	1224	177	317	826	78
Future Volume (vph)	120	1136	98	191	728	289	260	1224	177	317	826	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		170	245		180
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	30			25			25			40		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		612			271			331			725	
Travel Time (s)		13.9			6.2			7.5			16.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)	10%			10%								
Lane Group Flow (vph)	108	1148	98	172	747	289	260	1224	177	317	826	78
v/c Ratio	0.26	1.30	0.20	0.55	1.14	0.56	0.92	1.16	0.33	1.42	0.88	0.16
Control Delay	15.5	166.4	3.6	29.2	102.3	16.3	92.8	124.4	21.1	252.6	58.5	9.9
Queue Delay	0.0	1.7	0.0	9.1	2.8	8.1	0.0	2.0	1.0	0.0	0.0	0.0
Total Delay	15.5	168.1	3.6	38.2	105.1	24.4	92.8	126.4	22.1	252.6	58.5	9.9
Queue Length 50th (ft)	67	~707	24	159	~427	170	229	~661	62	~370	358	3
Queue Length 95th (ft)	m52	#825	m13	m174	m#445	m183	#406	#800	127	#559	441	43
Internal Link Dist (ft)		532			191			251			645	
Turn Bay Length (ft)	150		150						170	245		180
Base Capacity (vph)	420	884	491	312	657	515	282	1056	530	224	977	489
Starvation Cap Reductn	0	0	0	105	200	183	0	329	177	0	0	0
Spillback Cap Reductn	0	217	0	0	0	0	0	0	4	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	1.72	0.20	0.83	1.63	0.87	0.92	1.68	0.50	1.42	0.85	0.16

Intersection Summary	
Area Type:	Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1078	226	41	893	39	86	142	143	352	179	211
Future Volume (vph)	190	1078	226	41	893	39	86	142	143	352	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	130		130	100		100	85		75
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			40			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		271			397			872			306	
Travel Time (s)		6.2			9.0			19.8			7.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1304	0	41	893	39	86	142	143	352	179	211
v/c Ratio	0.30	1.04		0.09	1.03	0.09	0.28	0.25	0.25	1.03	0.31	0.35
Control Delay	7.3	39.0		50.0	71.6	21.9	28.0	26.0	5.0	101.8	38.4	11.2
Queue Delay	5.3	23.8		0.0	29.3	0.0	0.2	0.0	0.0	25.0	1.8	0.8
Total Delay	12.7	62.8		50.0	100.8	21.9	28.3	26.0	5.0	126.8	40.3	12.0
Queue Length 50th (ft)	32	~630		20	~236	8	53	83	9	~330	122	13
Queue Length 95th (ft)	m26	m333		m24	m#505	m13	m91	130	28	#531	172	79
Internal Link Dist (ft)		191			317			792			226	
Turn Bay Length (ft)				130		130	100		100	85		75
Base Capacity (vph)	634	1248		435	871	420	311	570	583	342	570	611
Starvation Cap Reductn	377	428		0	20	0	0	0	0	31	256	189
Spillback Cap Reductn	0	0		0	221	0	36	0	0	0	0	71
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.59		0.09	1.37	0.09	0.31	0.25	0.25	1.13	0.57	0.50

Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



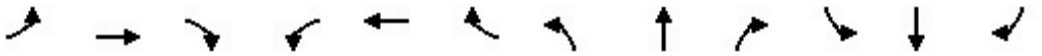
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1525	37	62	970	12	87
Future Volume (vph)	1525	37	62	970	12	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	90		75	0
Storage Lanes		0	1		1	1
Taper Length (ft)			40		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			30	30	
Link Distance (ft)	397			728	881	
Travel Time (s)	9.0			16.5	20.0	
Confl. Peds. (#/hr)		19	19		4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1562	0	62	970	12	87
v/c Ratio	0.80		0.12	0.92	0.13	0.52
Control Delay	8.2		34.4	59.1	62.0	23.1
Queue Delay	3.1		0.0	10.2	0.0	0.0
Total Delay	11.3		34.4	69.3	62.0	23.1
Queue Length 50th (ft)	184		39	424	10	0
Queue Length 95th (ft)	m211		75	#542	32	53
Internal Link Dist (ft)	317			648	801	
Turn Bay Length (ft)			90		75	
Base Capacity (vph)	1962		541	1082	237	287
Starvation Cap Reductn	295		0	0	0	0
Spillback Cap Reductn	0		0	105	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.94		0.11	0.99	0.05	0.30

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

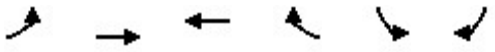


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	1398	0	18	1039	282	40	28	57	464	13	78
Future Volume (vph)	141	1398	0	18	1039	282	40	28	57	464	13	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	140		0	0		0	0		0
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	25			35			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		728			503			154			156	
Travel Time (s)		16.5			11.4			3.5			3.5	
Confl. Peds. (#/hr)	12					12						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	1398	0	18	1039	282	0	68	57	0	477	78
v/c Ratio	0.74	0.86		0.45	0.78	0.39		0.14	0.08		0.89	0.11
Control Delay	79.5	37.6		95.4	40.7	6.5		24.2	2.8		54.9	5.1
Queue Delay	0.0	2.8		0.0	16.9	0.0		0.0	0.0		54.1	2.9
Total Delay	79.5	40.5		95.4	57.6	6.5		24.2	2.8		109.0	8.0
Queue Length 50th (ft)	117	541		15	403	16		35	0		366	0
Queue Length 95th (ft)	#218	645		#52	488	79		68	17		#578	30
Internal Link Dist (ft)		648			423			74			76	
Turn Bay Length (ft)	140			140								
Base Capacity (vph)	190	1633		40	1333	716		473	713		537	714
Starvation Cap Reductn	0	144		0	306	0		0	0		266	550
Spillback Cap Reductn	0	0		0	0	0		0	0		0	0
Storage Cap Reductn	0	0		0	0	0		0	0		0	0
Reduced v/c Ratio	0.74	0.94		0.45	1.01	0.39		0.14	0.08		1.76	0.48

Intersection Summary

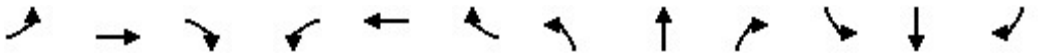
Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1307	1064	322	1413	278
Future Volume (vph)	0	1307	1064	322	1413	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			300	0	0
Storage Lanes	0			0	3	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	933		720	
Travel Time (s)		7.5	21.2		16.4	
Confl. Bikes (#/hr)				5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	1307	1386	0	1441	250
v/c Ratio		0.48	0.74		0.80	0.46
Control Delay		12.3	16.5		26.8	16.4
Queue Delay		1.1	0.0		0.0	0.0
Total Delay		13.4	16.5		26.8	16.4
Queue Length 50th (ft)		139	247		224	72
Queue Length 95th (ft)		173	330		278	148
Internal Link Dist (ft)		248	853		640	
Turn Bay Length (ft)						
Base Capacity (vph)		2733	1861		1811	543
Starvation Cap Reductn		1098	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.80	0.74		0.80	0.46

Intersection Summary	
Area Type:	Other



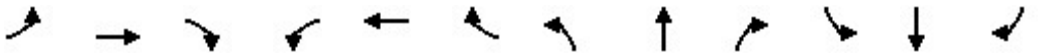
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	461	1962	460	0	706	62	502	319	1185	54	102	153
Future Volume (vph)	461	1962	460	0	706	62	502	319	1185	54	102	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		933			424			493			494	
Travel Time (s)		21.2			9.6			11.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							17%		33%			
Lane Group Flow (vph)	461	2422	0	0	706	62	417	795	794	54	102	153
v/c Ratio	0.95	0.87			0.78	0.14	0.89	0.95	0.94	0.51	0.92	0.27
Control Delay	77.4	28.8			54.0	7.0	67.8	65.0	61.7	78.7	127.7	9.7
Queue Delay	0.0	0.0			5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.4	28.8			59.0	7.0	67.8	65.0	61.7	78.7	127.7	9.7
Queue Length 50th (ft)	390	621			306	0	382	400	363	46	90	25
Queue Length 95th (ft)	#594	694			382	29	#591	#556	#507	93	#205	51
Internal Link Dist (ft)		853			344			413			414	
Turn Bay Length (ft)												
Base Capacity (vph)	501	2795			901	457	468	838	844	105	111	589
Starvation Cap Reductn	0	12			137	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0			0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0			0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.87			0.92	0.14	0.89	0.95	0.94	0.51	0.92	0.26

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

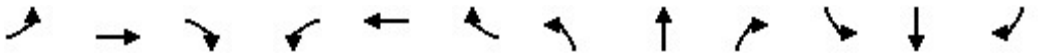


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	2610	179	10	1278	31	72	138	45	34	45	169
Future Volume (vph)	413	2610	179	10	1278	31	72	138	45	34	45	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	200		625	90		90	0		0
Storage Lanes	2		0	1		2	1		1	0		2
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			771			489			461	
Travel Time (s)		11.0			17.5			11.1			10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	413	2789	0	10	1309	0	65	145	45	0	79	169
v/c Ratio	0.50	0.89		0.12	0.73		0.28	0.60	0.15		0.38	0.53
Control Delay	40.2	23.3		56.3	32.0		45.4	54.7	1.1		50.6	51.8
Queue Delay	0.0	45.4		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	40.2	68.7		56.3	32.0		45.4	54.7	1.1		50.6	51.8
Queue Length 50th (ft)	125	517		6	261		41	94	0		48	60
Queue Length 95th (ft)	215	#964		27	355		92	182	0		107	111
Internal Link Dist (ft)		402			691			409			381	
Turn Bay Length (ft)	375			200			90		90			
Base Capacity (vph)	829	3124		84	2327		756	794	764		314	480
Starvation Cap Reductn	0	586		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	0.50	1.10		0.12	0.56		0.09	0.18	0.06		0.25	0.35

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

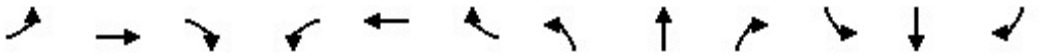


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1662	224	42	1084	14	71	10	19	34	11	148
Future Volume (vph)	366	1662	224	42	1084	14	71	10	19	34	11	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	225		100	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		481			615			467			309	
Travel Time (s)		10.9			14.0			10.6			7.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	366	1886	0	42	1084	14	0	100	0	0	45	148
v/c Ratio	0.69	0.62		0.40	0.68	0.02		0.47			0.28	0.53
Control Delay	36.4	14.4		53.4	29.8	0.1		41.6			43.1	14.7
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	36.4	14.4		53.4	29.8	0.1		41.6			43.1	14.7
Queue Length 50th (ft)	180	264		23	196	0		48			24	0
Queue Length 95th (ft)	#331	380		#61	274	0		101			59	56
Internal Link Dist (ft)		401			535			387			229	
Turn Bay Length (ft)	250			225		100						
Base Capacity (vph)	554	3020		106	1593	586		751			382	453
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.66	0.62		0.40	0.68	0.02		0.13			0.12	0.33

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	671	336	227	931	402	142	850	144	368	1402	207
Future Volume (vph)	268	671	336	227	931	402	142	850	144	368	1402	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		170	245		180
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	30			25			25			40		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		603			271			331			725	
Travel Time (s)		13.7			6.2			7.5			16.5	
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)	10%			10%								
Lane Group Flow (vph)	241	698	336	204	954	402	142	850	144	368	1402	207
v/c Ratio	0.66	0.91	0.69	0.56	1.24	0.75	0.61	0.84	0.29	1.49	1.35	0.43
Control Delay	27.2	35.7	14.5	27.5	142.1	13.7	67.6	54.2	16.0	280.3	201.0	25.1
Queue Delay	0.0	2.7	0.0	7.6	1.1	10.2	0.0	50.1	0.0	1.1	0.0	0.0
Total Delay	27.2	38.4	14.5	35.2	143.2	23.9	67.6	104.3	16.0	281.4	201.0	25.1
Queue Length 50th (ft)	212	358	229	128	~580	31	120	372	33	~448	~851	84
Queue Length 95th (ft)	m249	m389	m259	m171	#701	m75	194	455	90	#648	#991	161
Internal Link Dist (ft)		523			191			251			645	
Turn Bay Length (ft)	150		150						170	245		180
Base Capacity (vph)	366	771	487	366	772	537	234	1014	499	247	1040	486
Starvation Cap Reductn	0	0	0	120	121	109	0	361	0	0	0	0
Spillback Cap Reductn	0	28	0	0	0	0	0	0	6	18	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.94	0.69	0.83	1.47	0.94	0.61	1.30	0.29	1.61	1.35	0.43

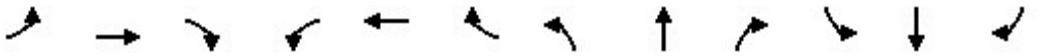
Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	767	86	56	781	178	381	465	150	95	94	317
Future Volume (vph)	306	767	86	56	781	178	381	465	150	95	94	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	130		130	100		100	85		75
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			40			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		271			397			872			306	
Travel Time (s)		6.2			9.0			19.8			7.0	
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	306	853	0	56	781	178	381	465	150	95	94	317
v/c Ratio	0.59	0.83		0.12	0.83	0.38	0.85	0.71	0.26	0.66	0.14	0.42
Control Delay	23.5	24.6		15.0	22.8	7.6	51.3	37.0	13.7	61.1	30.8	4.9
Queue Delay	7.4	26.3		0.0	49.7	0.0	9.9	0.0	0.0	0.4	0.0	1.1
Total Delay	30.9	50.9		15.0	72.5	7.6	61.3	37.0	13.7	61.5	30.8	6.1
Queue Length 50th (ft)	121	174		9	225	26	247	282	27	70	56	0
Queue Length 95th (ft)	m138	m194		m19	214	m40	m#448	m403	m82	#159	98	64
Internal Link Dist (ft)		191			317			792			226	
Turn Bay Length (ft)				130		130	100		100	85		75
Base Capacity (vph)	520	1024		468	936	467	446	657	586	144	657	752
Starvation Cap Reductn	168	204		0	72	0	0	0	0	0	0	237
Spillback Cap Reductn	0	135		0	256	0	48	0	13	2	0	87
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	1.04		0.12	1.15	0.38	0.96	0.71	0.26	0.67	0.14	0.62

Intersection Summary

Area Type: Other

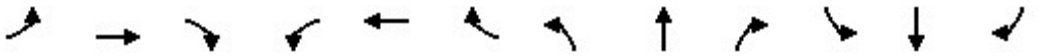
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	943	34	43	1015	20	474
Future Volume (vph)	943	34	43	1015	20	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	90		75	0
Storage Lanes		0	1		1	1
Taper Length (ft)			40		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			30	30	
Link Distance (ft)	397			728	881	
Travel Time (s)	9.0			16.5	20.0	
Confl. Peds. (#/hr)		18	18		6	
Confl. Bikes (#/hr)						1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Lane Group Flow (vph)	977	0	43	1015	20	474
v/c Ratio	0.56		0.07	0.85	0.14	0.85
Control Delay	12.7		29.6	49.4	56.3	19.4
Queue Delay	1.4		0.0	1.6	0.0	0.0
Total Delay	14.1		29.6	51.0	56.3	19.4
Queue Length 50th (ft)	51		25	431	17	0
Queue Length 95th (ft)	523		53	521	40	110
Internal Link Dist (ft)	317			648	801	
Turn Bay Length (ft)			90		75	
Base Capacity (vph)	1738		627	1254	377	706
Starvation Cap Reductn	528		0	0	0	0
Spillback Cap Reductn	0		0	105	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.81		0.07	0.88	0.05	0.67

Intersection Summary	
Area Type:	Other

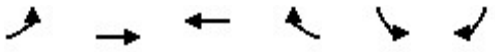


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1254	7	51	1186	554	56	72	26	341	6	66
Future Volume (vph)	221	1254	7	51	1186	554	56	72	26	341	6	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	140		0	0		0	0		0
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	25			35			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		728			503			154			156	
Travel Time (s)		16.5			11.4			3.5			3.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	1261	0	51	1186	554	0	128	26	0	347	66
v/c Ratio	0.76	0.66		0.41	0.83	0.59		0.37	0.05		0.99	0.12
Control Delay	54.4	18.6		52.4	32.4	4.7		29.6	0.2		81.1	2.3
Queue Delay	0.0	0.0		0.0	1.3	0.0		0.0	0.0		41.4	1.4
Total Delay	54.4	18.6		52.4	33.7	4.7		29.6	0.2		122.5	3.8
Queue Length 50th (ft)	126	300		30	339	0		60	0		207	0
Queue Length 95th (ft)	204	381		67	#473	67		113	0		#388	13
Internal Link Dist (ft)		648			423			74			76	
Turn Bay Length (ft)	140			140								
Base Capacity (vph)	335	1913		130	1427	944		348	542		350	554
Starvation Cap Reductn	0	0		0	97	0		0	0		155	366
Spillback Cap Reductn	0	0		0	0	0		0	0		0	0
Storage Cap Reductn	0	0		0	0	0		0	0		0	0
Reduced v/c Ratio	0.66	0.66		0.39	0.89	0.59		0.37	0.05		1.78	0.35

Intersection Summary

Area Type: Other

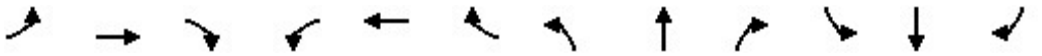
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1312	1231	887	660	540
Future Volume (vph)	0	1312	1231	887	660	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			300	0	0
Storage Lanes	0			0	3	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	933		720	
Travel Time (s)		7.5	21.2		16.4	
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						48%
Lane Group Flow (vph)	0	1312	2118	0	919	281
v/c Ratio		0.37	0.88		0.77	0.70
Control Delay		9.0	9.2		54.3	41.9
Queue Delay		3.2	3.3		0.0	0.0
Total Delay		12.2	12.5		54.3	41.9
Queue Length 50th (ft)		171	271		280	184
Queue Length 95th (ft)		194	m242		333	315
Internal Link Dist (ft)		248	853		640	
Turn Bay Length (ft)						
Base Capacity (vph)		3593	2398		1200	401
Starvation Cap Reductn		2141	200		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.90	0.96		0.77	0.70

Intersection Summary	
Area Type:	Other

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	1151	635	0	1615	89	448	100	76	88	450	392
Future Volume (vph)	272	1151	635	0	1615	89	448	100	76	88	450	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		933			395			493			494	
Travel Time (s)		21.2			9.0			11.2			11.2	
Confl. Bikes (#/hr)									6			1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							50%		10%			
Lane Group Flow (vph)	272	1786	0	0	1615	89	224	332	68	88	450	392
v/c Ratio	1.16	0.64			1.12	0.13	0.86	0.91dl	0.14	0.26	1.25	0.73
Control Delay	161.0	16.0			105.8	10.0	91.0	68.1	11.8	53.7	181.7	32.6
Queue Delay	0.0	0.0			1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	161.0	16.0			107.4	10.0	91.0	68.1	11.8	53.7	181.7	32.6
Queue Length 50th (ft)	~343	193			~955	14	234	188	0	74	~548	205
Queue Length 95th (ft)	m#519	209			#1094	51	#382	255	25	129	#769	292
Internal Link Dist (ft)		853			315			413			414	
Turn Bay Length (ft)												
Base Capacity (vph)	234	2789			1439	682	279	504	519	342	360	536
Starvation Cap Reductn	0	0			448	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0			0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0			0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.64			1.63	0.13	0.80	0.66	0.13	0.26	1.25	0.73

Intersection Summary

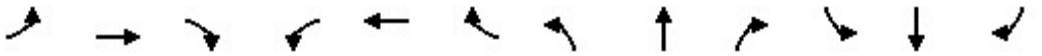
Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

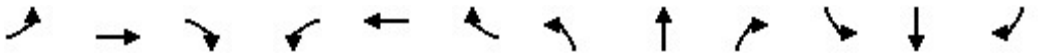


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	1104	90	103	2659	44	445	33	3	50	138	403
Future Volume (vph)	123	1104	90	103	2659	44	445	33	3	50	138	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	200		625	90		90	0		0
Storage Lanes	2		0	1		2	1		1	0		2
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		496			792			685			449	
Travel Time (s)		11.3			18.0			15.6			10.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							46%					
Lane Group Flow (vph)	123	1194	0	103	2703	0	240	238	3	0	188	403
v/c Ratio	0.76	0.56		0.61	0.89		0.76	0.75	0.01		0.62	0.87
Control Delay	88.8	29.9		71.0	35.9		64.7	63.5	0.0		60.4	72.6
Queue Delay	0.0	0.6		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	88.8	30.5		71.0	35.9		64.7	63.5	0.0		60.4	72.6
Queue Length 50th (ft)	52	267		82	576		198	196	0		145	185
Queue Length 95th (ft)	#113	372		150	#738		295	291	0		246	#315
Internal Link Dist (ft)		416			712			605			369	
Turn Bay Length (ft)	375			200			90		90			
Base Capacity (vph)	162	2138		223	3028		623	629	646		304	461
Starvation Cap Reductn	0	519		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	0.76	0.74		0.46	0.89		0.39	0.38	0.00		0.62	0.87

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

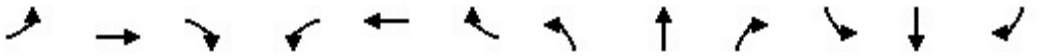


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	409	1520	104	8	1670	7	188	27	29	7	13	419
Future Volume (vph)	409	1520	104	8	1670	7	188	27	29	7	13	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	225		100	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		552			596			523			545	
Travel Time (s)		12.5			13.5			11.9			12.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	409	1624	0	8	1670	7	0	244	0	0	20	419
v/c Ratio	0.90	0.50		0.12	0.90	0.01		0.78			0.15	0.84
Control Delay	70.7	14.7		69.2	46.7	0.0		67.6			59.3	22.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	70.7	14.7		69.2	46.7	0.0		67.6			59.3	22.2
Queue Length 50th (ft)	317	211		6	454	0		187			16	7
Queue Length 95th (ft)	#633	451		27	#721	0		305			44	125
Internal Link Dist (ft)		472			516			443			465	
Turn Bay Length (ft)	250			225		100						
Base Capacity (vph)	456	3243		69	1865	640		498			257	574
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.90	0.50		0.12	0.90	0.01		0.49			0.08	0.73

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1220	98	195	739	293	260	1224	206	346	826	78
Future Volume (vph)	120	1220	98	195	739	293	260	1224	206	346	826	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		170	245		180
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	30			25			25			40		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		612			271			331			725	
Travel Time (s)		13.9			6.2			7.5			16.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)	10%			10%								
Lane Group Flow (vph)	108	1232	98	175	759	293	260	1224	206	346	826	78
v/c Ratio	0.25	1.35	0.21	0.56	1.16	0.57	0.94	1.19	0.39	1.54	0.89	0.17
Control Delay	15.6	190.4	4.3	18.4	100.6	5.0	97.3	136.2	22.3	304.3	60.4	10.1
Queue Delay	0.0	0.0	0.0	5.6	1.5	6.2	0.0	2.0	1.2	1.7	0.0	0.0
Total Delay	15.6	190.4	4.3	24.0	102.1	11.2	97.3	138.2	23.6	306.0	60.4	10.1
Queue Length 50th (ft)	65	~777	27	83	~421	29	229	~674	74	~422	362	3
Queue Length 95th (ft)	m51	#896	m13	m100	m#449	m34	#406	#812	147	#619	#454	43
Internal Link Dist (ft)		532			191			251			645	
Turn Bay Length (ft)	150		150						170	245		180
Base Capacity (vph)	432	910	478	312	657	515	276	1030	528	224	950	478
Starvation Cap Reductn	0	0	0	87	120	168	0	312	163	0	0	0
Spillback Cap Reductn	0	6	0	0	0	0	0	0	14	24	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.36	0.21	0.78	1.41	0.84	0.94	1.70	0.56	1.73	0.87	0.16

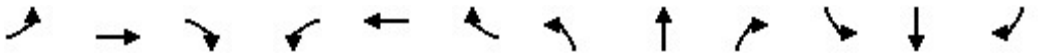
Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1220	226	41	912	39	86	142	143	352	179	211
Future Volume (vph)	190	1220	226	41	912	39	86	142	143	352	179	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	130		130	100		100	85		75
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			40			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		271			397			872			306	
Travel Time (s)		6.2			9.0			19.8			7.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1446	0	41	912	39	86	142	143	352	179	211
v/c Ratio	0.27	1.03		0.09	1.02	0.09	0.36	0.30	0.28	1.29	0.38	0.40
Control Delay	12.0	33.3		6.0	41.9	4.6	55.2	51.7	16.3	194.5	41.5	12.2
Queue Delay	3.0	28.1		0.0	31.9	0.0	0.0	0.0	0.0	0.4	2.2	0.8
Total Delay	15.0	61.4		6.0	73.9	4.6	55.2	51.7	16.3	194.9	43.7	13.0
Queue Length 50th (ft)	51	~722		15	~453	10	56	94	16	~395	124	18
Queue Length 95th (ft)	m42	m156		m15	m#492	m10	m117	166	68	#596	183	88
Internal Link Dist (ft)		191			317			792			226	
Turn Bay Length (ft)				130		130	100		100	85		75
Base Capacity (vph)	713	1404		449	897	432	241	472	508	272	472	528
Starvation Cap Reductn	418	276		0	239	0	0	0	0	8	180	126
Spillback Cap Reductn	0	21		0	188	0	0	0	0	0	0	8
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	1.28		0.09	1.39	0.09	0.36	0.30	0.28	1.33	0.61	0.52

Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

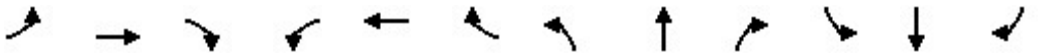
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1667	37	62	989	12	87
Future Volume (vph)	1667	37	62	989	12	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	90		75	0
Storage Lanes		0	1		1	1
Taper Length (ft)			40		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			30	30	
Link Distance (ft)	397			728	881	
Travel Time (s)	9.0			16.5	20.0	
Confl. Peds. (#/hr)		19	19		4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1704	0	62	989	12	87
v/c Ratio	0.86		0.12	0.96	0.13	0.52
Control Delay	12.6		35.8	66.7	62.0	23.1
Queue Delay	3.7		0.0	44.0	0.0	0.0
Total Delay	16.3		35.8	110.7	62.0	23.1
Queue Length 50th (ft)	210		40	446	10	0
Queue Length 95th (ft)	m211		77	#585	32	53
Internal Link Dist (ft)	317			648	801	
Turn Bay Length (ft)			90		75	
Base Capacity (vph)	1992		515	1030	237	287
Starvation Cap Reductn	211		0	0	0	0
Spillback Cap Reductn	0		0	357	18	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.96		0.12	1.47	0.05	0.30

Intersection Summary	
Area Type:	Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

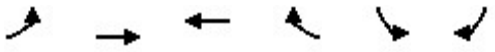


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	1540	0	18	1058	282	40	28	57	464	13	78
Future Volume (vph)	141	1540	0	18	1058	282	40	28	57	464	13	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	140		0	0		0	0		0
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	25			35			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		728			503			154			156	
Travel Time (s)		16.5			11.4			3.5			3.5	
Confl. Peds. (#/hr)	12					12						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	1540	0	18	1058	282	0	68	57	0	477	78
v/c Ratio	0.74	0.86		0.45	0.75	0.38		0.16	0.08		0.94	0.11
Control Delay	79.5	34.7		95.4	37.4	5.7		26.4	3.1		65.5	5.6
Queue Delay	0.0	3.7		0.0	14.7	0.0		0.0	0.0		50.1	2.9
Total Delay	79.5	38.4		95.4	52.2	5.7		26.4	3.1		115.7	8.4
Queue Length 50th (ft)	117	608		15	397	13		36	0		382	0
Queue Length 95th (ft)	#218	723		#52	481	71		71	17		#604	32
Internal Link Dist (ft)		648			423			74			76	
Turn Bay Length (ft)	140			140								
Base Capacity (vph)	190	1791		40	1415	747		425	678		508	680
Starvation Cap Reductn	0	177		0	360	0		0	0		248	517
Spillback Cap Reductn	0	0		0	0	0		0	0		0	0
Storage Cap Reductn	0	0		0	0	0		0	0		0	0
Reduced v/c Ratio	0.74	0.95		0.45	1.00	0.38		0.16	0.08		1.83	0.48

Intersection Summary

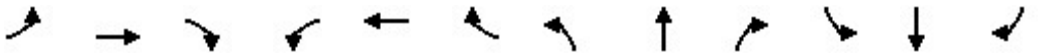
Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1449	1083	330	1539	278
Future Volume (vph)	0	1449	1083	330	1539	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			300	0	0
Storage Lanes	0			0	3	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	933		720	
Travel Time (s)		7.5	21.2		16.4	
Confl. Bikes (#/hr)				5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	1449	1413	0	1567	250
v/c Ratio		0.54	0.77		0.85	0.46
Control Delay		13.4	17.8		28.3	16.4
Queue Delay		1.6	0.0		0.0	0.0
Total Delay		15.0	17.8		28.3	16.4
Queue Length 50th (ft)		164	265		247	74
Queue Length 95th (ft)		204	353		305	150
Internal Link Dist (ft)		248	853		640	
Turn Bay Length (ft)						
Base Capacity (vph)		2706	1843		1886	557
Starvation Cap Reductn		1009	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.85	0.77		0.83	0.45

Intersection Summary	
Area Type:	Other



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	461	2230	460	0	733	62	502	319	1248	54	102	153
Future Volume (vph)	461	2230	460	0	733	62	502	319	1248	54	102	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		933			424			493			494	
Travel Time (s)		21.2			9.6			11.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							16%		33%			
Lane Group Flow (vph)	461	2690	0	0	733	62	422	811	836	54	102	153
v/c Ratio	0.94	0.96			0.82	0.14	0.88	0.96	0.97	0.59	1.05	0.27
Control Delay	76.7	38.1			55.6	6.9	65.2	66.5	66.0	87.1	165.4	9.7
Queue Delay	0.0	0.4			12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.7	38.5			68.5	6.9	65.2	66.5	66.0	87.1	165.4	9.7
Queue Length 50th (ft)	394	776			317	0	384	416	388	47	~96	24
Queue Length 95th (ft)	#606	#883			395	29	#589	#575	#544	#106	#217	51
Internal Link Dist (ft)		853			344			413			414	
Turn Bay Length (ft)												
Base Capacity (vph)	488	2795			897	456	480	848	864	92	97	569
Starvation Cap Reductn	0	14			155	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0			0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0			0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.97			0.99	0.14	0.88	0.96	0.97	0.59	1.05	0.27

Intersection Summary

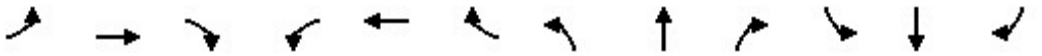
Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

7: Shoreway Road/Oracle Parkway & Ralston Avenue/Marine Parkway

01/14/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	2610	510	23	1278	31	116	138	47	34	45	169
Future Volume (vph)	413	2610	510	23	1278	31	116	138	47	34	45	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	200		625	90		90	0		0
Storage Lanes	2		0	1		2	1		1	0		2
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			771			489			461	
Travel Time (s)		11.0			17.5			11.1			10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	413	3120	0	23	1309	0	104	150	47	0	79	169
v/c Ratio	0.47	1.05		0.28	0.75		0.45	0.62	0.16		0.39	0.55
Control Delay	39.3	56.7		63.5	34.3		50.8	57.0	1.1		53.0	54.3
Queue Delay	0.0	19.9		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	39.3	76.6		63.5	34.3		50.8	57.0	1.1		53.0	54.3
Queue Length 50th (ft)	126	~931		16	303		73	109	0		54	66
Queue Length 95th (ft)	218	#1191		48	363		136	187	1		108	113
Internal Link Dist (ft)		402			691			409			381	
Turn Bay Length (ft)	375			200			90		90			
Base Capacity (vph)	888	2961		82	2259		734	769	744		305	465
Starvation Cap Reductn	0	432		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	0.47	1.23		0.28	0.58		0.14	0.20	0.06		0.26	0.36

Intersection Summary

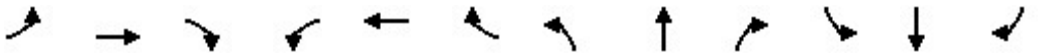
Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
1: El Camino Real & Ralston Ave

01/14/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	686	336	253	1006	428	142	850	149	373	1402	207
Future Volume (vph)	268	686	336	253	1006	428	142	850	149	373	1402	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		170	245		180
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	30			25			25			40		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		603			271			331			725	
Travel Time (s)		13.7			6.2			7.5			16.5	
Confl. Peds. (#/hr)	52		38	38		52	33		14	14		33
Confl. Bikes (#/hr)			1						5			2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)	10%			10%								
Lane Group Flow (vph)	241	713	336	228	1031	428	142	850	149	373	1402	207
v/c Ratio	0.66	0.92	0.69	0.60	1.30	0.79	0.61	0.88	0.31	1.43	1.38	0.44
Control Delay	27.2	37.9	14.7	27.0	165.8	14.7	67.6	59.3	17.1	257.0	215.7	26.0
Queue Delay	0.0	5.7	0.0	12.9	1.1	16.6	0.0	48.9	0.1	2.0	0.0	0.0
Total Delay	27.2	43.6	14.7	40.0	166.9	31.3	67.6	108.2	17.2	259.0	215.7	26.0
Queue Length 50th (ft)	212	365	230	145	~645	63	120	380	36	~445	~863	86
Queue Length 95th (ft)	m249	m#398	m259	m182	m#756	m66	194	#487	96	#645	#1003	163
Internal Link Dist (ft)		523			191			251			645	
Turn Bay Length (ft)	150		150						170	245		180
Base Capacity (vph)	366	771	484	378	796	545	234	962	479	260	1014	475
Starvation Cap Reductn	0	0	0	126	128	110	0	322	0	0	0	0
Spillback Cap Reductn	0	38	0	0	0	0	0	0	19	35	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.97	0.69	0.90	1.54	0.98	0.61	1.33	0.32	1.66	1.38	0.44

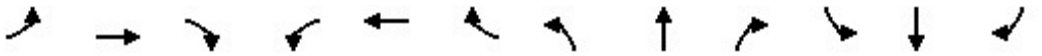
Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
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95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	792	86	56	908	178	381	465	150	95	94	317
Future Volume (vph)	306	792	86	56	908	178	381	465	150	95	94	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	130		130	100		100	85		75
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			40			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		271			397			872			306	
Travel Time (s)		6.2			9.0			19.8			7.0	
Confl. Peds. (#/hr)	11		17	17		11	7		10	10		7
Confl. Bikes (#/hr)			8			5			3			1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	306	878	0	56	908	178	381	465	150	95	94	317
v/c Ratio	0.62	0.90		0.11	0.90	0.36	0.87	0.72	0.26	0.70	0.15	0.43
Control Delay	27.6	29.9		8.8	23.1	4.8	55.9	39.8	15.5	67.7	31.5	5.1
Queue Delay	10.5	46.9		0.0	47.8	0.0	10.5	0.0	0.0	0.0	0.0	1.1
Total Delay	38.1	76.8		8.8	71.0	4.8	66.5	39.8	15.5	67.7	31.5	6.2
Queue Length 50th (ft)	136	203		12	407	38	260	296	32	72	57	0
Queue Length 95th (ft)	m148	m216		m9	#382	m0	m#457	m420	m88	#167	100	64
Internal Link Dist (ft)		191			317			792			226	
Turn Bay Length (ft)				130		130	100		100	85		75
Base Capacity (vph)	494	973		507	1014	491	436	643	575	135	643	743
Starvation Cap Reductn	157	184		0	81	0	0	0	0	0	0	228
Spillback Cap Reductn	0	143		0	282	0	42	0	2	0	0	81
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	1.11		0.11	1.24	0.36	0.97	0.72	0.26	0.70	0.15	0.62

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

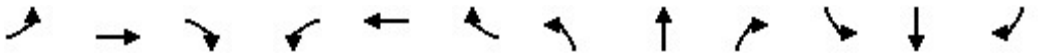
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	968	34	43	1142	20	474
Future Volume (vph)	968	34	43	1142	20	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	90		75	0
Storage Lanes		0	1		1	1
Taper Length (ft)			40		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			30	30	
Link Distance (ft)	397			728	881	
Travel Time (s)	9.0			16.5	20.0	
Confl. Peds. (#/hr)		18	18		6	
Confl. Bikes (#/hr)						1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1002	0	43	1142	20	474
v/c Ratio	0.62		0.07	0.87	0.14	0.85
Control Delay	12.5		27.1	48.0	56.4	19.4
Queue Delay	2.0		0.0	12.5	0.0	0.0
Total Delay	14.5		27.1	60.5	56.4	19.4
Queue Length 50th (ft)	60		23	464	17	0
Queue Length 95th (ft)	m521		51	582	40	110
Internal Link Dist (ft)	317			648	801	
Turn Bay Length (ft)			90		75	
Base Capacity (vph)	1623		677	1355	338	682
Starvation Cap Reductn	449		0	43	0	0
Spillback Cap Reductn	0		0	213	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.85		0.06	1.00	0.06	0.70

Intersection Summary	
Area Type:	Other

m Volume for 95th percentile queue is metered by upstream signal.

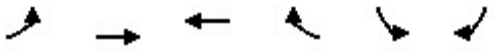


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1279	7	51	1313	554	56	72	26	341	6	66
Future Volume (vph)	221	1279	7	51	1313	554	56	72	26	341	6	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	140		0	0		0	0		0
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	25			35			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		728			503			154			156	
Travel Time (s)		16.5			11.4			3.5			3.5	
Confl. Peds. (#/hr)	4					4						
Confl. Bikes (#/hr)			6			9			19			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	1286	0	51	1313	554	0	128	26	0	347	66
v/c Ratio	0.76	0.67		0.41	0.92	0.59		0.37	0.05		0.99	0.12
Control Delay	54.4	18.9		52.4	39.5	5.2		29.6	0.2		81.1	2.3
Queue Delay	0.0	0.0		0.0	6.1	0.0		0.0	0.0		41.4	1.4
Total Delay	54.4	18.9		52.4	45.6	5.2		29.6	0.2		122.5	3.8
Queue Length 50th (ft)	126	310		30	397	6		60	0		207	0
Queue Length 95th (ft)	204	392		67	#560	79		113	0		#388	13
Internal Link Dist (ft)		648			423			74			76	
Turn Bay Length (ft)	140			140								
Base Capacity (vph)	335	1913		130	1427	934		348	542		350	554
Starvation Cap Reductn	0	0		0	91	0		0	0		155	366
Spillback Cap Reductn	0	0		0	0	0		0	0		0	0
Storage Cap Reductn	0	0		0	0	0		0	0		0	0
Reduced v/c Ratio	0.66	0.67		0.39	0.98	0.59		0.37	0.05		1.78	0.35

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



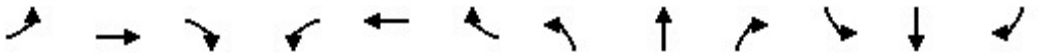
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1337	1358	943	683	540
Future Volume (vph)	0	1337	1358	943	683	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			300	0	0
Storage Lanes	0			0	3	1
Taper Length (ft)	25				25	
Right Turn on Red				Yes		Yes
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	933		720	
Travel Time (s)		7.5	21.2		16.4	
Confl. Peds. (#/hr)				2		
Confl. Bikes (#/hr)				10		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						47%
Lane Group Flow (vph)	0	1337	2301	0	937	286
v/c Ratio		0.36	0.92		0.88	0.80
Control Delay		7.5	10.7		63.7	55.1
Queue Delay		2.6	4.8		0.0	0.0
Total Delay		10.2	15.6		63.7	55.1
Queue Length 50th (ft)		157	107		300	217
Queue Length 95th (ft)		178	m244		356	#387
Internal Link Dist (ft)		248	853		640	
Turn Bay Length (ft)						
Base Capacity (vph)		3729	2489		1070	356
Starvation Cap Reductn		2224	153		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.89	0.99		0.88	0.80

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	1199	635	0	1798	89	448	100	87	88	450	392
Future Volume (vph)	272	1199	635	0	1798	89	448	100	87	88	450	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		933			395			493			494	
Travel Time (s)		21.2			9.0			11.2			11.2	
Confl. Bikes (#/hr)									6			1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							50%		10%			
Lane Group Flow (vph)	272	1834	0	0	1798	89	224	333	78	88	450	392
v/c Ratio	1.23	0.64			1.17	0.12	0.86	0.91dl	0.16	0.29	1.40	0.79
Control Delay	182.5	15.9			123.5	9.1	91.0	68.3	11.1	56.9	240.7	39.1
Queue Delay	0.0	0.0			1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	182.5	15.9			124.8	9.1	91.0	68.3	11.1	56.9	240.7	39.1
Queue Length 50th (ft)	~349	172			~1101	13	234	189	0	76	~585	218
Queue Length 95th (ft)	m#501	193			#1237	49	#382	256	27	132	#806	#312
Internal Link Dist (ft)		853			315			413			414	
Turn Bay Length (ft)												
Base Capacity (vph)	222	2886			1533	722	279	504	527	306	322	495
Starvation Cap Reductn	0	0			447	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0			0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0			0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.23	0.64			1.66	0.12	0.80	0.66	0.15	0.29	1.40	0.79

Intersection Summary

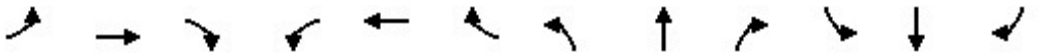
Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.



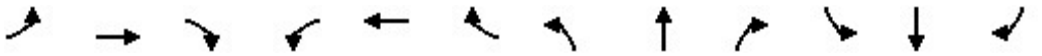
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	1104	149	106	2659	44	741	33	14	50	138	403
Future Volume (vph)	123	1104	149	106	2659	44	741	33	14	50	138	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	200		625	90		90	0		0
Storage Lanes	2		0	1		2	1		1	0		2
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		496			792			685			449	
Travel Time (s)		11.3			18.0			15.6			10.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	123	1253	0	106	2703	0	385	389	14	0	188	403
v/c Ratio	0.85	0.66		0.65	0.99		0.85	0.85	0.03		0.69	0.97
Control Delay	109.8	39.8		82.2	56.5		66.4	66.6	0.1		72.4	97.9
Queue Delay	0.0	1.6		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	109.8	41.5		82.2	56.5		66.4	66.6	0.1		72.4	97.9
Queue Length 50th (ft)	59	355		96	~735		353	357	0		168	215
Queue Length 95th (ft)	#127	451		167	#904		489	493	0		#283	#361
Internal Link Dist (ft)		416			712			605			369	
Turn Bay Length (ft)	375			200			90		90			
Base Capacity (vph)	145	1886		200	2718		559	563	590		273	414
Starvation Cap Reductn	0	427		0	0		0	0	0		0	0
Spillback Cap Reductn	0	0		0	0		0	0	0		0	0
Storage Cap Reductn	0	0		0	0		0	0	0		0	0
Reduced v/c Ratio	0.85	0.86		0.53	0.99		0.69	0.69	0.02		0.69	0.97

Intersection Summary

Area Type: Other

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

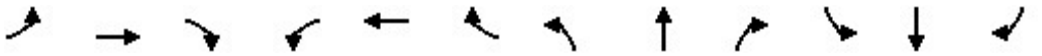


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	421	1520	104	8	1670	7	188	27	29	7	13	476
Future Volume (vph)	421	1520	104	8	1670	7	188	27	29	7	13	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	225		100	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		552			596			523			545	
Travel Time (s)		12.5			13.5			11.9			12.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	421	1624	0	8	1670	7	0	244	0	0	20	476
v/c Ratio	0.92	0.51		0.12	0.94	0.01		0.78			0.11	0.90
Control Delay	75.4	16.3		71.0	53.7	0.0		69.5			57.4	30.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	75.4	16.3		71.0	53.7	0.0		69.5			57.4	30.0
Queue Length 50th (ft)	360	266		7	517	0		202			16	46
Queue Length 95th (ft)	#645	451		27	#734	0		305			44	#236
Internal Link Dist (ft)		472			516			443			465	
Turn Bay Length (ft)	250			225		100						
Base Capacity (vph)	457	3156		67	1778	615		485			250	579
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.92	0.51		0.12	0.94	0.01		0.50			0.08	0.82

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	429	1662	224	42	1084	14	71	10	19	34	11	157
Future Volume (vph)	429	1662	224	42	1084	14	71	10	19	34	11	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	225		100	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		481			615			467			309	
Travel Time (s)		10.9			14.0			10.6			7.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Lane Group Flow (vph)	429	1886	0	42	1084	14	0	100	0	0	45	157
v/c Ratio	0.74	0.62		0.40	0.74	0.03		0.48			0.28	0.55
Control Delay	37.0	14.3		54.4	32.9	0.1		42.1			43.5	14.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	37.0	14.3		54.4	32.9	0.1		42.1			43.5	14.8
Queue Length 50th (ft)	215	263		23	203	0		49			24	0
Queue Length 95th (ft)	#403	382		#64	284	0		101			59	58
Internal Link Dist (ft)		401			535			387			229	
Turn Bay Length (ft)	250			225		100						
Base Capacity (vph)	583	3045		104	1469	550		724			373	453
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.74	0.62		0.40	0.74	0.03		0.14			0.12	0.35

Intersection Summary

Area Type: Other

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix C

Volume Summary Tables

Intersection Number: 1
Traffix Node Number: 1
Intersection Name: El Camino Real and Ralston Avenue (CMP)
Peak Hour: AM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**78**	**747**	**317**	**183**	**659**	**191**	**177**	**520**	**102**	**16**	**763**	**107**	**3860**
Approved Project Trips													
2 Davis Drive	0	0	0	0	3	0	0	0	2	0	1	0	6
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	1	0	3
Firehouse Square	0	2	0	0	0	5	6	5	0	0	0	0	18
Hillstreet @ El Camino Real	0	2	3	0	1	0	0	0	1	0	0	0	7
1325 Old County Road	0	-1	-2	6	8	2	-1	2	3	-1	-4	0	12
815 OCR	0	0	0	0	9	3	1	0	0	0	3	0	16
800 Laurel Avenue	0	0	0	0	1	0	0	0	0	1	2	0	4
604-608 Harbor Boulevard	0	0	0	1	1	0	0	2	2	0	0	0	6
625 Harbor & 1421 OCR	0	6	6	0	2	0	0	1	2	17	17	0	51
580 Masonic Way	0	0	0	0	9	6	2	0	0	0	3	0	20
1110 Old County Road	0	0	4	0	0	0	0	0	0	0	2	0	6
800 Belmont Avenue	0	7	7	2	0	0	0	2	0	0	0	2	20
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	22	0	0	0	0	0	2	0	0	0	0	24
560 El Camino Real	0	1	0	0	0	0	0	1	0	0	0	0	2
1030 Brittan Avenue	0	4	0	0	0	0	0	1	0	0	0	0	5
520 El Camino Real	0	1	0	0	0	0	0	1	0	0	0	0	2
26 El Camino Real	0	12	0	0	0	0	0	4	0	0	0	0	16
Transit Village	0	1	0	0	0	0	13	2	0	0	0	0	16
Wheeler Plaza	0	4	0	0	0	0	0	6	0	0	0	0	10
817 Walnut Street	0	0	0	0	0	0	0	1	0	0	0	0	1
644-678 Laurel Street	0	1	0	0	0	0	0	1	0	0	0	0	2
200 Two Dolphin Redwood City	0	0	6	1	2	1	5	0	0	0	15	0	30
Approved trips from San Mateo	0	5	0	0	0	0	0	13	0	0	0	0	18
Total Approved Trips	0	67	24	10	38	17	26	44	10	17	40	2	295
Background Conditions	**78**	**814**	**341**	**193**	**697**	**208**	**203**	**564**	**112**	**33**	**803**	**109**	**4155**
Project Trips	0	0	29	4	11	4	29	0	0	0	84	0	161
Existing Plus Project Conditions	**78**	**747**	**346**	**187**	**670**	**195**	**206**	**520**	**102**	**16**	**847**	**107**	**4021**
Background Plus Project Conditions	**78**	**814**	**370**	**197**	**708**	**212**	**232**	**564**	**112**	**33**	**887**	**109**	**4316**
Cumulative Conditions	78	826	317	289	728	191	177	1224	260	98	1136	120	5444
Cumulative Plus Project Conditions	**78**	**826**	**346**	**293**	**739**	**195**	**206**	**1224**	**260**	**98**	**1220**	**120**	**5605**

Intersection Number: 2
Traffix Node Number: 2
Intersection Name: Old County Road and Ralston Avenue
Peak Hour: AM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**211**	**179**	**178**	**24**	**768**	**41**	**99**	**102**	**54**	**30**	**1078**	**149**	**2913**
Approved Project Trips													
2 Davis Drive	0	0	0	0	3	0	0	0	0	0	1	0	4
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	1	0	3
Firehouse Square	0	0	0	0	5	0	0	0	0	0	6	0	11
Hillstreet @ El Camino Real	0	0	0	0	1	0	0	0	0	0	3	0	4
1325 Old County Road	0	0	0	0	0	-3	4	0	16	-7	0	0	10
815 OCR	12	4	12	4	0	0	0	1	0	0	0	4	37
800 Laurel Avenue	0	0	0	0	1	0	0	0	0	0	2	0	3
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	2	0	0	0	2
625 Harbor & 1421 OCR	0	0	0	0	0	10	1	0	2	10	13	0	36
580 Masonic Way	11	0	0	0	4	0	0	0	0	0	1	4	20
1110 Old County Road	0	0	0	0	0	8	1	0	0	6	0	0	15
800 Belmont Avenue	0	0	0	0	2	0	0	0	0	0	7	0	9
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	1	0	0	0	0	0	1	0	0	0	0	2
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	3	0	0	0	0	0	1	0	0	0	0	4
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	1	0	0	0	0	0	1	0	0	13	0	15
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	4	0	0	0	0	0	26	0	30
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	23	9	12	4	22	15	6	4	20	9	73	8	205
Background Conditions	**234**	**188**	**190**	**28**	**790**	**56**	**105**	**106**	**74**	**39**	**1151**	**157**	**3118**
Project Trips	0	0	0	0	19	0	0	0	0	0	142	0	161
Existing Plus Project Conditions	**211**	**179**	**178**	**24**	**787**	**41**	**99**	**102**	**54**	**30**	**1220**	**149**	**3074**
Background Plus Project Conditions	**234**	**188**	**190**	**28**	**809**	**56**	**105**	**106**	**74**	**39**	**1293**	**157**	**3279**
Cumulative Conditions	211	179	352	39	893	41	143	142	86	226	1078	190	3580
Cumulative Plus Project Conditions	**211**	**179**	**352**	**39**	**912**	**41**	**143**	**142**	**86**	**226**	**1220**	**190**	**3741**

Intersection Number: 3
Traffix Node Number: 3
Intersection Name: Elmer Street and Ralston Avenue
Peak Hour: AM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**0**	**0**	**0**	**0**	**845**	**51**	**79**	**0**	**1**	**25**	**1359**	**0**	**2360**
Approved Project Trips													
2 Davis Drive	0	0	0	0	3	0	0	0	0	0	1	0	4
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	1	0	3
Firehouse Square	0	0	0	0	5	0	0	0	0	0	6	0	11
Hillstreet @ El Camino Real	0	0	0	0	1	0	0	0	0	0	3	0	4
1325 Old County Road	0	0	0	0	-3	-7	15	0	0	0	4	0	9
815 OCR	0	0	0	0	4	0	0	0	0	0	12	0	16
800 Laurel Avenue	0	0	0	0	1	0	0	0	0	0	2	0	3
604-608 Harbor Boulevard	0	0	0	0	0	0	5	0	0	0	0	0	5
625 Harbor & 1421 OCR	0	0	0	0	10	50	7	0	0	13	1	0	81
580 Masonic Way	0	0	0	0	4	0	0	0	0	0	1	0	5
1110 Old County Road	0	0	0	0	8	0	0	0	0	0	1	0	9
800 Belmont Avenue	0	0	0	0	2	0	0	0	0	0	7	0	9
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	8	1	0	0	0	0	0	9
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	13	0	13
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	4	0	0	0	0	0	26	0	30
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	41	51	28	0	0	13	78	0	211
Background Conditions	**0**	**0**	**0**	**0**	**886**	**102**	**107**	**0**	**1**	**38**	**1437**	**0**	**2571**
Project Trips	0	0	0	0	19	0	0	0	0	0	142	0	161
Existing Plus Project Conditions	**0**	**0**	**0**	**0**	**864**	**51**	**79**	**0**	**1**	**25**	**1501**	**0**	**2521**
Background Plus Project Conditions	**0**	**0**	**0**	**0**	**905**	**102**	**107**	**0**	**1**	**38**	**1579**	**0**	**2732**
Cumulative Conditions	0	0	0	0	970	62	87	0	12	37	1525	0	2693
Cumulative Plus Project Conditions	**0**	**0**	**0**	**0**	**989**	**62**	**87**	**0**	**12**	**37**	**1667**	**0**	**2854**

Intersection Number: 4
Traffix Node Number: 4
Intersection Name: Hiller Street and Ralston Avenue
Peak Hour: AM
Count Date: 10/26/2017

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**78**	**9**	**432**	**207**	**793**	**14**	**57**	**25**	**27**	**0**	**1398**	**86**	**3126**
Approved Project Trips													
2 Davis Drive	0	0	0	0	3	0	0	0	0	0	1	0	4
Belmont Community Center	1	0	0	0	0	0	0	0	1	0	1	0	3
Firehouse Square	0	0	0	0	5	0	0	0	0	0	6	0	11
Hillstreet @ El Camino Real	0	0	0	0	1	0	0	0	0	0	3	0	4
1325 Old County Road	0	0	0	0	-10	0	0	0	0	0	19	0	9
815 OCR	0	0	12	5	4	0	0	0	0	0	12	0	33
800 Laurel Avenue	0	0	0	0	1	0	0	0	0	0	2	0	3
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	5	0	5
625 Harbor & 1421 OCR	0	0	0	0	60	0	0	0	0	0	8	0	68
580 Masonic Way	4	0	22	5	2	0	0	0	0	0	0	1	34
1110 Old County Road	0	0	0	0	8	0	0	0	0	0	1	0	9
800 Belmont Avenue	0	0	0	0	2	0	0	0	0	0	7	0	9
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	8	0	0	0	0	0	1	0	9
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	13	0	13
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	4	1	4	0	0	0	0	0	26	0	35
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	5	0	38	11	88	0	0	0	1	0	105	1	249
Background Conditions	**83**	**9**	**470**	**218**	**881**	**14**	**57**	**25**	**28**	**0**	**1503**	**87**	**3375**
Project Trips	0	0	0	0	19	0	0	0	0	0	142	0	161
Existing Plus Project Conditions	**78**	**9**	**432**	**207**	**812**	**14**	**57**	**25**	**27**	**0**	**1540**	**86**	**3287**
Background Plus Project Conditions	**83**	**9**	**470**	**218**	**900**	**14**	**57**	**25**	**28**	**0**	**1645**	**87**	**3536**
Cumulative Conditions	78	13	464	282	1039	18	57	28	40	0	1398	141	3558
Cumulative Plus Project Conditions	**78**	**13**	**464**	**282**	**1058**	**18**	**57**	**28**	**40**	**0**	**1540**	**141**	**3719**

Intersection Number: 5
Traffix Node Number: 5
Intersection Name: US 101 SB off ramp and Ralston Avenue
Peak Hour: AM
Count Date: 11/3/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**264**	**0**	**1363**	**322**	**750**	**0**	**0**	**0**	**0**	**0**	**1099**	**0**	**3798**
Approved Project Trips													
2 Davis Drive	1	0	0	0	2	0	0	0	0	0	1	0	4
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	3	0	0	0	2	0	0	0	0	0	6	0	11
Hillstreet @ El Camino Real	1	0	0	0	0	0	0	0	0	0	2	0	3
1325 Old County Road	-3	0	0	0	-7	0	0	0	0	0	16	0	6
815 OCR	3	0	0	0	6	0	0	0	0	0	15	0	24
800 Laurel Avenue	1	0	0	0	0	0	0	0	0	0	1	0	2
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	5	0	5
625 Harbor & 1421 OCR	0	0	0	0	60	0	0	0	0	0	8	0	68
580 Masonic Way	3	0	0	0	4	0	0	0	0	0	13	0	20
1110 Old County Road	4	0	0	0	4	0	0	0	0	0	0	0	8
800 Belmont Avenue	2	0	0	0	0	0	0	0	0	0	0	0	2
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	8	0	0	0	0	0	1	0	9
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	13	0	13
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	53	0	5	0	0	0	0	0	30	0	88
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	15	0	53	0	84	0	0	0	0	0	111	0	263
Background Conditions	**279**	**0**	**1416**	**322**	**834**	**0**	**0**	**0**	**0**	**0**	**1210**	**0**	**4061**
Project Trips	0	0	126	8	19	0	0	0	0	0	142	0	295
Existing Plus Project Conditions	**264**	**0**	**1489**	**330**	**769**	**0**	**0**	**0**	**0**	**0**	**1241**	**0**	**4093**
Background Plus Project Conditions	**279**	**0**	**1542**	**330**	**853**	**0**	**0**	**0**	**0**	**0**	**1352**	**0**	**4356**
Cumulative Conditions	278	0	1413	322	1064	0	0	0	0	0	1307	0	4384
Cumulative Plus Project Conditions	**278**	**0**	**1539**	**330**	**1083**	**0**	**0**	**0**	**0**	**0**	**1449**	**0**	**4679**

Intersection Number: 6
Traffix Node Number: 6
Intersection Name: Island Parkway/US 101 NB Off Ramp and Ralston Avenue
Peak Hour: AM
Count Date: 11/3/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**75**	**47**	**40**	**35**	**610**	**0**	**569**	**69**	**387**	**460**	**1845**	**157**	**4294**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	1	1	0	0	3
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	2	6	0	0	8
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	2	0	0	2
1325 Old County Road	0	0	0	0	-2	0	0	0	-5	11	5	0	9
815 OCR	0	0	0	0	3	0	0	0	3	9	6	0	21
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	1	0	0	1
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	1	4	5
625 Harbor & 1421 OCR	0	0	0	0	10	0	0	0	50	6	2	0	68
580 Masonic Way	0	0	0	0	1	0	0	0	3	9	4	0	17
1110 Old County Road	0	0	0	0	0	0	0	0	4	0	0	0	4
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	8	0	0	0	0	0	1	0	9
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	13	0	0	13
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	5	0	0	0	0	0	83	0	88
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	26	0	0	0	58	58	102	4	248
Background Conditions	**75**	**47**	**40**	**35**	**636**	**0**	**569**	**69**	**445**	**518**	**1947**	**161**	**4542**
Project Trips	0	0	0	0	27	0	63	0	0	0	268	0	358
Existing Plus Project Conditions	**75**	**47**	**40**	**35**	**637**	**0**	**632**	**69**	**387**	**460**	**2113**	**157**	**4652**
Background Plus Project Conditions	**75**	**47**	**40**	**35**	**663**	**0**	**632**	**69**	**445**	**518**	**2215**	**161**	**4900**
Cumulative Conditions	153	102	54	62	706	0	1185	319	502	460	1962	461	5966
Cumulative Plus Project Conditions	**153**	**102**	**54**	**62**	**733**	**0**	**1248**	**319**	**502**	**460**	**2230**	**461**	**6324**

Intersection Number: 7
Traffix Node Number: 7
Intersection Name: Shoreway Road/Oracle Parkway and Marine Parkway
Peak Hour: AM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**168**	**3**	**29**	**25**	**1100**	**7**	**9**	**12**	**72**	**159**	**1897**	**398**	**3879**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	0	0	0	0	1
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	-2	0	0	0	0	0	5	0	3
815 OCR	0	0	0	0	3	0	0	0	0	0	6	0	9
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	1	0	1
625 Harbor & 1421 OCR	0	0	0	0	10	0	0	0	0	0	2	0	12
580 Masonic Way	0	0	0	0	1	0	0	0	0	0	4	0	5
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	8	0	0	0	0	0	1	0	9
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	0	0	0	0	13	83	0	0	96
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	21	0	0	0	13	83	19	0	136
Background Conditions	**168**	**3**	**29**	**25**	**1121**	**7**	**9**	**12**	**85**	**242**	**1916**	**398**	**4015**
Project Trips	0	0	0	0	0	13	2	0	44	331	0	0	390
Existing Plus Project Conditions	**168**	**3**	**29**	**25**	**1100**	**20**	**11**	**12**	**116**	**490**	**1897**	**398**	**4269**
Background Plus Project Conditions	**168**	**3**	**29**	**25**	**1121**	**20**	**11**	**12**	**129**	**573**	**1916**	**398**	**4405**
Cumulative Conditions	169	45	34	31	1278	10	45	138	72	179	2610	413	5024
Cumulative Plus Project Conditions	**169**	**45**	**34**	**31**	**1278**	**23**	**47**	**138**	**116**	**510**	**2610**	**413**	**5414**

Intersection Number: 8
Traffix Node Number: 8
Intersection Name: Shoreway Road and Cormorant Drive
Peak Hour: AM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**0**	**77**	**20**	**29**	**0**	**25**	**34**	**76**	**0**	**0**	**0**	**0**	**261**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	0	0	0	0
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
815 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	0	0	0
625 Harbor & 1421 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
580 Masonic Way	0	0	0	0	0	0	0	0	0	0	0	0	0
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	0	0	0	0	0	0	0	0
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	83	13	0	5	37	0	0	0	0	0	138
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	83	13	0	5	37	0	0	0	0	0	138
Background Conditions	**0**	**77**	**103**	**42**	**0**	**30**	**71**	**76**	**0**	**0**	**0**	**0**	**399**
Project Trips	0	9	2	13	0	0	0	63	0	0	0	0	87
Existing Plus Project Conditions	**0**	**86**	**22**	**42**	**0**	**25**	**34**	**139**	**0**	**0**	**0**	**0**	**348**
Background Plus Project Conditions	**0**	**86**	**105**	**55**	**0**	**30**	**71**	**139**	**0**	**0**	**0**	**0**	**486**
Cumulative Conditions	0	159	20	29	0	26	47	235	0	0	0	0	516
Cumulative Plus Project Conditions	**0**	**168**	**22**	**42**	**0**	**26**	**47**	**298**	**0**	**0**	**0**	**0**	**603**

Intersection Number: 9
Traffix Node Number: 9
Intersection Name: Shoreway Road/Airport Way and Holly Street
Peak Hour: AM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**94**	**11**	**6**	**14**	**1084**	**42**	**19**	**9**	**71**	**224**	**1326**	**188**	**3088**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	0	0	0	0
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
815 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	0	0	0
625 Harbor & 1421 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
580 Masonic Way	0	0	0	0	0	0	0	0	0	0	0	0	0
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	0	0	0	0	0	0	0	0
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	5	0	0	0	4	0	0	0	0	0	20	37	66
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	5	0	0	0	4	0	0	0	0	0	20	37	66
Background Conditions	**99**	**11**	**6**	**14**	**1088**	**42**	**19**	**9**	**71**	**224**	**1346**	**225**	**3154**
Project Trips	9	0	0	0	0	0	0	0	0	0	0	63	72
Existing Plus Project Conditions	**103**	**11**	**6**	**14**	**1084**	**42**	**19**	**9**	**71**	**224**	**1326**	**251**	**3160**
Background Plus Project Conditions	**108**	**11**	**6**	**14**	**1088**	**42**	**19**	**9**	**71**	**224**	**1346**	**288**	**3226**
Cumulative Conditions	**148**	**11**	**34**	**14**	**1084**	**42**	**19**	**10**	**71**	**224**	**1662**	**366**	**3685**
Cumulative Plus Project Conditions	**157**	**11**	**34**	**14**	**1084**	**42**	**19**	**10**	**71**	**224**	**1662**	**429**	**3757**

Intersection Number: 1
Traffix Node Number: 1
Intersection Name: El Camino Real and Ralston Avenue (CMP)
Peak Hour: PM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**127**	**716**	**249**	**402**	**590**	**227**	**144**	**810**	**60**	**46**	**619**	**231**	**4221**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	0	2	4	0	7
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	2	0	4
Firehouse Square	0	6	0	0	0	15	5	4	0	0	0	0	30
Hillstreet @ El Camino Real	0	1	2	0	3	0	0	0	2	0	0	0	8
1325 Old County Road	0	2	6	1	1	0	2	0	1	3	9	0	25
815 OCR	0	0	0	0	6	2	3	0	0	0	10	0	21
800 Laurel Avenue	0	0	0	0	3	0	0	0	0	0	2	0	5
604-608 Harbor Boulevard	0	2	1	1	1	0	0	0	0	2	1	0	8
625 Harbor & 1421 OCR	0	1	0	7	20	0	0	7	20	2	2	0	59
580 Masonic Way	0	0	0	0	-6	-4	-2	0	0	0	-4	0	-16
1110 Old County Road	0	0	1	1	1	0	0	0	0	0	0	0	3
800 Belmont Avenue	0	3	3	2	5	0	0	7	0	0	0	7	27
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	1	0	0	0	0	0	17	0	0	0	0	18
560 El Camino Real	0	2	0	0	0	0	0	2	0	0	0	0	4
1030 Brittan Avenue	0	1	0	0	0	0	0	4	0	0	0	0	5
520 El Camino Real	0	2	0	0	0	0	0	2	0	0	0	0	4
26 El Camino Real	0	12	0	0	0	0	0	6	0	0	0	0	18
Transit Village	0	2	0	0	0	1	7	2	0	0	0	0	12
Wheeler Plaza	0	6	0	0	0	0	0	8	0	0	0	0	14
817 Walnut Street	0	1	0	0	0	0	0	1	0	0	0	0	2
644-678 Laurel Street	0	4	0	0	0	0	0	4	0	0	0	0	8
200 Two Dolphin Redwood City	0	0	1	6	15	4	1	0	0	0	2	0	29
Approved trips from San Mateo	0	13	0	0	0	0	0	15	0	0	0	0	28
Total Approved Trips	0	59	14	18	52	18	16	79	23	9	28	7	323
Background Conditions	**127**	**775**	**263**	**420**	**642**	**245**	**160**	**889**	**83**	**55**	**647**	**238**	**4544**
Net Project Trips	0	0	5	26	75	26	5	0	0	0	15	0	152
Existing Plus Project Conditions	**127**	**716**	**254**	**428**	**665**	**253**	**149**	**810**	**60**	**46**	**634**	**231**	**4373**
Background Plus Project Conditions	**127**	**775**	**268**	**446**	**717**	**271**	**165**	**889**	**83**	**55**	**662**	**238**	**4696**
Cumulative PM	**207**	**1402**	**368**	**402**	**931**	**227**	**144**	**850**	**142**	**336**	**671**	**268**	**5948**
Cumulative Plus Project Conditions	**207**	**1402**	**373**	**428**	**1006**	**253**	**149**	**850**	**142**	**336**	**686**	**268**	**6100**

Intersection Number: 2
Traffix Node Number: 2
Intersection Name: Old County Road and Ralston Avenue
Peak Hour: PM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**278**	**86**	**69**	**43**	**774**	**22**	**106**	**252**	**167**	**34**	**767**	**211**	**2809**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	0	0	4	0	5
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	2	0	4
Firehouse Square	0	0	0	0	15	0	0	0	0	0	5	0	20
Hillstreet @ El Camino Real	0	0	0	0	3	0	0	0	0	0	2	0	5
1325 Old County Road	0	0	0	0	0	7	1	0	2	17	0	0	27
815 OCR	8	3	7	12	0	0	0	4	0	0	0	13	47
800 Laurel Avenue	0	0	0	0	3	0	0	0	0	0	2	0	5
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	2	2	0	0	4
625 Harbor & 1421 OCR	0	0	0	0	7	1	10	0	20	1	1	0	40
580 Masonic Way	-7	0	0	0	-3	0	0	0	0	0	-1	-5	-16
1110 Old County Road	0	0	0	0	0	1	8	0	2	1	0	0	12
800 Belmont Avenue	0	0	0	0	7	0	0	0	0	0	3	0	10
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	16	0	0	0	0	0	12	0	0	0	0	28
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	1	0	0	0	0	0	3	0	0	0	0	4
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	1	1	0	0	0	0	0	1	0	0	7	0	10
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	25	0	0	0	0	0	4	0	29
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	2	21	7	12	60	9	19	20	26	21	29	8	234
Background Conditions	**280**	**107**	**76**	**55**	**834**	**31**	**125**	**272**	**193**	**55**	**796**	**219**	**3043**
Net Project Trips	0	0	0	0	127	0	0	0	0	0	25	0	152
Existing Plus Project Conditions	**278**	**86**	**69**	**43**	**901**	**22**	**106**	**252**	**167**	**34**	**792**	**211**	**2961**
Background Plus Project Conditions	**280**	**107**	**76**	**55**	**961**	**31**	**125**	**272**	**193**	**55**	**821**	**219**	**3195**
Cumulative PM	**317**	**94**	**95**	**178**	**781**	**56**	**150**	**465**	**381**	**86**	**767**	**306**	**3676**
Cumulative Plus Project Conditions	**317**	**94**	**95**	**178**	**908**	**56**	**150**	**465**	**381**	**86**	**792**	**306**	**3828**

Intersection Number: 3
Traffix Node Number: 3
Intersection Name: Elmer Street and Ralston Avenue
Peak Hour: PM
Count Date: 1/14/2020

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**0**	**0**	**0**	**0**	**855**	**33**	**462**	**0**	**3**	**23**	**943**	**0**	**2319**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	0	0	4	0	5
Belmont Community Center	0	0	0	0	2	0	0	0	0	0	2	0	4
Firehouse Square	0	0	0	0	15	0	0	0	0	0	5	0	20
Hillstreet @ El Camino Real	0	0	0	0	3	0	0	0	0	0	2	0	5
1325 Old County Road	0	0	0	0	7	16	2	0	0	0	1	0	26
815 OCR	0	0	0	0	12	0	0	0	0	0	7	0	19
800 Laurel Avenue	0	0	0	0	3	0	0	0	0	0	2	0	5
604-608 Harbor Boulevard	0	0	0	0	0	6	1	0	0	0	0	0	7
625 Harbor & 1421 OCR	0	0	0	0	1	6	61	0	7	1	10	0	86
580 Masonic Way	0	0	0	0	-3	0	0	0	0	0	-1	0	-4
1110 Old County Road	0	0	0	0	1	0	0	0	0	0	8	0	9
800 Belmont Avenue	0	0	0	0	7	0	0	0	0	0	3	0	10
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	1	10	0	0	0	0	0	11
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	7	0	7
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	25	0	0	0	0	0	4	0	29
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	74	29	74	0	7	1	54	0	239
Background Conditions	**0**	**0**	**0**	**0**	**929**	**62**	**536**	**0**	**10**	**24**	**997**	**0**	**2558**
Net Project Trips	0	0	0	0	127	0	0	0	0	0	25	0	152
Existing Plus Project Conditions	**0**	**0**	**0**	**0**	**982**	**33**	**462**	**0**	**3**	**23**	**968**	**0**	**2471**
Background Plus Project Conditions	**0**	**0**	**0**	**0**	**1056**	**62**	**536**	**0**	**10**	**24**	**1022**	**0**	**2710**
Cumulative PM	**0**	**0**	**0**	**0**	**1015**	**43**	**474**	**0**	**20**	**34**	**943**	**0**	**2529**
Cumulative Plus Project Conditions	**0**	**0**	**0**	**0**	**1142**	**43**	**474**	**0**	**20**	**34**	**968**	**0**	**2681**

Intersection Number: 4
Traffix Node Number: 4
Intersection Name: Hiller Street and Ralston Avenue
Peak Hour: PM
Count Date: 10/26/2017

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**33**	**6**	**290**	**554**	**1119**	**34**	**26**	**21**	**26**	**0**	**1163**	**180**	**3452**
Approved Project Trips													
2 Davis Drive	0	0	0	0	1	0	0	0	0	0	4	0	5
Belmont Community Center	1	0	0	0	0	0	0	0	1	0	0	1	3
Firehouse Square	0	0	0	0	15	0	0	0	0	0	5	0	20
Hillstreet @ El Camino Real	0	0	0	0	3	0	0	0	0	0	2	0	5
1325 Old County Road	0	0	0	0	23	0	0	0	0	0	3	0	26
815 OCR	0	0	7	12	12	0	0	0	0	0	7	0	38
800 Laurel Avenue	0	0	0	0	3	0	0	0	0	0	2	0	5
604-608 Harbor Boulevard	0	0	0	0	6	0	0	0	0	0	1	0	7
625 Harbor & 1421 OCR	0	0	0	0	7	0	0	0	0	0	71	0	78
580 Masonic Way	-3	0	-13	-5	-2	0	0	0	0	0	0	-1	-24
1110 Old County Road	0	0	0	0	1	0	0	0	0	0	8	0	9
800 Belmont Avenue	0	0	0	0	7	0	0	0	0	0	3	0	10
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	1	0	0	0	0	0	10	0	11
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	7	0	7
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	1	5	25	0	0	0	0	0	4	0	35
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	-2	0	-5	12	102	0	0	0	1	0	127	0	235
Background Conditions	**31**	**6**	**285**	**566**	**1221**	**34**	**26**	**21**	**27**	**0**	**1290**	**180**	**3687**
Net Project Trips	0	0	0	0	127	0	0	0	0	0	25	0	152
Existing Plus Project Conditions	**33**	**6**	**290**	**554**	**1246**	**34**	**26**	**21**	**26**	**0**	**1188**	**180**	**3604**
Background Plus Project Conditions	**31**	**6**	**285**	**566**	**1348**	**34**	**26**	**21**	**27**	**0**	**1315**	**180**	**3839**
Cumulative PM	**66**	**6**	**341**	**554**	**1186**	**51**	**26**	**72**	**56**	**7**	**1254**	**221**	**3840**
Cumulative Plus Project Conditions	**66**	**6**	**341**	**554**	**1313**	**51**	**26**	**72**	**56**	**7**	**1279**	**221**	**3992**

Intersection Number: 5
Traffix Node Number: 5
Intersection Name: US 101 SB off ramp and Ralston Avenue
Peak Hour: PM
Count Date: 11/3/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**540**	**0**	**561**	**613**	**1167**	**0**	**0**	**0**	**0**	**0**	**1061**	**0**	**3942**
Approved Project Trips													
2 Davis Drive	1	0	0	0	0	0	0	0	0	0	3	0	4
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	8	0	0	0	7	0	0	0	0	0	5	0	20
Hillstreet @ El Camino Real	2	0	0	0	1	0	0	0	0	0	1	0	4
1325 Old County Road	6	0	0	0	17	0	0	0	0	0	3	0	26
815 OCR	9	0	0	0	15	0	0	0	0	0	8	0	32
800 Laurel Avenue	1	0	0	0	2	0	0	0	0	0	1	0	4
604-608 Harbor Boulevard	1	0	0	0	5	0	0	0	0	0	1	0	7
625 Harbor & 1421 OCR	0	0	0	0	7	0	0	0	0	0	71	0	78
580 Masonic Way	-3	0	0	0	-4	0	0	0	0	0	-8	0	-15
1110 Old County Road	1	0	0	0	0	0	0	0	0	0	4	0	5
800 Belmont Avenue	7	0	0	0	0	0	0	0	0	0	0	0	7
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	1	0	0	0	0	0	10	0	11
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	7	0	7
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	8	0	30	0	0	0	0	0	5	0	43
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	33	0	8	0	81	0	0	0	0	0	111	0	233
Background Conditions	**573**	**0**	**569**	**613**	**1248**	**0**	**0**	**0**	**0**	**0**	**1172**	**0**	**4175**
Net Project Trips	0	0	23	56	127	0	0	0	0	0	25	0	231
Existing Plus Project Conditions	**540**	**0**	**584**	**669**	**1294**	**0**	**0**	**0**	**0**	**0**	**1086**	**0**	**4173**
Background Plus Project Conditions	**573**	**0**	**592**	**669**	**1375**	**0**	**0**	**0**	**0**	**0**	**1197**	**0**	**4406**
Cumulative PM	**540**	**0**	**660**	**887**	**1231**	**0**	**0**	**0**	**0**	**0**	**1312**	**0**	**4630**
Cumulative Plus Project Conditions	**540**	**0**	**683**	**943**	**1358**	**0**	**0**	**0**	**0**	**0**	**1337**	**0**	**4861**

Intersection Number: 6
Traffix Node Number: 6
Intersection Name: Island Parkway/US 101 NB Off Ramp and Ralston Avenue
Peak Hour: PM
Count Date: 11/3/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**170**	**70**	**39**	**48**	**1162**	**0**	**34**	**21**	**448**	**635**	**866**	**121**	**3614**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	2	1	0	3
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	7	5	0	0	12
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	1	1	0	0	2
1325 Old County Road	0	0	0	0	6	0	0	0	11	2	1	0	20
815 OCR	0	0	0	0	6	0	0	0	9	6	2	0	23
800 Laurel Avenue	0	0	0	0	1	0	0	0	1	1	0	0	3
604-608 Harbor Boulevard	0	0	0	0	2	0	0	0	3	1	0	0	6
625 Harbor & 1421 OCR	0	0	0	0	2	0	0	0	5	59	12	0	78
580 Masonic Way	0	0	0	0	-1	0	0	0	-3	-5	-3	0	-12
1110 Old County Road	0	0	0	0	0	0	0	0	0	4	0	0	4
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	1	0	0	0	0	0	10	0	11
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	7	0	0	7
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	30	0	0	0	0	0	13	0	43
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	47	0	0	0	34	83	36	0	200
Background Conditions	**170**	**70**	**39**	**48**	**1209**	**0**	**34**	**21**	**482**	**718**	**902**	**121**	**3814**
Net Project Trips	0	0	0	0	183	0	11	0	0	0	48	0	242
Existing Plus Project Conditions	**170**	**70**	**39**	**48**	**1345**	**0**	**45**	**21**	**448**	**635**	**914**	**121**	**3856**
Background Plus Project Conditions	**170**	**70**	**39**	**48**	**1392**	**0**	**45**	**21**	**482**	**718**	**950**	**121**	**4056**
Cumulative PM	**392**	**450**	**88**	**89**	**1615**	**0**	**76**	**100**	**448**	**635**	**1151**	**272**	**5316**
Cumulative Plus Project Conditions	**392**	**450**	**88**	**89**	**1798**	**0**	**87**	**100**	**448**	**635**	**1199**	**272**	**5558**

Intersection Number: 7
Traffix Node Number: 7
Intersection Name: Shoreway Road/Oracle Parkway and Marine Parkway
Peak Hour: PM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**391**	**11**	**19**	**28**	**2026**	**8**	**3**	**7**	**400**	**75**	**782**	**82**	**3832**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	0	1	0	1
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	6	0	0	0	0	0	1	0	7
815 OCR	0	0	0	0	6	0	0	0	0	0	2	0	8
800 Laurel Avenue	0	0	0	0	1	0	0	0	0	0	0	0	1
604-608 Harbor Boulevard	0	0	0	0	2	0	0	0	0	0	0	0	2
625 Harbor & 1421 OCR	0	0	0	0	2	0	0	0	0	0	12	0	14
580 Masonic Way	0	0	0	0	-1	0	0	0	0	0	-3	0	-4
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	1	0	0	0	0	0	10	0	11
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	0	0	0	0	0	0	81	13	0	0	94
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	17	0	0	0	81	13	23	0	134
Background Conditions	**391**	**11**	**19**	**28**	**2043**	**8**	**3**	**7**	**481**	**88**	**805**	**82**	**3966**
Net Project Trips	0	0	0	0	0	3	11	0	296	59	0	0	369
Existing Plus Project Conditions	**391**	**11**	**19**	**28**	**2026**	**11**	**14**	**7**	**696**	**134**	**782**	**82**	**4201**
Background Plus Project Conditions	**391**	**11**	**19**	**28**	**2043**	**11**	**14**	**7**	**777**	**147**	**805**	**82**	**4335**
Cumulative PM	**403**	**138**	**50**	**44**	**2659**	**103**	**3**	**33**	**445**	**90**	**1104**	**123**	**5195**
Cumulative Plus Project Conditions	**403**	**138**	**50**	**44**	**2659**	**106**	**14**	**33**	**741**	**149**	**1104**	**123**	**5564**

Intersection Number: 8
Traffix Node Number: 8
Intersection Name: Shoreway Road and Cormorant Drive
Peak Hour: PM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**0**	**73**	**15**	**26**	**0**	**36**	**23**	**342**	**0**	**0**	**0**	**0**	**515**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	0	0	0	0
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
815 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	0	0	0
625 Harbor & 1421 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
580 Masonic Way	0	0	0	0	0	0	0	0	0	0	0	0	0
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	0	0	0	0	0	0	0	0
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	0	0	13	81	0	34	6	0	0	0	0	0	134
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	13	81	0	34	6	0	0	0	0	0	134
Background Conditions	**0**	**73**	**28**	**107**	**0**	**70**	**29**	**342**	**0**	**0**	**0**	**0**	**649**
Net Project Trips	0	57	11	3	0	0	0	12	0	0	0	0	83
Existing Plus Project Conditions	**0**	**130**	**26**	**29**	**0**	**36**	**23**	**354**	**0**	**0**	**0**	**0**	**598**
Background Plus Project Conditions	**0**	**130**	**39**	**110**	**0**	**70**	**29**	**354**	**0**	**0**	**0**	**0**	**732**
Cumulative PM	**0**	**310**	**15**	**26**	**0**	**61**	**23**	**439**	**0**	**0**	**0**	**0**	**874**
Cumulative Plus Project Conditions	**0**	**367**	**26**	**29**	**0**	**61**	**23**	**451**	**0**	**0**	**0**	**0**	**957**

Intersection Number: 9
Traffix Node Number: 9
Intersection Name: Shoreway Road/Airport Way and Holly Street
Peak Hour: PM
Count Date: 3/21/2019

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	**164**	**4**	**7**	**7**	**1228**	**8**	**29**	**20**	**188**	**104**	**1520**	**318**	**3597**
Approved Project Trips													
2 Davis Drive	0	0	0	0	0	0	0	0	0	0	0	0	0
Belmont Community Center	0	0	0	0	0	0	0	0	0	0	0	0	0
Firehouse Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillstreet @ El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1325 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
815 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Laurel Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
604-608 Harbor Boulevard	0	0	0	0	0	0	0	0	0	0	0	0	0
625 Harbor & 1421 OCR	0	0	0	0	0	0	0	0	0	0	0	0	0
580 Masonic Way	0	0	0	0	0	0	0	0	0	0	0	0	0
1110 Old County Road	0	0	0	0	0	0	0	0	0	0	0	0	0
800 Belmont Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
1257 Magnolia	0	0	0	0	0	0	0	0	0	0	0	0	0
Meridian 25	0	0	0	0	0	0	0	0	0	0	0	0	0
560 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
1030 Brittan Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0
520 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
26 El Camino Real	0	0	0	0	0	0	0	0	0	0	0	0	0
Transit Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheeler Plaza	0	0	0	0	0	0	0	0	0	0	0	0	0
817 Walnut Street	0	0	0	0	0	0	0	0	0	0	0	0	0
644-678 Laurel Street	0	0	0	0	0	0	0	0	0	0	0	0	0
200 Two Dolphin Redwood City	34	0	0	0	22	0	0	0	0	0	3	6	65
Approved trips from San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	34	0	0	0	22	0	0	0	0	0	3	6	65
Background Conditions	**198**	**4**	**7**	**7**	**1250**	**8**	**29**	**20**	**188**	**104**	**1523**	**324**	**3662**
Net Project Trips	57	0	0	0	0	0	0	0	0	0	0	12	69
Existing Plus Project Conditions	**221**	**4**	**7**	**7**	**1228**	**8**	**29**	**20**	**188**	**104**	**1520**	**330**	**3666**
Background Plus Project Conditions	**255**	**4**	**7**	**7**	**1250**	**8**	**29**	**20**	**188**	**104**	**1523**	**336**	**3731**
Cumulative PM	**419**	**13**	**7**	**7**	**1670**	**8**	**29**	**27**	**188**	**104**	**1520**	**409**	**4401**
Cumulative Plus Project Conditions	**476**	**13**	**7**	**7**	**1670**	**8**	**29**	**27**	**188**	**104**	**1520**	**421**	**4470**

Appendix D

Signal Warrant Worksheets

Elmer Street & Ralston Avenue

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SS date: 3/7/22

Major Street: Ralston Avenue — Critical Approach Speed* (mph): 30

Minor Street: Elmer Street — Critical Approach Speed* (mph): 25

**Posted Speed.*

☐ Critical speed of major street traffic > 50 mph (64 km/h)……..……..…….. or ☐ In built up area of isolated community of < 10,000 population……..…….. } **Rural (R)**

☑ **Urban (U)**

AM PEAK PERIOD

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

AM PEAK PERIOD

	Existing	Background	Existing + Proj	Background + Proj				
Minor Street Approach Direction w/ Highest Delay	NB	NB	NB	NB				
Highest Minor Street Average Delay (sec/veh)	11.0	11.0	11.0	11.6				
Corresponding Minor Street Approach Volume (veh/hr)	80	108	80	108				
Minor Street Total Delay (veh-hrs)	0.2	0.3	0.2	0.3				
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	NO	NO	NO	NO				
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	NO	YES	NO	YES				
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	YES	YES	YES	YES				
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**				

PART B

AM PEAK PERIOD

		Approach Lanes: One	Approach Lanes: 2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Ralston Avenue		X	2280	2463	2441	2624				
Minor Street - Highest Approach	Elmer Street	X		80	108	80	108				
Signal Warranted based on Part B?				**No**	**Yes**	**No**	**YES**				

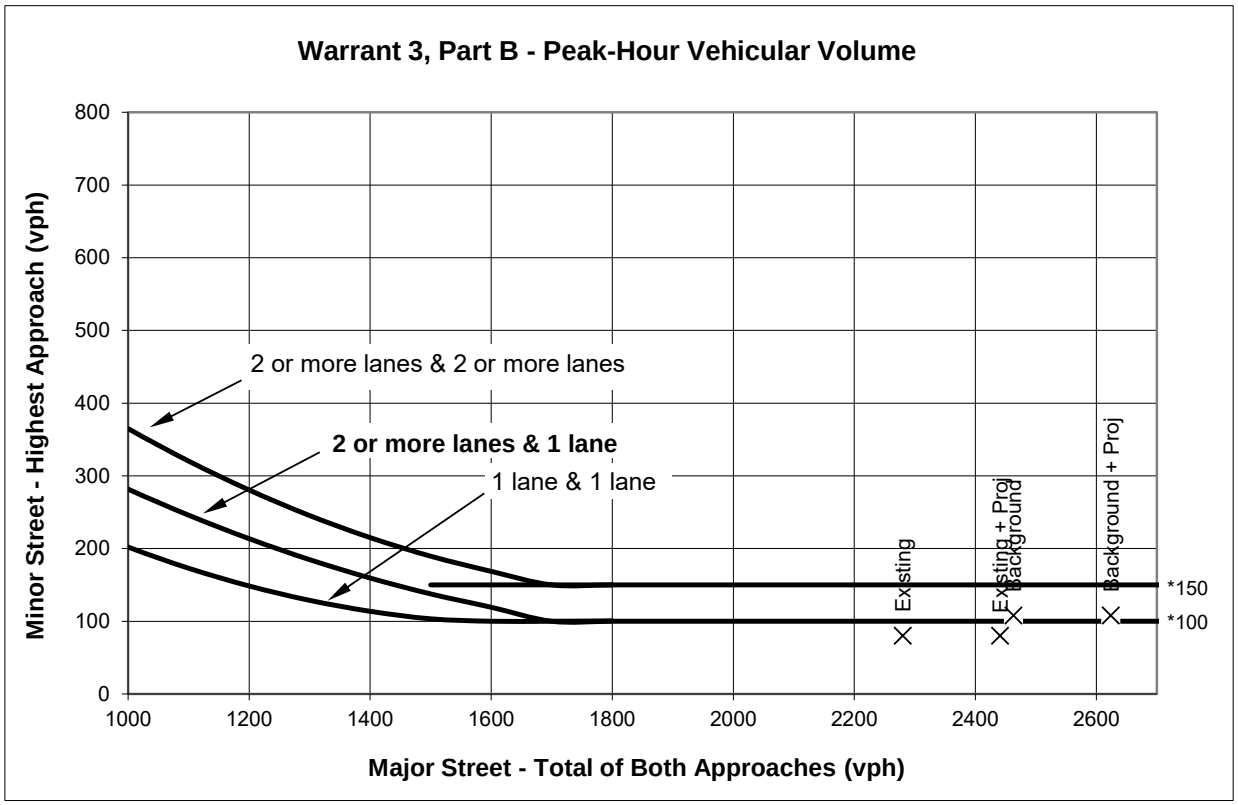
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

Elmer Street & Ralston Avenue

Elmer Street & Ralston Avenue **AM PEAK PERIOD**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Ralston Avenue		X	2280	2463	2441	2624				
Minor Street - Highest Approach	Elmer Street	X		80	108	80	108				
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**Yes**	**No**	**Yes**				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Elmer Street & Ralston Avenue

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SS date: 3/7/22

Major Street: Ralston Avenue — Critical Approach Speed* (mph): 30

Minor Street: Elmer Street — Critical Approach Speed* (mph): 25

**Posted Speed.*

☐ Critical speed of major street traffic > 50 mph (64 km/h)……..……..…….. or ☐ In built up area of isolated community of < 10,000 population……..…….. } **Rural (R)**

☑ **Urban (U)**

PM PEAK HOUR

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

	PM PEAK HOUR							
	Existing	Background	Existing + Proj	Background + Proj				
Minor Street Approach Direction w/ Highest Delay	NB	NB	NB	NB				
Highest Minor Street Average Delay (sec/veh)	14.8	18.7	15.0	19.1				
Corresponding Minor Street Approach Volume (veh/hr)	465	546	465	546				
Minor Street Total Delay (veh-hrs)	1.9	2.8	1.9	2.9				
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	NO	NO	NO	NO				
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	YES	YES	YES	YES				
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	YES	YES	YES	YES				
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**				

PART B

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Ralston Avenue		X	1854	2012	2006	2164				
Minor Street - Highest Approach	Elmer Street	X		465	546	465	546				
Signal Warranted based on Part B?				**Yes**	**Yes**	**Yes**	**Yes**				

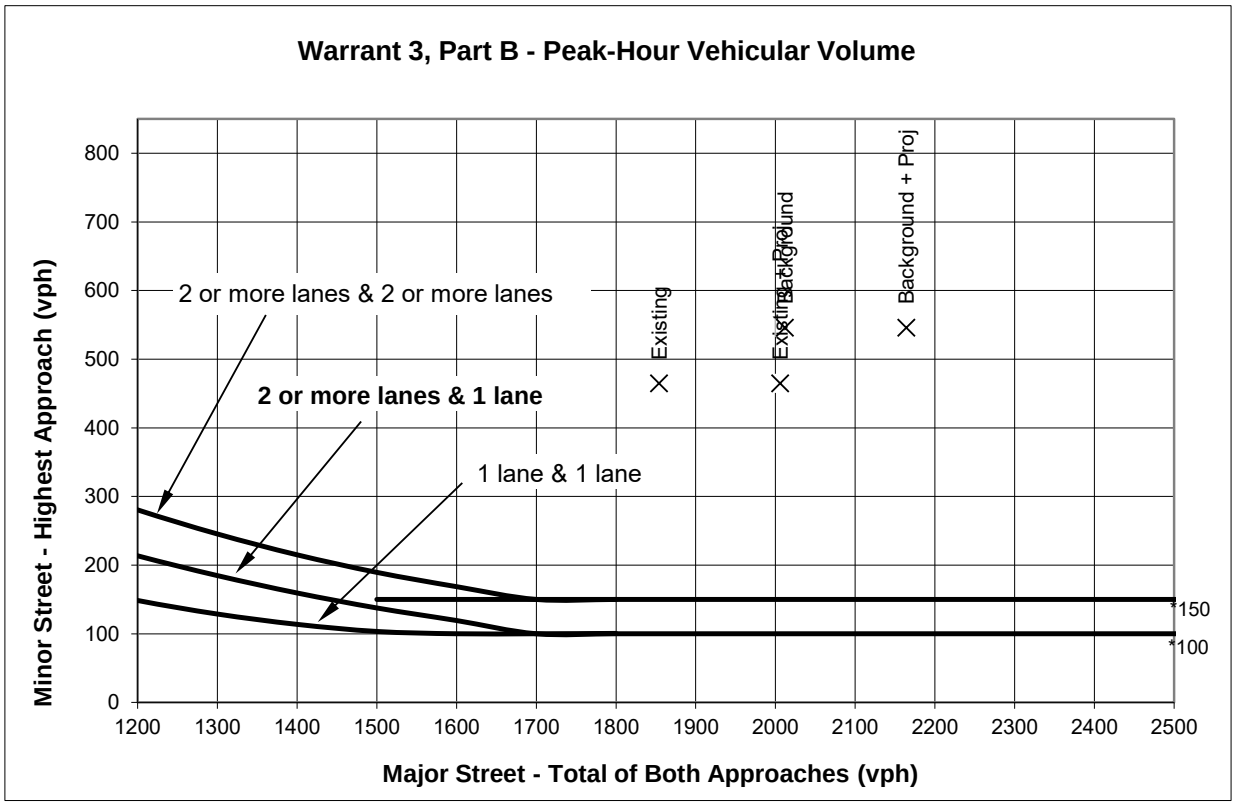
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

Elmer Street & Ralston Avenue

Elmer Street & Ralston Avenue **PM PEAK HOUR**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Ralston Avenue		X	1854	2012	2006	2164				
Minor Street - Highest Approach	Elmer Street	X		465	546	465	546				
Signal Warranted Based on Part B - Peak-Hour Volumes?				**Yes**	**Yes**	**Yes**	**Yes**				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Shoreway Road & Cormorant Drive

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SS date: 3/7/22

Major Street: Shoreway Rad — Critical Approach Speed* (mph): 35

Minor Street: Cormorant Drive — Critical Approach Speed* (mph): 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)……..……..……..……. ☐

or

In built up area of isolated community of < 10,000 population……..……..…….. ☐ **Rural (R)**

☑ **Urban (U)**

AM PEAK PERIOD

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

AM PEAK PERIOD

	Existing	Background	Existing + Proj	Background + Proj				
Minor Street Approach Direction w/ Highest Delay	WB	WB	WB	WB				
Highest Minor Street Average Delay (sec/veh)	10.1	10.7	10.1	11.2				
Corresponding Minor Street Approach Volume (veh/hr)	25	30	25	30				
Minor Street Total Delay (veh-hrs)	0.1	0.1	0.1	0.1				
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	NO	NO	NO	NO				
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	NO	NO	NO	NO				
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	NO	NO	NO	NO				
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**				

PART B

AM PEAK PERIOD

		Approach Lanes: One	Approach Lanes: 2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Shoreway Rad	X		207	327	281	401				
Minor Street - Highest Approach	Cormorant Drive		X	54	72	67	85				
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**				

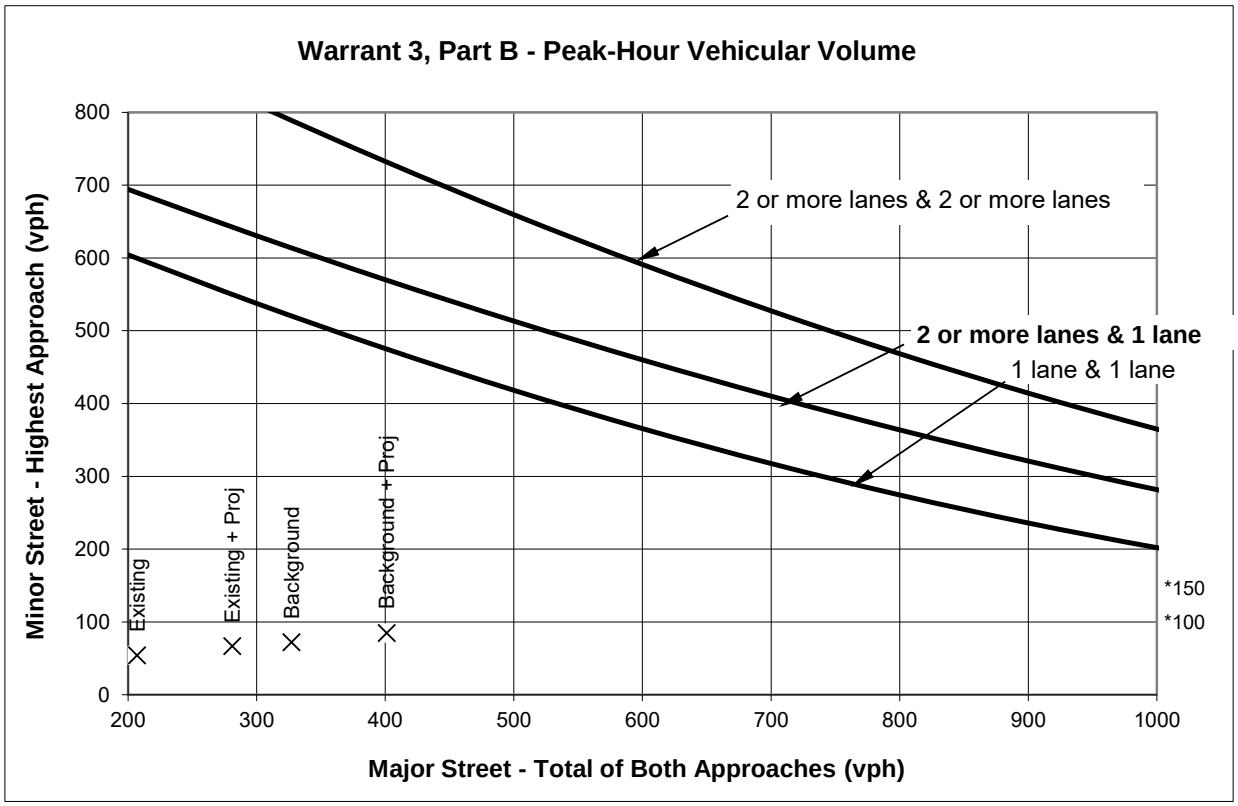
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

Shoreway Road & Cormorant Drive

Shoreway Road & Cormorant Drive **AM PEAK PERIOD**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Shoreway Rad	X		207	327	281	401				
Minor Street - Highest Approach	Cormorant Drive		X	54	72	67	85				
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Shoreway Road & Cormorant Drive

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SS date: 3/7/22

Major Street: Shoreway Rad — Critical Approach Speed* (mph): 35

Minor Street: Cormorant Drive — Critical Approach Speed* (mph): 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)…… ☐ or In built up area of isolated community of < 10,000 population…… ☐ } **Rural (R)**

☑ **Urban (U)**

PM PEAK HOUR

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

PM PEAK HOUR

	Existing	Background	Existing + Proj	Background + Proj				
Minor Street Approach Direction w/ Highest Delay	WB	WB	WB	WB				
Highest Minor Street Average Delay (sec/veh)	11.7	12.5	12.5	13.2				
Corresponding Minor Street Approach Volume (veh/hr)	36	70	36	70				
Minor Street Total Delay (veh-hrs)	0.1	0.2	0.1	0.3				
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	NO	NO	NO	NO				
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	NO	YES	NO	YES				
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	NO	NO	NO	YES				
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**				

PART B

PM PEAK HOUR

		Approach Lanes: One	Approach Lanes: 2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Shoreway Rad	X		453	472	533	552				
Minor Street - Highest Approach	Cormorant Drive		X	62	177	65	180				
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**				

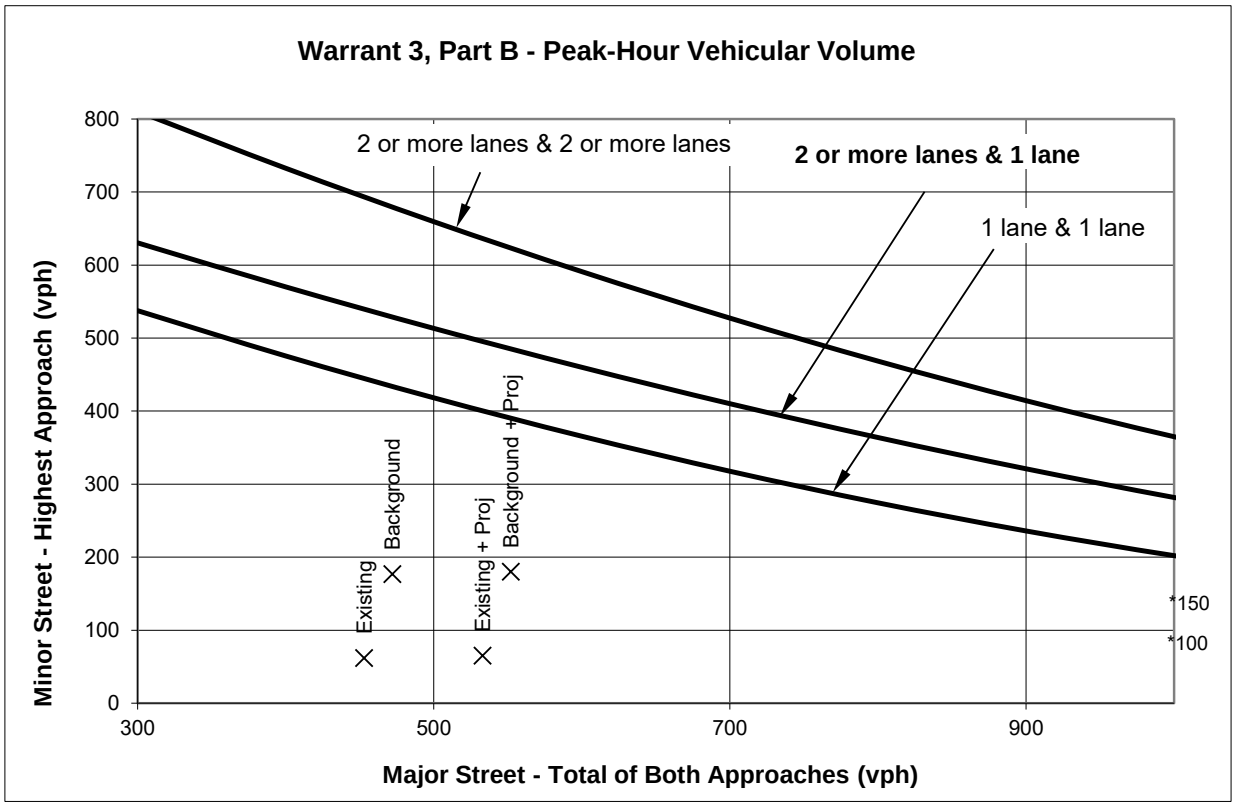
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

Shoreway Road & Cormorant Drive

Shoreway Road & Cormorant Drive **PM PEAK HOUR**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

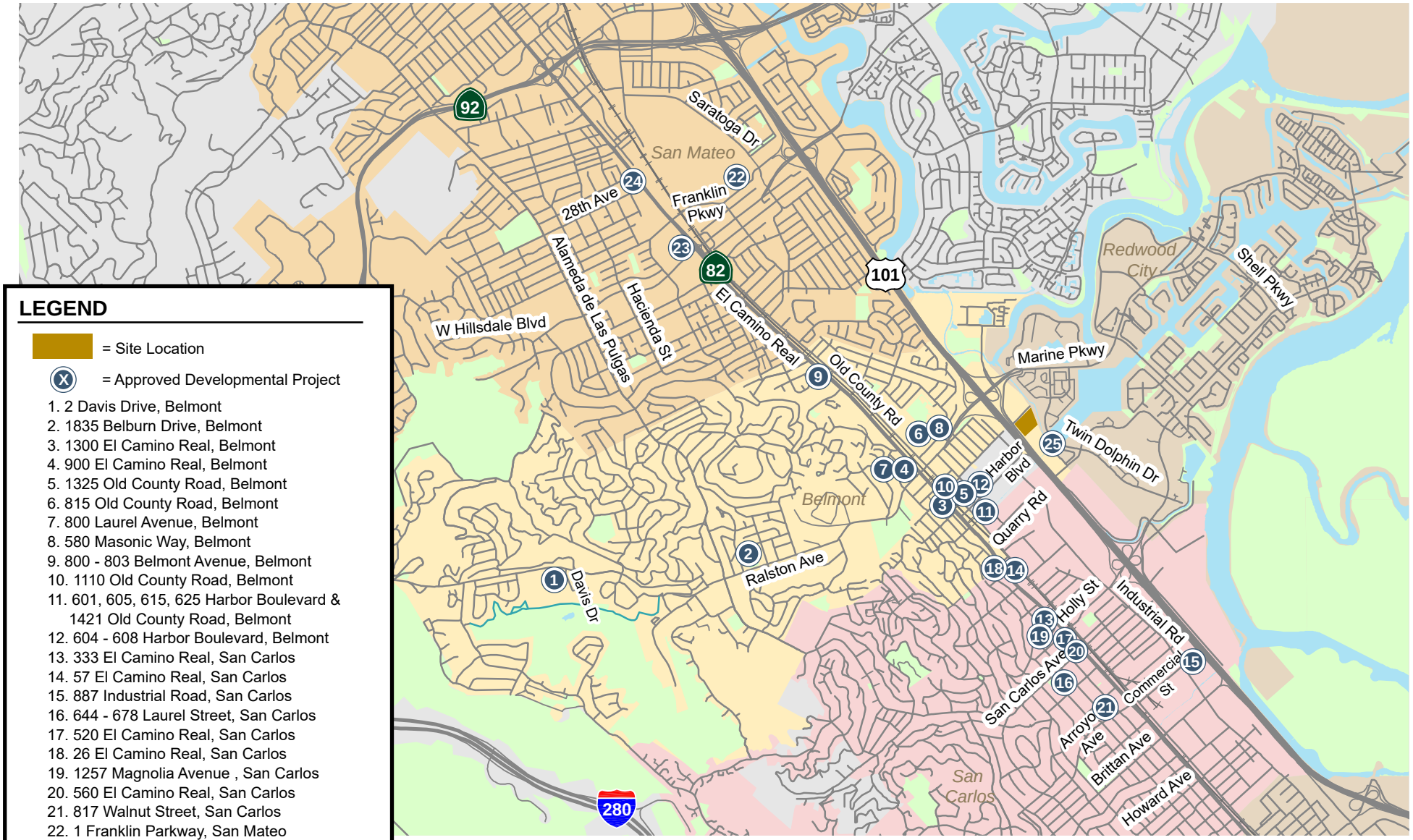
Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Background	Existing + Proj	Background + Proj				
Major Street - Both Approaches	Shoreway Rad	X		453	472	533	552				
Minor Street - Highest Approach	Cormorant Drive		X	62	177	65	180				
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Appendix E

Approved Developmental Projects included in Background Volumes



LEGEND

= Site Location

(X) = Approved Developmental Project

1. 2 Davis Drive, Belmont
2. 1835 Belburn Drive, Belmont
3. 1300 El Camino Real, Belmont
4. 900 El Camino Real, Belmont
5. 1325 Old County Road, Belmont
6. 815 Old County Road, Belmont
7. 800 Laurel Avenue, Belmont
8. 580 Masonic Way, Belmont
9. 800 - 803 Belmont Avenue, Belmont
10. 1110 Old County Road, Belmont
11. 601, 605, 615, 625 Harbor Boulevard & 1421 Old County Road, Belmont
12. 604 - 608 Harbor Boulevard, Belmont
13. 333 El Camino Real, San Carlos
14. 57 El Camino Real, San Carlos
15. 887 Industrial Road, San Carlos
16. 644 - 678 Laurel Street, San Carlos
17. 520 El Camino Real, San Carlos
18. 26 El Camino Real, San Carlos
19. 1257 Magnolia Avenue , San Carlos
20. 560 El Camino Real, San Carlos
21. 817 Walnut Street, San Carlos
22. 1 Franklin Parkway, San Mateo
23. 60 31st Avenue, San Mateo
24. 2700 - 2790 El Camino Real, San Mateo
25. 200 Twin Dolphin Drive, Redwood City

Appendix E
Approved Developmental Projects included in Background Volumes

NORTH
Not to Scale

Appendix F - Fair Share Calculation for El Camino Real and Ralston Avenue

#	Study Intersection	Peak Hour	Existing Volume	Cum Volume + Prject Trips	Difference (A)	1301 Shoreway Road Project Trips (B)	Fair Share % (B / A)
1	El Camino Real and Ralston Avenue	AM	3860	5605	1745	161	9.2%
		PM	4221	6100	1879	152	8.1%
						Average	**8.7%**

Appendix G

Developmental Projects included in Cumulative Modal

Cross-City Project List for Traffic Impact Analysis

Project Address	Project Name	Agency	Link to Project Webpage	Type of Development and SF/units	Phase in Progress	Anticipated CofO	Peak / ADT trip #s
Redwood City							
800 - 3400 Bridge Parkway	Redwood Life	City of Redwood City	https://www.redwoodcity.org/city-hall/current-projects/development-projects?id=113	3.3 million sq ft life science building, 46,000 sq ft amenities, and 104 room hotel	Planning Application Review	TBD	TBD
10 Twin Dolphin Drive	10 Twin Dolphin	City of Redwood City	https://www.redwoodcity.org/city-hall/current-projects/development-projects?id=134	654,000 sq ft office	Planning Application Review	TBD	TBD
1 Twin Dolphin Drive	1 Twin Dolphin	City of Redwood City	https://www.redwoodcity.org/city-hall/current-projects/development-projects?id=133	197,000 sq ft office	Planning Application Review	TBD	TBD
240 Twin Dolphin	240 Twin Dolphin	City of Redwood City	https://www.redwoodcity.org/city-hall/current-projects/development-projects?id=96	202,010 sq ft Office	Planning Approval Received	TBD	TBD
Belmont							
900 El Camino Real	LINC Housing	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/407/642	37 residential apartments	Approved February 2023. Seeking support funding (next Tax Credit round is March 2024)	TBD	TBD
1300 El Camino Real	Firehouse Square	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/26/642	3,700 sq ft commercial, 15 townhomes, 66 residential apartments	Phase 1: Completed; Phase 2: construction; completion anticipated January 2024	TBD	TBD
1325 Old County Road	Artisan Crossing	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/409/642	3,000 sq ft commercial/flex space, 250 residential apartments	Under construction; TCO for first batch of the units (165) to be issued in November.	fall 2023	TBD
815 Old County Road	815 OCR	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/441/32	240,000 sq ft residential (177 units)	Under construction; TCO for first batch of the units anticipated in December.	fall 2023	TBD
800-803 Belmont Avenue	800 Belmont Avenue	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/431/333	125 residential apartments	Planning Approval Received May 2022; all support funding obtained. Undergoing Building Permit plan check; issuance and construction start anticipated Spring 2024.	TBD	TBD
580 Masonic Way	Belmont Town Center	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/467/642	148,828 sq ft residential (139 units)	Planning Application Review (filed August 2023)	TBD	TBD
425-435 Harbor and 120 Industrial)	Assemblage	City of Belmont		827,000 sq feet bld, 1,560 parking spaces, 3 levels undergound	Planning Application anticipated to be filed in Nov 2023	TBD	TBD
500-530 Harbor Boulevard	Life Sciences/Office	City of Belmont		TBP		TBD	TBD
608 Harbor Boulevard	608 Harbor	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/439/642	103 residential apartments	Planning Approval Received June 2023. City/County Property tax share agreements approved Oct 2023. Annexation to Belmont anticipated January 2024.	fall 2025	TBD
601 Harbor Boulevard	601 Harbor Life Sciences Building	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/463/642	376,000 sq ft life science development	Planning Application Review; First public hearings anticipated December 2023/January 2024	TBD	TBD
1301 Shoreway Road	1301 Shoreway Road	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/471/642	550,000 sq ft life sciences development	Planning Application Review	TBD	TBD
2 Davis Drive	2 Davis	City of Belmont	https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/401/333	77,525 sq ft office/R&D, 14,050 sq ft dedication for new fire station	Planning Application Review. DEIR public comment period completed October 2023. Public Hearings anticipated Q1 2024.	TBD	TBD
300, 301, and 401 Island Pkwy & 800 Clipper Dr	Island Parkway, Biomed Realty Island Parkway Life Sciences Campus	City of Belmont		800,000 sq feet comprising three life science buildings, a parking structure, plus amenity space	Planning Application Review	TBD	TBD
678 Ralston Avenue		City of Belmont		65-unit all affordable residential apartment development; 19 parking spaces; 8 stories.	Planning Application Review; Potential SB-35 submittal	TBD	TBD

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: April 29, 2024

To: Mr. Craig Bacheller, DGA

From: Gary Black, Kai-Ling Kuo

Subject: Sight Distance Analysis for the 1301 Shoreway Road Development

This memorandum presents the sight distance analysis for the 1301 Shoreway Road development in Belmont, CA. The project proposes an exit-only driveway on Shoreway Road that would be located 100 feet south of the edge of the Sem Lane (or 122 feet south of westbound travel lane on Sem Lane). The City of Belmont provided the following comments in their on April 15, 2024 letter asking about sight distance of the proposed driveway.

- Sight distance. The Caltrans recommended stopping sight distance on Sem Lane is 200 feet and on Shoreway Road is 305 feet. The project driveways should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with the City's standards.

  Measure and demonstrate driveway sight distance from the stop bar on private property.

- The proposed driveway location onto Shoreway Road has not been proven to provide adequate distance from the Shoreway/Sem intersection based on Caltrans sight distance requirements. Based on conversations with the Fire Marshal, the location of the proposed driveway onto Shoreway Road is one of many solutions to meet fire code requirements. Please revise the plans to remove the proposed driveway and implement improvements to meet fire code requirements, or show the driveway has adequate sight distance from the Shoreway/Sem intersection.

This memorandum was prepared to address these comments and demonstrate that the proposed driveway would have adequate sight distance for approaching vehicles on Shoreway Road and on Sem Lane.

Sight Distance Analysis

This sight distance analysis complies with the Caltrans *Highway Design Manual* (HDM) Section 201.1, which addresses stopping sight distance. According to the guidelines, the sight distance for drivers at the driveway needs to be measured 10 feet plus the shoulder width of the major road but not less than 15 feet from the travel lane. Shoreway Road is approximately 16 feet wide for the northbound lane (12-foot travel lane plus a non-striped 4-foot shoulder), so the setback of 15 feet from the travel lane is at the back of the proposed crosswalk.

For the sight distance of the approach traffic on Shoreway Road, the recommended Caltrans stopping sight distance is 300 feet (based on a design speed of 40 mph). Thus, a driver must be able to see 300 feet on Shoreway Road to locate a sufficient gap to turn out of the driveway. Figure

1 shows the sight distance within 300 feet of the exiting driver at the project driveway. There would be no obstructions within the line of sight because there is no street parking and the landscaping along the Shoreway Road frontage would not block the light of sight.

The City also has requested to know whether the sight distance is adequate between the proposed driveway and Sem Lane so that vehicles exiting each could see each other. Figure 1 shows that there would be no obstructions within the 122-foot line of sight for an exiting driver at the project driveway to see vehicles turning from Sem Lane, or vice versa.

The project also proposes a full access driveway on Shoreway Road toward the southern end the project site. Figure 2 shows that there would be no obstructions within the 300-foot line of sight for an exiting driver at the project driveway to see approaching vehicles on Shoreway Road.

The analysis shows that the proposed north driveway location would have adequate distance from the Shoreway Road/Sem Lane intersection.

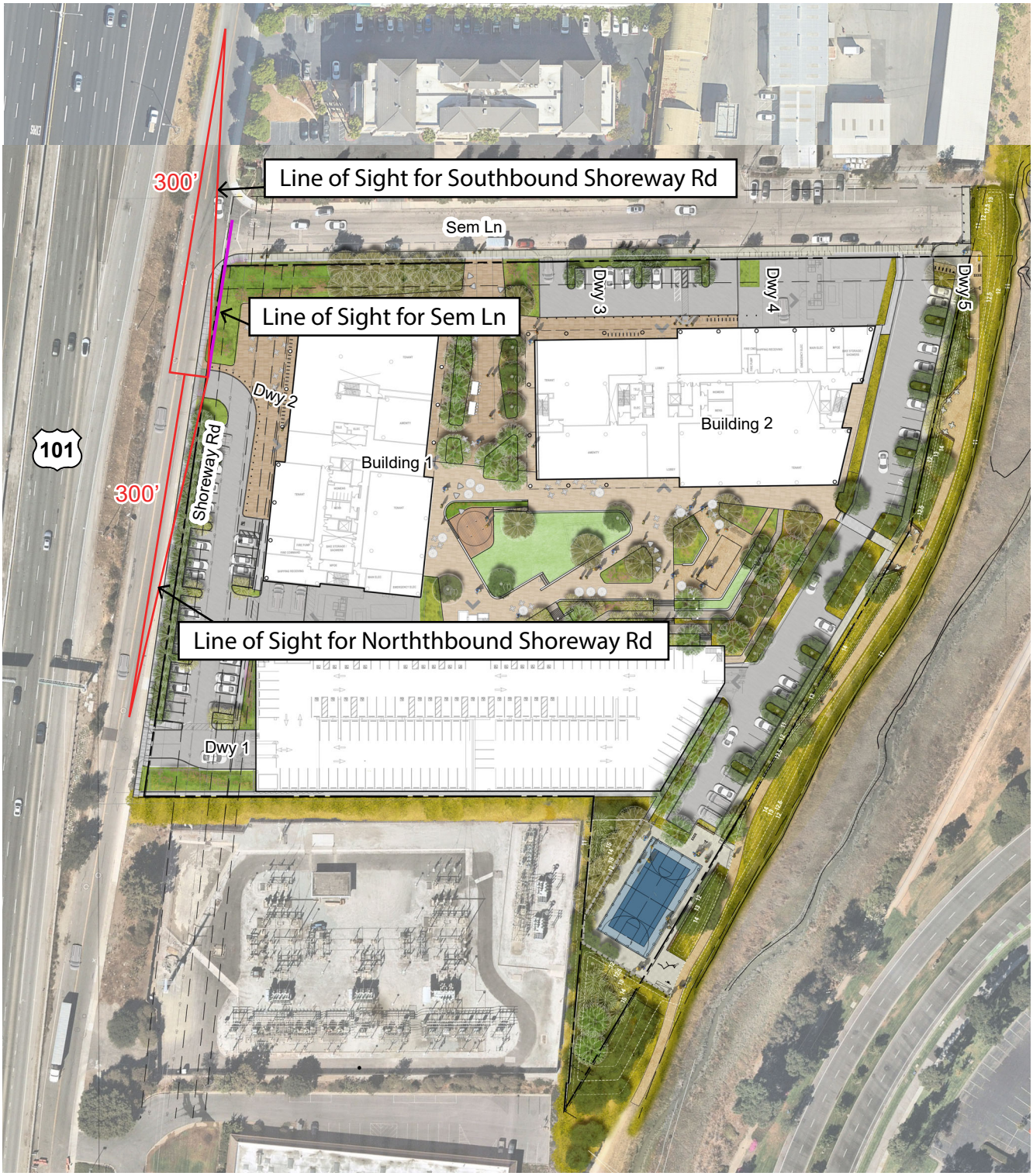


Figure 1
Sight Distance for North Driveway



Figure 2
Sight Distance for South Driveway

NORTH
Not to Scale

Appendix J

Water Supply Assessment

Water Supply Assessment for 1301 Shoreway Road Project

Mid-Peninsula Water District

October 2022
EKI C20104.00

EKI ENVIRONMENT & WATER, INC.
www.ekiconsult.com
2001 Junipero Serra Blvd, Suite 300 • Daly City, CA 94014

Water Supply Assessment

1301 Shoreway Road Project
Mid-Peninsula Water District

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Water Supply Assessment

1301 Shoreway Road Project
Mid-Peninsula Water District

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APPENDICES

Appendix A Response to Water Supply Assessment Request for Information Form, Mid-Peninsula Water District – 1301 Shoreway Road
Appendix B Documentation of Water Supply Agreements (excluding attachments)
Appendix C SFPUC Memorandum Re: Regional Water System Supply Reliability and UWMP 2020

1 INTRODUCTION

This report provides a Senate Bill (SB) 610-compliant water supply assessment (WSA), evaluating water supplies available for the proposed 1301 Shoreway Road Project ("Project"; **Figure 1**). The proposed Project site is comprised of approximately 6.9 acres located on the corner of Shoreway Road and Sem Lane in the City of Belmont, CA ("City"). The proposed Project includes demolition of an existing 148,919 square foot (sq ft) office building and construction of two commercial life science buildings and associated parking structure: specifically, one seven-story 271,589 sq ft building, one eight-story 270,446 sq ft building, a nine-level 441,280 sq ft parking garage, and 36,909 sq ft of landscape area (Four Corners Properties, 2022). Water for the proposed Project will be served by Mid-Peninsula Water District ("MPWD" or "District").

The information provided in this WSA is consistent with California Water Code (CWC or Water Code) §10910-10912 requirements. The text of specific sub-sections of the Water Code is included in grey boxes and italicized font at the beginning of specific sections of this WSA. The information presented in those respective sections, and the associated tables and figures, respond directly to applicable Water Code requirements.

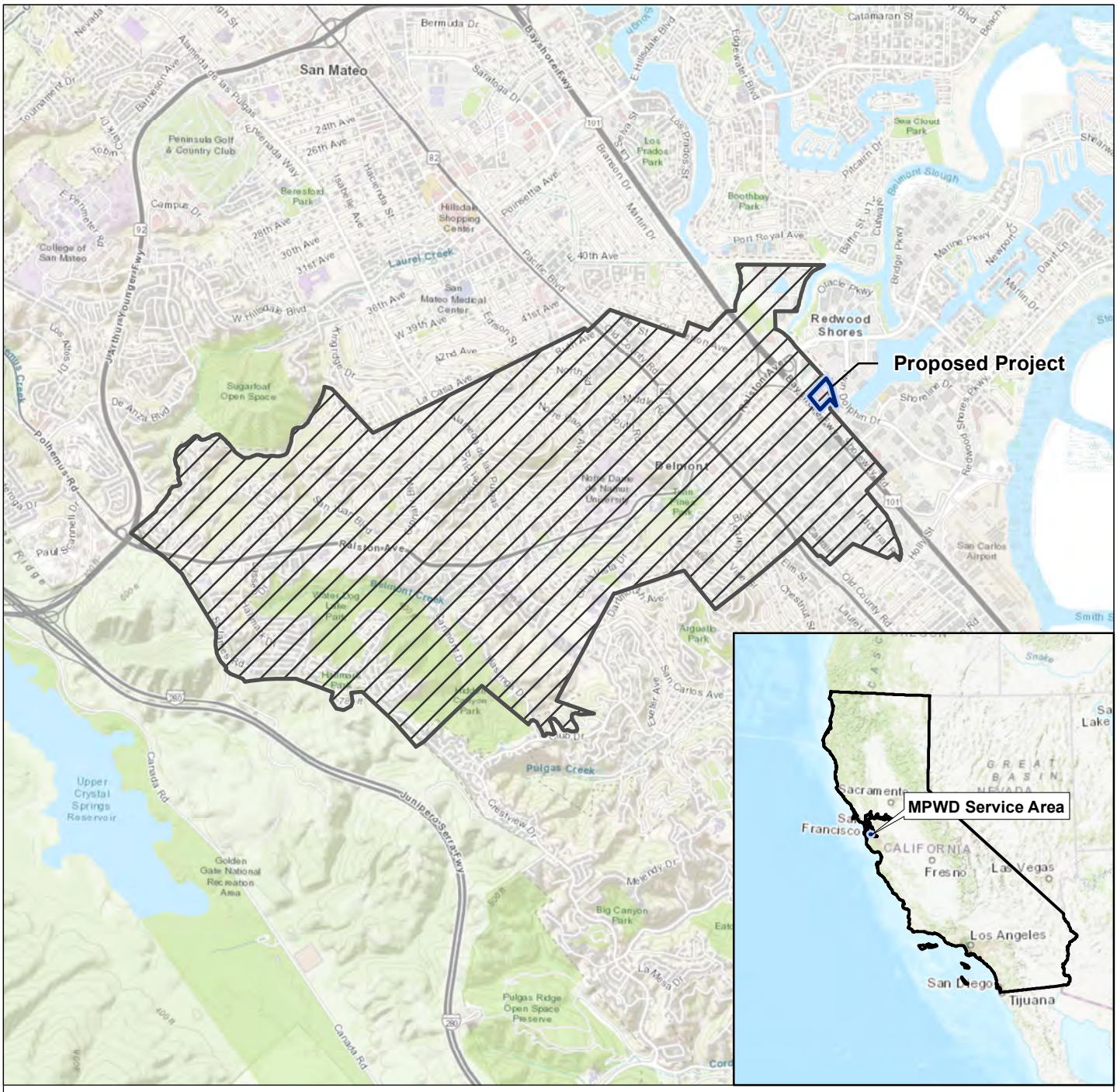
The purpose of a WSA is to evaluate whether the water provider identified for the Project has sufficient water supply to meet the current and planned water demands within its service area, including the demands associated with the proposed Project, during normal, single dry, and multiple dry hydrologic years over a 20-year time horizon.[1] More specifically, this WSA includes:

- A summary of the WSA requirements articulated in Water Code §10910-10912 and a description of how they apply to the proposed Project;
- A description and analysis of the current and projected future water demands of the proposed Project through the year 2045;
- A description and analysis of the historical, current, and projected water demands for the District through the year 2045;
- A description and analysis of the current and projected future water supplies for the District's service area through the year 2045; and
- A comparison of the water supplies and demands for the District's service area, including the projected water demands associated with the proposed Project as well as existing and planned future uses, including agriculture and manufacturing.

The information contained in this WSA is based primarily on MPWD's 2020 Urban Water Management Plan (UWMP), except where updated with relevant water demand and supply reliability and other information provided by the District, California Department of Water Resources (DWR), the San Francisco Public Utilities Commission (SFPUC), and the Bay Area Water Supply and Conservation Agency (BAWSCA).

[1] The Water Code specifies that a WSA must look at supplies and demand on a 20-year horizon (i.e., to 2042), but given the available data, this WSA looks beyond that to 2045.

This WSA concludes that MPWD's contractual Individual Supply Guarantee (ISG) allocation of 3.891 million gallons per day (MGD) from SFPUC is sufficient to meet projected future demands within its service area. MPWD's future demands, inclusive of the Project and two additional new development projects (Section 5.4), are projected to reach, at most, 82% of the District's contractual ISG allocation in hydrologically normal years through 2045. Further, supply shortfalls that are currently projected during dry years are anticipated to occur irrespective of the three new development projects. A significant source of uncertainty is how and when the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment; Section 6.1.1.2) will be implemented and how it will affect the supply reliability of the City and County of San Francisco's Regional Water System (RWS). The District will address projected shortfalls through implementation of the District's Water Shortage Contingency Plan (WSCP). In addition, as described herein, the District, BAWSCA, and SFPUC are pursuing the development of additional water supplies to improve the RWS and District supply reliability (Section 6.1.1.3). Therefore, this WSA finds that the District's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to the District's existing and planned future uses, with the implementation of its WSCP during dry years.



Legend

- Project Boundary
- Mid-Peninsula Water District

N

0 4,000 8,000

Feet

Notes

1. All locations are approximate.

Abbreviations

MPWD - Mid-Peninsula Water District

Sources

1. Basemap provided by ESRI.

Mid-Peninsula Water District
Service Area and Project Location

1301 Shoreway Road Project
City of Belmont, CA
October 2022
EKI C20104.00

Figure 1

eki environment & water

Path: X:\C20104\...00\Maps\2022\10\Fig1_GeneralLocation.mxd

2 GENERAL REQUIREMENTS FOR THE PREPARATION OF A WATER SUPPLY ASSESSMENT

The purpose of this section is to outline the types of projects that require the preparation of a WSA, who is responsible for preparation, and the necessary components of a WSA.

2.1 Applicability of Senate Bill 610 to the Project

☑ ***CWC § 10910 (a)***

Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

☑ ***CWC § 10912***

For the purposes of this part, the following terms have the following meanings:

(a) "Project" means any of the following:

(1) A proposed residential development of more than 500 dwelling units.

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

(4) A proposed hotel or motel, or both, having more than 500 rooms.

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

(6) A mixed-use project that includes one or more of the projects specified in this subdivision.

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

(b) If a public water system has fewer than 5,000 service connections, then "project" means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The approximately 6.9-acre proposed Project site is located on the corner of Shoreway Road and Sem Lane in the City of Belmont, CA (**Figure 2**), which is located within San Mateo County. The proposed Project includes demolition of an existing 148,919 sq ft office building and construction of two commercial life science buildings and associated parking structure, specifically one seven-story 271,589 sq ft building, one eight-story 270,446 sq ft building, a 441,280 sq ft above-grade parking garage, and 36,909 sq ft of landscape area. The proposed Project meets the definition of a "project" requiring a WSA pursuant to SB 610 (Water Code §10910(a) and 10912(a)(3)).

2.2 Responsibility for Preparation of the Water Supply Assessment

☑ ***CWC § 10910 (b)***

The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined in Section 10912, that may supply water for the project. If the city or county is not able to identify any public water system that may supply water for the project, the city or county shall prepare the water assessment required by this part after consulting with any entity serving domestic water supplies whose service area includes the project site, the local agency formation commission, and any public water system adjacent to the project site.

The proposed Project is located within the MPWD service area and the water for the proposed Project will be supplied by MPWD. Therefore, in accordance with Water Code §10910(b), MPWD is the entity responsible for preparation and adoption of a WSA for the proposed Project.

2.3 Components of a Water Supply Assessment

☑ ***CWC § 10910 (c)***

(c)(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).

(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

☑ ***CWC § 10911***

(b) The city or county shall include the water supply assessment provided pursuant to Section 10910, and any information provided pursuant to subdivision (a), in any environmental document prepared for the project pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.

(c) The city or county may include in any environmental document an evaluation of any information included in that environmental document provided pursuant to subdivision (b). The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses. If the city or county determines that water supplies will not be sufficient, the city or county shall include that determination in its findings for the project.

As listed above in Water Code §10910(c), the primary purpose of a WSA is to evaluate whether sufficient water supply is available to meet all future demands within the water supplier's service area, including those associated with the proposed Project, during normal, single dry, and multiple dry hydrologic years for a 20-year planning horizon.[2] More specifically, this WSA includes:

- A summary of the WSA requirements articulated in Water Code §10910-10912 and a description of how they apply to the proposed Project;
- A description and analysis of the current and projected future water demands of the proposed Project through the year 2045;
- A description and analysis of the historical, current, and projected water demands for the District through the year 2045;
- A description and analysis of the current and projected future water supplies for the District's service area through the year 2045; and
- A comparison of the water supplies and demands for the District's service area, including the projected water demands associated with the proposed Project as well as existing and planned future uses, including agriculture and manufacturing.

[2] The Water Code specifies that a WSA must look at supplies and demand on a 20-year horizon (i.e., to 2042), but given the available data, this WSA looks beyond that to 2045.



Legend

Project Boundary

Notes

1. All locations are approximate.

Abbreviations

APN = Assessor Parcel Number

Sources

1. Parcel Boundaries courtesy of San Mateo County GIS.
2. Basemap is ESRI's ArcGIS Online world aerial map, obtained 4 October 2022.

N

0 150 300

Feet

Project Location and Parcel Boundaries

1301 Shoreway Road Project
City of Belmont, CA
October 2022
EKI C20104.00

Figure 2

eki environment & water

Path: X:\C20104\...00\Maps\2022\10\Fig2_Project.mxd

3 PROJECT DESCRIPTION

The proposed Project includes construction of two commercial life science buildings and associated parking structure, specifically one seven-story 271,589 sq ft building and one eight-story 270,446 sq ft building, including nine levels of above-grade parking on an approximately 6.9-acre site (see Site Plan in **Appendix A**). The proposed Project is located at 1301 Shoreway Road on the corner of Shoreway Road and Sem Lane in the City of Belmont, CA and includes assessor parcel number (APN) 040371110.

Based on the project description (Four Corners Properties, 2022), the Project will include both office and life science research and development (R&D) use and likely use distilled water for R&D. The total number of onsite employees is expected to range from 1,425 to 2,500 employees at full buildout, which is anticipated to be completed in 2026.

As shown on **Figure 2,** the proposed Project site currently includes surface parking, a basketball court, and an existing 148,919 sq ft office building, which would be demolished to allow for development of the proposed Project. Current occupants include a medical provider, university, business consultant, realtor, and business in the technology sector.

Historical water use at the site ranged between approximately 2.43 to 3.55 million gallons per year (MGY) between 2017 and 2021, and averaged 2.70 MGY over the last three years (MPWD, 2022a). The proposed Project is located within the MPWD service area and potable water service will be provided by the District (**Figure 1**).

4 PROJECT WATER DEMAND

The District and the City of Belmont have adopted water efficient landscape ordinances consistent with the California Model Water Efficient Landscape Ordinance (MWELO). Further, the City of Belmont has adopted green building standards consistent with previous versions of the CalGreen building standards. As part of state requirements, all new developments must comply with these efficiency standards. As such, the proposed Project development is expected to include a number of water-efficient features, including, but not limited to:

- Use of low-flow lavatory faucets, kitchen faucets, toilets, and urinals in accordance with CalGreen Code; and
- Inclusion of low-water use landscaping and high-efficiency irrigation systems to minimize outdoor water use in accordance with MWELO.

As described below, EKI utilized water use information for a similar Bay Area R&D campus constructed in the last ten years to estimate average annual water demand for the proposed Project (City of South San Francisco, 2019). These estimates were evaluated relative to current water use by similar uses in the region. **Table 1** includes a summary of the water demand projections associated with the proposed land uses at Project completion. Full Project buildout is anticipated to be completed in 2026, therefore Project demands are not included in the 2025 demand estimate.

4.1 Indoor Water Use

Table 1 provides a summary of the land uses, unit demand factors, and respective water demand associated with each land use. EKI conducted an independent estimate of Project indoor water use demands by applying a water demand factor developed from recent utility data at a Genentech Life Science campus: 0.18 gallons per day per square foot (GPD/sq ft; City of South San Francisco, 2019).[3] Using this demand factor for the entirety of the Project life science area, the total indoor water use for the proposed Project is estimated to be approximately 97,600 GPD, or 36 MGY (see **Table 1**).

It is noted that water use by life sciences R&D varies significantly based on the specific operations of the facility, and that in absence of specific information regarding facility water uses, a conservative water demand factor is used. Below is a comparison of the Table 1 Project indoor water demand estimates to other available demand factors:

- Based on a nation-wide survey of large buildings (i.e., greater than 200,000 sq ft), it was found that buildings that included sterilizers and autoclaves used on average 0.1128 GPD/sq ft (CBECS, 2017). If this demand factor were applied, the total indoor water use for the proposed Project would be estimated to be approximately 61,000 GPD, or 22 MGY.
- The Project Proponent estimated the number of employees range between 1,425 and 2,500 at full build-out (Four Corners Properties, 2022). Therefore, based on the

[3] The R&D demand factor was calculated by dividing the total water use of the Genentech campus in 2016 by the total area of the campus to estimate demand per area.

Genentech demand factors, the estimated indoor Project demand is 39-68 GPD/employee, which is higher than the 20-35 GPD/employee estimate range for commercial and industrial settings, per the United States Environmental Protection Agency (USEPA) Lean & Water Toolkit (USEPA, 2021).[4]

Based on these comparisons, the water demand estimates used herein reflect a higher intensity of water use than typical office and commercial uses and, relative to other life sciences related uses (i.e., buildings with autoclaves or sterilizers), are expected to be conservative.

4.2 Parking Structure Water Use

The Proposed Project would include nine levels of above-grade parking totaling approximately 441,280 sq ft (Four Corners Properties, 2022). Water use associated with this space is anticipated to be minimal, limited to cleaning of the facility. For purposes of this WSA, it is assumed that the garage will be cleaned twelve times per year and that 0.02 gallons per sq ft will be used per cleaning event (City of Los Angeles Bureau of Engineering, 2012). Thus, it is estimated that 0.11 MGY will be used for purposes of cleaning the parking garage.

4.3 Outdoor Water Use

The Project Proponent calculated irrigated landscape water use based on the Estimated Total Water Use (ETWU) per the MWELO (DWR, 2015). Based on this methodology, it is estimated that the total irrigated landscape water use for the proposed Project will be 1,350 GPD or approximately 0.49 MGY[5] (Four Corners Properties, 2022; ICF, 2022).

4.4 Distribution System Losses

Water distribution systems experience a degree of water loss over the course of transmission from the source to the customer. Although distribution system losses from the newly-constructed portion of the system's infrastructure associated with the proposed Project would initially be expected to be minimal, it is conservatively assumed that distribution system losses associated with delivering water for the proposed Project will ultimately be consistent with the proportion of non-revenue water loss per the 2020 validated water loss audit submitted to DWR for MPWD (i.e., 3.4%; MPWD, 2022b). **Table 1** shows the distribution system losses for the proposed Project, estimated at a total of 1.28 MGY.

4.5 Existing Current Water Demand on the Proposed Project Site

The proposed Project site is currently developed with an existing office building. Current occupants include a medical provider, university, business consultant, realtor, and businesses in the technology sector. Historical water use for the current land uses at the proposed Project site

[4] Per USEPA (2021), additional savings of 25-35 percent beyond this 20-35 GPD/employee are readily achievable.
[5] Total outdoor water use reflects the ETWU from Four Corners Properties (2022), plus the water use associated with an additional 5,600 sq ft of low water use landscape area (ICF, 2022).

over the last three years (i.e., 2019 – 2021) ranged between 2.43 and 2.88 MGY, and averaged 2.70 million gallons (MG) over the last three years (MPWD, 2022a). Water demand by the new development is considered incremental to this existing demand, and thus, as shown in **Table 1**, the average of the last three years of existing site demand is subtracted from the estimated demands associated with the proposed Project.

4.6 Total Project Water Demand

Based on the above methodologies and assumptions, and adjusting for the existing water use at the site, the incremental increase in water demand associated with the proposed Project at full buildout and occupancy is estimated to be 35 MGY following construction completion in 2026, as shown in **Table 1**.

Table 1

Summary of Estimated Incremental Annual Project Water Demand

1301 Shoreway Road Project, Belmont, California

Water Use (a)	Area (SF)	Demand Factor	Demand Factor Units	Total Water Demand (MG)				
				2025 (h)	2030	2035	2040	2045
Office and R&D (b)	542,035	0.18	gpd/sf	0	36	36	36	36
Irrigation (c)	42,509	--	--	0	0.49	0.49	0.49	0.49
Parking Garage (d)	441,280	0.020	gal/sf/cleaning	0	0.11	0.11	0.11	0.11
Distribution System Losses (e)	--	3.4%	%	0	1.28	1.28	1.28	1.28
Existing Site Demand (f)	--	--	--	0	-2.70	-2.70	-2.70	-2.70
Net Annual Water Demand (g)				**0**	**35**	**35**	**35**	**35**

Abbreviations:

"DWR" = California Department of Water Resources
"gal" = gallons
"gpd" = gallons per day
"gpd/sf" = gallons per day per square foot
"MG" = million gallons
"R&D" = Research and Development
"sf" = square feet
"WSA" = Water Supply Assessment

Notes:

(a) Office and R&D square footage per Reference 1. 100% of the office and R&D use was conservatively assumed to be R&D.
(b) Demand factors for the R&D use per Reference 2.
(c) Irrigation demands are based on a calculation of the Estimated Total Water Use, provided in Reference 1, plus demands associated with 5,600 additional square feet of low-water use landscape area, per Reference 6.
(d) Water use associated with this space is anticipated to be minimal, limited to cleaning of the facility. For purposes of this WSA, it is assumed that the garage will be cleaned twelve times per year and that 0.02 gallons per sq ft will be used per each cleaning event, per Reference 5.
(e) Estimated distribution system water loss is calculated using the 2020 DWR Water Audit Report non-revenue water loss as a percent of volume of water supplied (i.e., 3.4% of project demands), per Reference 3 and includes both real and apparent losses.
(f) Existing site demands per Reference 4. Existing demands are subtracted from total projected water demands to show the incremental increase in demands associated with the Project (i.e., the net increase in water demand).
(g) Total may not sum due to rounding.
(h) Per Reference 1, Project completion is not anticipated to occur until 2026. Therefore, Project demands for 2025 are shown as zero.

References:

1. Four Corners, 2022. Response to Water Supply Assessment Request for Information Form - 1301 Shoreway Road, prepared by Four Corners, dated 12 July 2022.
2. City of South San Francisco, 2019. Genentech Campus Master Plan Update, Draft Environmental Impact Report, prepared by Lamphier-Gregory, dated October 2019.
3. Mid-Peninsula Water District 2020 Water Audit Data Report, accessed via the WUEdata - Water Audit Report Data website on 19 May 2022. https://wuedata.water.ca.gov/awwa_plans.
4. Data provided by Mid-Peninsula Water District via email on 15 July 2022.
5. City of Los Angeles Bureau of Engineering, 2012. Sewer Generation Factors Chart, dated 6 April 2012.
6. Additional landscape area provided by ICF via email on 11 October 2022.

5 MPWD WATER DEMAND

☑ ***CWC § 10910 (c)***

(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).

(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

5.1 Review of Project's Inclusion in 2020 UWMP Growth Projections

Consistent with the UWMP Act (Water Code §10610-10657), the District's 2020 UWMP presents estimates of projected future water demand in five year increments, between the years 2025 and 2045 (MPWD, 2021). While the 2020 UWMP water demand projections account for growth within the MPWD, the proposed Project is not explicitly included in these projections, and it was determined by the District that the projected demand associated with the proposed Project was not explicitly accounted for in the projected demand growth anticipated by the 2020 UWMP. Accordingly, this WSA provides a discussion of whether MPWD's total projected water supplies available during normal, single dry, and multiple dry water years during a 25-year projection will meet the projected water demand associated with the proposed Project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

The 2020 UWMP[6] based its commercial and industrial sector growth projections on its Demand Management Decision Support System Model (DSS Model), which examines current water use trends, along with land use forecasts, projections of passive conservation savings, information about potential impacts from climate change, and other factors relevant to sector-specific water use (MPWD, 2021). The DSS Model projects a net increase of 55 commercial and industrial accounts by 2025 and 139 accounts by 2045, compared to 2020, and a projected net increase of 43 MGY of commercial and industrial sector demand by 2025 and 46 MGY by 2045. These projections include assumptions that future water uses will be similar to those for existing accounts within the District, and reflect new commercial and industrial accounts using 0.47 MGY/account on average. As detailed in Section 4, the proposed Project is expected to result in an incremental net increase in demand of 35 MGY by 2040, or 76% of the projected

[6] Normal year water projections by sector for the District are presented in Table 4-2 of the District's 2020 UWMP.

incremental new demand through the 2045 planning horizon. Based on this, neither the specific Project was envisioned in the 2020 UWMP projections, nor the shift to such high intensity water uses for commercial or industrial accounts.

Therefore, for the purposes of this WSA, it is conservatively assumed that no portion of the water demand associated with the proposed Project is included in the projected District water demands.

5.2 Current and Historical Water Demand Within the MPWD Service Area

Historical water demand within the MPWD service area from 2000 through 2021 is summarized in **Table 2**. The largest proportion of water demand within the MPWD service area is from the single-family sector, which represented 56% of demand in 2020. The remainder of the demand was split between multi-family residential (17%), commercial (10%), landscape irrigation (i.e., dedicated irrigation accounts; 7%), institutional/governmental (3%), industrial (3%), and distribution system losses (4%; MPWD, 2021).

As shown in **Table 2**, water use within the MPWD service area has significantly declined since 2000. Water use in this time period was highest from 2000-2004, at an average of 1,279 MGY, and steadily decreased in the following decade. In 2015 and 2016, water use reached its lowest (i.e., corresponding with drought and mandatory state-wide water use restrictions and water conservation targets) at an average of 835 MGY. Following the drought, water use from 2017-2021 remained fairly consistent, at an average of 922 MGY. However, water use in 2021 was slightly lower than previous years, again corresponding with drought conditions. Based on the data summarized in **Table 2**, the total water use averaged 907 MG from 2016 through 2021.

5.3 MPWD Water Demand Projections

Projected water demands for MPWD are documented in the MPWD 2020 UWMP (2020 UWMP) and presented in **Table 3** in 5-year increments. While demand projections for all BAWSCA member agencies were updated in April 2022 as part of the regional demand and conservation projections data collection and analysis update performed by Maddaus Water Management (Maddaus, 2022), no changes were made to MPWD's demand projections from those presented in the 2020 UWMP, and thus the demand projections presented in this WSA reflect the most recent demand projections for the District.

Taking into account historical water use, expected population increase and other growth, climatic variability, the effects of passive and active water conservation measures, and other assumptions, water demand within MPWD inclusive of the three proposed development projects (Section 5.4) is projected to increase to 1,158 MG by 2045, an increase of 28% over the 2016-2021 average, and just 82% of the District's contractual ISG (i.e., 3.891 MGD or 1,420 MGY).

5.4 Planned Development Projects within MPWD

As discussed above, while the 2020 UWMP water demand projections account for growth within the District's service area, the proposed Project is not explicitly included in these projections and represents a higher intensity of water use than anticipated in the growth envisioned in the 2020

UWMP. In addition to the proposed Project, MPWD has received requests to prepare WSAs for the (1) 642 Quarry Road and (2) 601 Harbor Boulevard development projects, both of which are redevelopment projects, with the construction of new office and/or life science R&D uses. Based on information provided to the District to date, these projects are anticipated to include:

- **642 Quarry Road, City of San Carlos** – redevelopment of a 4.7-acre site currently developed with a two-story 104,391 sq ft building. The new development would consist of two commercial life science buildings with an associated parking garage structure, specifically one six-story 215,022 sq ft building, one six-story 192,650 sq ft building, a 103,023 sq ft parking garage structure, and 34,763 sq ft of landscape area.
- **601 Harbor Boulevard, City of Belmont** – redevelopment of a 3.5-acre site currently developed with six existing commercial/industrial buildings. The new development would include construction of a 381,622 sq ft, four-story life sciences building, including three levels of below-grade parking.

These two projects total up to 789,294 sq ft life science space, plus associated parking and landscaping, and as like the Proposed Project (Section 5.1) were also not explicitly included in the Districts' 2020 UWMP demand projections, nor representative of the type of growth envisioned in the 2020 UWMP. WSAs are being prepared separately for each of these projects, which will include estimates of water demand specific to the projects. For purposes of looking at the cumulative impact on water demand of all three projects, using a demand factor of 0.18 GPD/sq ft for life science R&D use (Section 4.1), which is expected to be the largest demand for these projects, the demand for the 642 Quarry Road and 601 Harbor Boulevard projects is estimated to be 53 MGY.

5.5 Total Projected MPWD District Water Demand (Inclusive of the Proposed Project)

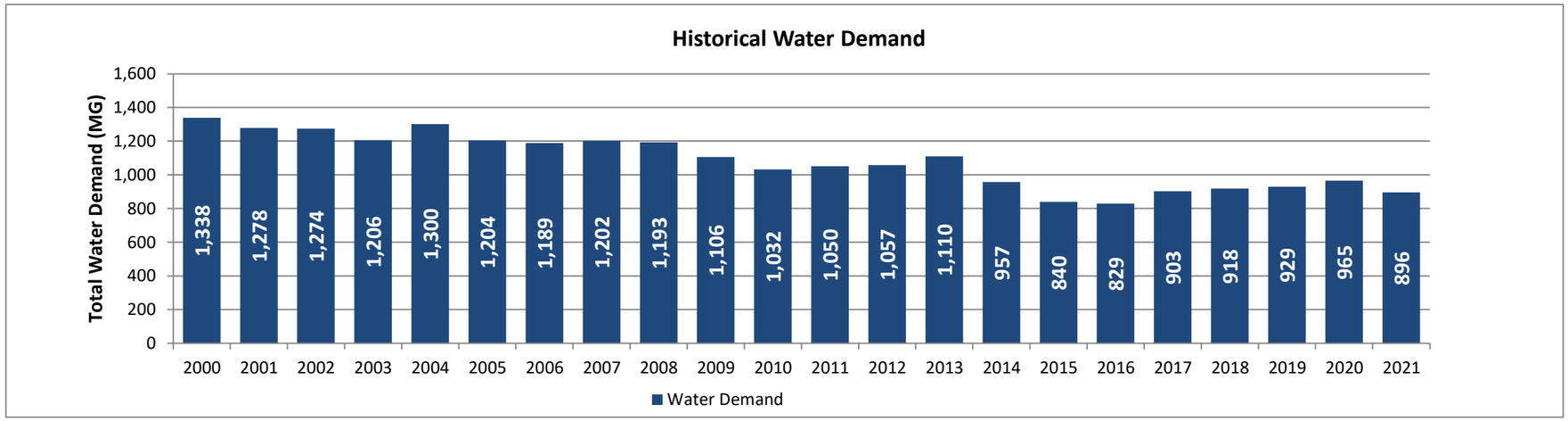
Table 3 shows the projected water demands for MPWD inclusive of the estimated proposed Project water demands, as well as the proposed demands for the two new development projects discussed above.

Table 2

Historical Water Demand for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Water Demand	Mid-Peninsula Water District Historical Annual Water Demand (MG) (a)																					
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Water Demand	1,338	1,278	1,274	1,206	1,300	1,204	1,189	1,202	1,193	1,106	1,032	1,050	1,057	1,110	957	840	829	903	918	929	965	896
Total Water Demand	**1,338**	**1,278**	**1,274**	**1,206**	**1,300**	**1,204**	**1,189**	**1,202**	**1,193**	**1,106**	**1,032**	**1,050**	**1,057**	**1,110**	**957**	**840**	**829**	**903**	**918**	**929**	**965**	**896**



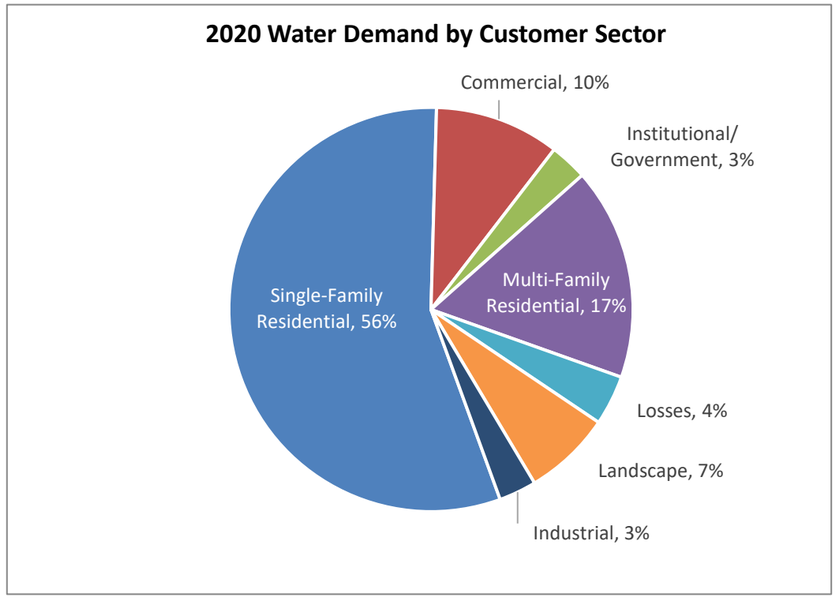


Table 2

Historical Water Demand for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Abbreviations:

"MG" = Million Gallons

Notes:

(a) Historical water demands for per Reference 1. 2020 water use by customer sector per Reference 2.

References:

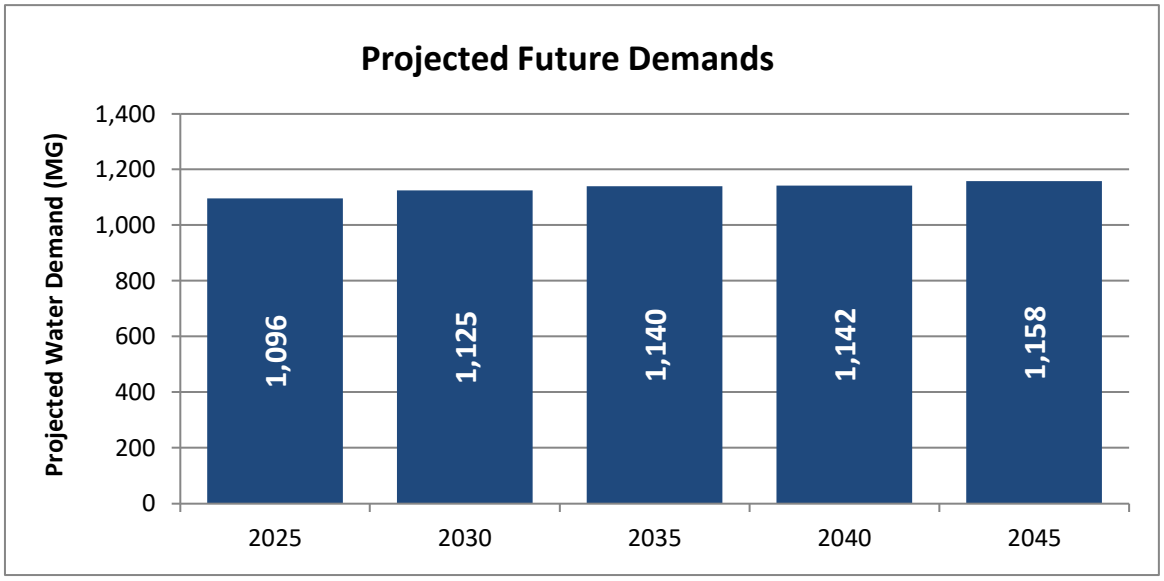
1. Historical water demand data provided by the District via email on 25 August 2022.
2. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

Table 3

Projected Future Water Demand for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Water Demand (a)	Projected Annual Water Demand (MG)				
	2025	2030	2035	2040	2045
MPWD District 2020 UWMP (a)					
Single Family	553	542	546	552	559
Multi-Family	147	143	143	143	144
Commercial	137	146	153	151	150
Industrial	35	32	29	27	25
Institutional/Governmental	34	34	36	37	38
Landscape	76	79	84	84	90
Losses	61	61	61	60	64
1301 Shoreway Road Project (b)	0	35	35	35	35
Other Proposed Development Projects (c)	53	53	53	53	53
Total Water Demand (d)	1,096	1,125	1,140	1,142	1,158



Abbreviations:

"MG" = Million Gallons

"MPWD" = Mid-Peninsula Water District

"UWMP" = Urban Water Management Plan

Notes:

(a) Water demand projections for Mid-Peninsula are from the 2020 UWMP, and are presented per Table 4-2 of Reference 1.

(b) Project completion is not anticipated to occur until 2026. Therefore, Project demands for 2025 are shown as zero.

(c) The water demand shown in the table is an estimate of the combined demand for the 642 Quarry Road and 601 Harbor Boulevard projects. Specific project water demands are described within the projects' respective Water Supply Assessments.

(d) The total water demand is the sum of total water use and distribution system losses.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

6 MPWD WATER SUPPLY

This section identifies MPWD's water supplies and discusses the vulnerability of the various supplies to drought and other factors affecting water supply reliability. MPWD utilizes imported surface water supply purchased from the SFPUC, which is expected to constitute the sole water supply for the proposed Project.

6.1 Identification of Water Supply Rights

☑ ***CWC § 10910 (d)(1)***

The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

Pursuant to Water Code §10910(d)(1), a WSA is required to include identification of all water supply entitlements, water rights, and water service contracts relevant to the identified water supply for the proposed Project. In accordance with these requirements, this WSA includes a summary of MPWD's water supply sources and the agreements between MPWD and its wholesale supplier, the SFPUC, and other parties. The primary sources of this information are the 2020 UWMP (MPWD, 2021) and information provided by BAWSCA and SFPUC in support of the development of the SFPUC customer agencies' 2020 UWMPs.

6.1.1 SFPUC Regional Water System

6.1.1.1 RWS Supply Sources and Allocation

The MPWD purchases 100% of its potable water on a wholesale basis from the City and County of San Francisco's RWS operated by the SFPUC.

The RWS supply originates predominantly from the Sierra Nevada but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties. Approximately 85% of the RWS supply is from the Tuolumne River via the Hetch-Hetchy Reservoir and aqueducts. The remaining 15% is derived from local watersheds and the San Antonio, Calaveras, Crystal Springs, Pilarcitos, and San Andreas Reservoirs.

The business relationship between the City and County of San Francisco and its Wholesale Customers (including MPWD) is largely defined by the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County (Agreement) entered into in July 2009. The Agreement, which has a 25-year term, addresses water supply availability for the RWS as well as the methodology used by the SFPUC in setting wholesale water rates. This Agreement supersedes an earlier 25-year agreement signed in 1984 and was most recently amended in 2018 (SFPUC, 2018). The amendments included extending the deadline for SFPUC to decide whether to make the cities of San Jose and Santa Clara permanent customers, a revision to the drought allocation formula, and

a deadline extension for completion of its Water Supply Improvement Program (WSIP), among other things. A copy of this Agreement (without signatures) is included in **Appendix B**.

The Agreement provides a 184 MGD Supply Assurance to the SFPUC's 24 permanent Wholesale Customers collectively (MPWD, 2021). The Supply Assurance is subject to reduction during periods of water shortage due to drought, emergencies, or other scenarios resulting in a water shortage. Each permanent wholesale customer's share of the 184 MGD is referred to as their ISG[7]. Although the Agreement expires in 2034, the Supply Assurance and ISGs continue in perpetuity as both are subject to separate binding water allocation agreements described above and would continue beyond the term of the Agreement. At expiration of the Agreement, it is likely that a new agreement will be entered into as was done at the termination of the prior 1984 agreement.

MPWD's contractual ISG allocation from SFPUC is 3.891 MGD for an average of 1,420.22 MG per year (MPWD, 2021).

Information regarding the Agreement and subsequent amendments was provided by BAWSCA in coordination with SFPUC in support of 2020 UWMP development and is provided verbatim below.

> *In the 2009 Water Supply Agreement, the SFPUC committed to make three decisions before 2018 that affect water supply development:*
>
> - *Whether or not to make the cities of San Jose and Santa Clara permanent customers,*
> - *Whether or not to supply the additional unmet supply needs of the Wholesale Customers beyond 2018, and*
> - *Whether or not to increase the wholesale customer Supply Assurance above 184 mgd.*
>
> *Events since 2009 made it difficult for the SFPUC to conduct the necessary water supply planning and The California Environmental Quality Act (CEQA) analysis required to make these three decisions before 2018. Therefore, in the 2018 Amended and Restated Water Supply Agreement, the decisions were deferred for 10 years to 2028.*
>
> *Additionally, there have been recent changes to instream flow requirements and customer demand projections that have affected water supply planning beyond 2018. As a result, the SFPUC has established an Alternative Water Supply Planning program to evaluate several regional and local water supply options. Through this program, the SFPUC will conduct feasibility studies and develop an Alternative Water Supply Plan by July 2023 to support the continued development of water supplies to meet future needs.*

MPWD's current and projected purchase quantities are approximately equal to 965 MG in 2020 and 1,158 MG in 2045, respectively (MPWD, 2021; see **Table 3** and **Table 4**). Both current and projected quantities are less than MPWD's contractual ISG of 1,420 MGY, and less than historic use within the District (see **Table 2**).

[7] Two customers (also BAWSCA agencies) do not have ISGs.

6.1.1.2 RWS Supply Reliability

The RWS has historically met demand in its service area in all year types. Factors that will affect future reliability of the RWS are discussed below. Detailed information regarding factors that impact the SFPUC RWS supply reliability are provided in the 2020 UWMP (MPWD, 2021).

The water available to SFPUC's Retail and Wholesale Customers from the RWS is constrained by hydrology, physical facilities, and the institutional parameters that allocate the water supply of the Tuolumne River (SFPUC, 2021a). In addition, statewide regulations and other factors can impact the system reliability. For example, the implementation of the Bay-Delta Plan Amendment could impact the reliability of the RWS supplies in the future.

If the current Bay-Delta Plan Amendment (July 2018) is implemented, the proposed unimpaired flow volumes would significantly reduce water supply available through the RWS during future drought conditions. MPWD would be required to reduce its water use by as much as 54% during multi-year droughts (MPWD, 2021).

In support of 2020 UWMP development by its Wholesale Customers, SFPUC provided a detailed discussion of the factors contributing to the significant uncertainties surrounding the Bay-Delta Plan Amendment. This discussion is excerpted below:

> *In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 30-50% of the "unimpaired flow"[8] on the three tributaries from February through June in every year type. In SFPUC modeling of the new flow standard, it is assumed that the required release is 40% of unimpaired flow.*
>
> *If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet the projected water demands presented in this Urban Water Management Plan (UWMP) in normal years but would experience supply shortages in single dry years or multiple dry years. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry years and multiple dry years. The SFPUC has initiated an Alternative Water Supply Planning Program (AWSP) to ensure that San Francisco can meet its Retail and Wholesale Customer water needs, address projected dry years shortages, and limit rationing to a maximum 20 percent system-wide in accordance with adopted SFPUC policies. This program is in early planning stages and is intended to meet future water supply challenges and vulnerabilities such as environmental flow needs and other regulatory changes; earthquakes, disasters, and emergencies; increases in population and employment; and*

[8] "Unimpaired flow represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds." (Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Dec. 12, 2018) p.17, fn. 14, available at: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf.)

climate change. As the region faces future challenges – both known and unknown – the SFPUC is considering this suite of diverse non-traditional supplies and leveraging regional partnerships to meet Retail and Wholesale Customer needs through 2045.

The SWRCB has stated that it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, assuming all required approvals are obtained by that time. But implementation of the Plan Amendment is uncertain for multiple reasons.

First, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal courts, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including a legal challenge filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation. This litigation is in the early stages and there have been no dispositive court rulings as of this date.

Second, the Bay-Delta Plan Amendment is not self-implementing and does not automatically allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders.

…

Third, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB ("March 1st Proposed Voluntary Agreement"). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support the SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration.[9,10]

There are several sources of uncertainty regarding RWS dry year water supply projections. The key sources of uncertainty include:

- *Benefits of the AWSP are not accounted for in current supply projections.* As discussed above, SFPUC is exploring options to increase its supplies through the AWSP. Implementation of feasible projects developed under the AWSP is not yet reflected in the supply reliability scenarios presented herein and is anticipated to reduce the projected RWS supply shortfalls.

[9] California Natural Resources Agency, "Voluntary Agreements to Improve Habitat and Flow in the Delta and its Watersheds," available at https://files.resources.ca.gov/voluntary-agreements/.

[10] As of 29 October 2021, state regulators announced that the Voluntary Agreement negotiations process has ceased, with no agreement reached. San Francisco Chronicle, "California Drought: Key Talks Over Water Use Break Down, SF May Face Tighter Regulation," available at https://www.sfchronicle.com/sf/article/California-drought-Key-talks-over-water-use-16576132.php

- *Methodology for Tier One and Tier Two Wholesale drought allocations have not been established for wholesale shortages greater than 20%.* As discussed further in Section 6.1.1.4, the current Tier One and Tier Two Plans are not designed for RWS supply shortages of greater than 20%. For UWMP planning purposes per BAWSCA guidance, the Tier One Wholesale share for a 16% to 20% supply reduction (62.5%) has been applied for reductions greater than 20% and an equal percent reduction has been applied across all Wholesale Customers. BAWSCA member agencies have not formally agreed to adopt this shortage allocation methodology and are in discussions about jointly developing an alternative allocation method that would consider additional equity factors if SFPUC is unable to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.
- *RWS demands are subject to change.* The RWS supply availability is dependent upon the collective system demands. The supply scenarios are based on the total projected Wholesale Customer purchases provided by BAWSCA to SFPUC in January 2021. Many BAWSCA agencies have refined their projected demands during the UWMP process after these estimates were provided to SFPUC, and BAWSCA lead a demand projection update that was completed in 2022 that captures some of these changes (Maddaus, 2022). Furthermore, the RWS demand projections are subject to change in the future based upon future housing needs, increased conservation, and development of additional local supplies, among other factors.
- *Frequency and duration of cutbacks are also uncertain.* While the projected shortfalls presented in the UWMP appear severe with implementation of the Bay-Delta Plan Amendment, the actual frequency and duration of such shortfalls are uncertain. Based on the Hetch Hetchy and Local Simulation Model (HHLSM) simulations provided by BAWSCA for the Bay-Delta Plan Amendment scenario, rationing is anticipated to be required 20% of years for base year 2025 through 2035, 23% of all years for base year 2040, and 25% of years for base year 2045. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls.

The 2020 UWMP notes that the implementation of the Bay-Delta Plan Amendment was under negotiation, through Voluntary Settlement Agreement negotiations between SFPUC, in partnership with other key stakeholders and the SWRCB. However, in October 2021, state regulators announced that these negotiations ceased.[6] In March 2022, state regulators entered into a Memorandum of Understanding with twelve entities, advancing the process of reaching voluntary settlement agreements.[11] It is noted that SFPUC was not among the signatories of this Memorandum of Understanding and has not reached an agreement with state regulators.

Further, implementation of the Bay-Delta Plan Amendment is still pending. The SWRCB has yet to approve an implementation policy for water supply cutbacks associated with the Bay-Delta Plan Amendment, particularly during droughts. Further, there are currently over a dozen active

[11] Memorandum of Understanding Advancing a Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan, and Other Related Actions, dated 29 March 2022: https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf. It is noted that SFPUC is not a party to this Memorandum of Understanding.

lawsuits challenging the SWRCB's adoption of the Bay-Delta Plan Amendment. This litigation is in the early stages and there have been no dispositive court rulings as of this date. This is a dynamic situation and the projected drought cutback allocations may need to be revised before the next (i.e., 2025) UWMP depending on court decisions and/or an adopted implementation policy. The Tuolumne River Voluntary Agreement (TRVA) has significant technical support to improve the Tuolumne River ecosystem and, in MPWD's view, is a preferable path forward that protects water supplies for the RWS and could avoid protracted litigation. MPWD has and will continue to encourage SFPUC to prioritize its commitment to the TRVA negotiations.

Numerous uncertainties remain surrounding the implementation of the Bay-Delta Plan Amendment. The water supply projections presented in the 2020 UWMP represent a worst-case scenario in which the Bay-Delta Plan Amendment is implemented as written and do not account for implementation of SFPUC's AWSP. Additional information regarding water service reliability and drought risks can be found in Chapter 7 of MPWD's 2020 UWMP.

6.1.1.3 Efforts to Increase RWS Supply Reliability

On 2 June 2021, the SFPUC released a memorandum that outlines numerous options the SFPUC is pursuing to improve the supply reliability projected in its 2020 UWMP and meet its Level of Service (LOS) Goals. This memorandum is included as **Appendix C**. Furthermore, the SFPUC's WSIP and its Water Management Action Plan (Water MAP) articulate the SFPUC's goals and objectives to improve the delivery reliability of the RWS, including water supply reliability.

The WSIP program goal is to improve the SFPUC's ability to reliably meet its Retail and Wholesale Customers water needs in non-drought and drought periods. In 2008, the SFPUC adopted LOS Goals and Objectives in conjunction with the adoption of the WSIP. The SFPUC's LOS Goals and Objectives include: (a) meeting average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years for system demands through 2028; (b) meeting dry-year delivery needs through 2028 while limiting rationing to a maximum 20% system-wide reduction in water service during extended droughts; (c) diversifying water supply options during non-drought and drought periods; and (d) improving use of new water sources and drought management, including groundwater, recycled water, conservation, and transfers (SFPUC, 2018). The anticipated completion date of the overall WSIP is May 2023. As of 31 December 2021, WSIP local projects are 100% complete and regional projects are 98.9% complete (SFPUC, 2021b).

The SFPUC also developed a Water MAP in 2016 to provide the information necessary to begin developing a water supply program for the 2019 to 2040 planning horizon. The SFPUC intends that the Water MAP will guide its efforts to continue to meet its commitments and responsibilities to its customers, including the BAWSCA member agencies (BAWSCA, 2017). The Water MAP was developed with consideration of the 2018 SFPUC's supply decisions (now postponed to 2028; as discussed above), as well as recent changes to instream flow requirements and customer demand projections. The Water MAP has identified water supply needs on the RWS by 2040 and prioritized those needs in the following order:

1. Meeting existing obligations to existing permanent customers (3.5 MGD).

2. New supply in order to make the City of San Jose a permanent customer of the SFPUC (Up to 9.5 MGD).
3. New supply in order to make the City of Santa Clara a permanent customer of the SFPUC (Up to 5.0 MGD).
4. New supply to meet the City of East Palo Alto's projected needs above its ISG (Up to 1.5 MGD).

Through implementation of its Long-Term Water Supply Reliability Strategy (LTWSRS), BAWSCA is also actively evaluating opportunities to increase the supply reliability of the RWS (BAWSCA, 2015). The strategy includes short- and long-term implementation plans including water supply management projects that could be implemented to meet identified needs. Potential projects include recycled water projects, desalination projects, water transfer projects, and local capture and reuse projects. In addition, the District is actively participating in the ongoing 2022 Water Supply Reliability Roundtable discussions hosted by BAWSCA to discuss regional water supply reliability and opportunities to pursue the development of additional imported and local water supplies (https://bawsca.org/water/reliability/Roundtable).

In 2016, BAWSCA, California Water Service (Cal Water), SFPUC, the City of Redwood City, the City of San Mateo, and Silicon Valley Clean Water (SVCW; collectively, the "PREP parties") initiated the development of a Potable Reuse Exploratory Plan (PREP) to study potable reuse as a source of alternative water supply in the Mid-Peninsula region. After three phases of preliminary screening and evaluations, the PREP parties published a Title XVI Feasibility Study and identified a preferred project and path forward for implementing potable reuse in the Mid-Peninsula region (Kennedy Jenks, 2022). The preferred project would blend 6 MGD of purified water from local wastewater facilities with runoff and streamflow diversion at Crystal Springs Reservoir (Phase 1) and deliver an additional 6 MGD (total of 12 MGD) of purified water directly to local conveyance systems in Redwood City, San Carlos, and/or MPWD (Phase 2). The District is engaged in the planning process, including entering into a Memorandum of Agreement with the PREP parties and committing funds for the development of a basis of design report, and would be a recipient of a portion of the future supply. The San Francisco-Peninsula Regional Purewater (SPRP) project has been identified and is in the early planning phase. Completion of Phase 1 and Phase 2 of the SPRP is anticipated to occur in 2034 and 2037, respectively (Kennedy Jenks, 2022). The SPRP project is estimated to cost $700-750 million in capital costs, and $30 million in annual operations and maintenance (Kennedy Jenks, 2022). Upon completion, this project would provide up to 12 MGD or 4,380 MGY of additional supply to the region that can be used during drought years.

6.1.1.4 RWS Water Shortage Allocations

The Agreement includes a Water Shortage Allocation Plan (WSAP) that allocates water from the RWS to Retail and Wholesale Customers during system-wide shortages of 20% or less. As described in detail in the 2020 UWMP, the WSAP has two components:

1. The Tier One Plan, which allocates water between San Francisco and the Wholesale Customers collectively; and
2. The Tier Two Plan, which allocates the collective wholesale customer share among the Wholesale Customers.

It is noted that the dry year supply reliability projections provided herein (Section 6.2) are obtained from the 2020 UWMP based on application of BAWSCA-provided revised methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20%.[12] However, BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20%. While MPWD is working independently and with the other BAWSCA agencies to identify regional mitigation measures to improve reliability for regional and local water supplies and meet its customers' water needs, MPWD expects that SFPUC's LOS Goals and Objectives will be met and that it can rely on its contract with SFPUC as written.

6.2 Total Potable Supply in Normal, Single Dry, and Multiple Dry Years

As described above, the projected potable water supply sources for MPWD are solely supplied by water purchased from the SFPUC RWS. Historical supplies from 2000 through 2021 are shown on **Table 4**, including the District's historical purchases from SFPUC, and the District's contractual ISG of 1,420.22 MGY. Notably, from 2000-2002, the District used over 90% of its contractual ISG. However, water use has steadily declined over the past 20 years due to the District's conservation efforts, and in recent years (i.e., 2014-2021) the District has consistently used less than 70% of its contractual ISG, despite an increasing population within the MPWD service area. A comparison of historical and projected normal year supplies (i.e., SFPUC purchases) and demands through 2045 are shown in **Table 5**. **Table 6** shows the projected demand for MPWD, with the inclusion of the proposed Project, and the anticipated SFPUC purchases through 2045 under normal hydrologic conditions. The current and planned future water supply within MPWD for normal hydrologic years is expected to meet all projected demands, which are estimated to be 1,158 MGY by 2045 and below the District's ISG of 1,420.22 MGY.

The anticipated dry-year supply estimates presented below are based on the delivery estimates provided by MPWD as part of the 2020 UWMP (MPWD, 2021).[11] MPWD's 2020 UWMP evaluates dry year supply availability under two supply scenarios provided by BAWSCA and SFPUC: (1) assuming implementation of the Bay-Delta Plan Amendment, and (2) without implementation of the Bay-Delta Plan Amendment. Under the scenario without implementation of the Bay-Delta Plan Amendment, no supply shortfalls would be anticipated for the District through 2040, and a shortfall of 10% would be anticipated in the fourth and fifth year of a drought in 2045[13]. As discussed above, because the Bay-Delta Plan Amendment has been adopted and SFPUC and state regulators have not reached a

[12] The projected SFPUC RWS supplies presented in this WSA are based on dry year allocation projections included in the 2020 UWMP based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA, assuming the implementation of the Bay-Delta Plan; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC.

[13] As discussed in Section 5.4, the 2020 UWMP does not include the demands of the three proposed development projects. Including projecting demands from the three proposed development projects, this WSA anticipates shortfalls ranging from 7% to 10% in single dry years from 2025-2045 without implementation of the Bay-Delta Plan Amendment (see **Table 7a**).

settlement agreement, dry year conditions both with and without Bay-Delta Plan Amendment implementation, as evaluated in the 2020 UWMP, are presented in **Tables 7a, 7b, 8a** and **8b** herein, and considered below.

As discussed in Section 6.1.1.4, BAWSCA provided a revised methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20% in support of 2020 UWMP development, given the projected dry year shortfalls associated with Bay-Delta Plan Amendment implementation. However, BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20%.

During single dry years, without Bay-Delta Plan Amendment implementation, the annual supply within the MPWD service area will be 1,069 MG by 2045, per the 2020 UWMP. Supply shortfalls relative to total demands during single dry years, inclusive of the three proposed development projects discussed above, are estimated to range between 7% in 2025 and 10% in 2045 (see **Table 7a**). However, with Bay-Delta Plan Amendment implementation, the annual supply within the MPWD service area will be reduced to 580 MG by 2045. Supply shortfalls during single dry years are estimated to range between 40% in 2025 and 51% in 2045 (see **Table 7b**).

During multiple dry years, the 2020 UWMP estimates that without Bay-Delta Plan Amendment implementation, the annual supply within the MPWD service area will be reduced to 1,044 MG in 2025 for five years of a drought. In 2045, the UWMP estimates that annual supply will increase to 1,069 MG for the first, second and third years of drought, and reduce to 960 MG in the fourth and fifth years of drought. Supply shortfalls are estimated to range between 7% for a five-year drought in 2025 to 19% during the fourth and fifth years of a drought in 2045 (see **Table 8a**). With implementation of the Bay-Delta Plan Amendment, the 2020 UWMP estimates that the annual supply within the MPWD service area will be reduced to 668 MG in 2025 during the first year of a drought, and 573 MG in 2025 in the second, third, fourth, and fifth years of drought. The 2020 UWMP further estimates that in 2045, annual supply will be reduced to 580 MG during the first three years of a drought, and 496 MG in fourth and fifth years of drought. Supply shortfalls relative to total demands are estimated to range between 40% during the first year of a drought in 2025 to 58% during the fourth and fifth years of a drought in 2045 (see **Table 8b**).

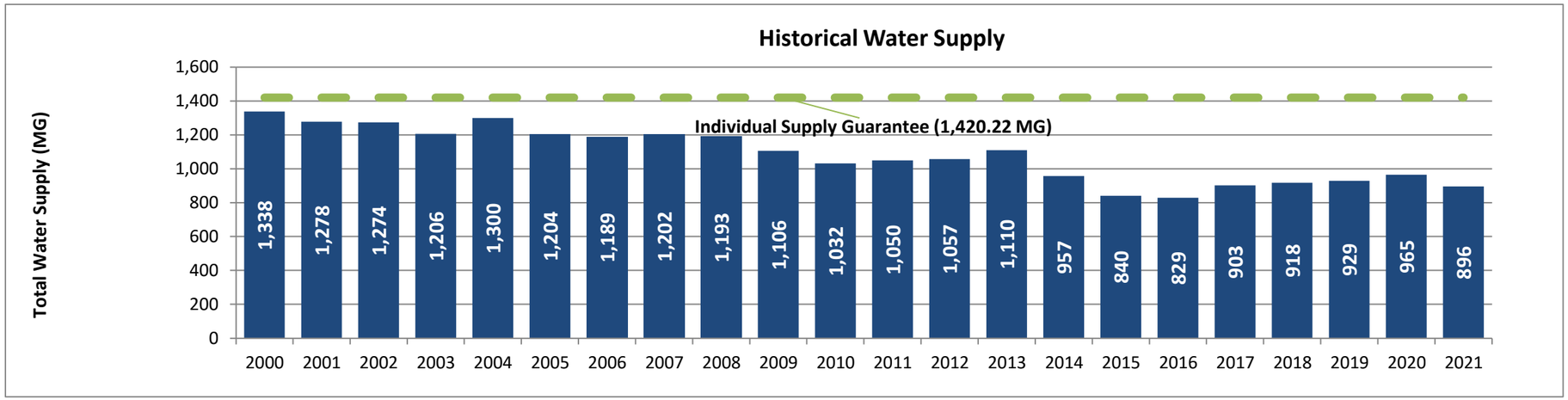
If the "worst-case" supply scenario described under Section 6.1.1.2 in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for the implementation of actions identified as part of SFPUC's AWSP, or BAWSCA's LTWSRS, shortfalls of up to 58% are projected during drought years. However, it should be noted that these shortfalls are significant, and will occur irrespective of the proposed demands of the three new development projects. To address this issue, under Rule 14.1, MPWD plans to enact its WSCP, which includes Mandatory Staged Restrictions of Water Use. The WSCP systematically identifies ways in which MPWD can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages and address water demand reductions over 50%. MPWD's WSCP was revised as part of the 2020 UWMP update process, and includes detailed information about how drought risks are evaluated by MPWD on an annual basis to determine the potential need for reductions.

Table 4

Historical Water Supply for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Water Supply Source	Historical Water Supply (MG) (a)																					
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Purchased Water from SFPUC	1,338	1,278	1,274	1,206	1,300	1,204	1,189	1,202	1,193	1,106	1,032	1,050	1,057	1,110	957	840	829	903	918	929	965	896
Total Water Supply	**1,338**	**1,278**	**1,274**	**1,206**	**1,300**	**1,204**	**1,189**	**1,202**	**1,193**	**1,106**	**1,032**	**1,050**	**1,057**	**1,110**	**957**	**840**	**829**	**903**	**918**	**929**	**965**	**896**



Abbreviations:

"MG" = Million Gallons "SFPUC" = San Francisco Public Utilities Commission

Notes:

(a) Historical water supply for per Reference 1.

References:

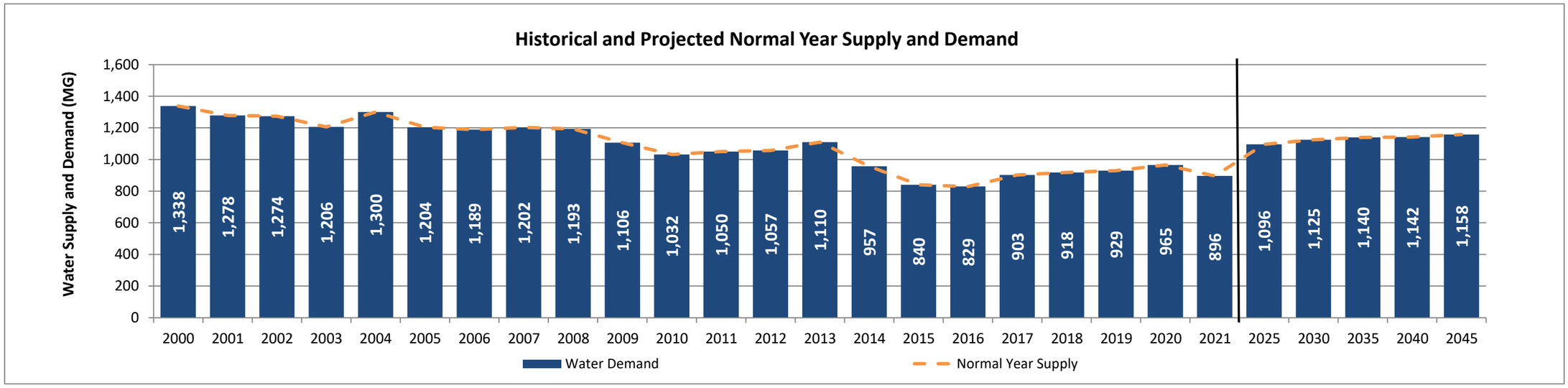
1. Historical water supply data provided by the District via email on 25 August 2022.

Table 5

Historical and Projected Supply and Demand for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Water Supply and Demand	Historical Supply and Demand (MG) (a)																					Projected Supply and Demand (MG) (b)				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2025	2030	2035	2040	2045
Normal Year Supply	1,338	1,278	1,274	1,206	1,300	1,204	1,189	1,202	1,193	1,106	1,032	1,050	1,057	1,110	957	840	829	903	918	929	965	896	1,096	1,125	1,140	1,142	1,158
Water Demand	1,338	1,278	1,274	1,206	1,300	1,204	1,189	1,202	1,193	1,106	1,032	1,050	1,057	1,110	957	840	829	903	918	929	965	896	1,096	1,125	1,140	1,142	1,158
Supply Minus Demand	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***



Abbreviations:

"ISG" = Individual Supply Guarantee "MG" = Million Gallons "MGY" = Million Gallons Per Year

Notes:

(a) Historical supply and demand per Reference 1.

(b) Projected supply and demand per Table 7-3 in Reference 2, plus the projected demands of the three proposed development projects. The District's contractual ISG of 1,420 MGY is anticipated to provide sufficient supply in normal years through 2045.

References:

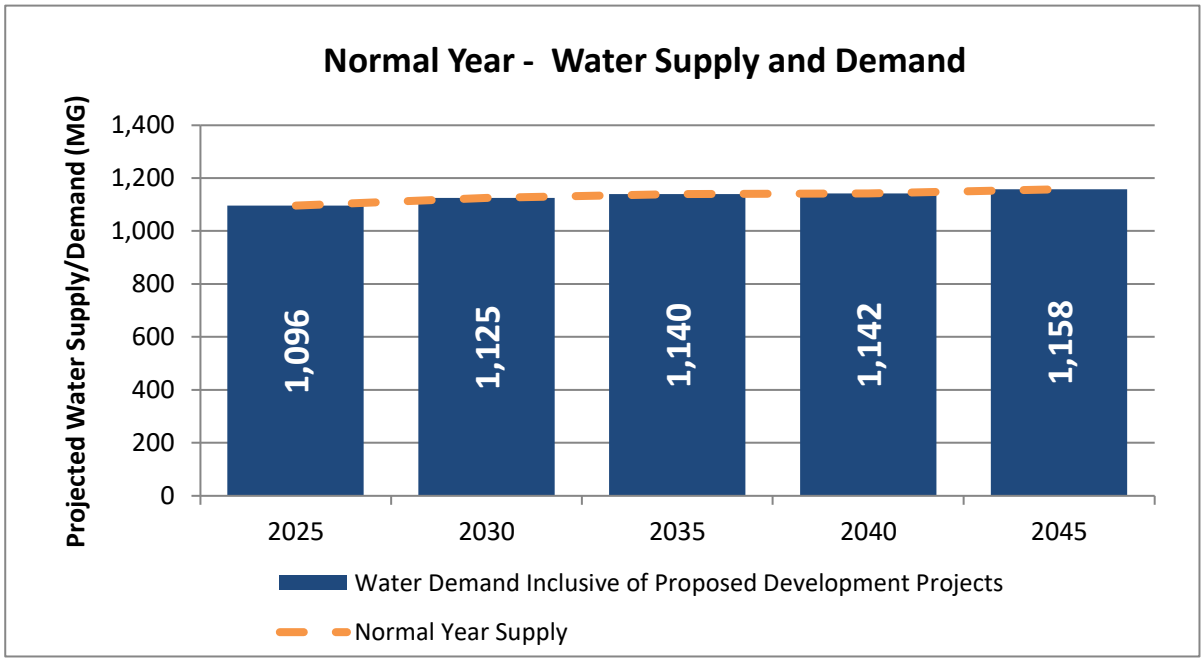
1. Historical water supply and demand data provided by the District via email on 25 August 2022.
2. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

Table 6

Projected Normal Year Water Supply and Demand for Mid-Peninsula Water District

1301 Shoreway Road Project, Belmont, California

Water Supply and Demand (a)	Projected Normal Year Supply and Demand (MG)				
	2025	**2030**	**2035**	**2040**	**2045**
Normal Year Supply	1,096	1,125	1,140	1,142	1,158
Water Demand Inclusive of Proposed Development Projects	1,096	1,125	1,140	1,142	1,158
Supply Shortfall (% demand) (b)	***None***	***None***	***None***	***None***	***None***



Abbreviations:

"ISG" = Individual Supply Guarantee
"MG" = Million Gallons
"MGY" = Million Gallons Per Year
"MPWD" = Mid-Peninsula Water District
"RWS" = Regional Water System
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan

Notes:

(a) Projected supply and demand per Table 7-3 in Reference 1, plus the projected demands of the three proposed development projects. The District's contractual ISG of 1,420 MGY is anticipated to provide sufficient supply in normal years through 2045.

(b) Modeling completed in support of SFPUC's 2020 UWMP indicates that the SFPUC RWS will meet all demands during normal hydrologic years, including those projected in MPWD's 2020 UWMP.

References:

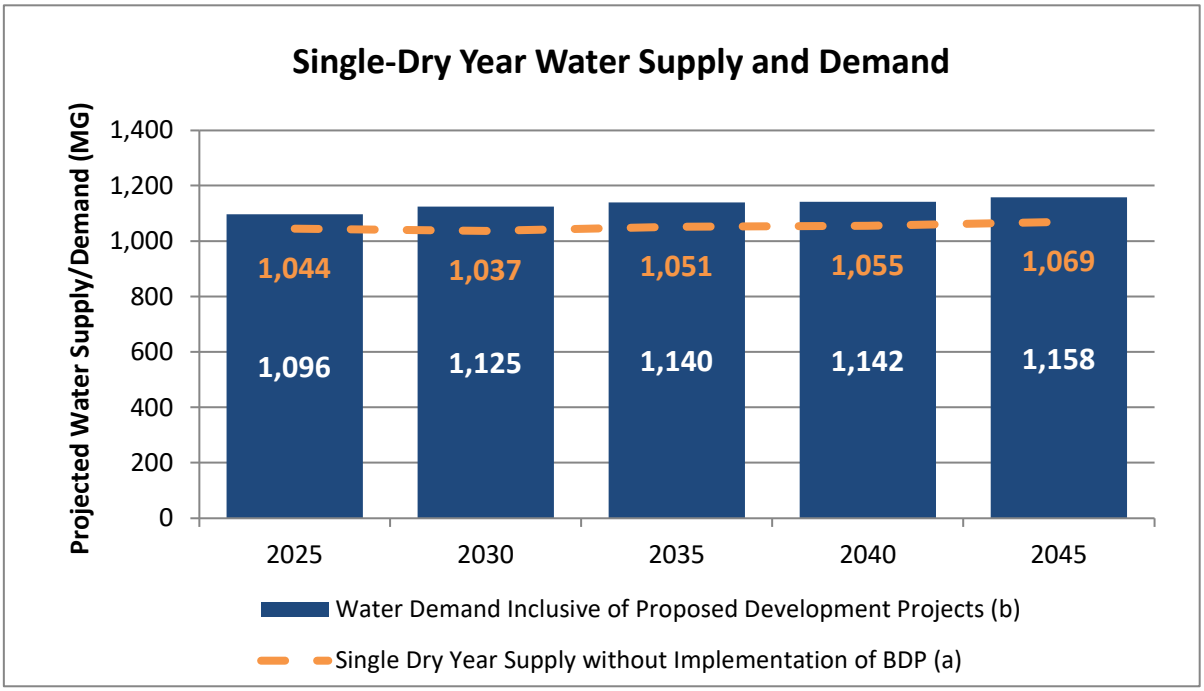
1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

Table 7a

Comparison of Single Dry Year Water Supply and Demand for Mid-Peninsula Water District Without Bay-Delta Plan Amendment Implementation

1301 Shoreway Road Project, Belmont, California

Water Supply and Demand (a)	Projected Dry Year Supply and Demand (MG)				
	2025	2030	2035	2040	2045
Single Dry Year Supply without Implementation of BDP (a)	1,044	1,037	1,051	1,055	1,069
Water Demand Inclusive of Proposed Development Projects (b)	1,096	1,125	1,140	1,142	1,158
Supply Shortfall (% demand)	***7%***	***10%***	***10%***	***10%***	***10%***



Abbreviations:

"BDP" = Bay-Delta Plan Amendment
"MG" = Million Gallons
"MPWD" = Mid-Peninsula Water District
"RWS" = Regional Water System
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan

Notes:

(a) Projected SFPUC supply is based on dry year supply projections, assuming the Bay-Delta Plan Amendment (BDP) is not implemented. As discussed in Section 6.1.1.2, there are numerous uncertainties associated with implementation of the BDP. Supply projections with the BDP are presented per the MPWD's 2020 UWMP; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC. Supply volumes are per Table 7-5, which assumes the BDP will not be implemented, in Reference 1.

(b) Projected demand per Table 7-5 in Reference 1, plus the projected demands of the three proposed development projects.

References:

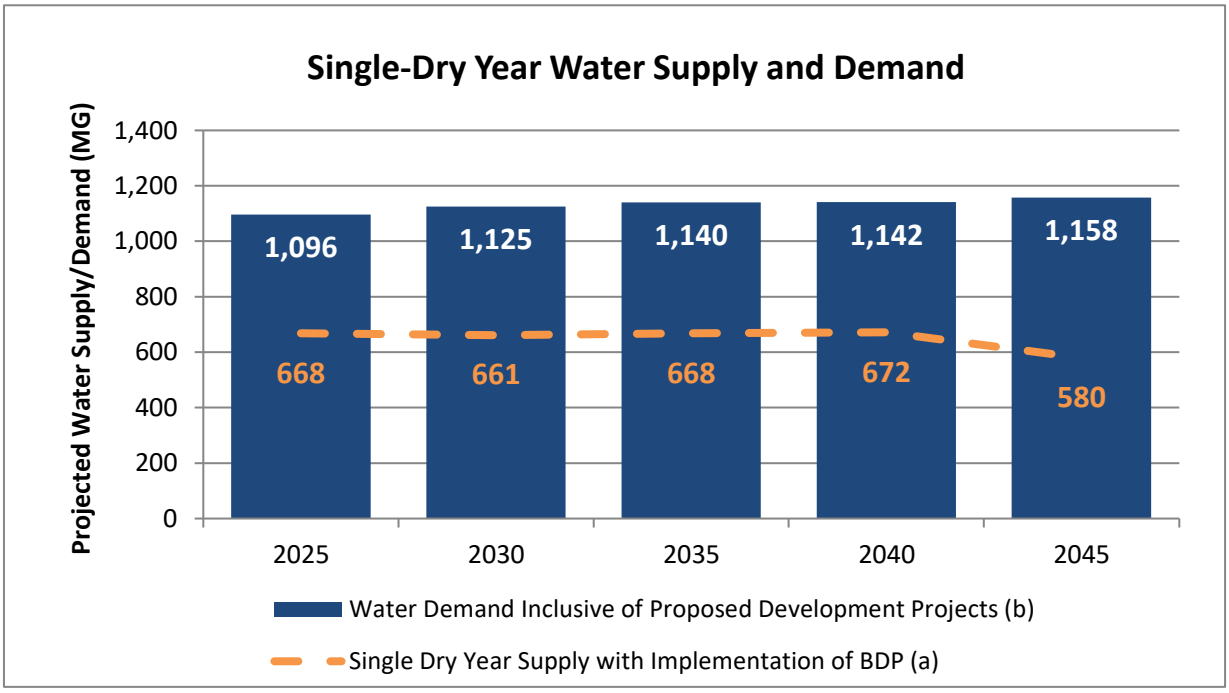
1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

Table 7b

Comparison of Single Dry Year Water Supply and Demand for Mid-Peninsula Water District With Bay-Delta Plan Amendment Implementation

1301 Shoreway Road Project, Belmont, California

Water Supply and Demand (a)	Projected Dry Year Supply and Demand (MG)				
	2025	2030	2035	2040	2045
Single Dry Year Supply with Implementation of BDP (a)	668	661	668	672	580
Water Demand Inclusive of Proposed Development Projects (b)	1,096	1,125	1,140	1,142	1,158
Supply Shortfall (% demand)	***40%***	***43%***	***43%***	***42%***	***51%***



Abbreviations:

"BDP" = Bay-Delta Plan Amendment
"MG" = Million Gallons
"MPWD" = Mid-Peninsula Water District
"RWS" = Regional Water System
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan

Notes:

(a) Projected SFPUC supply is based on dry year supply projections, assuming the Bay-Delta Plan Amendment (BDP) is implemented as written. As discussed in Section 6.1.1.2, there are numerous uncertainties associated with implementation of the BDP. Supply projections with the BDP are presented per the MPWD's 2020 UWMP; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC. Supply volumes are per Table 7-4, which assumes implementation of the BPD, in Reference 1.

(b) Projected demand per Table 7-4 in Reference 1, plus the projected demands of the three proposed development projects.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

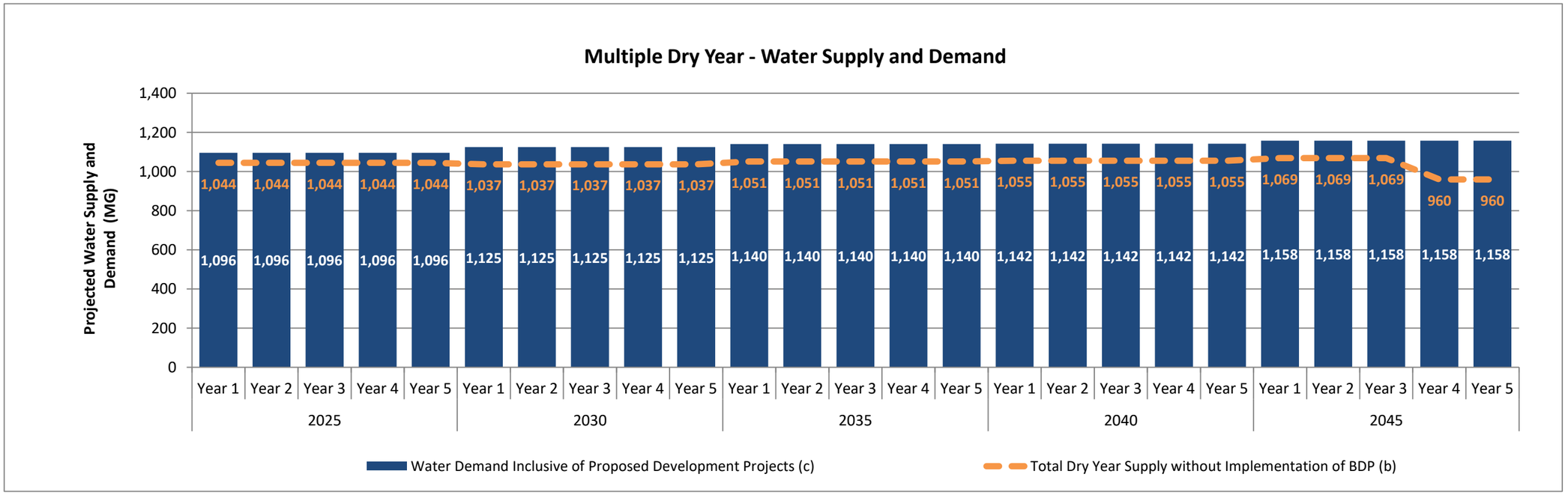
Table 8a

Multiple Dry Year Water Supply and Demand for Mid-Peninsula Water District

Without Bay-Delta Plan Amendment Implementation

1301 Shoreway Road Project, Belmont, California

Water Supply and Demand	Projected Water Supply and Demand During Multiple Dry Years (MG) (a)																								
	2025					2030					2035					2040					2045				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5
Total Dry Year Supply without Implementation of BDP (b)	1,044	1,044	1,044	1,044	1,044	1,037	1,037	1,037	1,037	1,037	1,051	1,051	1,051	1,051	1,051	1,055	1,055	1,055	1,055	1,055	1,069	1,069	1,069	960	960
Water Demand Inclusive of Proposed Development Projects (c)	1,096	1,096	1,096	1,096	1,096	1,125	1,125	1,125	1,125	1,125	1,140	1,140	1,140	1,140	1,140	1,142	1,142	1,142	1,142	1,142	1,158	1,158	1,158	1,158	1,158
Supply Shortfall (% demand)	***7%***	***7%***	***7%***	***7%***	***7%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***10%***	***19%***	***19%***



Abbreviations:

"BDP" = Bay-Delta Plan Amendment
"MG" = Million Gallons
"MPWD" = Mid-Peninsula Water District
"RWS" = Regional Water System
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan
"WSA" = Water Supply Assessment

Table 8a

Multiple Dry Year Water Supply and Demand for Mid-Peninsula Water District

Without Bay-Delta Plan Amendment Implementation

1301 Shoreway Road Project, Belmont, California

Notes:

(a) While WSA regulations only require an analysis of a three-year drought scenario, UWMP regulations were updated in 2018 to include a five-year drought scenario (California Water Code §10635). Therefore, a five-year drought scenario is presented here.

(b) Projected SFPUC supply is based on dry year supply projections, assuming the Bay-Delta Plan Amendment (BDP) is not implemented. As discussed in Section 6.1.1.2, there are numerous uncertainties associated with implementation of the BDP. Supply projections with the BDP are presented per the MPWD's 2020 UWMP; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC. Supply volumes are per Table 7-7, which assumes the BDP will not be implemented, in Reference 1.

(c) Projected demand per Table 7-7 in Reference 1, plus the projected demands of the three proposed development projects.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

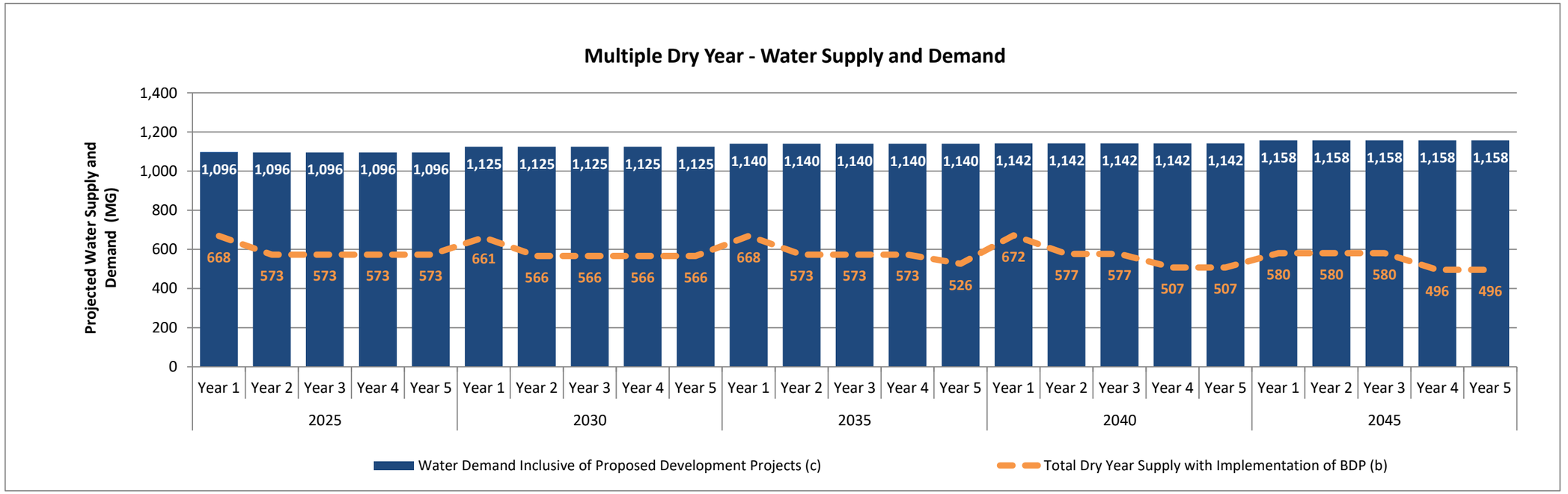
Table 8b

Multiple Dry Year Water Supply and Demand for Mid-Peninsula Water District

With Bay-Delta Plan Amendment Implementation

1301 Shoreway Road, Belmont, California

Water Supply and Demand	Projected Water Supply and Demand During Multiple Dry Years (MG) (a)																									
	2025					2030					2035					2040					2045				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5
Total Dry Year Supply with Implementation of BDP (b)	668	573	573	573	573	661	566	566	566	566	668	573	573	573	526	672	577	577	507	507	580	580	580	496	496
Water Demand Inclusive of Proposed Development Projects (c)	1,096	1,096	1,096	1,096	1,096	1,125	1,125	1,125	1,125	1,125	1,140	1,140	1,140	1,140	1,140	1,142	1,142	1,142	1,142	1,142	1,158	1,158	1,158	1,158	1,158
Supply Shortfall (% demand)	***40%***	***49%***	***49%***	***49%***	***49%***	***43%***	***51%***	***51%***	***51%***	***51%***	***43%***	***51%***	***51%***	***51%***	***55%***	***42%***	***51%***	***51%***	***57%***	***57%***	***51%***	***51%***	***51%***	***58%***	***58%***



Abbreviations:

"BDP" = Bay-Delta Plan Amendment
"MG" = Million Gallons
"MPWD" = Mid-Peninsula Water District
"RWS" = Regional Water System
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan
"WSA" = Water Supply Assessment

Table 8b

Multiple Dry Year Water Supply and Demand for Mid-Peninsula Water District

With Bay-Delta Plan Amendment Implementation

1301 Shoreway Road, Belmont, California

Notes:

(a) While WSA regulations only require an analysis of a three-year drought scenario, UWMP regulations were updated in 2018 to include a five-year drought scenario (California Water Code §10635). Therefore, a five-year drought scenario is presented here.

(b) Projected SFPUC supply is based on dry year supply projections, assuming the Bay-Delta Plan Amendment (BDP) is implemented as written. As discussed in Section 6.1.1.2, there are numerous uncertainties associated with implementation of the BDP. Supply projections with the BDP are presented per the MPWD's 2020 UWMP; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC. Supply volumes are per Table 7-6, which assumes implementation of the BPD, in Reference 1.

(c) Projected demand per Table 7-6 in Reference 1, plus the projected demands of the three proposed development projects.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula Water District, dated September 2021.

7 COMPARISON OF SUPPLY AND DEMAND

☑ ***CWC § 10910 (c)(3)***

If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

☑ ***CWC § 10911 (a)***

If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. If the city or county, if either is required to comply with this part pursuant to subdivision (b), concludes as a result of its assessment, that water supplies are, or will be, insufficient, the city or county shall include in its water supply assessment its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. Those plans may include, but are not limited to, information concerning all of the following:

(1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.

(2) All federal, state, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.

(3) Based on the considerations set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), expects to be able to acquire additional water supplies.

☑ ***CWC § 10911 (c)***

The city or county may include in any environmental document an evaluation of any information included in that environmental document provided pursuant to subdivision (b). The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses. If the city or county determines that water supplies will not be sufficient, the city or county shall include that determination in its findings for the project.

Pursuant to CWC §10910(c)(3), this WSA must include an estimate of the projected water supplies available to the MPWD under normal, single dry, and multiple dry years, and a discussion of whether those supplies will meet the projected demand associated with the proposed Project, in addition to the water system's existing and planned future uses. This assessment is parallel to the multiple-dry year supply reliability analysis required for UWMPs under CWC §10635. In 2018, CWC §10635 was revised to require UWMPs to extend this analysis to consider "a drought lasting five consecutive water years." Although CWC §10910(c)(3) has not yet been updated to require this for WSAs, a five-year drought scenario is also evaluated herein and reflects a multiple dry year analysis.

Tables 6 through **8b** provide a comparison of the demands and supplies in normal year, single-dry year, and multiple-dry year hydrologic scenarios for MPWD, both assuming implementation of the Bay-Delta Plan Amendment as written, and without implementation of the Bay-Delta Plan Amendment. It is projected that available water supplies will be sufficient to meet the demands

under normal year hydrologic conditions through 2045, inclusive of the proposed Project. However, in drought periods, shortfalls of up to 58% are possible if, as discussed above, the "worst-case" supply scenario is realized in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for the implementation of actions identified as part of SFPUC's AWSP or BAWSCA's LTWSRS. As discussed in Section 6.1.1.4, MPWD is working with other agencies to identify regional mitigation measures to improve reliability for regional and local water supplies and meet its customers' water needs, including through the potable reuse of recycled water. As a result, MPWD expects that SFPUC's LOS Goals and Objectives will be met and that it can rely on its contract with SFPUC as written. Thus, any dry year shortfalls would be expected to be lower than those shown in **Tables 7a** through **8b**.

As described in Section 6, in response to anticipated future dry-year shortfalls, MPWD has developed a WSCP that systematically identifies ways in which the District can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages ranging from 10% to greater than 50% shortfalls.

On 12 July 2021, the SFPUC called for voluntary 15% rationing for all wholesale and retail customers in alignment with Governor Newsom's Executive Order N-10-21. The RWS has historically met demand in its service area in all year types, and prior to 2021, only called for voluntary 10% rationing during 2007 to 2009 and 2014 to 2015. Although the MPWD has not experienced any shortage of RWS deliveries, during a recent drought, it was subject to the SWRCB's mandatory water reduction target at 20% between June 2015 and May 2016.[14] During this period, MPWD surpassed its reduction target and achieved a cumulative water demand reduction of 28.4% compared to its water use in 2013 (SWRCB, 2016).

While RWS reliability is constrained by hydrology, physical facilities, institutional parameters including state and federal regulations, the SFPUC is implementing both capital improvement and planning processes to enhance RWS reliability and meet its contractual commitment to Wholesale Customers through 2045 (see SFPUC memorandum included as **Appendix C**; SFPUC, 2021c). SFPUC supply projects under development include the following:

- *Daly City Recycled Water Expansion:* An initial feasibility study completed in 2010 identified the capital requirements that would be needed to produce additional capacity at the existing treatment plant location. The study demonstrated that a new tertiary treatment facility would be required onsite to produce additional capacity of up to 3.4 MGD. Currently, flows that exceed the capacity of the existing treatment plant are discharged into the Pacific Ocean. With this project, some of that discharge may be treated and used for irrigation. New facilities would include a treatment facility, pump station, distribution pipelines, and storage. The capital cost is estimated to be $85 million, which is budgeted for in the SFPUC's 10-year capital

[14] On 5 May 2015, the SWRCB adopted Resolution 2015-0032 that mandates minimum actions by water suppliers and their customers to conserve water supplies into 2016 and assigned a mandatory water conservation goal to each water supplier based on their R-GPCD. The Resolution was adopted pursuant to Executive Order B-29-15 that directed SWRCB to impose mandatory restrictions on urban water suppliers to achieve a statewide 25% reduction in potable urban water usage to address California's severe drought conditions.

planning horizon. The annual operations and maintenance (O&M) cost is estimated to be $3 million. Construction may occur as soon as 2023 with operation beginning in 2027.

- *Alameda County Water District (ACWD) Transfer Partnership*: Water would be acquired from Contra Costa Water District (CCWD) for delivery to ACWD through the South Bay Aqueduct utilizing a planned expansion of the Los Vaqueros Reservoir (see below). This project is expected to deliver up to 5 MGD of additional supply. The capital cost is estimated to be $50-150 million, with an annual O&M cost of $2.5 million. Construction may occur as soon as 2028 with operation beginning in 2032.
- *Brackish Water Desalination in Contra Costa County*: The Bay Area Brackish Water Treatment (Regional Desalination) Project proposes to turn brackish water into a reliable, drought-proof drinking water supply, delivering a total of up to 10-20 MGD in drought and non-drought years (i.e., dry and normal years), throughout the region. A new brackish water treatment plant would be constructed in East Contra Costa and tie into the existing CCWD system for delivery through Los Vaqueros Reservoir and the South Bay Aqueduct, or delivery via a connection with East Bay Municipal Utility District (EBMUD). The capital cost is estimated to be $200-800 million, with an annual O&M cost of $12-20 million. Construction may occur as soon as 2032 and be phased so that 5-9 MGD would be available to the region by 2035 and a total of 5-11 MGD would be available after 2040.
- *ACWD-USD Purified Water Partnership*: This may be an indirect or direct potable reuse project that would inject highly-treated water from Union Sanitary District (USD) for groundwater recharge, then recover the water through the ACWD Brackish Groundwater Desalination Plant. How the water would be transferred to the SFPUC remains to be determined. The capital cost is estimated to be $200-400 million, with an annual O&M cost of $2.5 million. Construction may occur as soon as 2038 with operation beginning in 2045.
- *SF-Peninsula Regional Purewater (SPRP; also referred to as Crystal Springs Purified Water*): This project is an indirect potable reuse project that would blend wastewater from Silicon Valley Clean Water and possibly the City of San Mateo into Crystal Springs Reservoir and treat the blended water at Harry Tracy Water Treatment Plant for potable reuse. The capital cost is estimated to be $700-750 million, with an annual O&M cost of $18-25 million. Construction currently estimated to begin in 2034 and be phased so that 3-5 MGD would be available to the region by 2035 and up to 7 MGD would be available after 2040. The District is actively engaged in the planning process for this project and has committed funds to the development of a basis of design report, as the next step in the process.

  The SPRP project also includes a second phase, which would deliver approximately 6 MGD of purified wastewater directly to local conveyance systems in Redwood City, San Carlos, and/or MPWD (see Section 6.1.1.3). Therefore, the SPRP project would provide up to 12 MGD of additional supply to the region upon completion of both Phase 1 and Phase 2.
- *Los Vaqueros Reservoir Expansion*: Expansion of storage capacity in Los Vaqueros is to allow the ACWD Transfer Partnership and Brackish Water Desalination in Contra Costa County to be optimized. The capital cost is estimated to be $20-50 million. The annual O&M cost is yet to be estimated. Construction may occur as soon as 2021 with operation beginning in 2027.

- *Calaveras Reservoir Expansion*: Calaveras Reservoir would be expanded to create 94,000 MG additional capacity to store excess RWS supplies or other source water in wet and normal years. In addition to reservoir enlargement, the project would involve infrastructure to pump water to the reservoir, such as pump stations and transmission facilities. The cost of this project is yet to be determined, as construction would not occur until the early 2040s with operation beginning around 2050.

Additionally, within and outside the RWS, BAWSCA is leading multiple efforts to develop additional water supply for its member agencies through implementation of its LTWSRS and ongoing 2022 Water Supply Reliability Roundtable discussions.

8 CONCLUSIONS

As listed in Water Code §10910(c), the primary purpose of this WSA is to evaluate whether the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to MPWD's existing and planned future uses, including agricultural and manufacturing uses.

It should be noted that if the uncertain "worst-case" supply scenario described under Section 6.1.1.2 in which the Bay-Delta Plan Amendment is implemented as written and not accounting for the implementation of actions identified as part of SFPUC's AWSP, or BAWSCA's LTWSRS, shortfalls of up to 58% are projected during drought years. However, as described in Section 6.1.1, MPWD expects that SFPUC's LOS Goals will be met and that it can rely on its contract with SFPUC as written. If drought conditions should arise, MPWD will meet its demands through the implementation of its WSCP, as described in Section 7.

This WSA concludes that MPWD's contractual ISG allocation of 3.891 MGD from SFPUC is sufficient to meet projected future demands within its service area. MPWD's future demands, inclusive of the Project and two additional new development projects (Section 5.4), are projected to reach, at most, 82% of the District's contractual ISG allocation in hydrologically normal years through 2045. Further, supply shortfalls that are currently projected during dry years are anticipated to occur irrespective of the three new development projects. A significant source of uncertainty is how and when the Bay-Delta Plan Amendment (Section 6.1.1.2) will be implemented and how it will affect the supply reliability of the City and County of San Francisco's RWS. The District will address projected shortfalls through implementation of the District's WSCP. In addition, as described herein, the District, BAWSCA, and SFPUC are pursuing the development of additional water supplies to improve the RWS and District supply reliability (Section 6.1.1.3). Therefore, this WSA finds that the District's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed Project, in addition to the District's existing and planned future uses, with the implementation of its WSCP during dry years.

Nothing in this WSA creates a right or entitlement to water service or any specific level of water service. Nothing in this WSA imposes, expands, or limits any duty concerning the obligation of MPWD to provide certain service to its existing customers or to any future potential customers.

9 REFERENCES

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USEPA, 2021. United States Environmental Protection Agency Lean & Water Toolkit: Appendix C, accessed 25 February 2022. https://www.epa.gov/sustainability/lean-water-toolkit-appendix-c

Appendix A

Response to Water Supply Assessment Request for Information Form, Mid-Peninsula Water District – 1301 Shoreway Road

Mid-Peninsula Water District - 1301 Shoreway Road
Water Supply Assessment Request for Information Form

Project Address	**Date Submitted**
1301 Shoreway Road, Belmont CA 94002	7/12/2022
Project Contact's Name	**Project Contact's Information**
Ryan Payne, Four Corners	650-793-9820 rpayne@fourcornersproperties.com Please copy: Claudia.Garcia@icf.com and Kristi.Black@icf.com

PROJECT DESCRIPTION

Instructions: Answer the following questions using the space provided or include a separate attachment. If including an attachment, ensure that it addresses all the following questions or provide written responses below.

Provide a detailed description of the proposed Project.

The applicant is seeking entitlements to construct a Class-A building for office, technology, and/or research and development (R&D), including life sciences. The project would consist of demolition of the existing 148,919 square-foot office building and construction of an eight-story 270,446 square foot building (Building 1), a seven-story 271,589 square foot building (Building 2), and a 441,280 square foot parking garage with nine levels above grade.

Total lot size of Project (square feet):	**Total building area (square feet):**
300,564 square feet (6.9 acres)	983,315 gross square feet

Provide all assessor's parcel numbers (APNs) associated with the Project.

040-37-1110

☒ **Attach a figure identifying the Project site plan that can be included in the WSA.**

Provide all Project land uses. If the Project includes housing, please specify the type of anticipated housing units with as much detail as available. If additional rows are needed, please provide as attachment.

Land Use	Square Footage	Number of Housing Units
Office, technology, and/or R&D, including life sciences.	542,035 square feet (Building 1 and Building 2)	No housing is proposed
Parking Garage	441,280 square feet (Parking Garage)	No housing is proposed
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Does the Project include any of the following water using features (e.g., pools, fountains, constructed ponds, etc.)?

☐ Yes ☒ No

If yes, describe:

Click or tap here to enter text.

Is the Project expected to include any manufacturing type uses? ☐ Yes ☒ No

If yes, describe:

Click or tap here to enter text.

Is the Project expected to include any food service uses? ☒ Yes ☐ No

If yes, describe:

Coffee house or small café; level of service will not include food service such that a grease trap is required

Is the Project expected to include any cleaning service uses? ☐ Yes ☒ No

If yes, describe:

Click or tap here to enter text.

Is the Project expected to include hotel uses? ☐ Yes ☒ No

If yes, provide the number of rooms:

Click or tap here to enter text.

Does the Project include institutional housing (e.g., hospitals, nursing homes, rehabilitation centers, etc.)? ☐ Yes ☒ No

If yes, indicate how many beds:

Click or tap here to enter text.

Will the Project use non-domestic water (e.g., process water, plumbed distilled water, etc.)? ☒ Yes ☐ No

If yes, describe:

We expect that a R&D tenant would utilize distilled water.

Provide the expected number of employees, if applicable. If Project includes multiple land uses, indicate the number of employees for each land use. If an increase is anticipated for "peak seasons," provide the number of employees and anticipated duration of the peak season(s).

The number of employees is dependent on the use so a range is provided: the project would expect up to 1,425 R&D employees or up to 2,500 Office employees working on-site.

Provide the expected number of residents, if applicable. If Project includes multiple housing types, indicate the number of residents anticipated per housing type.

Not applicable

Provide the anticipated buildout schedule for the Project, including anticipated date of completion and any anticipated partial occupancy milestones.

Construction is expected to begin January 2024 with project completion in 2026.

WATER SUPPLY SOURCES

Identify any source(s) of water other than potable water that will supply the Project (e.g., recycled water, on-site reuse, etc.).

None

Water Source	Annual Volume Available	Annual Volume Anticipated to be Used by Project Uses
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

PROJECT WATER DEMANDS

Have water demands been estimated for this Project? ☒ Yes ☐ No

If yes, provide estimated annual water demand. Include estimates for all land uses and supply sources. Include a description of the basis used for the estimates.

See attached worksheet.

☒ **Attach the landscaping plan to this form, if available.**

If the landscaping plan is included, ensure that it addresses all of the following items or provide a written response below:

Indicate the Project landscaping square footage, anticipated use (e.g., gathering space, playground, aesthetic, etc.), and water supply source. Indicate any areas associated with housing units (i.e., areas managed by the residents, not common space). Indicate if any areas meet the State Water Resources Control Board definition of *non-functional turf* (i.e., "turf that is solely ornamental and not regularly used for human recreational purposes or for civic or community events. Non-functional turf does not include sports fields and turf that is regularly used for human recreational purposes or for civic or community events.").

See attached worksheet and plan

Have water demands been estimated for the Project landscaping? ☒ Yes ☐ No

If yes, provide the estimated total water use (ETWU), and include calculations as an attachment.

436,641.54; See attached worksheet.

If the Project includes residential uses, does the provided ETWU include water use associated with landscape areas controlled by residents? ☐ Yes ☒ No

If yes, describe how landscape water use for areas controlled by residents was calculated.

Not Applicable

ATTACHMENTS

Provide list of attachments:

Attachment 1 - Water Sewer Load Calculations; Attachment 2 - Landscape Worksheet; Attachment 3 - Landscape Plan

Attachment 1

Water Sewer Load Calculations

Project Name:	1301 Shoreway Road, Belmont, CA
Project Number:	SFO-21023957-00
Designer:	Timothy Swe, P.E.
Date:	7/22/2022

2 Buildings (7 Story) 271,589 GSF

Drainage Fixture Unit (DFU) per 2019 California Plumbing Code Table 701.2 Drainage Fixture Unit

Water Supply Fixture Unit (WSFU) per 2019 California Plumbing Code Table A103.1 and chart A103.1(1) for GPM conversion

Category:	Phase	Description:	Fixture Quantity	WSFU (per fixture)			DFU (per fixture)	WSFU Total	DFU Total
				CW	HW	Total			
Water Closet	Core and Shell	1.28 gpf, sensor flush valve	56	5	-	5	4	280	224
Lavatory	Core and Shell	0.5 gpm, sensor Faucet	18	1	1	1	1	18	18
Mop Sink	Core and Shell	1.5 gpm, manual faucet	9	3	2	3	3	27	27
Shower	Core and Shell	1.5 gpm, shower head	8	2	2	2	2	16	16
Floor Drain	Core and Shell		18				2	-	36
Equipment Floor Sink	Core and Shell	max 7-1/2 gpm intermittent flow	4				1	-	4
Roof Condensate Drain	Core and Shell	max 7-1/2 gpm intermittent flow	4				1	-	4
Core and Shell Total								**341**	**329**
Laboratory Sink	Tenant Improvement (20 sinks per floor)	1.5 gpm, wrist blade handle faucet	140	2	2	2	2	280	280
Handwash sink	Tenant Improvement (4 sinks per floor)	0.5 gpm, sensor Faucet	28	1	1	1	1	28	28
Break Rm sink	Tenant Improvement (4 sinks per floor)	1.5 gpm, single lever faucet	28	2	1	2	2	42	56
Equipment Floor Sink	Tenant Improvement (4 floor sinks per floor)	max 7-1/2 gpm intermittent flow	28				1	-	28
Equipment Floor Sink	Tenant Improvement (4 floor sinks per floor)	max 15 gpm intermittent flow	28				2	-	56
Tenant Improvement Total								**350**	**448**

Building Total	**691**	**777**
Reserve for Design Contingency 20%	138.2	155.4
Design Load	829.2	932.4
GPM	180	220
Cooling Tower Intermittent Water Demand allowance (GPM)	20	
Lab Equipment Intermittent Water Demand allowance (GPM)	20	
Total Water Design GPM	**220**	

Sewer Line 8" capacity	2112 DFU (1% slope)	Note: 8" sewer line is required
Sewer Line 6" capacity	576 DFU (1% slope)	
Minimum Water Line Size	4"	Note: 220 gpm @ 4" line velocity is 7 feet/second

Attachment 2

Landscape Worksheet

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 42.9

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
LAWN	.8	SPRAY	.75	1.06	4000	4,240	112,775.52
LOW	.3	DRIP	.81	.37	32909	12176.33	323,866.02
				Totals	Darrin Trag (A)	ICF (B)	
Special Landscape Areas							
NONE				1			
				1			
				1			
				Totals	0 (C)	0 (D)	
						ETWU Total	436,641.54
						Maximum Allowed Water Allowance (MAWA)[e]	441,779.48

[a] ***Hydrozone #/Planting Description*** *E.g*
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method*** *overhead spray or drip*

[c] ***Irrigation Efficiency*** *0.75 for spray head 0.81 for drip*

[d] ***ETWU*** **(Annual Gallons Required) =** *Eto x 0.62 x ETAF x Area*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed) = (****Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	12180.57
Total Area	(A)	36909
Average ETAF	**B ÷ A**	.33

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)	12180.57
Total Area	(A+C)	36909
Sitewide ETAF	**(B+D) ÷ (A+C)**	.33

A copy of this form may be obtained from Department of Water Resources website: http://www.water.ca.gov/wateruseefficiency/landscapeordinance/

Attachment 3

Landscape Plan

1301 SHOREWAY, BELMONT | SITE PLAN – PROPOSED



Sheet List Table

Sheet Number	Sheet Title
L0.00	SHEET INDEX & ILLUSTRATIVE SITE PLAN
L0.01	MATERIAL SCHEDULE & IMAGES
L0.02	TREE DISPOSITION PLAN
L1.01	LAYOUT & MATERIAL PLAN
L1.02	LAYOUT ENLARGEMENT
L2.01	GRADING & DRAINAGE PLAN
L3.01	TREE PLANTING PLAN
L3.02	UNDERSTORY PLANTING PLAN
L4.00	IRRIGATION NOTE
L4.01	IRRIGATION PLAN
L4.02	IRRIGATION DETAILS
L4.03	IRRIGATION DETAILS
L5.01	SECTIONS
L5.02	SECTIONS

LAYOUT NOTES

1. VERIFY LOCATION OF ALL BUILDINGS, WALLS, ROADS AND CURBS AFFECTING LANDSCAPE SCOPE OF WORK WITH ARCHITECTURAL AND CIVIL ENGINEER'S DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL CURRENT BUILDING GROUND FLOOR PLANS.
2. VERIFY LOCATION OF ALL VAULTS, ELECTRICAL DUCT BANKS, MANHOLES, CONDUIT AND PIPING, DRAINAGE STRUCTURES AND OTHER UTILITIES WITH THE APPROPRIATE ENGINEERING DRAWINGS. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS WITH LANDSCAPE SCOPE.
3. TAKE ALL DIMENSIONS FROM FACE OF CURB, WALL OR BUILDING OR TO CENTERLINE OF COLUMNS OR TREES UNLESS OTHERWISE NOTED. ALL MEASUREMENTS TO DESIGNATED CENTERLINE(S).
4. TAKE ALL DIMENSIONS PERPENDICULAR TO ANY REFERENCE LINE, WORK LINE, FACE OF BUILDING, FACE OF WALL, OR CENTERLINE.
5. ALL DIMENSIONS TAKEN TO CENTERLINE OF BUILDING COLUMN SHALL MEAN THE FIRST ROW OF COLUMNS CLOSEST TO THE FACE OF THE BUILDING. SEE ARCHITECT'S DRAWINGS FOR CORRESPONDING COLUMN LINES.
6. ALL ANGLES TO BE 90 DEGREES AND ALL LINES OF PAVING AND FENCING TO BE PARALLEL UNLESS NOTED OTHERWISE. MAINTAIN HORIZONTAL ALIGNMENT OF ADJACENT ELEMENTS AS NOTED ON THE DRAWINGS.
7. HOLD TOPS OF WALLS AND FENCES LEVEL UNLESS NOTED OTHERWISE.
8. REFERENCE TO NORTH REFERS TO PLAN NORTH, REFERENCE TO SCALE IS FOR FULL-SIZED DRAWINGS ONLY. DO NOT SCALE FROM REDUCED DRAWINGS.
9. DIMENSIONS TAKE PRESIDENCE OVER SCALES SHOWN ON DRAWINGS.
10. NOTES AND DETAILS ON SPECIFIC DRAWINGS TAKE PRESIDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
11. DO NOT INSTALL ANY WORK ON STRUCTURE PRIOR TO REVIEW OF WATERPROOFING BY ARCHITECT.
12. WHERE NOT SHOWN ON LANDSCAPE DRAWINGS, SEE CIVIL ENGINEER'S DRAWINGS FOR ROADWAY CENTERLINES, BUILDING SETBACKS AND BENCH MARKS.
13. ALL CONCRETE SLABS AND RAMP OR STEP FOOTINGS SHALL BE DOWELED INTO ABUTTING WALLS, FOUNDATIONS AND FOOTINGS USING BARS OF THE SAME SIZE AND SPACING UNLESS NOTED OTHERWISE. SEE JOINTING DETAILS.

GRADING NOTES

1. FOR EXISTING TOPOGRAPHY INCLUDING GRADES, UTILITIES, PROPERTY LINES, LIMITS OF ROADWAYS, CURBS AND GUTTERS, EXISTING TREES, ETC., REFER TO THE CIVIL DRAWINGS.
2. ALL FINISHED GRADES SHALL PROVIDE FOR NATURAL RUNOFF OF WATER WITHOUT LOW SPOTS OR POCKETS. SET FLOW LINES ACCURATELY AND PROVIDE A MINIMUM 2% AND A MAXIMUM 50% GRADIENT UNLESS OTHERWISE NOTED.
3. HOLD FINISHED GRADES FOR SHRUB AND GROUNDCOVER AREAS 1 1/2 INCH BELOW TOP OF ADJACENT PAVEMENT, CURBS, OR HEADERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
4. GRADUALLY ROUND OFF TOPS AND TOES OF ALL PLANTED SLOPES TO PRODUCE A SMOOTH AND NATURAL APPEARING TRANSITION BETWEEN RELATIVELY LEVEL AREAS AND SLOPES.
5. GENERAL CONTRACTOR TO COORDINATE SIZE AND LOCATION OF SLAB PENETRATIONS FOR DRAINAGE STRUCTURES WITH MECHANICAL CONTRACTOR.

PLANTING NOTES

1. PROVIDE MATCHING SIZES AND FORMS FOR EACH SPECIES OF TREE INSTALLED ON GRID OR SPACED EQUALLY IN ROWS AS SHOWN ON DRAWINGS. ALIGN TREES ACROSS WALKS. ADJUST SPACING AS NECESSARY, SUBJECT TO REVIEW BY THE LANDSCAPE ARCHITECT.
2. PROVIDE MATCHING SIZES AND FORMS FOR ALL HEDGE PLANTINGS. SPACE EQUALLY, ON GRID, TRIANGULARY, AS SHOWN.
3. FORM 40 INCH WATERING BASIN AROUND ALL TREES NOT INSTALLED IN LAWN OR PAVED AREAS. FILL BASIN WITH 2 INCH LAYER OF GRAVEL MULCH.
4. PROVIDE HEADER TO SEPERATE ALL SHRUB AND GROUND COVER PLANTING AREAS FROM LAWN PLANTING AREAS.
5. INSTALL LAWN UNDER ALL TREES THROUGHOUT ENTIRE LAWN PLANTING AREA TO LIMIT OF SPRAY IRRIGATION UNLESS NOTED OTHERWISE. TREES OUTSIDE OF SPRAY IRRIGATION LIMIT ARE TO BE DRIP IRRIGATED.
6. EQUALLY SPACE VINES WHERE PLANTED AGAINST WALLS OR FENCES. SEE DRAWINGS FOR QUANTITY AND APPROXIMATE SPACING.
7. EACH LOCATION OF ALL TREES SHALL BE APPROVED BY LANDSCAPE ARCHITECT PROIR TO FINAL INSTALLATION.
8. EXACT PLACEMENT OF HEADERS WILL BE REVIEWED BY LANDSCAPE ARCHITECT PRIOR TO FINAL INSTALLATION.
9. PLANT NAMES ARE ABBREVIATED ON THE DRAWINGS. SEE PLANT LIST FOR KEY AND CLASSIFICATION.
10. FINISH ALL PLANTERS WITH 2" WOOD MULCH, UON AS GRAVEL AT TREE PLANTINGS, SEE DRAWINGS.

ABBREVIATIONS

BLDG	BUILDING	PGR	PER GEOTECHNICAL RECOMMENDATIONS
BIO	BIORETENTION	LOW	LIMIT OF WORK
BC	BOTTOM OF CURB	LP	LOW POINT
BW	BOTTOM OF WALL	R	RADIUS
CL	CENTER LINE	SIM	SIMILAR
CONC	CONCRETE	SJ	SCORE JOINT
DIA	DIAMETER	SQ	SQUARE
(E)	EXISTING	SS	STAINLESS STEEL
EQ	EQUAL	SSMH	SANITARY SEWER MANHOLE
EJ	EXPANSION JOINT	SSWR	SANITARY SEWER
FFE	FINISH FLOOR ELEVATION	TBD	TO BE DETERMINED
FG	FINISH GRADE	TYP	TYPICAL
GAL	GALLON	TC	TOP OF CURB
HDR	HEADER	TW	TOP OF WALL
HP	HIGH POINT	VIF	VERIFY IN FIELD
O.C.	ON CENTER		
OCEW	ON CENTER EACH WAY		
PA	PLANTING AREA		

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Key Plan

Date
06.16.2022
Phase
PLANNING
Job Number
DGAT201

Drawing Title

SHEET INDEX & ILLUSTRATIVE SITE PLAN

Drawing Number

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TREE SCHEDULE AND LEGEND

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SIZE @ MATURITY	CAL. NATIVE	CITY LIST
	PINUS CANARIENSIS	CANARY ISLAND PINE	36" BOX	60–90 FT TALL 60–80 FT WIDE		
	QUERCUS AGRIFOLIA	COAST LIVE OAK	60" BOX	25–80 FT TALL 15–35 FT WIDE	X	X
	ULMUS PARVIFLORA 'GREEN GEM'	CHINESE ELM	24" BOX	35–50 FT TALL 50–65 FT WIDE		
	CERCIS CANADENSIS	EASTERN REDBUD	24" BOX	15–40 FT TALL 40 FT WIDE	X	X
	ARCTOSTAPHYLOS DENSIFLORA	VINE HILL MANZANITA	24" BOX	7–10 FT TALL 7–10 FT WIDE	X	X

UNDERSTORY SCHEDULE AND LEGEND

UNDERSTORY

KEY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SIZE @ MATURITY	CAL. NATIVE	C3 LIST
PA1		FESTUCA RUBRA 'MOLATE'	CREEPING RED FESCUE	SOD	1–2 FT	X	
PA2		CAREX DIVULSA MUHLENBERGIA RIGENS	SEDGE DEER GRASS	1 GAL.	2–3 FT	X X	X X
PA3		IRIS DOUGLASIANA JUNCUS PATENS 'ELK BLUE' LEYMUS CONDENSATUS SALVIA SPATHACEA	WILD IRIS SPREADING RUSH WILD RYE HUMINGBIRD SAGE	1 GAL.	2–3 FT	X X X X	X X X X
PA4		CARPENTERIA CALIFORNICA HETEROMELES ARBUTIFOLIA ROMNEYA COULTERI CISTUS SPP.	BUSH ANEMONE TOYON MATILIJA POPPY ROCK ROSE	1 GAL.	3–8 FT	X X X X	

TREE DISPOSITION LEGEND

SYMBOL/KEY	DESCRIPTION	QUANTITY	NOTE
TAG # XXX SPECIES	EXISTING TREE TO BE REMOVED	X	PER PLAN
TAG # XXX SPECIES	TREE TO PROTECT IN PLACE	X	(D) NOTES DESIGNATED TREES. DASH REPRESENTS TREE DRIPLINE
	TREE PROTECTION FENCING ZONE	X	SEE PLAN FOR LOCATIONS

IRRIGATION

SYMBOL	DESCRIPTION
	TREE BUBBLER AT NEW AND EXISTING TREES
	SPRAY IRRIGATION ZONE
	DRIP IRRIGATION ZONE
	EXISTING IRRIGATION ZONE
	CONTROL VALVE
	EXISTING BACKFLOW
	BASELINE HYDROMETER
	GATE VALVE
	MAIN LINE

LAYOUT SCHEDULE AND LEGEND

PAVING SCHEDULE

KEY	SYMBOL	DESCRIPTION	LOCATION	SQ. FT
P1		CAST–IN–PLACE CONCRETE PAVING, SAW CUT	INNER COURTYARD ENTRY DRIVES ENTRY PLAZA	33,671
P2		STEP STONE	INNER COURTYARD CREEK EDGE	31,325
P3		ASPHALT PAVING – SEE CIVIL DRAWINGS	SEE CIVIL DRAWINGS	SEE CIVIL
P4		CAST–IN–PLACE CONCRETE WALK 5' WIDE @ R.O.W	BERM	2,406
P5		CAST–IN–PLACE CONCRETE WALK 5' WIDE @ R.O.W	ENTRY PLAZA INNER COURTYARD	2,094
P6		TRUNCATED DOMES	AS NEEDED	851
P7		DECOMPOSED GRANITE	ACTIVITY COURT/BERM	3324

WALLS & STEPS

KEY	SYMBOL	DESCRIPTION
W1		CAST–IN–PLACE CONCRETE WALL
S1		CONCRETE STEPS
R1		HAND RAIL AT STEPS

AMENITIES

KEY	SYMBOL	DESCRIPTION
A1		BIKE RACK
A2		BOLLARD
A3		WOOD DECK
A4		SHADE STRUCTURE
A5		PRE–FABRICATED GAZEBO
A6		ACTIVITY COURT
F1		PICNIC TABLES
F2		ASSORTED LANDSCAPE SEATING & TABLES
F3		TREE GRATE

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

GRADING LEGEND

SYMBOL	DESCRIPTION
+ 13.50	SPOT ELEVATION
	RIDGE LINE
	PLANTER DRAIN
	AREA DRAIN
FD	FRENCH DRAIN
	SLOT DRAIN
	SLOPE IN PAVING
	SLOPE IN PLANTING
1.00	EXISTING CONTOUR
1.00	NEW CONTOUR
GB	GRADE BREAK
BIO	BIO RETENTION AREA – SEE CIVIL DRAWINGS
TS	TOP OF STAIR
BS	BOTTOM OF STAIR
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
TW	TOP OF WALL
BW	BOTTOM OF WALL
FS	FINISH SURFACE
FG	FINISH GRADE
TC	TOP OF CURB

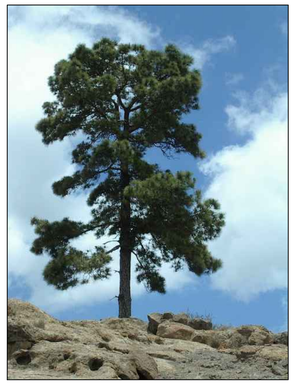
ULMUS PARVIFLORA



CERCIS CANADENSIS



PINUS CANARIENSIS



QUERCUS AGRIFOLIA



BIKE RACKS



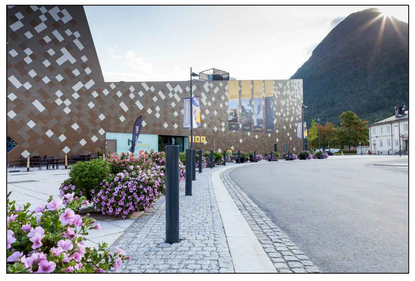
TABLES & SEATING



PRE–FABRICATED GAZEBO



BOLLARDS



PICNIC TABLES



WALLS



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Key Plan

Date
06.16.2022
Phase
PLANNING
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DGAT201

Drawing Title

MATERIAL SCHEDULE & IMAGES

Drawing Number

NOT FOR CONSTRUCTION

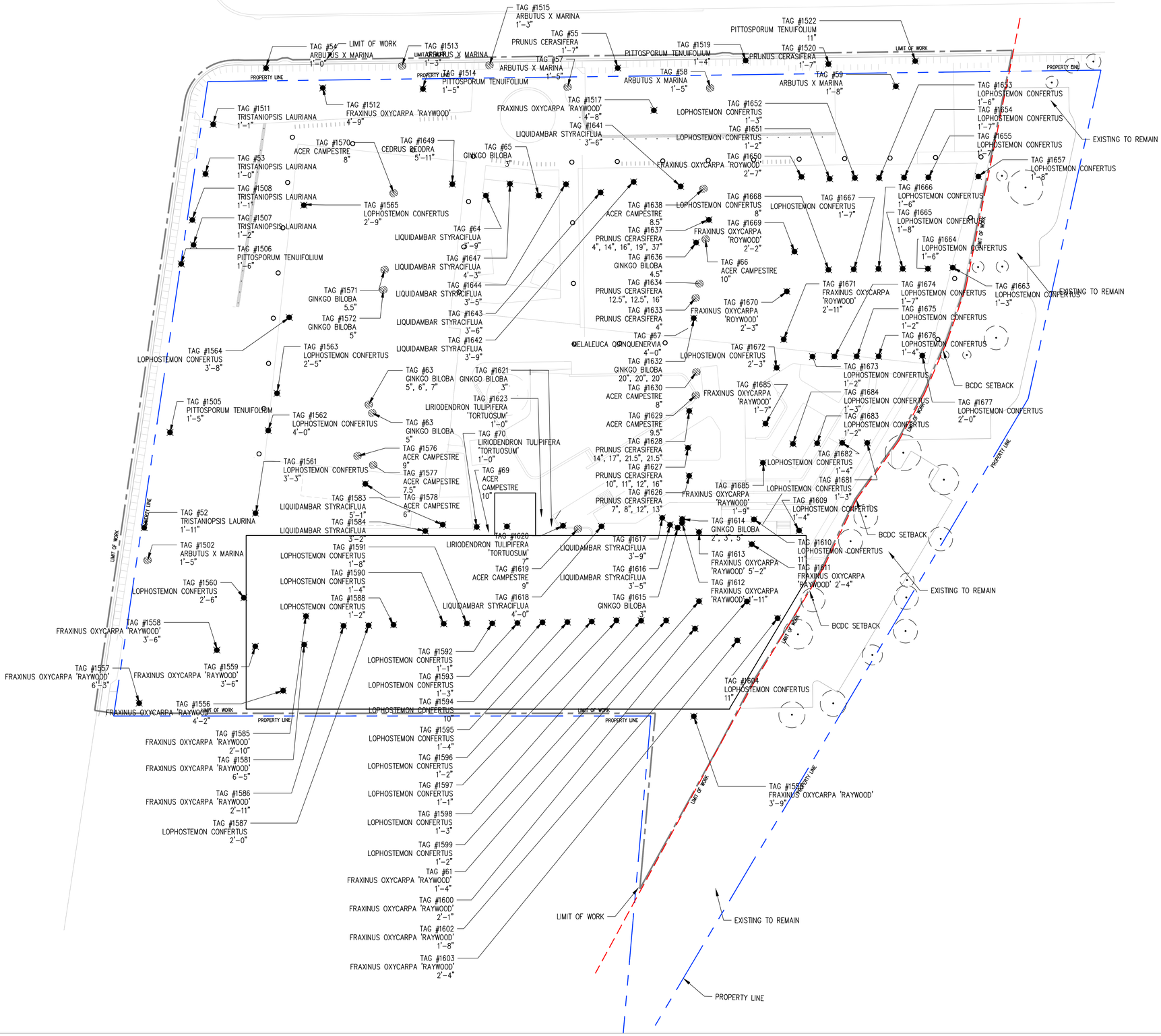
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1301 SHOREWAY, BELMONT | SITE PLAN – PROPOSED

Scale 0 15' 30'
1" = 30'



LEGEND

SYMBOL		TOTAL
TAG # SCIENTIFIC NAME X"-X"	TREE TO BE TRANSPLANTED**	19
TAG # SCIENTIFIC NAME X"-X"	TREE TO BE REMOVED	134
	TREES TO PROTECT IN PLACE	23

*ON-SITE NURSERY LOCATION TO BE DETERMINED.
**PROTECT IN PLACE UNTIL TRANSPLANTED. FOLLOW INDUSTRY STANDARD. SEE PLAN FOR ON-SITE NURSERY LOCATION FOR TREES TO BE TRANSPLANTED

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

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Key Plan

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Drawing Title
TREE DISPOSITION PLAN

Drawing Number
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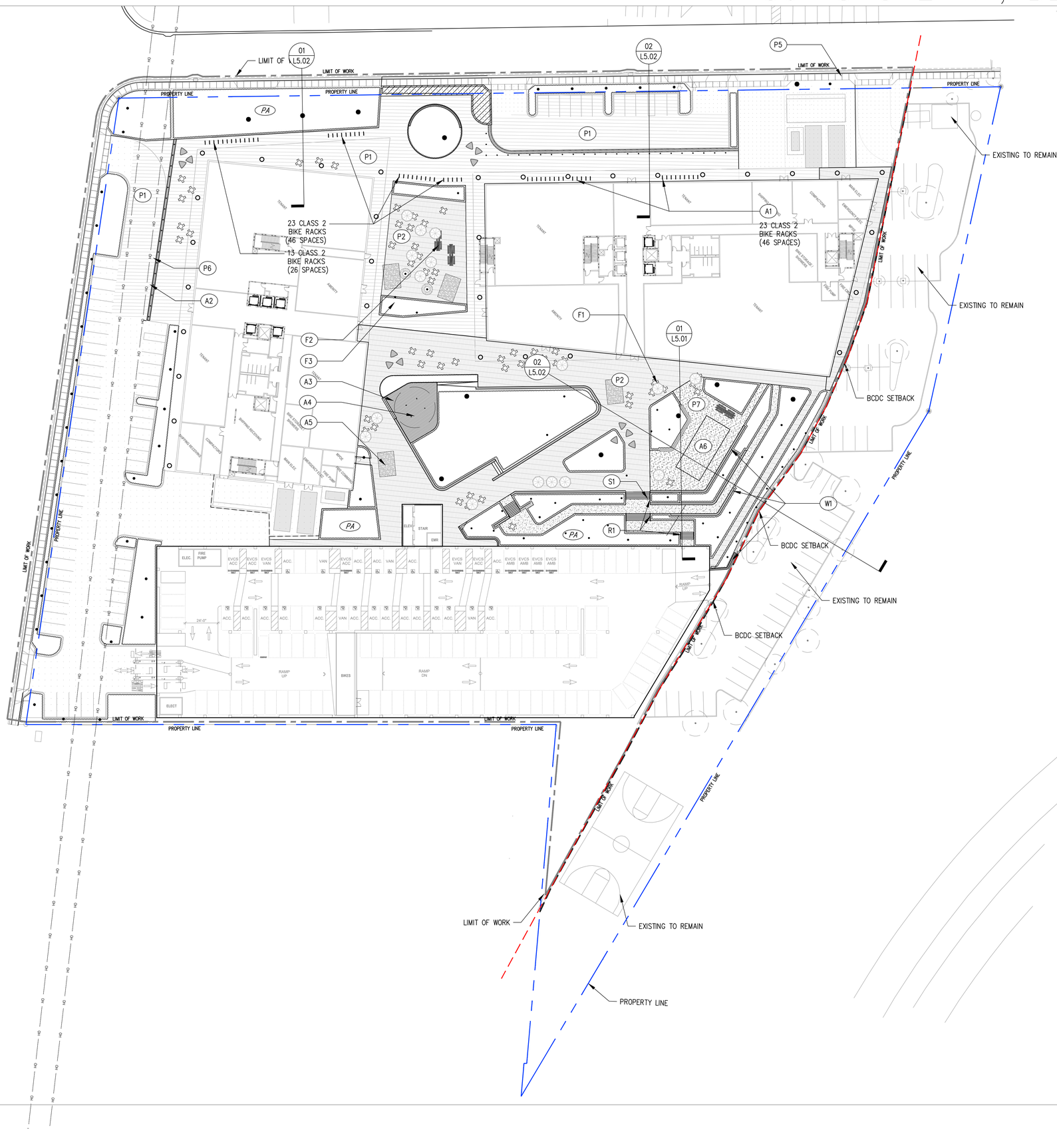
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1301 SHOREWAY, BELMONT | SITE PLAN – PROPOSED

Scale 0 15' 30'
1" = 30'



AMENITIES

KEY	SYMBOL	DESCRIPTION
A1		BIKE RACK
A2		BOLLARD
A3		WOOD DECK
A4		SHADE STRUCTURE
A5		PRE–FABRICATED GAZEBO
A6		ACTIVITY COURT
F1		PICNIC TABLES
F2		ASSORTED LANDSCAPE SEATING & TABLES
F3		TREE GRATE

WALLS & STEPS

KEY	SYMBOL	DESCRIPTION
W1		CAST–IN–PLACE CONCRETE WALL
S1		CONCRETE STEPS
R1		HAND RAIL AT STEPS

PAVING SCHEDULE

KEY	SYMBOL	DESCRIPTION
P1		CAST–IN–PLACE CONCRETE PAVING, SAW CUT
P2		STEP STONE
P3		ASPHALT PAVING – SEE CIVIL DRAWINGS
P4		CAST–IN–PLACE CONCRETE WALK 5' WIDE @ R.O.W
P5		CAST–IN–PLACE CONCRETE WALK 5' WIDE @ R.O.W
P6		TRUNCATED DOMES
P7		DECOMPOSED GRANITE

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

Landscape Architect

swa

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94108
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www.swagroup.com
+1.415.838.8770 o

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Key Plan

Date
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Phase
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Job Number
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Drawing Title

LAYOUT & MATERIAL PLAN

Drawing Number

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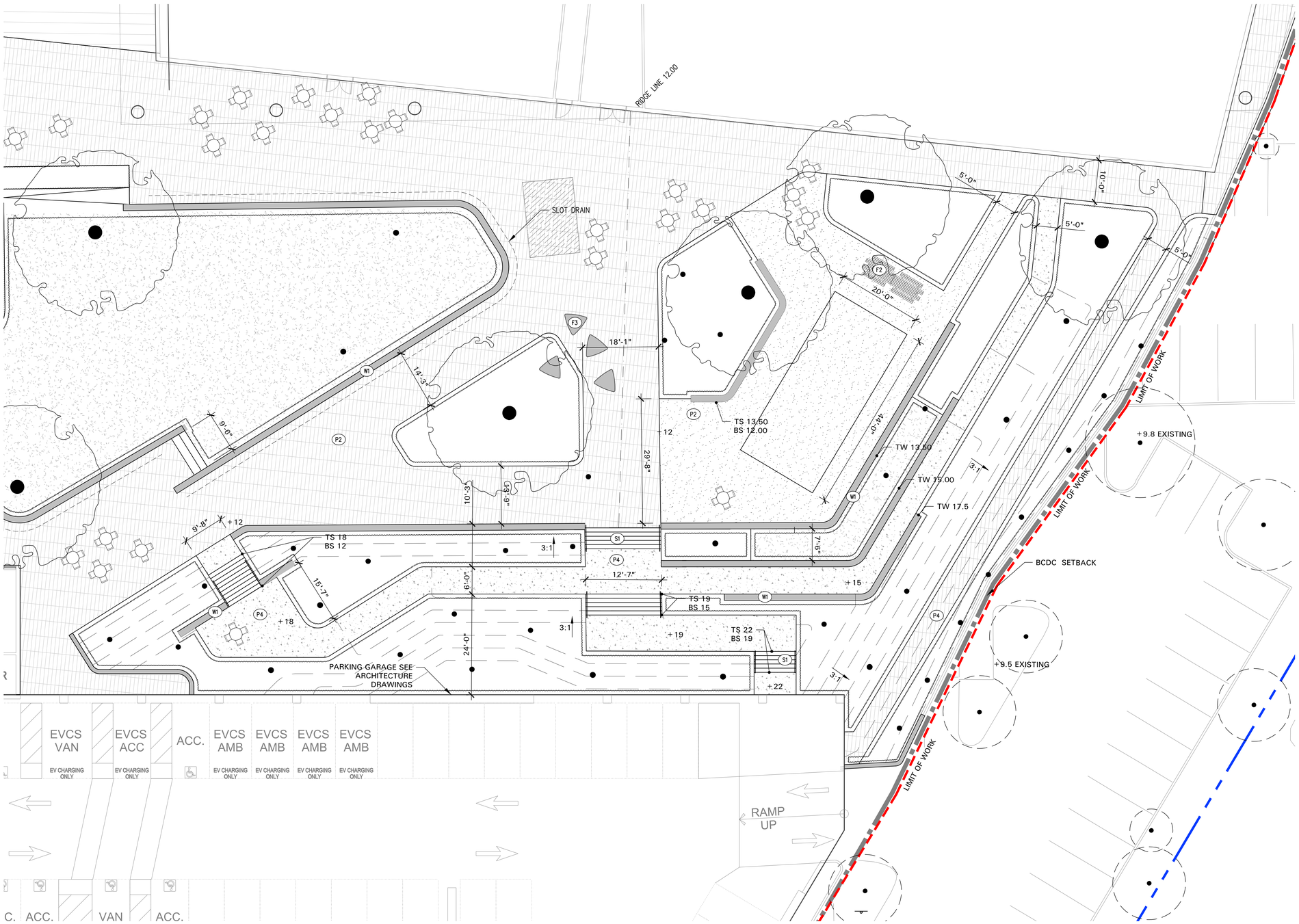
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1301 SHOREWAY, BELMONT | SITE PLAN – PROPOSED

Scale 0 5' 10' — 1" = 10'



WALLS & STEPS

KEY	SYMBOL	DESCRIPTION
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S1		CONCRETE STEPS
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SYMBOL/KEY	DESCRIPTION
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PA	PLANTING AREA
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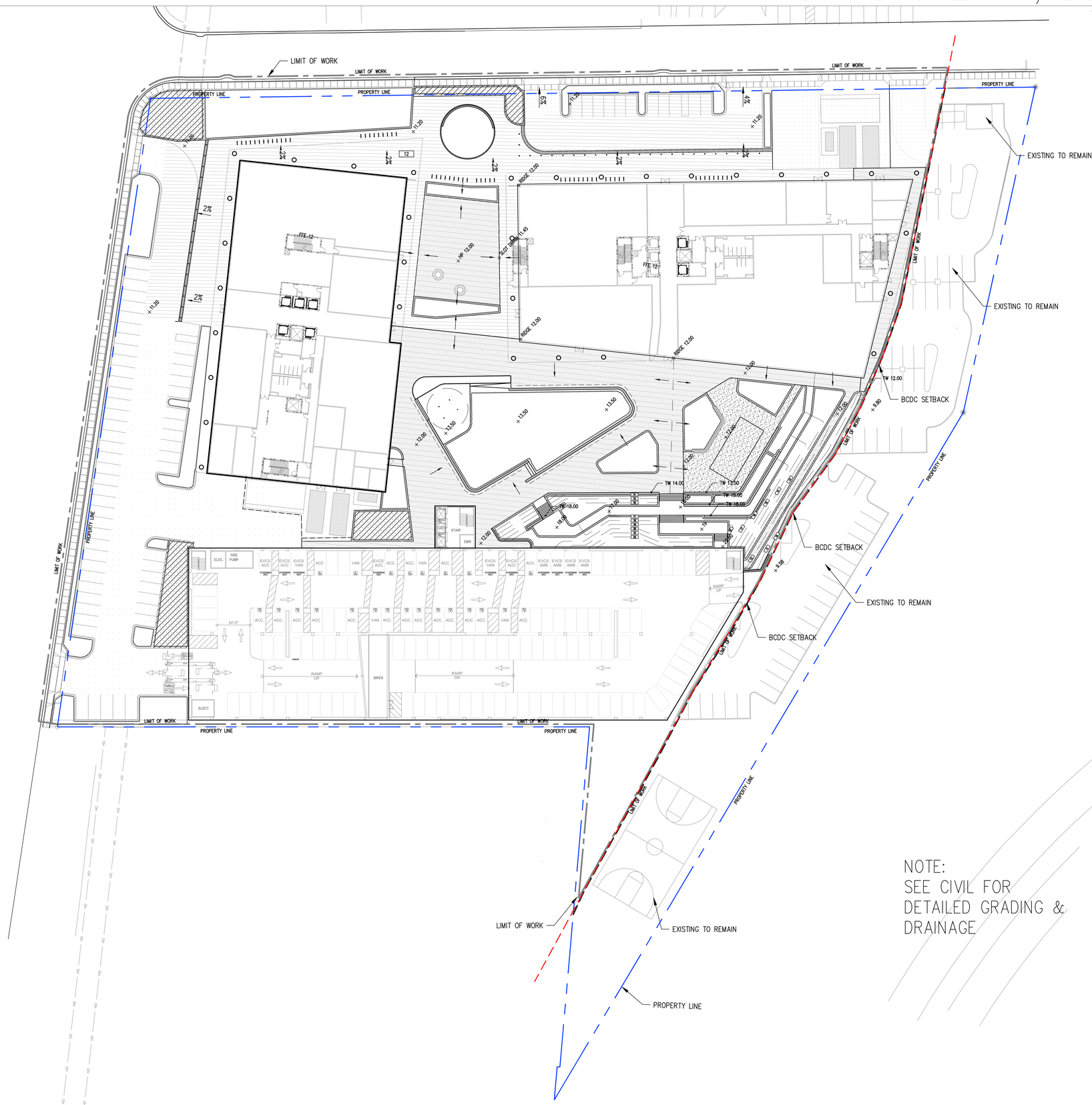
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1" = 30'



NOTE:
SEE CIVIL FOR DETAILED GRADING & DRAINAGE

GRADING LEGEND

SYMBOL	DESCRIPTION
+ 13.50	SPOT ELEVATION
— —	RIDGE LINE
	PLANTER DRAIN
	AREA DRAIN
—FD—	FRENCH DRAIN
	SLOT DRAIN
	SLOPE IN PAVING
	SLOPE IN PLANTING
1.00	EXISTING CONTOUR
1.00	NEW CONTOUR
GB	GRADE BREAK
BIO	BIO RETENTION AREA – SEE CIVIL DRAWINGS
TS	TOP OF STAIR
BS	BOTTOM OF STAIR
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
TW	TOP OF WALL
BW	BOTTOM OF WALL
FS	FINISH SURFACE
FG	FINISH GRADE
TC	TOP OF CURB

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

Landscape Architect

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Key Plan

Date
06.16.2022
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Job Number
DGAT201

Drawing Title

GRADING & DRAINAGE PLAN

Drawing Number

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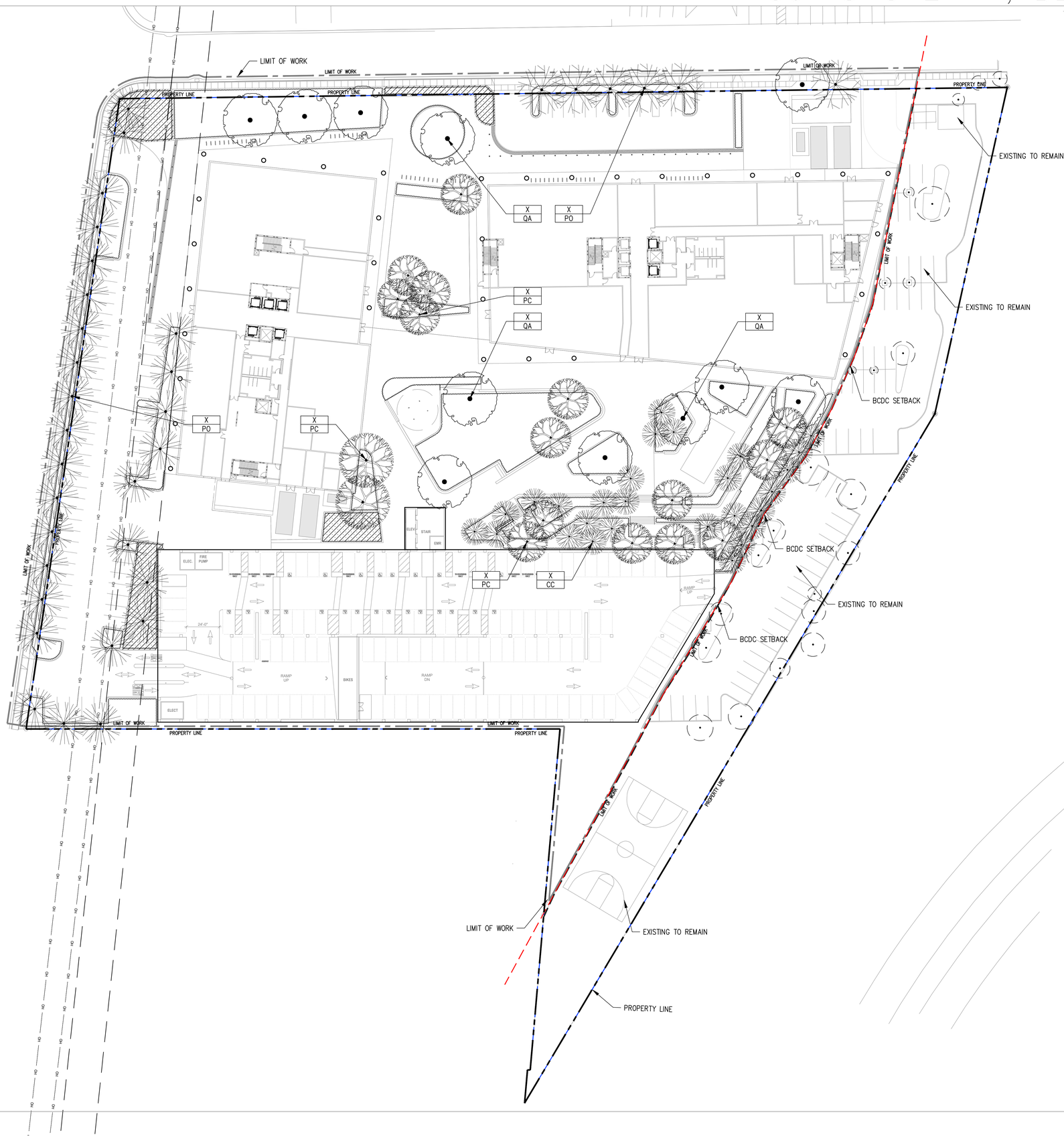
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1" = 30'



TREES	
KEY	BOTANICAL NAME
	PINUS CANARIENSIS
	QUERCUS AGRIFOLIA
	ULMUS PARVIFLORA 'GREEN GEM'
	CERCIS CANADENSIS
	ARCTOSTAPHYLOS DENSIFLORA

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

Landscape Architect

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Key Plan

Date
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PLANNING
Job Number
DGAT201

Drawing Title

TREE PLANTING PLAN

Drawing Number

NOT FOR CONSTRUCTION

L3.01

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Scale 0 15' 30'
1" = 30'



UNDERSTORY

KEY	SYMBOL	BOTANICAL NAME
PA1		FESTUCA RUBRA 'MOLATE'
PA2		CAREX DIVULSA MUHLENBERGIA RIGENS
PA3		IRIS DOUGLASIANA JUNCUS PATENS 'ELK BLUE' LEYMUS CONDENSATUS SALVIA SPATHACEA
PA4		CARPENTERIA CALIFORNICA HETEROMELES ARBUTIFOLIA ROMNEYA COULTERI CISTUS SPP.

GENERAL

SYMBOL/KEY	DESCRIPTION
	LIMIT OF WORK
	PROPERTY LINE
PA	PLANTING AREA
	EXISTING TREE TO REMAIN

Landscape Architect

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Key Plan

Date
06.16.2022
Phase
PLANNING
Job Number
DGAT201

Drawing Title

UNDERSTORY PLANTING PLAN

Drawing Number

NOT FOR CONSTRUCTION

L3.02

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Appendix B

Documentation of Water Supply Agreements (excluding attachments)

AMENDED AND RESTATED
WATER SUPPLY AGREEMENT
between
THE CITY AND COUNTY OF SAN FRANCISCO
and
WHOLESALE CUSTOMERS
in
ALAMEDA COUNTY, SAN MATEO COUNTY AND
SANTA CLARA COUNTY

NOVEMBER 2018

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O Statement of Wholesale Revenue Requirement/Changes in Balancing Account (Section 7.02.B.1)

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AMENDED AND RESTATED
WHOLESALE WATER SUPPLY AGREEMENT

Introductory Statement

Both San Francisco, as the Regional Water System owner and operator, and its Wholesale Customers share a commitment to the Regional Water System providing a reliable supply of high quality water at a fair price, and achieving these goals in an environmentally sustainable manner.

Article 1. Parties, Effective Date, And Defined Terms

1.01. Definitions

The capitalized terms used in this Agreement shall have the meanings set forth in Attachment A.

1.02. Parties

The parties to this Agreement are the City and County of San Francisco and such of the following entities (all of which purchase water from San Francisco) as have executed this Agreement:

Alameda County Water District
California Water Service Company
City of Brisbane
City of Burlingame
City of Daly City
City of East Palo Alto
City of Hayward
City of Menlo Park
City of Millbrae
City of Milpitas
City of Mountain View
City of Palo Alto

City of Redwood City
City of San Bruno
City of San José
City of Santa Clara
City of Sunnyvale
Coastside County Water District
Estero Municipal Improvement District
Guadalupe Valley Municipal Improvement District
Mid-Peninsula Water District
North Coast County Water District
Purissima Hills Water District
Stanford University
Town of Hillsborough
Westborough Water District

The entities listed above which have executed this Agreement shall be collectively referred to as the "Wholesale Customers."

1.03. Effective Date

A. Except as provided in subsection C, this Agreement shall become effective only when it has been approved by San Francisco and by each of the entities listed in Section 1.02 and when San Francisco and each of those entities (except for the City of Hayward) have entered into an Individual Water Sales Contract as provided in Section 9.01.

B. If San Francisco and all of the entities listed in Section 1.02 approve this Agreement and (except for the City of Hayward) an Individual Water Sales Contract on or before July 1, 2009, the effective date shall be July 1, 2009. If San Francisco and all of the entities listed in Section 1.02 approve this Agreement and (except for the City of Hayward) an Individual Water Sales Contract after July 1, 2009 but on or before September 1, 2009, the effective date shall be the date on which the last entity listed in Section 1.02 approves this Agreement and, if required, an Individual Water Sales Contract.

C. If by September 1, 2009 this Agreement has been approved by fewer than all of the entities listed in Section 1.02 or fewer than all of such entities (other than the City of Hayward) have entered into an Individual Water Sales Contract, but it has been approved by entities representing at least 75% in number and 75% of the water purchased from SFPUC by

all listed agencies during FY 2007-08 (i.e., 173.39 MGD), then San Francisco shall have the option to waive the requirement in subsection A that all listed agencies have approved this Agreement and an Individual Water Sales Contract as a condition precedent to this Agreement and any Individual Water Sales Contract becoming effective. San Francisco shall have 60 days from September 1, 2009 (i.e., until October 31, 2009) within which to decide whether or not to waive the condition. If San Francisco decides to waive the condition, those listed agencies that have approved this Agreement and Individual Water Sales Contract before October 31, 2009 will be bound thereby and this Agreement and Individual Water Sales Contracts will become effective as to them, as of the date of San Francisco's waiver. For purposes of determining whether listed agencies that have approved this Agreement represent at least 75% of the water purchased during FY 2007-08, the quantity of water attributable to each listed entity shall be as set forth on Attachment B.

D. he provisions of Article 9 that apply to fewer than all Wholesale Customers (i.e., Sections 9.02 - 9.07) shall not become effective unless San Francisco and the entity to which the section applies have each approved (1) this Agreement, and (2) the underlying Individual Water Sales Contract, unless otherwise provided in Article 9. This provision does not affect the continued enforceability of provisions in those sections that derive from independently enforceable judgments, orders or agreements.

Article 2. Term; Amendments During Term

2.01. Term

The term ("Term") of this Agreement shall be twenty five (25) years. The Term shall begin on July 1, 2009, regardless of whether the Effective Date is before or after that date, and shall end on June 30, 2034. Except as provided in Article 9, the term of all Individual Water Sales Contracts shall also begin on July 1, 2009 and end on June 30, 2034.

2.02. Extension and Renewal of Term

A. In December 2031, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of this Agreement. Between January 1, 2032 and June 30, 2032, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2032 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2030-31, the Term shall be extended for another five (5) years ("First Extension Term"), through June 30, 2039. No party to this Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties under this section.

B. In December 2036, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of this Agreement. Between January 1, 2037 and June 30, 2037, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2037 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2035-36, the Term shall be extended for another five (5) years ("Second Extension Term"), through June 30, 2044. No party to this Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties under this section.

C. After the expiration of the Term, and, if applicable, the Extension Terms, this Agreement may be renewed by mutual consent of the parties, subject to any modifications thereof which may be determined at that time. If fewer than all of the parties desire to renew this Agreement beyond its Term, with or without modifications, the SFPUC and the Wholesale

Customers who wish to extend the Agreement shall be free to do so, provided that no party to this Agreement which does not wish to become a party to such a renewed Agreement shall be compelled to do so by the actions of other parties under this section.

2.03. Amendments

A. **Amendments to Agreement; General**

1. This Agreement may be amended with the written consent of all parties.

2. This Agreement may also be amended with the written consent of San Francisco and of Wholesale Customers representing at least two-thirds in number (i.e., 18 as of July 1, 2009) and seventy five percent (75%) of the quantity of water delivered by San Francisco to all Wholesale Customers during the fiscal year immediately preceding the amendment.

3. No amendment which adversely affects a Fundamental Right of a Wholesale Customer may be made without the written consent of that customer. Amendments to Article 5 which merely affect the allocation of costs between City Retail customers on the one hand and Wholesale Customers collectively on the other, and amendments to Articles 6 and 7 which merely alter budgetary, accounting and auditing procedures do not affect Fundamental Rights and may be made with the consent of parties meeting the requirements of Section 2.03.A.2.

4. When an amendment has been approved by San Francisco and the number of Wholesale Customers required in Section 2.03.A.2, San Francisco shall notify each of the Wholesale Customers in writing of the amendment's adoption. Notwithstanding any provision of law or this Agreement, any Wholesale Customer that claims that the amendment violates its Fundamental Rights under Section 2.03.A.3, shall have 30 days from the date San Francisco delivers the notice of its adoption in which to challenge the amendment's validity through a judicial action. If no such action is filed within 30 days, the amendment shall be finally and conclusively deemed to have been adopted in compliance with this section.

B. **Amendments to Article 9**

1. Notwithstanding the provisions of Sections 2.03.A.2 and 2.03.A.3, any provision of Article 9 which applies only to an individual Wholesale Customer may be amended with the written concurrence of San Francisco and the Wholesale Customer to which it applies;

provided that the amendment will not, directly or indirectly, adversely affect the Fundamental Rights of the other Wholesale Customers.

2. Before making any such amendment effective, San Francisco shall give notice, with a copy of the text of the proposed amendment, to all other Wholesale Customers. The Wholesale Customers shall have 30 days in which to object to the amendment on the ground that it is not permissible under this subsection. If no such objection is received by San Francisco, the proposed amendment shall become effective. If one or more Wholesale Customers object to the amendment, San Francisco, the individual Wholesale Customer with which San Francisco intends to effect the amendment, and the Wholesale Customer(s) which lodged the objection shall meet to discuss the matter.

3. If the dispute cannot be resolved and San Francisco and the Wholesale Customer involved elect to proceed with the amendment, either San Francisco or the Wholesale Customer shall give written notice of such election to each Wholesale Customer that has objected. Any Wholesale Customer that has objected to such amendment shall have 30 days from receipt of this notice within which to commence an action challenging the validity of such amendment, and such amendment shall be deemed effective as of the end of this 30-day period unless restrained by order of court.

C. **Amendments to Attachments**. The following attachments may be amended with the written concurrence of San Francisco and BAWSCA on behalf of the Wholesale Customers:

Attachment	Name
G	January 2006 Water Quality Notification and Communications Plan
J	Water Use Measurement and Tabulation
L-1	Identification of WSIP Projects as Regional/Retail
N-1	Balancing Account/Rate Setting Calculation Table
N-2	Wholesale Revenue Requirement Schedules
N-3	Schedule of Projected Water Sales, Wholesale Revenue Requirement and Wholesale Rates
P	Management Representation Letter

R Classification of Existing System Assets (subject to Section 5.11)

Amendments to these attachments shall be approved on behalf of San Francisco by the Commission and on behalf of BAWSCA by its Board of Directors, unless the Commission by resolution delegates such authority to the General Manager of the SFPUC or the Board of Directors by resolution delegates such authority to the General Manager/CEO of BAWSCA.

D. **Amendments to Individual Water Sales Contracts**. Individual Water Sales Contracts described in Section 9.01 may be amended with the written concurrence of San Francisco and the Wholesale Customer which is a party to that Individual Water Sales Contract; provided that the amendment is not inconsistent with this Agreement or in derogation of the Fundamental Rights of other Wholesale Customers under this Agreement.

Article 3. Water Supply

3.01. Supply Assurance

A. San Francisco agrees to deliver water to the Wholesale Customers up to the amount of the Supply Assurance. The Supply Assurance is for the benefit of the entities listed in Section 1.02, irrespective of whether or not they have executed this Agreement. Water delivered by San Francisco to Retail Customers shall not be included in the Supply Assurance. Until December 31, 2018, the foregoing commitment is subject to Article 4.

B. Both the Supply Assurance and the Individual Supply Guarantees identified in Section 3.02 are expressed in terms of daily deliveries on an annual average basis and do not themselves constitute a guarantee by San Francisco to meet peak daily or hourly demands of the Wholesale Customers, irrespective of what those peak demands may be. The parties acknowledge, however, that the Regional Water System has been designed and constructed to meet peak daily and hourly demands and that its capacity to do so has not yet been reached. San Francisco agrees to operate the Regional Water System to meet peak requirements of the Wholesale Customers to the extent possible without adversely affecting its ability to meet peak demands of Retail Customers. This Agreement shall not preclude San Francisco from undertaking to meet specific peak demand requirements of individual Wholesale Customers in their Individual Water Sales Contracts.

C. The Supply Assurance is perpetual and shall survive the expiration or earlier termination of this Agreement. Similarly, the Individual Supply Guarantees identified in Section 3.02 and/or the Individual Water Sales Contracts are perpetual and shall survive the expiration or earlier termination of this Agreement or the Individual Water Sales Contracts.

D. Notwithstanding the Supply Assurance established by this section, the Individual Supply Guarantees identified in Section 3.02 and the Individual Water Sales Contracts, the amount of water made available by San Francisco to the Wholesale Customers is subject to reduction, to the extent and for the period made necessary by reason of water shortage, Drought, Emergencies, or by malfunctioning or rehabilitation of facilities in the Regional Water System. Any such reduction will be implemented in accordance with Section 3.11. The amount of water made available to the Wholesale Customers may not be reduced, however, merely because the water recycling and groundwater projects which the WSIP envisions to be constructed within San Francisco, or the conservation programs intended to reduce water use

by Retail Customers that are included in the WSIP, do not generate the yield or savings (10 MGD combined) anticipated by San Francisco.

3.02. Allocation of Supply Assurance

A. Pursuant to Section 7.02 of the 1984 Agreement, a portion of the Supply Assurance has been allocated among 24 of the 26 Wholesale Customers. These Individual Supply Guarantees are also expressed in terms of annual average metered deliveries of millions of gallons per day and are listed in Attachment C.

B. Three Wholesale Customers do not have Individual Supply Guarantees. The cities of San Jose and Santa Clara do not have an Individual Supply Guarantees because San Francisco has provided water to them on a temporary and interruptible basis as described in Sections 4.05 and 9.06. The City of Hayward does not have an Individual Supply Guarantee because of the terms of the 1962 contract between it and San Francisco, as further described in Section 9.03.

C. If the total amount of water delivered by San Francisco to Hayward and to the Wholesale Customers that are listed on Attachment C exceeds 184 MGD over a period of three consecutive fiscal years (i.e., July 1 through June 30), then the Individual Supply Guarantees of those Wholesale Customers listed on Attachment C shall be reduced pro rata so that their combined entitlement and the sustained use by Hayward does not exceed 184 MGD. The procedure for calculating the pro rata reduction in Individual Supply Guarantees is set out in Attachment D.

1. The provisions of this subsection C are not in derogation of the reservation of claims to water in excess of the Supply Assurance which are contained in Section 8.07. Nor do they constitute an acknowledgement by Wholesale Customers other than Hayward that San Francisco is obligated or entitled to reduce their Individual Supply Guarantees in the circumstances described herein. The provisions of this subsection C shall, however, be operative unless and until a court determines that its provisions violate rights of the Wholesale Customers derived independently of this Agreement.

2. The foregoing paragraph is not intended to and shall not constitute a contractual commitment on the part of San Francisco to furnish more water than the Supply Assurance to the Wholesale Customers or a concession by San Francisco that the provisions of this subsection violate any rights of the Wholesale Customers.

D. Notwithstanding the reservation of claims contained in Sections 3.02.C and 8.07, it shall be the responsibility of each Wholesale Customer to limit its purchases of water from San Francisco so as to remain within its Individual Supply Guarantee. San Francisco shall not be liable to any Wholesale Customer or be obligated to supply more water to any Wholesale Customer individually or to the Wholesale Customers collectively than the amount to which it or they are otherwise entitled under this Agreement due to the use by any Wholesale Customer of more water than the amount to which it is entitled under this Agreement.

E. San Francisco shall install such new connections between the Regional Water System and the distribution system of any Wholesale Customer that are necessary to deliver the quantities of water to which the Wholesale Customer is entitled under this Agreement. San Francisco shall have the right to determine the location of such connections, in light of the need to maintain the structural integrity of the Regional Water System and, where applicable, the need to limit peaking directly off of Regional Water System pipelines by a Wholesale Customer's individual retail customers, the need to ensure that a Wholesale Customer's individual retail customers have access to alternative sources of water in the event of a reduction in San Francisco's ability to provide them with water, and other factors which may affect the desirability or undesirability of a particular location. San Francisco's decisions regarding the location of new connections and the location, size and type of any new meters shall not be reviewable by a court except for an abuse of discretion or failure to provide a Wholesale Customer with connections and meters adequate to deliver the quantity of water to which it is entitled under this Agreement.

3.03. Wholesale Customer Service Areas

A. Each of the Individual Water Sales Contracts described in Section 9.01 will contain, as an exhibit, a map of the Wholesale Customer’s service area. A Wholesale Customer may not deliver water furnished to it by San Francisco outside the boundary of its service area without the prior written consent of San Francisco, except for deliveries to another Wholesale Customer on an emergency and temporary basis pursuant to Section 3.07.B.

B. If a Wholesale Customer wishes to expand its service area, it shall request San Francisco's consent to the expansion and provide information reasonably requested by San Francisco about the amount of water projected to be purchased from San Francisco to meet demand within the area proposed to be added to the service area.

C. San Francisco may refuse a Wholesale Customer's request to expand its service area on any reasonable basis. If San Francisco denies a request by a Wholesale Customer to expand its service area, or fails to act on the request for six months after it has been submitted, the Wholesale Customer may challenge San Francisco's denial or delay in court. Such a challenge may be based on the Wholesale Customers' claim, reserved in Section 8.07, that San Francisco is obligated under federal or state law to furnish water, included within its Individual Supply Guarantee, to it for delivery outside its then-existing service area and that it is entitled to enlarge its service area to supply water to such customers. San Francisco reserves the right to contest any such claim on any applicable ground. This subsection does not apply to San Jose and Santa Clara, whose maximum service areas are fixed pursuant to Section 9.06.

D. This section will not prevent San Francisco and any Wholesale Customer, other than San Jose and Santa Clara, from agreeing in an Individual Water Sales Contract or an amendment thereto that:

- the Wholesale Customer may expand its service area without subsequent San Francisco approval to a definitive size but no larger, or
- the Wholesale Customer will not expand its service area beyond its present limits without San Francisco approval

and waiving the provisions of this section with respect to any additional expansion.

E. If two or more Wholesale Customers agree to adjust the boundaries of their respective service areas so that one assumes an obligation to serve customers in an area that was previously within the service area of another Wholesale Customer, they may also correspondingly adjust their respective Individual Supply Guarantees. Such adjustments are not subject to the requirements of Section 3.04 and shall require only the consent of San Francisco and the Wholesale Customers involved, so long as the Supply Assurance and the Individual Supply Guarantees of other Wholesale Customers are not affected. Service area boundary adjustments that would result in the expansion of any California Water Service Company service areas are subject to the requirements of Section 9.02.D. Any adjustment of service area boundaries that would result in the supply of water in violation of this Agreement or the Act shall be void.

F. San Francisco acknowledges that it has heretofore consented in writing to deliveries of water by individual Wholesale Customers outside their service area boundaries and

agrees that nothing in this Agreement is intended to affect such prior authorizations, which remain in full force and effect according to their terms. Such authorizations shall be identified in the Individual Water Sales Contracts.

3.04. Permanent Transfers of Individual Supply Guarantees

A. A Wholesale Customer that has an Individual Supply Guarantee may transfer a portion of it to one or more other Wholesale Customers, as provided in this section.

B. Transfers of a portion of an Individual Supply Guarantee must be permanent. The minimum quantity that may be transferred is 1/10th of a MGD.

C. Transfers of portions of Individual Supply Guarantees are subject to approval by the SFPUC. SFPUC review is limited to determining (1) whether a proposed transfer complies with the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee.

D. The participants in a proposed transfer shall provide notice to the SFPUC specifying the amount of the Individual Supply Guarantee proposed to be transferred, the proposed effective date of the transfer, which shall not be less than 60 days after the notice is submitted to the SFPUC, and the Individual Supply Guarantees of both participants resulting from the transfer. The SFPUC may require additional information reasonably necessary to evaluate the operational impacts of the transfer. The SFPUC will not unreasonably withhold or delay its approval; if the SFPUC does not act on the notice within 60 days, the transfer will be deemed to have been approved.

E. Within 30 days after the transfer has become effective, both the transferor and the transferee will provide notice to the SFPUC and BAWSCA. By September 30 of each year during the Term, the SFPUC and BAWSCA will prepare an updated Attachment C to reflect transfers occurring during the immediately preceding fiscal year.

F. Amounts transferred will remain subject to pro rata reduction under the circumstances described in Section 3.02.C and according to the formula set forth in Attachment D.

3.05. Restrictions on Resale

Each Wholesale Customer agrees that it will not sell any water purchased from San Francisco to a private party for resale by such private party to others in violation of the Act.

Each Wholesale Customer also agrees that it will not sell water purchased from San Francisco to another Wholesale Customer without prior written approval of the SFPUC, except on a temporary and emergency basis as permitted in Section 3.07.B.2. The SFPUC agrees that it will not unreasonably withhold its consent to a request by a Wholesale Customer to deliver water to another Wholesale Customer for resale.

3.06. Conservation; Use of Local Sources; Water Management Charge

A. In order to support the continuation and expansion of water conservation programs, water recycling, and development of alternative supplies within the Wholesale Customers' service areas, the SFPUC will, if requested by BAWSCA, include the Water Management Charge in water bills sent to Wholesale Customers. The SFPUC will deliver all Water Management Charge revenue to BAWSCA monthly and shall deliver an annual accounting of Water Management Charge revenue to BAWSCA within 90 days after the end of each fiscal year. The SFPUC's obligations to collect and deliver Water Management Charge revenue to BAWSCA under this subsection are conditioned on BAWSCA's delivery to the SFPUC of an annual report describing the projects and programs on which Water Management Charge funds received from the SFPUC during the previous fiscal year were expended and an estimate of the amount of water savings attributable to conservation programs and of the yield of alternative supplies developed. This report will be due within 180 days after the end of each fiscal year during which Water Management Charge funds were received.

B. The SFPUC will work together with BAWSCA to explore ways to support water conservation programs, recycling projects, and conjunctive use alternatives outside the Wholesale Service Area, in particular projects and programs that have the potential to increase both flows in the lower Tuolumne River (downstream of New Don Pedro Reservoir) and water deliveries to the Regional Water System.

C. Each Wholesale Customer shall take all actions within its legal authority related to water conservation that are necessary to insure that the SFPUC (a) remains eligible for (i) state and federal grants and (ii) access to the Drought Water Bank operated by the California Department of Water Resources, as well as other Drought-related water purchase or transfer

programs, and (b) complies with future legal requirements imposed on the Regional Water System by the federal government, the State, or any other third party as conditions for receiving funding or water supply.

D. San Francisco and each Wholesale Customer agree that they will diligently apply their best efforts to use both surface water and groundwater sources located within their respective service areas and available recycled water to the maximum feasible extent, taking into account the environmental impacts, the public health effects and the effects on supply reliability of such use, as well as the cost of developing such sources.

3.07. Restrictions on Purchases of Water from Others; Minimum Annual Purchases

A. Each Wholesale Customer (except for Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale) agrees that it will not contract for, purchase or receive, with or without compensation, directly or indirectly, from any person, corporation, governmental agency or other entity, any water for delivery or use within its service area without the prior written consent of San Francisco.

B. The prohibition in subsection A does not apply to:

1. recycled water;

2. water necessary on an emergency and temporary basis, provided that the Wholesale Customer promptly gives San Francisco notice of the nature of the emergency, the amount of water that has been or is to be purchased, and the expected duration of the emergency; or

3. water in excess of a Wholesale Customer's Individual Supply Guarantee.

C. Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale may purchase water from sources other than San Francisco, provided that San Francisco shall require that each purchase a minimum annual quantity of water from San Francisco. These minimum quantities are set out in Attachment E and shall also be included in the Individual Water Sales Contracts between San Francisco and each of these four Wholesale Customers. The minimum purchase requirement in these Individual Water Sales Contracts will be waived during a Drought or other period of water shortage if the water San Francisco makes available to these Wholesale Customers is less than its minimum purchase quantity.

3.08. Water Quality

A. San Francisco shall deliver treated water to Wholesale Customers (except Coastside County Water District, which receives untreated water from Crystal Springs and Pilarcitos Reservoirs) that complies with primary maximum contaminant level and treatment technique standards at the regulatory entry points designated in the San Francisco Regional Water System Domestic Water Supply Permit (currently Permit No. 02-04-04P3810001) issued by the California Department of Public Health (CDPH).

B. San Francisco will provide notice to the Wholesale Customers in accordance with the Water Quality Notification and Communications Plan (current version dated January 2006), attached hereto as Attachment G. San Francisco will regularly update its plan in consultation with the Wholesale Customers and the CDPH. The next update will be completed one year after the Effective Date and include expanded coverage of secondary maximum contaminant level exceedances and water quality communication triggers. The plan will note that the Wholesale Customers will receive the same notification no later than the San Francisco water system (currently Permit No. 02-04-01P3810011) except for distribution-related issues.

C. San Francisco and the Wholesale Customers will establish a Water Quality Committee. The Water Quality Committee will meet at least quarterly to collaboratively address water quality issues, such as Water Quality Notification and Communications Plan updates, regulatory issues, and water quality planning studies/ applied research. San Francisco and each Wholesale Customer will designate a representative to serve on the committee. There will be a Chair and Vice Chair position for the Water Quality Committee. The Chair and Vice Chair positions will be held by San Francisco and the Wholesale Customers and rotate between them on an annual basis.

3.09. Completion of WSIP

San Francisco will complete construction of the physical facilities in the WSIP by December 30, 2021. The SFPUC agrees to provide for full public review and comment by local and state interests of any proposed changes that delay previously adopted project completion dates or that delete projects. The SFPUC shall meet and consult with BAWSCA before proposing to the Commission any changes in the scope of WSIP projects which reduce their capacity or ability to achieve adopted Level of Service Goals and Objectives. The SFPUC

retains discretion to determine whether to approve the physical facilities in the WSIP until after it completes the CEQA process as set forth in Section 4.07.

3.10. Regional Water System Repair, Maintenance and Operation

A. San Francisco will keep the Regional Water System in good working order and repair consistent with prudent utility practice.

B. San Francisco will submit reports to its Retail and Wholesale Customers on the "State of the Regional Water System," including reports on completed and planned maintenance, repair or replacement projects or programs, by September of every even-numbered year, with reports to start in September 2010.

C. San Francisco will cooperate with any audit of the SFPUC's asset management practices that may be initiated and financed by BAWSCA or the Wholesale Customers. BAWSCA may contract with third parties to conduct the audits. San Francisco will consider the findings and recommendations of such audits and will provide a written response indicating agreement with the recommendations, or disagreement with particular recommendations and the reasons why, within 90 calendar days after receipt.

D. San Francisco will continue to operate its reservoirs in a manner that assigns higher priority to the delivery of water to the Bay Area and the environment than to the generation of electric power. The SFPUC, as the Regional Water System operator, is solely responsible for making day-to-day operational decisions.

3.11. Shortages

A. **Localized Water Reductions**. Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers individually, San Francisco may reduce the amount of water available or interrupt water deliveries to specific geographical areas within the Regional Water System service area to the extent that such reductions are necessary due to Emergencies, or in order to install, repair, rehabilitate, replace, investigate or inspect equipment in, or perform other maintenance work on, the Regional Water System. Such reductions or interruptions may be imposed by San Francisco without corresponding reductions or interruptions in the amount of water available to SFPUC water users outside the specific geographical area where reductions or interruptions are necessary, if the system's ability to supply water outside the specific geographical area has not been impaired. In the event of such

a reduction or interruption, San Francisco will restore the supply of water to the specific geographical area as soon as is possible. Except in cases of Emergencies (during which oral notice shall be sufficient), San Francisco will give the affected Wholesale Customer(s) reasonable written notice of such localized reductions or interruptions, the reasons therefor, and the probable duration thereof.

B. **System-Wide Shortages and SFPUC Response to Regional Emergencies**. Following a major system emergency event, the SFPUC will work closely with its Wholesale Customers to monitor customer demand, including the demand source. In the event that any individual Wholesale Service Area or Retail Service Area customer's uncontrolled distribution system leaks could result in major water waste and endanger the supply provided by the Regional Water System as a whole, flow through some customer connections may need to be temporarily reduced or terminated. SFPUC will work closely with customers to assess the nature of the demand (e.g. fire-fighting versus leakage), so that public health and safety protection can be given top priority.

1. All emergencies that require use of non-potable source water will require use of chlorine, or other suitable disinfectant, if feasible.

2. San Francisco will use its best efforts to meet the seismic reliability and delivery reliability Level of Service Goals and Objectives adopted by the Commission in conjunction with the WSIP. San Francisco will distribute water on an equitable basis throughout the Regional Water System service area following a regional Emergency, subject to physical limitations caused by damage to the Regional Water System.

3. San Francisco's response to Emergencies will be guided by the then-current version of the ERRP. The SFPUC shall periodically review, and the Commission may amend, the ERRP to ensure that it remains an up-to-date and effective management tool.

4. The SFPUC will give the Wholesale Customers notice of any proposal to amend the ERRP in a manner that would affect them. The notice will be delivered at least thirty days in advance of the date on which the proposal is to be considered by the Commission and will be accompanied by the text of the proposed amendment.

C. **Shortages Caused by Drought; Acquisition of Dry Year Supplies**. Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers

individually, San Francisco may reduce the amount of water available to the Wholesale Customers in response to Drought.

1. The Tier 1 Shortage Plan (Attachment H) will continue to be used to allocate water from the Regional Water System between Retail and Wholesale Customers during system-wide shortages of 20% or less.

2. San Francisco and the Wholesale Customers may negotiate in good faith revisions to the Tier 1 Shortage Plan to adjust for and accommodate anticipated changes due to demand hardening in the SFPUC's Wholesale and Retail Service Areas. Until agreement is reached, the current Tier 1 Shortage Plan will remain in effect.

3. The SFPUC will honor allocations of water among the Wholesale Customers ("Tier 2 Allocations") provided by BAWSCA or if unanimously agreed to by all Wholesale Customers. If BAWSCA or all Wholesale Customers do not provide the SFPUC with Tier 2 Allocations, then the SFPUC may make a final allocation decision after first meeting and discussing allocations with BAWSCA and the Wholesale Customers. For Regional Water System shortages in excess of 20%, San Francisco shall (a) follow the Tier 1 Shortage Plan allocations up to the 20% reduction, (b) meet and discuss how to implement incremental reductions above 20% with the Wholesale Customers, and (c) make a final determination of allocations above the 20% reduction. After the SFPUC has made the final allocation decision, the Wholesale Customers shall be free to challenge the allocation on any applicable legal or equitable basis.

4. San Francisco will use its best efforts to identify potential sources of dry year water supplies and establish the contractual and other means to access and deliver those supplies in sufficient quantity to meet a goal of not more than 20 percent system-wide shortage in any year of the design drought.

5. San Francisco will cooperate with BAWSCA to improve water supply reliability. As an example of such cooperation, San Francisco may invite a representative of BAWSCA to attend and participate in meetings with third parties for development of dry year water supplies. If San Francisco does not invite a BAWSCA representative to attend a specific scheduled meeting, it will promptly (within 30 days of any such meeting) provide BAWSCA with a written or oral report on the meeting, including any decisions reached at it, as well as information about planned subsequent meetings. Progress in securing dry year water supplies

will be reported to the SFPUC and the BAWSCA board of directors during the first quarter of each calendar year.

3.12. Wheeling of Water from Outside SFPUC System

Subject to the Wheeling Statute, the SFPUC will not deny use of Regional Water System unused capacity for wheeling when such capacity is available for wheeling purposes during periods when the SFPUC has declared a water shortage emergency under Water Code Section 350 if the following conditions are met:

A. The transferor pays reasonable charges incurred by the SFPUC as a result of the wheeling, including capital, operation, maintenance, administrative and replacement costs (as such are defined in the Wheeling Statute).

B. Wheeled water that is stored in the Regional Water System spills first.

C. Wheeled water will not unreasonably: (1) impact fish and wildlife resources in Regional Water System reservoirs; (2) diminish the quality of water delivered for consumptive uses; or (3) increase the risk of exotic species impairing Regional Water System operations. The transferor may at its own expense provide for treatment to mitigate these effects.

D. Priority will be given to wheeling by Wholesale Customers or BAWSCA over arrangements for third-party public entities.

3.13. Limits on New Customers

A. **New Wholesale Customers Prior to December 31, 2028**. Until December 31, 2028, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations as provided in Section 4.07;

2. It concurrently completes any necessary environmental review under CEQA as provided in Section 4.07 and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD; and

3. This Agreement is amended to incorporate any commitments to proposed new wholesale customers and to San Jose and Santa Clara, and to address the effects, if any,

of the new customer(s) on water supply reliability, water quality and cost to existing customers of the Regional Water System.

B. **New Wholesale Customers After December 31, 2028**. As of January 1, 2029, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations as provided in Section 4.07;

2. It concurrently completes any necessary environmental review under CEQA as provided in Section 4.07 and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD;

3. Doing so increases the reliability of the Regional Water System; and

4. This Agreement is concurrently amended (a) to reflect that increased reliability by means of an increased commitment by San Francisco to deliver water during Droughts and (b) to address the effects, if any, of the new customer(s) on water supply, water quality and cost to existing customers of the Regional Water System.

C. **New Retail Customers**. San Francisco may enter into new retail water service obligations outside of the City and County of San Francisco:

1. Only in Alameda, San Mateo, Santa Clara, San Joaquin and Tuolumne Counties;

2. That are within or immediately adjacent to areas in which it currently serves other Retail Customers; and

3. Until the aggregate additional demand represented by the new retail customers reaches 0.5 MGD.

The limitations on serving new Retail Customers described in this subsection do not apply to historical obligations to supply water that may be contained in prior agreements between the SFPUC or its predecessor the Spring Valley Water Company, and individual users or property owners located adjacent to Regional Water System transmission pipelines.

D. **Water Exchanges and Cost Sharing Agreements with Other Water Suppliers**. Subject to completion of necessary environmental review under CEQA, San

Francisco may at any time enter into water exchanges or cost sharing agreements with other water suppliers to enhance dry year or normal year water deliveries, provided that San Francisco cannot incur new water service obligations to such other water suppliers unless the requirements for taking on new wholesale customers in subsections A and B above are met.

3.14. Measurement of Water

A. The parties recognize that continuous and accurate measurement of water deliveries to and from the Regional Water System and maintenance of complete and accurate records of those measurements is necessary (1) for the costs of the Regional Water System to be allocated in accordance with this Agreement, (2) for implementation of other provisions of this Agreement, and (3) for effective operation and maintenance of a water system serving a large urbanized region.

B. It is the responsibility of the SFPUC to obtain and record these measurements. To do so, the SFPUC shall install, maintain and operate measuring and recording equipment at the following locations: (1) inputs to the Regional Water System from all water sources ("System Input Meters"), (2) internal flow meters to support operation of the Regional Water System ("In-Line Meters"), (3) deliveries to the City at the San Francisco-San Mateo County line ("County-Line Meters") and to three reservoirs in San Francisco ("In-City Terminal Reservoir Meters"), (4) deliveries to SFPUC Retail Customers located outside the boundaries of the City, and (5) deliveries to the Wholesale Customers, as described and illustrated in Attachment J.

C. The SFPUC shall inspect, test, service, and calibrate the measuring and recording equipment installed at the locations described in subsection B and will repair or replace them when necessary, in order to ensure that their accuracy is consistent with specifications provided in Attachment J.

D. The SFPUC shall continue to contract with a qualified independent metering consultant to perform periodic inspection, testing, servicing and calibration of the County-Line Meters, the In-City Terminal Reservoir Meters, and the System Input and In-Line Meters described in Attachment J, as well as the portion of the SFPUC's Supervisory Control and Data Acquisition (SCADA) system that utilizes the flow signals produced by that measuring and recording equipment. The method, schedule and frequency for calibration and maintenance of the County-Line Meters and the In-City Terminal Reservoir Meters are specified in Attachment J. The SFPUC shall provide copies of the metering consultant's reports to BAWSCA.

E. System Input Meters measure water deliveries into the Regional Water System from sources such as Hetch Hetchy and the SFPUC's water treatment plants. System Input Meters also measure deliveries from the Regional Water System to outside sources or from such sources to the Regional Water System through interties with the Santa Clara Valley Water District and the East Bay Municipal Utility District. In-Line Meters measure internal system flows and are located on the Bay Division Pipelines and other main transmission pipelines. These meters are collectively referred to as the "System Input and In-line Meters." Similar to the County-Line Meters, the System Input and In-Line Meters have secondary metering equipment, such as differential pressure transmitters and flow recorders. The System Input and In-Line Meters, and all associated secondary metering equipment, shall be calibrated and maintained according to the method, schedule, and frequency specified in the Procedures Manual described in subsection G, below.

F. The locations of the smaller and more numerous meters described in subsection B (4) and (5) are not illustrated in Attachment J; however, they are also critical in the determination of cost allocations, and accordingly require continued maintenance and calibration. It is the responsibility of the SFPUC to maintain the accuracy of these meters and their secondary metering equipment.

G. The SFPUC will prepare a Procedures Manual which will describe in detail the procedures for periodic inspection, testing, servicing and calibration of the measuring and recording equipment described in subsection B. Once the Procedures Manual is completed, the SFPUC and BAWSCA may agree that it should supersede some or all of the requirements in Attachment J regarding the County-Line and the In-City Terminal Reservoir Meters. Unless and until such an agreement is reached and documented, however, the requirements in Attachment J, Section D will continue in force as minimum standards for meter maintenance and calibration of the County-Line and In-City Terminal Reservoir Meters (subject to modification under the circumstances described in Attachment J, Section A.4).

H. If BAWSCA and the SFPUC are unable to agree on the water use calculations required by Attachment J for a particular year, the Wholesale Customers may file a demand for arbitration challenging the SFPUC's determination of the Wholesale Revenue Requirement for that year on the basis of its reliance on disputed water use calculations. Such a challenge must be brought in the manner and within the time specified in Section 8.01.

3.15. New Sources of Water Supply to Maintain Supply Assurance

A. **Urgent Reductions of Existing Surface Water Supplies**. Sudden and unanticipated events may require San Francisco to act promptly to protect the health, safety and economic well-being of its Retail and Wholesale Customers. Such sudden events include, but are not limited to drought, earthquakes, terrorist acts, catastrophic failures of facilities owned and operated by San Francisco, and other natural or man-made events. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers. San Francisco will keep the Wholesale Customers informed of actions being taken under this subsection, progress made, and contingency actions the Wholesale Customers may need to consider taking. To the extent appropriate and applicable, San Francisco will act in accordance with Section 3.11 and the ERRP. Nothing in this subsection limits San Francisco's obligations under Section 3.11 to pursue additional sources of supply to augment supplies available during drought.

B. **Non-Urgent Reductions of Existing Surface Water Supplies**. Climate change, regulatory actions and other events may impact San Francisco's ability to maintain the Supply Assurance from its existing surface water supplies, but on timescales long enough to permit San Francisco to collaborate with its Wholesale Customers on how best to address possible impacts to water supply. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers. San Francisco will keep the Wholesale Customers informed of actions being taken under this subsection, progress made, and contingency actions the Wholesale Customers may need to consider taking. San Francisco will solicit input and recommendations from BAWSCA and the Wholesale Customers, and take those recommendations into consideration. Prior to Commission approval of plans or taking other actions that would impact the Wholesale Revenue Requirement, San Francisco will hold a public hearing to receive written and oral comments. Nothing in this subsection modifies San Francisco's obligation to maintain the ability to provide the Supply Assurance under this Agreement.

3.16. New Sources of Water Supply to Increase Supply Assurance

A. **Surface Water Supplies From Existing Watersheds After 2018**. The Commission action in SFPUC Resolution Number 08-0200, adopted October 30, 2008 requires certain decisions by San Francisco regarding whether to supply more than 265 MGD from its watersheds following 2018. Such decisions are to be made by December 31, 2018, subject to the exercise of San Francisco's retained CEQA discretion in Section 4.07. San Francisco's future decisions may include an offer to increase the Supply Assurance at the request of some or all of its Wholesale Customers. Costs associated with providing additional water from its existing water supplies in San Mateo, Santa Clara, Alameda, Tuolumne, and Stanislaus Counties shall be allocated to Wholesale and Retail Customers as described in Article 5.

B. **New Water Supplies**. If San Francisco seeks to develop additional water supplies from new sources to increase the Supply Assurance available to Wholesale Customers, studies and resulting water supply projects will be conducted jointly with BAWSCA under separate agreement(s) specifying the purpose of the projects, the anticipated regional benefits and how costs of studies and implementation will be allocated and charged. Nothing in this Agreement shall serve as precedent for the allocation of such new supply capital costs between Retail and Wholesale Customers or associated operational expenses, which shall only occur following approval of both parties and amendment of this Agreement, if necessary, under Section 2.03.

3.17. Westside Basin Groundwater Storage and Recovery Project

In August 2014, the SFPUC approved a WSIP project called the Groundwater Storage and Recovery Project (“Project”), which authorized the SFPUC to enter into an agreement governing the operation of the Project with the Participating Pumpers entitled “Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Groundwater Basin by and among the San Francisco Public Utilities Commission, the City of Daly City, the City of San Bruno, and California Water Service Company” (“Project Operating Agreement”), which became effective on December 16, 2014. The Project produces Regional benefits for all customers of the Regional Water System by making use of available groundwater storage capacity in the Southern portion of the Westside Basin through the supply of additional surface water (“In Lieu Water”) to the Participating Pumpers from the Regional Water System, in exchange for a corresponding reduction in groundwater pumping at existing wells owned by the Participating Pumpers. The new groundwater supply that accrues to storage as a result of

delivery of In Lieu Water will be recovered from the SFPUC Storage Account during water shortages using new Regional Project Facilities or Shared Facilities operated by the Participating Pumpers and the SFPUC. Project mitigation capital costs and annual Project operations and maintenance expenses and water supplies shall be allocated as follows:

A. All In Lieu Water delivered to the Participating Pumpers shall be (1) temporary and interruptible in nature and (2) at the sole discretion of the SFPUC based on the total volume of water available to the Regional Water System.

B. All In Lieu Water delivered to the Participating Pumpers shall be considered a delivery of water to storage and shall not be construed to affect or increase the Individual Supply Guarantees of these Wholesale Customers or to otherwise entitle them to any claim of water in excess of their Individual Supply Guarantees.

C. In the event that it is necessary to reduce the Participating Pumpers' aggregate designated quantity of groundwater production allocation pursuant to Section 4.7 of the Project Operating Agreement, the SFPUC may supply an annual maximum of up to 500 acre feet of Participating Pumper Replacement Water from the Regional Water System at a price comparable to the Participating Pumpers' then-current groundwater cost, as may be adjusted annually as provided for in Section 4.7 of the Project Operating Agreement. Each of the Participating Pumpers may elect to take delivery of its share of Participating Pumper Replacement Water either as interruptible surface water deliveries from the Regional Water System or as a transfer of storage credits from the SFPUC Storage Account. All revenue received from such water sales or transfers shall be considered revenue related to the sale of water and allocated between Retail Customers and Wholesale Customers on the basis of Proportional Water Use. All volumes of Participating Pumper Replacement Water delivered shall not be construed to affect or increase the Individual Supply Guarantees of these Wholesale Customers or to otherwise entitle them to any claim of water in excess of their Individual Supply Guarantees.

D. Any operation and maintenance expenses incurred by the Participating Pumpers and the SFPUC that are related to the operation of Project Facilities and Shared Facilities for Project purposes shall be included as Regional pumping expenses under Section 5.05.B of this Agreement and included as part of the Wholesale Revenue Requirement. For rate setting purposes, estimated Project operation and maintenance expenses shall be used as set forth in

Section 6.01 of this Agreement. Operation and maintenance expenses associated with the Participating Pumpers' Existing Facilities that do not provide Regional benefits shall not be included in the Wholesale Revenue Requirement. On a case-by-case basis, the SFPUC may include operation and maintenance expenses associated operation of the Participating Pumpers' Existing Facilities in the Wholesale Revenue Requirement provided that such expenses (1) are solely attributable to Project operations for a Regional benefit and (2) are not caused by the Participating Pumper's failure to operate and maintain its existing wells in a reasonable and prudent manner consistent with water utility industry standards. The SFPUC shall provide the Wholesale Customers with copies of Project Operation and Maintenance Expenses documentation provided by the Participating Pumpers under Section 9.2 of the Project Operating Agreement.

E. The Project Mitigation, Monitoring and Reporting Program ("MMRP") adopted by the SFPUC included mitigation measure HY-6 to prevent well interference impacts to the Irrigation Well Owners. In mitigation measure HY-6, the SFPUC agreed to provide standby supplies of Irrigation Well Owner Replacement Water from the Regional Water System, to alter Project operations, and implement other actions (e.g., well replacement) to avoid well interference impacts that require the consent of the Irrigation Well Owners. The SFPUC's Project mitigation and other obligations to the Irrigation Well Owners are memorialized in substantially identical "Groundwater Well Monitoring and Mitigation Agreements" with one or more of the Irrigation Well Owners. For purposes of this Agreement, water supplies, and the capital costs and operations and maintenance expenses associated with providing Irrigation Well Owner Replacement Water and implementing other mitigation actions identified in the Project MMRP, shall be allocated as follows:

1. Irrigation Well Owner Replacement Water shall be limited to a cumulative maximum of 1.76 mgd and shall be delivered only in volumes necessary for mitigating well interference impacts as provided in the Project MMRP. The supply of Irrigation Well Owner Replacement Water by the SFPUC shall not be considered a new water supply commitment to Retail Customers or Wholesale Customers under Section 3.13 of this Agreement. The annual volume of Irrigation Well Owner Replacement Water supplied shall be metered and allocated as water from the Regional Water System during shortages between Retail Customers and Wholesale Customers in proportion to and consistent with the provisions of the Shortage Allocation Plan. All revenue received from Irrigation Well Owners for metered deliveries of Irrigation Well Owner Replacement Water shall be considered revenue related to the sale of

water and allocated between Retail Customers and Wholesale Customers on the basis of Proportional Water Use.

2. All Project capital costs incurred by the SFPUC in complying with the mitigation measures in the Project MMRP shall be considered Regional capital costs under Section 5.04 of this Agreement.

3. Operations and maintenance expenses incurred by the SFPUC in maintaining Project mitigation assets described in the Project MMRP shall be considered Regional transmission and distribution expenses under Section 5.05.D of this Agreement. Well pumping expenses that are required to be paid by the SFPUC in the agreements with the Irrigation Well Owners shall be considered Regional pumping expenses under Section 5.05.B of this Agreement.

4. Any wheeling charges imposed by California Water Service Company for delivery of Irrigation Well Owner Replacement Water shall be considered Regional transmission and distribution expenses under Section 5.05.D of this Agreement.

F. F. The SFPUC will audit (1) operation and maintenance expenses submitted by the Participating Pumpers, and (2) well pumping expenses submitted by the Irrigation Well Owners, for reimbursement to confirm that such costs were incurred, respectively, as a result of (1) operating Project Facilities and Shared Facilities for a Regional benefit and (2) complying with mitigation obligations in the Project MMRP. Costs associated with the use of Project Facilities or Shared Facilities for Direct Retail or Direct Wholesale purposes, or that do not otherwise provide Regional benefits, shall not be included in the Wholesale Revenue Requirement. The SFPUC is responsible for resolving disputes with the Participating Pumpers and Irrigation Well Owners concerning expense allocations. Project expense documentation, including documentation of negotiation and settlement of disputed costs, will be available for review during the Compliance Audit described in Section 7.04 of this Agreement. The Wholesale Customers may dispute the SFPUC's resolution of expense allocations through the arbitration provisions in Section 8.01 of this Agreement.

G. The SFPUC may direct the Participating Pumpers to recover water from the SFPUC Storage Account for any type of shortage referenced in Section 3.11 of this Agreement. Water recovered from the SFPUC Storage Account using Project Facilities and Shared Facilities may be used for (1) the benefit of all Regional Water System customers; (2) Retail Customers; or (3) one or more of the Participating Pumpers. The Wholesale Revenue Requirement shall

only include operation and maintenance expenses incurred due to the operation of Project Facilities and Shared Facilities for Regional benefits, including expenses incurred due to compliance with mitigation measures in the Project MMRP.

H. All water recovered during shortages caused by drought from the SFPUC Storage Account for Regional benefit, by the Participating Pumpers and by the SFPUC for delivery to Retail and Wholesale Customers, shall be used to free up a comparable volume of surface water from the Regional Water System for allocation in accordance with the Tier 1 Shortage Plan.

I. If the Project is terminated for any reason, including breach of the Project Operating Agreement by one or more of the Participating Pumpers or the SFPUC, a force majeure event as specifically defined by the Project Operating Agreement, or due to regulatory action or legal action, then:

1. Any water remaining in the SFPUC Storage Account shall be used for the benefit of all customers of the Regional Water System;

2. Outstanding eligible operation and maintenance expenses, including costs incurred during recovery of remaining stored water, will be allocated as provided in this Section 3.17 of this Agreement; and

3. If Project Facilities are no longer capable of being used for a Regional benefit, the Wholesale Customers will be credited with their share of proceeds from disposition of Project Facilities or reimbursed their share of such capital costs for any Project Facilities which are retained by the SFPUC for Direct Retail benefit and not used for the benefit of the Wholesale Customers, on the basis of (a) original cost less depreciation and outstanding related Indebtedness or (b) original cost less accumulated depreciation for revenue funded Project Facilities.

J. In the event that a Participating Pumper establishes the occurrence of a force majeure event as defined in the Project Operating Agreement, the SFPUC may enter into negotiations with the Participating Pumper to take over the operation of the portion of any Shared Facilities used for Project purposes for continued Regional use. If the SFPUC cannot reach agreement regarding the continued use of Shared Facilities for ongoing Regional benefit, the Participating Pumper shall reimburse the SFPUC and the Wholesale Customers for their respective shares of previously incurred Project capital costs used to upgrade the Shared

Facilities on the basis of (a) original cost less depreciation and outstanding related Indebtedness or (b) original cost less accumulated depreciation for revenue funded Shared Facilities. In the event that the SFPUC seeks to take over the operation of Shared Facilities for Direct Retail use, or one or more Wholesale Customers seeks to negotiate with a Participating Pumper to take over the operation of Shared Facilities for individual use or Direct Wholesale use, the party or parties benefiting from such transfer of Shared Facilities shall reimburse the other parties to this Agreement with their respective shares of previously incurred Project capital costs on the basis described in the previous sentence, or as the parties may otherwise agree.

3.18. Water Supply Agreement Amendment Required.

San Francisco may not change the existing condition of the Hetch Hetchy Reservoir by:

1. Abandoning or decommissioning O'Shaughnessy Dam; or
2. Draining Hetch Hetchy Reservoir, except for purposes of (i) repair, rehabilitation, maintenance, improvement, or reconstruction of O'Shaughnessy Dam or appurtenances, (ii) supplying water to the Bay Area during drought, or (iii) meeting water release requirements under the Raker Act, or federal or state law,

unless the parties enter into an amendment to the Water Supply Agreement, in full force and effect, adopted in accordance with Section 2.03.

The amendment shall state, or restate, as the case may be:

A. The level of service goals for seismic reliability and delivery reliability adopted by the Commission in conjunction with such proposed changes to the Regional Water System, provided such goals are at least as protective of the Wholesale Customers as the Level of Service Goals and Objectives;

B. The level of water quality to be delivered, which is currently provided for in Section 3.08, and

C. The specific cost allocation procedures, written as an amendment to Article 5, which apply to (1) the abandonment or decommissioning of O'Shaughnessy Dam, or (2) the draining of Hetch Hetchy Reservoir, and (3) the development, operation and maintenance of New Regional Assets

that may be required to replace water supplied by Hetch Hetchy Reservoir and delivered to the Bay Area.

In the event that the parties are not able to agree upon and approve an amendment to the Water Supply Agreement as set forth above, San Francisco may not abandon or decommission O'Shaughnessy Dam or drain Hetch Hetchy Reservoir.

Article 4. Implementation of Interim Supply Limitation.

4.01. Interim Supply Limitation Imposed by SFPUC

In adopting the WSIP in Res. No. 08-0200, the Commission included full implementation of all proposed WSIP capital improvement projects to achieve Level of Service Goals and Objectives relating to public health, seismic safety, and delivery reliability, but decided to adopt a water supply element that includes the Interim Supply Limitation. This article describes how the parties will implement the Interim Supply Limitation imposed by the SFPUC between the Effective Date and December 31, 2018, and how the SFPUC will conduct water supply planning after December 31, 2018.

4.02. Retail and Wholesale Customer Allocations Under Interim Supply Limitation

The Interim Supply Limitation is allocated as follows between Retail and Wholesale Customers:

Retail Customers' allocation: 81 MGD

Wholesale Customers' allocation: 184 MGD

The Wholesale Customers' collective allocation of 184 MGD under the Interim Supply Limitation includes the demand of the cities of San Jose and Santa Clara, whose demand is not included in the Supply Assurance, as provided in Section 3.02.B. By December 31st, 2010, the Commission will establish each Wholesale Customer's Interim Supply Allocation at a public meeting.

4.03. Transfers of Interim Supply Allocations

A. Any Wholesale Customer, including Hayward, may transfer a portion of its Interim Supply Allocation to one or more other Wholesale Customers, as provided in this section. All Wholesale Customers are also eligible transferees, including California Water Service Company up to its Individual Supply Guarantee.

B. Transfers of a portion of an Interim Supply Allocation must be prospective. The duration of a transfer cannot be less than the balance of the fiscal year. The minimum quantity that may be transferred is 1/10th of a MGD.

C. Transfers of portions of Interim Supply Allocations are subject to approval by the SFPUC. SFPUC review is limited to determining (1) whether a proposed transfer complies with

the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee.

D. The participants in a proposed transfer shall provide notice to the SFPUC specifying the amount of the Interim Supply Allocation proposed to be transferred and the proposed effective date of the transfer, which shall not be less than 60 days after the notice is submitted to the SFPUC. The SFPUC may require additional information reasonably necessary to evaluate the operational impacts of the transfer. The SFPUC will not unreasonably withhold or delay its approval; if the SFPUC does not act on the notice within 60 days, the transfer will be deemed to have been approved.

E. Within 30 days after the transfer has become effective, both the transferor and the transferee will provide written notice to the SFPUC and BAWSCA.

F. Transfers of Interim Supply Allocations shall continue in effect until the earlier of (1) delivery of written notice to the SFPUC by the transfer participants that the transfer has been rescinded or (2) December 31, 2018.

4.04. Environmental Enhancement Surcharge

A. **Establishment of Environmental Enhancement Surcharge**. Beginning with wholesale water rates for fiscal year 2011-2012, and continuing for the duration of the Interim Supply Limitation, the Commission will establish the Environmental Enhancement Surcharge concurrently with the budget-coordinated rate process set forth in Article 6 of this Agreement. The monetary amount of the Environmental Enhancement Surcharge per volume of water, such as dollars per acre-foot, will be equivalent for Retail Customer use in excess of 81 MGD and Wholesale Customer use in excess of 184 MGD. The Environmental Enhancement Surcharge will be simple to calculate so that Wholesale Customers can estimate potential surcharges for budgeting purposes and establish retail rates within their service areas.

B. **Application of Environmental Enhancement Surcharge**. Beginning in fiscal year 2011-12, the Environmental Enhancement Surcharge will be levied only if and when combined Retail Customer and Wholesale Customer purchases exceed the Interim Supply Limitation of 265 MGD and if the fund described in subsection D below has been established by the San Francisco Board of Supervisors. In that event, the Environmental Enhancement Surcharge will apply to Retail Customers for use in excess of 81 MGD and to individual

Wholesale Customers for use in excess of their Interim Supply Allocations established by the Commission pursuant to Section 4.02.

1. Environmental Enhancement Surcharges related to the Retail Customers' use in excess of their 81 MGD Retail Customer Allocation will be paid by the SFPUC, and no portion of such surcharges may be allocated to Wholesale Customers. The method of recovering the Environmental Enhancement Surcharges imposed upon Retail Customers shall be within the sole discretion of the SFPUC.

2. Environmental Enhancement Surcharges related to the individual Wholesale Customers' use in excess of their respective Interim Supply Allocations will be paid to the SFPUC by individual Wholesale Customers.

C. **Collection of Environmental Enhancement Surcharge**. Notwithstanding the budget-coordinated rate setting process contemplated in Article 6 of this Agreement, the Environmental Enhancement Surcharge for any given year will be determined retrospectively based on actual annual usage during the fiscal year in excess of the Interim Supply Allocation and paid in equal monthly installments over the remainder of the immediately following fiscal year.

D. **Establishment of Fund for Environmental Enhancement Surcharge Proceeds**. Environmental Enhancement Surcharges paid by the SFPUC and by Wholesale Customers will be placed into a restricted reserve fund. The SFPUC will request the San Francisco Board of Supervisors to establish this fund by ordinance and, if adopted, the fund will be subject to the following restrictions:

1. Interest earnings will stay in the reserve fund.
2. The reserve fund shall (a) be subject to automatic appropriation; (b) require unexpended and unencumbered fund balances to be carried forward from year to year; and (c) not be transferred to the San Francisco General Fund.
3. The reserve fund may be used only for specific environmental restoration and enhancement measures for the Sierra and local watersheds, such as those included in the Watershed Environmental Improvement Program.
4. Environmental Enhancement Surcharge proceeds shall be expended in an expeditious manner. Any Environmental Enhancement Surcharge

proceeds that remain in the reserve fund as of December 31, 2018 shall be used to complete projects previously approved under subsection E. Upon completion of the identified projects, the balance of any unexpended sums in the reserve fund shall be distributed to BAWSCA and the SFPUC in proportion to the total amount of surcharges assessed to the Wholesale and Retail Customers, respectively.

E. **Use of Environmental Enhancement Surcharge Proceeds**. Specific uses of Environmental Enhancement Surcharges will be decided by the SFPUC and BAWSCA General Managers following input from environmental stakeholders and other interested members of the public. If parties are unable to agree, then they will jointly select a third person to participate in making the decision.

4.05. San Jose/ Santa Clara Interim Supply Allocation and Process for Reduction/ Termination.

San Francisco will supply a combined annual average of 9 MGD to the cities of San Jose and Santa Clara through 2028. Water supplied by San Francisco may only be used in the defined service areas of San Jose and Santa Clara shown on Attachment Q-1 and Q-2, respectively. San Francisco may reduce the quantity of water specified in this section when it establishes the Interim Supply Allocations for Wholesale Customers in Section 4.02. The establishment of Interim Supply Allocations for San Jose and Santa Clara shall not be considered a reduction of supply within the meaning of this section, provided that the Interim Supply Allocations assigned to San Jose and Santa Clara do not effect a reduction greater than the aggregate average reduction in Individual Supply Guarantees for Wholesale Customers that have such guarantees. The application of Interim Supply Allocations to San Jose and Santa Clara, and water supply planning after December 31, 2018, are subject to the following provisions:

A. In December 2010 and in each December thereafter through 2027, the SFPUC shall prepare and the Commission shall consider, at a regularly scheduled public meeting, a Water Supply Development Report detailing progress made toward (1) meeting the Interim Supply Limitation by June 30, 2018 and (2) developing additional water supplies that will allow the Commission to designate San Jose and Santa Clara as permanent Wholesale Customers of the Regional Water System with a combined Individual Supply Guarantee of up to 9 MGD by the end of the Term on June 30, 2034.

B. The annual Water Supply Development Report shall be based on water purchase projections and work plans prepared by the SFPUC for the Retail Customers and by BAWSCA for the Wholesale Customers, respectively, and submitted to the Commission in June of each year beginning in 2010.

C. If the Commission finds that the projections in the Water Supply Development Report show that (1) the Interim Supply Limitation will not be met by June 30, 2018, as a result of Wholesale Customers' projected use exceeding 184 MGD, or (2) the purchases of the Wholesale Customers, including San Jose and Santa Clara, are projected to exceed 184 MGD before June 30, 2028, the Commission may issue a conditional ten year notice of interruption or reduction in supply of water to San Jose and Santa Clara.

D. Upon issuance of the conditional notice of interruption or reduction, the SFPUC will prepare a new analysis of water supply that will be utilized by the San Francisco Planning Department in its preparation of any necessary documentation under CEQA pursuant to Section 4.07 on the impacts of interrupting or reducing service to San Jose and Santa Clara.

E. Such notice of interruption or reduction will be rescinded if the Commission finds, based upon a subsequent annual Water Supply Development Report, that (1) sufficient progress has been made toward meeting the Interim Supply Limitation, or (2) projections show that the projected purchases of the Wholesale Customers, including San Jose and Santa Clara, will not exceed 184 MGD by June 30, 2028.

F. In no case shall any interruption or reduction of service to San Jose or Santa Clara pursuant to this section become effective less than two years from the completion of the CEQA process (not including resolution of any appeals or litigation) or ten years from the notice, whichever is longer. If the ten year notice is issued after 2018, such interruption or reduction would be effective after 2028.

G. If deliveries to San Jose and Santa Clara are interrupted, existing turnout facilities to San Jose and Santa Clara will remain in place for possible use during emergencies.

H. San Francisco and the cities of San Jose and Santa Clara will cooperate with BAWSCA and the Santa Clara Valley Water District in the identification and implementation of additional water sources and conservation measures for the cities' service areas that are

relevant to the water supply and the possible offer of permanent status for the two cities by the SFPUC.

4.06. San Francisco Decisions in 2028 Regarding Future Water Supply

A. By December 31, 2028, San Francisco will have completed any necessary CEQA review pursuant to Section 4.07 that is relevant to making San Jose and Santa Clara permanent customers of the Regional Water System and will decide whether or not to make San Jose and Santa Clara permanent customers of the Regional Water System with a combined Individual Supply Guarantee of 9 MGD allocated equally between the two cities, as well as how much water in excess of 9 MGD it will supply to San Jose and Santa Clara. San Francisco will make San Jose and Santa Clara permanent customers only if, and to the extent that, San Francisco determines that Regional Water System long term water supplies are available. In the event that San Francisco decides to afford permanent status to San Jose and Santa Clara, this Agreement will be amended pursuant to Section 2.03.

B. By December 31, 2028, San Francisco will have completed any necessary CEQA review pursuant to Section 4.07 and will decide how much water, if any, in excess of the Supply Assurance it will supply to Wholesale Customers from the Regional Water System to meet their projected future water demands until the year 2040, and whether to offer a corresponding increase in the Supply Assurance as a result of these determinations.

4.07. Retained Discretion of SFPUC and Wholesale Customers

A. This Agreement contemplates discretionary actions that the SFPUC and the Wholesale Customers may choose to take in the future that could result in physical changes to the environment ("Discretionary Actions"). The Discretionary Actions include decisions to:

1. Develop additional or alternate water resources by the SFPUC or one or more Wholesale Customers;
2. Implement the physical facilities comprising the WSIP by December 30, 2021;
3. Approve wheeling proposals by Wholesale Customers;
4. Approve new wholesale customers and water exchange or cost sharing agreements with other water suppliers;
5. Provide additional water to San Jose and/or Santa Clara;
6. Offer permanent status to San Jose and/or Santa Clara;

7. Reduce or terminate supply to San Jose and/or Santa Clara;
8. Provide additional water to Wholesale Customers in excess of the Supply Assurance to meet their projected future water demands;
9. Offer a corresponding volumetric increase in the Supply Assurance; and
10. Implement the Hetch Hetchy Water and Power projects listed in Attachment R-2.

The Discretionary Actions may require the SFPUC or Wholesale Customers to prepare environmental documents in accordance with CEQA prior to the SFPUC or the Wholesale Customers determining whether to proceed with any of the Discretionary Actions. Accordingly, and notwithstanding any provision of this Agreement to the contrary, nothing in this Agreement commits the SFPUC or the Wholesale Customers to approve or carry out any Discretionary Actions that are subject to CEQA. Furthermore, the SFPUC's or Wholesale Customers' decisions to approve any of these Discretionary Actions are subject to the requirement that San Francisco and each Wholesale Customer, as either a "Lead Agency" (as defined in Section 21067 of CEQA and Section 15367 of the CEQA Guidelines) or a "Responsible Agency" (as defined in Section 21069 of CEQA and Section 15381 of the CEQA Guidelines) shall have completed any CEQA-required environmental review prior to approving a proposed Discretionary Action.

B. In considering any proposed Discretionary Actions, the SFPUC and Wholesale Customers retain absolute discretion to: (1) make such modifications to any of the proposed Discretionary Actions as may be necessary to mitigate significant environmental impacts; (2) select feasible alternatives to the proposed Discretionary Actions that avoid significant adverse impacts; (3) require the implementation of specific measures to mitigate the significant adverse environmental impacts as part of the decision to approve the Discretionary Actions; (4) balance the benefits of the proposed Discretionary Actions against any significant environmental impacts before taking final actions to approve the proposed Discretionary Actions if such significant impacts cannot otherwise be avoided; or (5) determine not to proceed with the proposed Discretionary Actions.

Article 5. Wholesale Revenue Requirement

5.01. Scope of Agreement

This Article shall be applicable only to the water rates charged by San Francisco to the Wholesale Customers. Nothing contained in this Agreement shall limit, constrain, or in any way affect the rates which San Francisco may charge for water sold to Retail Customers or the methodology by which such rates are determined.

5.02. General Principles

This Article sets forth the method by which the Wholesale Customers' collective share of expenses incurred by the SFPUC in delivering water to them will be determined. This collective share is defined as the "Wholesale Revenue Requirement."

A. The SFPUC currently operates several enterprises, including the Water Enterprise, the Wastewater Enterprise, and the Hetch Hetchy Enterprise.

B. The Wastewater Enterprise is responsible for treating sewage within San Francisco and provides no benefit to the Wholesale Customers.

C. The Hetch Hetchy Enterprise is responsible for storing and transmitting water to the Water Enterprise, generating hydroelectric power and transmitting it to San Francisco, generating electric power within San Francisco, and distributing electricity and steam heat within San Francisco. Its water supply operations provide benefits to the Wholesale Customers.

D. The Water Enterprise delivers water to both Retail Customers, which are located both within and outside San Francisco, and to the Wholesale Customers, all of which are located outside San Francisco.

E. This Article implements two general principles as follows: (1) the Wholesale Customers should not pay for expenses of SFPUC operations from which they receive no benefit and (2) the Wholesale Customers should pay their share of expenses incurred by the SFPUC in delivering water to them on the basis of Proportional Annual Use unless otherwise explicitly provided in this Agreement.

F. To implement these general principles, the Wholesale Revenue Requirement will consist of, and be limited to, the Wholesale Customers' shares of the following categories of expense:

1. Capital cost recovery of Water Enterprise Existing Assets, and Hetch Hetchy Enterprise Existing Assets classified as Water-Only and the Water-Related portion of Joint assets (Section 5.03)

2. Contribution to the capital cost of Water Enterprise New Regional Assets (Section 5.04)

3. Water Enterprise operation and maintenance expenses, including power purchased from the Hetch Hetchy Enterprise that is used in the operation of the Water Enterprise (Section 5.05)

4. Water Enterprise administrative and general expenses (Section 5.06)

5. Water Enterprise property taxes (Section 5.07)

6. The Water Enterprise's share of the Hetch Hetchy Enterprise's operation and maintenance, administrative and general, and property tax expenses (Section 5.08)

7. The Water Enterprise's share of the Hetch Hetchy Enterprise's capital cost of New Assets classified as Water-Only and the Water-Related portion of Joint assets (Section 5.09)

In each of these cost categories, Direct Retail Expenses will be allocated entirely to Retail Customers. Direct Wholesale Expenses will be allocated entirely to the Wholesale Customers. Regional Expenses will be allocated between Retail Customers and Wholesale Customers as provided in this Article.

G. For purposes of establishing the rates to be charged Wholesale Customers, expenses will be based on the budget for, and estimates of water purchases in, the following fiscal year, as provided in Article 6. For purposes of accounting, the Wholesale Revenue Requirement will be determined on the basis of actual expenses incurred and actual water use, as provided in Article 7.

H. In addition, rates charged to Wholesale Customers may include the Wholesale Customers' contribution to a Wholesale Revenue Coverage Reserve, as provided in Section 6.06, which is not included in the Wholesale Revenue Requirement itself.

5.03. Capital Cost Recovery - Existing Regional Assets

A. SFPUC has previously advanced funds to acquire or construct Existing Assets used and useful in the delivery of water to both Wholesale Customers and Retail Customers. The parties estimate that the Wholesale Customers' share of the net book value of these assets, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately $366,734,424, as shown on Attachment K-1.

B. In addition, SFPUC has also previously advanced funds received from Retail Customer revenues to acquire or construct assets included in Construction-Work-In-Progress (CWIP) as of June 30, 2009. The parties estimate that the Wholesale Customers' share of the book value of these revenue funded capital expenditures, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately $15,594,990, as shown on Attachment K-2. The Wholesale Customers shall pay their share of the cost of Existing Assets and revenue-funded CWIP by amortizing the amounts shown on Attachment K-1 and Attachment K-2 over 25 years at an interest rate of 5.13 percent. The amounts to be included in the Wholesale Revenue Requirement pursuant to this section shall be the sum of the annual principal and interest amounts shown on Attachments K-3 (for Water Enterprise Regional Assets and the one Direct Wholesale Asset) and K-4 (for Hetch Hetchy Enterprise Water-Only Assets and the Water-Related portion [45 percent] of Joint assets) calculated on the basis of monthly amortization of principal as set forth on Attachments K-3 and K-4.

C. In addition, the Commission has previously appropriated funds, advanced through rates charged to Retail Customers, for construction of capital projects. Some of these projects are active, and have unexpended balances of appropriated funds that are not included in CWIP as of June 30, 2009. These projects, and the associated balances, are shown on Attachment K-5. Expenditures of funds from these balances during FY 2009-10, FY 2010-11 and FY 2011-12 will be reviewed in FY 2012-13. The SFPUC will prepare a report showing the amount expended in each year on each project and the total expended during all years on all projects that are categorized as Regional or, in the case of Hetch Hetchy Enterprise, are categorized as either Water-Only or Joint. The wholesale share of that total will be determined using the allocation principles in this Agreement based on Proportional Water Use during those three years. The result, plus accrued interest at the rate specified in Section 6.05.B, will be calculated by the SFPUC and its calculation reviewed by the Compliance Auditor as part of the Compliance Audit for FY 2012-13. The audited total will be paid based on a schedule of level

annual principal and interest amounts over ten years at an interest rate of 4.00%, calculated on a monthly amortization basis. All or any portion of the balance may be prepaid. The first year's payment will be included in the Wholesale Revenue Requirement for FY 2014-15.

D. The parties agree that the Wholesale Customers' share of the net book values of Existing Regional Assets as of June 30, 2008 as shown on Attachment K-1 are accurate. The compliance audit conducted on the calculation of the FY 2008-09 Suburban Revenue Requirement required by the 1984 Agreement will determine the actual amounts of depreciation on, and capital additions to, plant in service during that fiscal year. Those amounts will be compared to the corresponding estimates shown on Attachments K-1 and K-2. The differences will be added to or subtracted from the estimated asset values shown on Attachments K-1 and K-2 and the amortization schedules in Attachments K-3 and K-4 will be recalculated. The wholesale allocation factors shall be fixed at 70.1% for the Water Enterprise Existing Assets and 64.2% for Hetch Hetchy Enterprise Existing Assets for both the preliminary and final payment schedules. The SFPUC will prepare and provide to the Wholesale Customers revised Attachments K-1 through K-4 based on the Wholesale Customers' share of the net book value of the assets placed in service as of June 30, 2009 used to provide water service to the Wholesale Customers and the net book value of revenue-funded CWIP expended as of June 30, 2009. The revised Attachments K-1 through K-4 shall be approved by the General Manager of the SFPUC and the General Manager/CEO of BAWSCA and will be substituted for the original Attachments K-1 through K-4.

E. The original Attachments K-1 through K-4, based on estimates, shall be used for estimating the Wholesale Revenue Requirement for the fiscal year beginning July 1, 2009. The revised Attachments, based on audited actuals, shall be used to determine the actual Wholesale Revenue Requirement for FY 2009-10 and to determine the Wholesale Revenue Requirement(s) in all subsequent years, except as may be provided elsewhere in this Agreement.

F. The Wholesale Customers, acting through BAWSCA, may prepay the remaining unpaid Existing Assets principal balance, in whole or in part, at any time without penalty or early payment premium. Any prepayments will be applied in the month immediately following the month in which the prepayment is made and the revised monthly amount(s) will be used to calculate the Wholesale Revenue Requirement. Any partial prepayments must be in an amount at least equal to $10 million. In the event of a partial prepayment, an updated schedule for the

remaining payments shall be prepared reflecting the unpaid balance after prepayment, amortized through the end of FY 2034, calculated as provided in this section. The updated schedule, approved by the General Manager of the SFPUC and the General Manager/CEO of BAWSCA, will be substituted for Attachment K-3 and/or Attachment K-4.

5.04. Capital Cost Contribution - New Regional Assets

A. **Debt-Funded Capital Additions**. The Wholesale Customers shall pay the wholesale share of Net Annual Debt Service for New Regional Assets. The Regional projects in the WSIP are identified in Attachment L-1.

1. The amount of Net Annual Debt Service for New Regional Assets will be determined for each series of Indebtedness issued. Until the proceeds of a particular series are Substantially Expended, the amount attributable to specific projects will be based on the expected use of proceeds shown in the "Certificate Regarding Use of Proceeds" executed by the SFPUC General Manager on behalf of the Commission in connection with the sale of the Indebtedness, provided such certificate identifies the use of proceeds at a level of detail equivalent to that shown on Attachment L-2, which is a copy of the certificate prepared for the 2006 Revenue Bonds, Series A. If a certificate does not identify the use of proceeds at that level of detail, the SFPUC General Manager shall prepare and execute a separate certificate which does identify the use of proceeds at the level of detail shown on Attachment L-2 and deliver it to BAWSCA within 15 days from the closing of the sale of the Indebtedness.

2. After the proceeds of a series are Substantially Expended, the SFPUC General Manager will prepare and execute a certificate showing the actual expenditure of proceeds at a level of detail equivalent to the initial General Manager certificate. The resulting allocation of Net Debt Service to New Regional Assets for a series of bonds will be used in the fiscal year in which the proceeds have been Substantially Expended and thereafter. Differences between the amount of Net Debt Service paid by Wholesale Customers prior to that year and the amount of Net Debt Service that they should have paid during that time based on the actual expenditure of proceeds will be taken into account in calculation of the balancing account for the fiscal year in which the proceeds were Substantially Expended. The application of the remaining proceeds shall be proportionate to the allocation of the Net Debt Service to New Regional Assets.

3. The Wholesale Customers' share of Net Annual Debt Service for the New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the

projects in the WSIP are categorized as Direct Wholesale.) The Wholesale Customers' share of Net Annual Debt Service for all other New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use.

4. If Indebtedness is issued by the SFPUC to refund the 2006 Revenue Bonds, Series A or to refund any other long-term Indebtedness issued after July 1, 2009, the Net Annual Debt Service attributable to proceeds used for refunding will be allocated on the same basis as the Indebtedness being refunded.

5. The SFPUC will prepare an annual report showing for each issue of Indebtedness and through the most recently completed fiscal year: (1) net financing proceeds available to pay project costs, (2) actual earnings on proceeds, (3) actual expenditures by project. The report shall be substantially in the form of Attachment L-3 and shall be delivered to BAWSCA on or before November 30 of each year, commencing November 2009.

6. In addition to Net Debt Service, Wholesale Customers will pay a proportionate share of annual administrative costs associated with Indebtedness, such as bond trustee fees, credit rating agency fees, letter of credit issuer fees, San Francisco Revenue Bond Oversight Committee fees, etc., but only to the extent such fees are neither paid from proceeds of Indebtedness nor included in SFPUC operation and maintenance or administrative and general expenses.

B. **Revenue-Funded Capital Additions**. The Wholesale Customers shall pay the wholesale share of the appropriation contained in the SFPUC annual budget for each year to be used to acquire or construct New Regional Assets. If such appropriations are reimbursed from proceeds of Indebtedness, the Wholesale Customers will be credited for prior payments made under this Section 5.04.B.

The Wholesale Customers' share of the annual appropriation for revenue-funded New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the Repair and Replacement projects in the SFPUC's most recent capital improvement program updated on February 10, 2009, is categorized as Direct Wholesale.) The Wholesale Customers' share of the annual appropriation for all other revenue-funded New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use in each fiscal year. The amount appropriated in each fiscal year for the wholesale share of New Regional Assets shall be contributed to the Wholesale Capital Fund described in Section 6.08 and reported on and administered as shown in that section and Attachments M-1 through M-3.

5.05. Water Enterprise Operation and Maintenance Expenses

There are five categories of Water Enterprise Operation and Maintenance Expenses, described below:

A. Source of Supply

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of collecting and impounding reservoirs, dams, wells and other water supply facilities located outside San Francisco; watershed protection; water supply planning; and the purchase of water.

2. Allocation: Direct Retail expenses, including water supply planning for Retail operations (such as City Retail water conservation programs), will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Source of Supply category.)

B. Pumping

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of water pumping plants, ancillary structures and equipment and surrounding grounds; and fuel and power purchased for pumping water.

2. Allocation: Direct Retail expenses will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Pumping category.)

C. Treatment

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies and other expenses incurred in the operation and maintenance of water treatment plants and drinking water quality sampling and testing. The cost of water quality testing will not include expenses incurred on behalf of the Wastewater

Enterprise. Any remaining costs, after adjusting for the Wastewater Enterprise, will be reduced by the amount of revenue received for laboratory analyses of any type performed for agencies, businesses and/or individuals other than the Water and Hetch Hetchy Enterprises.

2. Allocation: Direct Retail expenses will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Treatment category.)

D. **Transmission and Distribution**

1. Description: This category consists of the cost of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of transmission and distribution pipelines, appurtenances, meters (other than those expenses payable by individual Wholesale Customers pursuant to Section 5.10.C.3), distribution reservoirs storing treated water, craft shops and auto shops servicing vehicles used for operation and maintenance of the Regional Water System rather than for Direct Retail facilities, and miscellaneous facilities related to the transmission and distribution of water.

2. Allocation: Direct Retail Transmission and Distribution expenses will be assigned to the Retail Customers. Regional Transmission and Distribution expenses will be allocated between Retail and Wholesale Customers on the basis of Proportional Annual Use. Expenses incurred for the operation and maintenance of three terminal reservoirs, i.e., Sunset Reservoir (North and South Basins), University Mound Reservoir (North and South Basins), and Merced Manor Reservoir, as well as transmission pipelines delivering water to them, are classified as Regional expenses notwithstanding the location of the reservoirs within San Francisco. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date the only Direct Wholesale expenses in the Transmission and Distribution category are associated with the Palo Alto pipeline.)

E. **Customer Services**

1. Description: This category consists of labor; materials and supplies; and other expenses incurred for meter reading, customer record keeping, and billing and collection for the Water Enterprise.

2. Allocation: Customer Services expenses will be allocated among the Water Enterprise, the Wastewater Enterprise, and Hetch Hetchy Enterprise in proportion to the time spent by employees in Customer Services for each operating department/enterprise. The Water Enterprise's share of Customer Services expense will be allocated 98 percent to the Retail Customers and two percent to the Wholesale Customers, as illustrated on Attachment N-2, Schedule 1.

5.06. Water Enterprise Administrative and General Expenses

Administrative and General expenses consist of the Water Enterprise's share of the cost of general government distributed through the full-cost Countywide Cost Allocation Plan, the services of SFPUC support bureaus, Water Enterprise administrative and general expenses that cannot be directly assigned to a specific operating and maintenance category, and the cost of the Compliance Audit. These four subcategories, and the method by which costs in each are to be calculated and allocated, are as follows:

A. **Countywide Cost Allocation Plan**

1. Description: This subcategory consists of the Water Enterprise's share of the costs of San Francisco general government and other City central service departments which are not directly billed to the Water Enterprise or other operating departments. All San Francisco operating departments are assigned a prorated share of these costs through the full-cost Countywide Cost Allocation Plan (COWCAP) prepared annually by the San Francisco Controller.

2. Allocation: The Water Enterprise's assigned share of central government costs as shown in the annual full-cost COWCAP prepared by the San Francisco Controller, will be allocated between Retail Customers and Wholesale Customers on the basis of the composite percentage of the allocated expenses in the five categories of operation and maintenance expense described in Section 5.05. The composite wholesale percentage shown on Attachment N-2, Schedule 1 is 42.07 percent, derived by dividing the wholesale share of Operation and Maintenance expenses ($46,573,883) by total Operation and Maintenance expenses ($110,700,133).

B. **Services of SFPUC Bureaus**

1. Description: This subcategory consists of the support services provided to the Water Enterprise by the SFPUC Bureaus, which presently consist of the General

Manager's Office, Business Services, External Affairs, and Infrastructure Bureau. Business Services presently includes Financial Services, Information Technology Services, Human Resource Services, Fleet Management, and Customer Services.

2. Allocation: There are three steps involved in determining the Wholesale Customers' share of SFPUC Bureau costs.

a. Step One: Bureau expenses which have either been recovered separately or which provide no benefit to Wholesale Customers will be excluded. Examples of Bureau expenses recovered separately include (1) Customer Services expenses, which are recovered as provided in Section 5.05.E, and (2) Infrastructure expenses, which are assigned to individual projects and capitalized. An example of a Bureau expense that provides no benefit to Wholesale Customers is Information Technology Services expenses for support of the San Francisco Municipal Railway. In addition, the SFPUC will continue its practice of assigning City Attorney Office expenses charged to the General Manager's Office for projects or lawsuits that relate to only one enterprise directly to that enterprise. For example, costs related to a lawsuit involving the Wastewater Enterprise will not be assigned to the Water Enterprise.

b. Step Two: Bureau expenses adjusted as provided in Step One will be allocated among the Water Enterprise, the Wastewater Enterprise and the Hetch Hetchy Enterprise on the basis of the actual salaries of employees in each enterprise or department, as illustrated on Attachment N-2, Schedule 7.

c. Step Three: The amount allocated to the Water Enterprise through Step Two will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use.

C. **Water Enterprise Administrative and General**

1. Description: This category includes expenses incurred by the Water Enterprise that are not readily assignable to specific operating divisions. This category includes the following expenses:

a. Water Administration: This includes the costs of labor and other expenses of the administrative section of the Water Enterprise, supervision and engineering expenses, professional services, travel and training, equipment purchases, and materials and supplies not directly assignable to a specific operating unit.

b. Services Provided by Other City Departments: This includes charges of other San Francisco departments directly billed to the Water Enterprise

administration by other San Francisco departments for services ordered by the Water Enterprise, such as legal services, risk management, telecommunications, employee relations, purchasing, mail services, and workers compensation claims paid.

c. Litigation and Claims Paid: This includes charges incurred for attorney services and claims and judgments paid in litigation arising from the operation of the Water Enterprise.

2. Allocation: In each of these three subcategories, expenses that benefit only Retail Customers will be excluded. For example, the cost of claims and judgments resulting from a break in or leak from pipelines or reservoirs in the Retail Service Area (with the exception of the three terminal reservoirs and pipelines delivering water to them) will be assigned to the Retail Customers. Remaining Water Enterprise Administrative and General expenses will be allocated between Retail Customers and Wholesale Customers on the basis of the composite percentage of allocated operation and maintenance expense categories described in Section 5.05.

D. Compliance Audit. The cost of the Compliance Audit described in Section 7.04 will be assigned 50 percent to the Retail Customers and 50 percent to the Wholesale Customers.

5.07. Water Enterprise Property Taxes

A. Description: This category consists of property taxes levied against property owned by San Francisco located in Alameda, San Mateo and Santa Clara counties and used and managed by the SFPUC.

B. Allocation: All property taxes paid, net of (1) reimbursements received from lessees and permit holders, and (2) refunds from the taxing authority, are Regional expenses. Net property taxes will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use.

5.08. Hetch Hetchy Enterprise Expenses

A. **Introduction**. There are two steps involved in determining the amount of the Wholesale Customers' share of Hetch Hetchy Enterprise expenses.

1. The first step is to determine the Water Enterprise's share of Hetch Hetchy Enterprise operation expenses, maintenance expenses, administrative and general expenses, and property taxes.

2. The second step is to determine the Wholesale Customers' share of expenses allocable to the Water Enterprise.

B. **Determination of the Water-Related Portion of Hetch Hetchy Enterprise Expenses**

1. Operation and Maintenance Expenses: This category consists of the cost of labor, materials and supplies, and other expenses incurred in operating and maintaining Hetch Hetchy Enterprise physical facilities.

a. Description: Expenses associated exclusively with the production and distribution of hydroelectric power (e.g., generating plants and power transmission lines and towers, transformers and associated electric equipment, purchased power, wheeling charges, rental of power lines, etc.) are categorized as Power-Only and are allocated to power. Expenses associated exclusively with the operation and maintenance of facilities that serve only the water function (e.g., water transmission pipelines and aqueducts, activities related to compliance with federal and state drinking water quality laws, etc.) are categorized as Water-Only and are allocated entirely to water. Expenses associated with the operation and maintenance of facilities that serve both the water and power functions (e.g., dams, security programs, etc.) are categorized as Joint and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

2. Administrative and General Expenses: There are three subcategories of Hetch Hetchy Enterprise Administrative and General expenses.

a. Full-Cost Countywide Cost Allocation Plan: This subcategory consists of the cost of San Francisco general government and other City central service departments which are not directly billed to operating departments but allocated through the full-cost Countywide Cost Allocation Plan described in Section 5.06.A. Costs in this subcategory are classified as Joint, and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

b. SFPUC Bureau Costs: This subcategory consists of the expenses described in Section 5.06.B. One hundred percent of Customer Services expenses allocated to the Hetch Hetchy Enterprise are categorized as Power-Only. The remaining amount of Bureau

expenses allocated to the Hetch Hetchy Enterprise pursuant to Section 5.06.B will be reallocated between power and water in proportion to the salaries of Hetch Hetchy Enterprise employees assigned to each function as shown on Attachment N-2, Schedule 7.1.

c. Other Administrative and General: This subcategory includes payments to the United States required by the Act, labor, supervision and engineering and other costs not readily assignable to a specific operation or maintenance function or program. Costs related to power administration (such as long range planning and policy analysis for energy development, administration of power contracts, and administration of work orders to City departments for energy services) are Power-Only costs. Costs related to water administration (such as legal and professional services for the protection of the City's water rights) are Water-Only costs and will be assigned to the Water Enterprise. Costs related to both power administration and water administration (such as general administration, office rents, office materials and supplies, and services of other City departments benefitting to both power and water are Joint administrative and general costs and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

3. Property Taxes. This category consists of property taxes levied against property owned by San Francisco in Tuolumne, Stanislaus, San Joaquin, and Alameda counties and operated and managed by the Hetch Hetchy Enterprise.

Allocation: Property taxes are classified as Joint costs. They will be reallocated as 55 percent Power-Related and 45 percent Water-Related.

C. **Calculation of Wholesale Customers' Share of Hetch Hetchy Enterprise Expenses**. The Water Enterprise's share of Hetch Hetchy Enterprise expenses consist of 100 percent of Water-Only expenses and the Water-Related portion (45%) of Joint expenses.

The Wholesale Customers' share of the sum of the Water Enterprise's share of Hetch Hetchy Enterprise expenses determined under subsection B shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

5.09. Hetch Hetchy Enterprise Capital Costs

A. **Introduction**. Wholesale Customers are also allocated a share of Hetch Hetchy Enterprise capital costs.

B. **Components of Capital Costs**. The components of Hetch Hetchy Enterprise capital costs are as follows:

1. Existing Assets Cost Recovery. The Wholesale Customers' repayment of their share of Hetch Hetchy Existing Assets (Water-Only and the Water-Related portion [45 percent] of Joint assets) is shown on Attachment K-4 accompanying Section 5.03.

2. Debt Service on New Assets. The Water Enterprise will be assigned 100 percent of Net Annual Debt Service attributable to acquisition and construction of New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of Net Annual Debt Service on New Hetch Hetchy Enterprise Joint assets. The provisions of Section 5.04.A apply to debt service on New Hetch Hetchy Enterprise assets.

3. Revenue-Funded Capital Additions. The Water Enterprise will be assigned 100 percent of capital expenditures from revenues for New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of such expenditures for new Hetch Hetchy Enterprise Joint assets. The provisions of Section 5.04.B apply to the payment of New revenue-funded Hetch Hetchy Enterprise assets.

C. **Calculation of Wholesale Customers' Share of Hetch Hetchy Enterprise Capital Costs**. The Wholesale Customers' share of the Net Annual Debt Service and revenue funded capital expenditures determined under subsections B.2 and 3 shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

5.10. Additional Agreements Related to Financial Issues

A. **Wholesale Customers Not Entitled to Certain Revenues**. The Wholesale Customers have no entitlement to any of the following sources of revenue to the SFPUC.

1. Revenues from leases or sales of SFPUC real property.

2. Revenues from the other utility services such as the sale of electric power, natural gas and steam.

3. Revenues from the sale of water to customers and entities other than the Wholesale Customers.

4. Revenues earned from the investment of SFPUC funds other than funds contributed by the Wholesale Customers to the Wholesale Revenue Coverage Reserve described in Section 6.06 or the Wholesale Capital Fund described in Section 6.08. Wholesale Customers are also entitled to the benefit of earnings on proceeds of Indebtedness (through

expenditure on New Regional Assets and /or application to Debt Service) and to interest on the Balancing Account as provided in Section 6.05.B.

5. Revenues not related to the sale of water.

B. **Wholesale Customers Not Charged with Certain Expenses**. The Wholesale Customers will not be charged with any of the following expenses:

1. Capital costs for assets constructed or acquired prior to July 1, 1984 other than Existing Asset costs that are repaid pursuant to Section 5.03.

2. Expenses incurred by the SFPUC for generation and distribution of electric power, including Hetch Hetchy Enterprise Power-Only expenses and the Power-Related share of Hetch Hetchy Enterprise Joint expenses. An exception to this is Regional energy costs incurred by the Water Enterprise, for which Wholesale Customers are charged on the basis of Proportional Annual Use.

3. Expenses incurred by SFPUC in providing water to Retail Customers.

4. Expenses associated with the SFPUC's accruals or allocations for uncollectible Retail Water accounts.

5. Attorneys' fees and costs incurred by the Wholesale Customers that a court of competent jurisdiction orders San Francisco to pay as part of a final, binding judgment against San Francisco as provided in Section 8.03.B.2.

6. Any expenses associated with funding any reserves (other than the required Wholesale Revenue Coverage Reserve described in Section 6.06) accrued and not anticipated to be paid within one year unless such reserve is established by mutual agreement of the SFPUC and BAWSCA.

7. Any expenses accrued in respect to pending or threatened litigation, damage or personal injury claims or other loss contingencies unless projected to be paid within one year. Otherwise, such expenses will be charged to the Wholesale Customers when actually paid.

8. Any expense associated with installing, relocating, enlarging, removing or modifying meters and service connections at the request of an individual Wholesale Customer.

9. The Retail Customers' portion of any Environmental Enhancement Surcharges imposed to enforce the Interim Supply Limitation set forth in Section 4.04.

C. **Revenues Not Credited to Payment of Wholesale Revenue Requirement**. The following payments by Wholesale Customers, individually or collectively, are not credited as Wholesale revenues for purposes of Section 6.05.B:

1. Payments by individual Wholesale Customers of the Environmental Enhancement Surcharge imposed to enforce the Interim Supply Limitation set forth in Section 4.04.
2. Payments of attorneys' fees and costs incurred by San Francisco that a court of competent jurisdiction orders the Wholesale Customers to pay as part of a final, binding judgment against the Wholesale Customers, as provided in Section 8.03.B.3.
3. Payments by individual Wholesale Customers for installation, relocation, enlargement, removal or modification of meters and service connections requested by, and charged to, a Wholesale Customer.
4. Payments applied to the amortization of the ending balance in the balancing account under the 1984 Agreement, pursuant to Section 6.05.A.
5. Payments of the Water Management Charge which are delivered to BAWSCA pursuant to Section 3.06.
6. Payments directed to the Wholesale Revenue Coverage Reserve pursuant to Section 6.06.
7. Prepayments authorized by Sections 5.03.C and 5.03.F.

D. **Other**

1. The Wholesale Customers will receive a proportional benefit from funds received by the SFPUC from (a) governmental grants, rebates, reimbursements or other subventions, (b) private-sector grants for Regional capital or operating purposes of the Water Enterprise and the Water-Only and Water-related portion of Joint Hetch Hetchy Water Enterprise expenses, or (c) a SFPUC use of taxable bonds.

2. The Wholesale Customers will receive a proportionate benefit from recovery of damages, including liquidated damages, by SFPUC from judgments against or settlements with contractors, suppliers, sureties, etc., related to Regional Water System projects and the Water-Only and Water-Related portion of Joint Hetch Hetchy Enterprise projects.

3. The SFPUC will continue to charge Wholesale Customers for assets acquired or constructed with proceeds of Indebtedness on which Wholesale Customers paid Debt Service during the Term of this Agreement on the "cash" basis (as opposed to the "utility" basis) after the expiration or earlier termination of this Agreement. The undertaking in this Section 5.10.D.3 will survive the expiration or earlier termination of this Agreement.

5.11. Classification of Existing System Assets.

Existing System Assets of the Regional Water System include the water storage, transmission, and treatment systems owned and operated by San Francisco in Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco Counties. These assets are managed by either the Water Enterprise or the Hetch Hetchy Enterprise and the assets have been classified for purposes of cost allocation.

A. **Water Enterprise Assets**. Water Enterprise assets are currently managed, operated, and maintained by the Water Enterprise and are generally located west of Alameda East Portal, in addition to the treatment facilities located at Tesla and the Thomas Shaft Emergency Disinfection Facility. These assets are classified as Direct Retail, Direct Wholesale, or Regional.

B. **Hetch Hetchy Enterprise Assets**. Hetch Hetchy Enterprise assets are currently managed, operated and maintained by the Hetch Hetchy Enterprise and are generally located east of the Alameda East Portal of the Coast Range Tunnel in Sunol Valley, Alameda County. These assets are classified as Power-Only, Water-Only, or Joint, in accordance with Sections 5.08 and 5.09. Through the Wholesale Revenue Requirement, the Wholesale Customers pay Existing System Asset capital costs and operating expenses in accordance with Section 5.02.F and do not pay capital costs or operating expenses associated with assets classified as Direct Retail, Power-Only, and the Power-Related portion of Joint assets.

C. **Attachment R Documents Classifications**. To facilitate WSA administration, Attachment R documents the classification of major Existing System Assets operated by the Hetch Hetchy Enterprise. Attachment R consists of three documents: R-1 Introduction, R-2 Special Classification of Discrete Projects for 2018 Amendment Purposes, and R-3 Major Hetch Hetchy Enterprise Existing System Assets. Attachment R may be modified as specified in Section 5.11.D and in the manner set forth in Section 2.03.C.

D. **Attachment R-3, Major Hetch Hetchy Enterprise Existing System Assets is Not Exhaustive**. Existing System Assets include, but are not limited to, land; fixed infrastructure such as dams, tunnels, buildings, water treatment plants and pipelines; equipment such as pumps and vehicles; and related appurtenances. Major Hetch Hetchy Enterprise Existing System Assets, and their classifications, are listed in Attachment R-3. Attachment R-3 does not include all assets of the Regional Water System, but represents the parties' best efforts to document major Hetch Hetchy Enterprise Existing System Assets that would incur capital costs and operating expenses subject to cost allocation. The classification of assets listed on R-3 may not be changed during the Term, any Extension Term, and any renewal of the Agreement, however, Attachment R-3 may be modified by mutual agreement in accordance with Section 2.03.C to (1) add an asset that was inadvertently omitted, (2) to add a new asset, and (3) remove a destroyed or obsolete asset. In the event that the parties cannot agree on the classification of any omitted or new assets, the dispute shall be subject to arbitration under Section 8.01.

E. **Attachment R-3, Major Hetch Hetchy Enterprise Existing System Assets Classifications are Fixed**. The classification of the major Hetch Hetchy Enterprise Existing System Assets is fixed and shall control the allocation of capital costs and operating expenses for the remainder of the Term, any Extension Terms, and any renewal of the Agreement. However, changes may be proposed in accordance with subsection G below. Capital costs and operating expenses are meant to be inclusive of all costs related to assets, including, but not limited to, any alterations, additions, improvements, rehabilitation, replacement of assets, and equipment that is appurtenant thereto. Since asset classifications are fixed in Attachment R-3, asset classifications may not be modified by mutual agreement in accordance with Section 2.03.C.

F. **Attachment R-2, Special Classification of Discrete Projects for 2018 Amendment Purposes**. Past, ongoing and future capital projects involving five Hetch Hetchy Enterprise Existing System Assets defined in Attachment R-2 have classifications that differ from the underlying asset classifications. These project-related classification changes shown on Attachment R-2, are part of the 2018 amendments to the Agreement and are not precedential for any other asset-related capital cost or operating expense. With the exception of the defined projects related to the five assets listed on R-2, the capital projects for all assets follow the asset classifications. Capital projects listed on Attachment R-2 must be approved by the SFPUC following necessary CEQA review.

G. **Five Year Notice of Intent to Renegotiate Cost Allocation**. In the event San Francisco or the Wholesale Customers, which may be represented by BAWSCA, wish to propose and negotiate a change in Existing System Asset classifications, or a change in the Water-Related portion (45 percent) of Joint expenses, for the next Water Supply Agreement, such party must provide the other at least 5 years' written notice prior to the expiration of the Term or Extension Term, or the renewal of the Agreement. At a minimum, the noticing party must provide a comprehensive analysis of the financial and rate impacts of the proposed change at least two years prior to the expiration of the Term or Extension Term, or the renewal of the Agreement.

To meet this requirement, the parties may agree to jointly analyze, under a separate agreement, system capacity and usage and/or new assets, as well as other possible alternative cost allocation methodologies. Either party may also unilaterally initiate such studies by consultants of their choice and bear all their own costs.

Article 6. Integration of Wholesale Revenue Requirement with SFPUC Budget Development and Rate Adjustments

6.01. General

A. The purpose of the allocation bases set forth in Article 5 is to determine the Wholesale Revenue Requirement for each fiscal year. The Wholesale Revenue Requirement can only be estimated in advance, based on projected costs and water deliveries. These projections are used to establish water rates applicable to the Wholesale Customers.

B. After the close of each fiscal year, the procedures described in Article 7 will be used to determine the actual Wholesale Revenue Requirement for that year, based on actual costs incurred, allocated according to the provisions of Article 5, and using actual water delivery data. The amount properly allocated to the Wholesale Customers shall be compared to the amount billed to the Wholesale Customers for the fiscal year, other than those identified in Section 5.10.C. The difference will be entered into a balancing account to be charged to, or credited to, the Wholesale Customers, as appropriate.

C. The balancing account shall be managed as described in Section 6.05.

6.02. Budget Development

The SFPUC General Manager will send a copy of the proposed SFPUC budget to BAWSCA at the same time as it is sent to the Commission. In addition, a copy of materials submitted to the Commission for consideration at meetings prior to the meeting at which the overall SFPUC budget is considered (including (a) operating budgets for the Water Enterprise and the Hetch Hetchy Enterprise, (b) budgets for SFPUC Bureaus, and (c) capital budgets for the Water Enterprise and the Hetch Hetchy Enterprise) will also be sent to BAWSCA concurrently with their submission to the Commission.

6.03. Rate Adjustments

A. **Budget Coordinated Rate Adjustments**. Adjustments to the rates applicable to the Wholesale Customers shall be coordinated with the budget development process described in this section except to the extent that Sections 6.03.B and 6.03.C authorize emergency rate increases and drought rate increases, respectively.

If the SFPUC intends to increase wholesale water rates during the ensuing fiscal year, it will comply with the following procedures:

1. Adjustments to the wholesale rates will be adopted by the Commission at a regularly scheduled meeting or at special meeting, properly noticed, called for the purpose of adjusting rates or for taking any other action under the jurisdiction of the Commission.

2. The SFPUC will send a written notice by mail or electronic means to each Wholesale Customer and to BAWSCA of the recommended adjustment at least thirty (30) days prior to the date of the meeting at which the Commission will consider the proposed adjustment. The notice will include the date, time and place of the Commission meeting.

3. The SFPUC shall prepare and provide to each Wholesale Customer and to BAWSCA the following materials: (a) a table illustrating how the increase or decrease in the Wholesale Revenue Requirement and wholesale rates were calculated, substantially in the form of Attachment N-1, (b) a schedule showing the projected expenses included in the Wholesale Revenue Requirement for the fiscal year for which the rates are being proposed, and supporting materials, substantially in the form of Attachment N-2, and (c) a schedule showing projected water sales, Wholesale Revenue Requirements and wholesale rates for the fiscal year for which rates are being set and the following four years, substantially in the form of Attachment N-3. These materials will be included with the notification required by Section 6.03.A.2.

4. Rate adjustments will be effective no sooner than thirty (30) days after adoption of the wholesale rate by the Commission.

5. San Francisco will use its best efforts to provide the Wholesale Customers with the information described above. San Francisco's failure to comply with the requirements set forth in this section shall not invalidate any action taken by the Commission (including, but not limited to, any rate increase or decrease adopted). In the event of such failure, the Wholesale Customers may either invoke arbitration, as set forth in Section 8.01, or seek injunctive relief, to compel San Francisco to remedy the failure as soon as is reasonably practical, and San Francisco shall be free to oppose the issuance of the requested judicial or arbitral relief on any applicable legal or equitable basis. The existence of this right to resort to arbitration shall not be deemed to preclude the right to seek injunctive relief.

6. Because delays in the budget process or other events may cause San Francisco to defer the effective date of Wholesale Customer rate adjustments until after the beginning of San Francisco's fiscal year, nothing contained in this Agreement shall require San Francisco to make any changes in the water rates charged to Wholesale Customers effective at

the start of San Francisco's fiscal year or at any other specific date. Nothing in the preceding sentence shall excuse non-compliance with the provisions of Section 6.02 and this section.

B. **Emergency Rate Increases**. The Commission may adjust the Wholesale Customers' rates without complying with the requirements of Section 6.03.A in response to an Emergency that damages the Regional Water System and disrupts San Francisco's ability to maintain normal deliveries of water to Retail and Wholesale Customers. In such an Emergency, the Commission may adopt an emergency rate surcharge applicable to Wholesale Customers without following the procedures set forth in this section, provided that any such rate surcharge imposed by the Commission shall be applicable to both Retail and Wholesale Customers and incorporate the same percentage increase for all customers. Any emergency rate surcharge adopted by the Commission shall remain in effect only until the next-budget coordinated rate-setting cycle.

C. **Drought Rates**. If the Commission declares a water shortage emergency under Water Code Section 350, implements the Tier 1 Shortage Plan (Attachment H) described in Section 3.11.C, and imposes drought rates on Retail Customers, it may concurrently adjust wholesale rates independently of coordination with the annual budget process. Those adjustments may be designed to encourage water conservation and may constitute changes to the structure of the rates within the meaning of Section 6.04. The parties agree, however, that, in adopting changes in rates in response to a declaration of water shortage emergency, the Commission shall comply with Section 6.03.A.1 and 2 but need not comply with Section 6.04.B. Drought Rate payments and payments of excess use charges levied in accordance with the Tier 1 Shortage Plan described in Section 3.11.C constitute Wholesale Customer Revenue and count towards the Wholesale Revenue Requirement. The SFPUC may use these revenues to purchase additional water for the Wholesale Customers from the State Drought Water Bank or other willing seller.

6.04. Rate Structure

A. This Agreement is not intended and shall not be construed to limit the Commission's right (a) to adjust the structure of the rate schedule applicable to the Wholesale Customers (i.e., the relationship among the several charges set out therein) or (b) to add, delete, or change the various charges which make up the rate schedule, provided that neither such charges nor the structure of the rate schedule(s) applicable to the Wholesale Customers shall be arbitrary, unreasonable, or unjustly discriminatory as among said customers. The

SFPUC will give careful consideration to proposals for changes in the rate schedule made jointly by the Wholesale Customers but, subject to the limitations set out above, shall retain the sole and exclusive right to determine the structure of the rate schedule.

B. If the SFPUC intends to recommend that the Commission adopt one or more changes to the structure of wholesale rates (currently set forth in SFPUC Rate Schedule W-25), it shall prepare and distribute to the Wholesale Customers and BAWSCA a report describing the proposed change(s), the purpose(s) for which it/they are being considered, and the estimated financial effect on individual Wholesale Customers or classes of customers. Wholesale Customers may submit comments on the report to the SFPUC for sixty (60) days after receiving the report. The SFPUC will consider these comments and, if it determines to recommend that the Commission adopt the change(s), as described in the report or as modified in response to comments, the SFPUC General Manager shall submit a report to the Commission recommending specific change(s) in the rate structure. Copies of the General Manager's report shall be sent to all Wholesale Customers and BAWSCA at least thirty (30) days prior to the Commission meeting at which the changes will be considered.

C. The SFPUC may recommend, and the Commission may adopt, changes in the structure of wholesale rates at any time. However, the new rate schedule implementing these changes will become effective at the beginning of the following fiscal year.

6.05. Balancing Account

A. **Balancing Account Established Under 1984 Agreement**. The amount of credit in favor of San Francisco as of the expiration of the term of 1984 Agreement (June 30, 2009) is not known with certainty as of preparation and execution of this Agreement. It will not be known with certainty until the Compliance Audit for FY 2008-09 is completed and disputes, if any, that the Wholesale Customers or the SFPUC may have with the calculation of the Suburban Revenue Requirement for that fiscal year and for previous fiscal years have been settled or decided by arbitration.

The parties anticipate that the amount of the credit in favor of San Francisco as of June 30, 2009 may be within the range of $15 million to $20 million.

In order to reduce the credit balance due San Francisco under the 1984 Agreement in an orderly manner, while avoiding unnecessary fluctuations in wholesale rates, the parties agree to implement the following procedure.

1. In setting wholesale rates for FY 2009-10, SFPUC will include a balancing account repayment of approximately $2 million.

2. In setting wholesale rates for FY 2010-11 and following years, SFPUC will include a balancing account repayment of not less than $2 million and not more than $5 million annually until the full amount of the balance due, plus interest at the rate specified in Section 6.05.B, is repaid.

3. The actual ending balance as of June 30, 2009 will be determined, by the parties' agreement or arbitral ruling, after the Compliance Audit report for FY 2008-09 is delivered to BAWSCA. That amount, once determined, will establish the principal to be amortized through subsequent years' repayments pursuant to this Section 6.05.A.

B. **Balancing Account Under This Agreement**

1. Operation. After the close of each fiscal year, the SFPUC will compute the costs allocable to the Wholesale Customers for that fiscal year pursuant to Article 5, based on actual costs incurred by the SFPUC and actual amounts of water used by the Wholesale Customers and the Retail Customers. That amount will be compared to the amounts billed to the Wholesale Customers for that fiscal year (including any Excess Use Charges, but excluding revenues described in Section 5.10.C). The difference will be posted to a "balancing account" as a credit to, or charge against, the Wholesale Customers. Interest shall also be posted to the balancing account calculated by multiplying the amount of the opening balance by the average net interest rate, certified by the Controller as earned in the San Francisco Treasury for the previous fiscal year on the San Francisco County Pooled Investment Account. Interest, when posted, will carry the same mathematical sign (whether positive or negative) as carried by the opening balance. The amount posted to the balancing account in each year shall be added to, or subtracted from, the balance in the account from previous years. The calculation of the amount to be posted to the balancing account shall be included in the report prepared by the SFPUC pursuant to Section 7.02.

The opening balance for fiscal year 2009-10 shall be zero.

2. Integration of Balancing Account with Wholesale Rate Setting Process. If the amount in the balancing account is owed to the Wholesale Customers (a positive balance), the SFPUC shall take it into consideration in establishing wholesale rates. However, the SFPUC need not apply the entire amount to reduce wholesale rates for the immediately ensuing

year. Instead, the SFPUC may prorate a positive ending balance over a period of up to three successive years in order to avoid fluctuating decreases and increases in wholesale rates.

a. If a positive balance is maintained for three successive years and represents 10 percent or more of the Wholesale Revenue Requirement for the most recent fiscal year, the SFPUC shall consult with BAWSCA as to the Wholesale Customers' preferred application of the balance. The Wholesale Customers shall, through BAWSCA, direct that the positive balance be applied to one or more of the following purposes: (a) transfer to the Wholesale Revenue Coverage Reserve, (b) amortization of any remaining negative balance from the ending balancing account under the 1984 Agreement, (c) prepayment of the existing asset balance under Section 5.03, (d) water conservation or water supply projects administered by or through BAWSCA, (e) immediate reduction of wholesale rates, or (f) continued retention for future rate stabilization purposes. In the absence of a direction from BAWSCA, the SFPUC shall continue to retain the balance for rate stabilization in subsequent years.

b. If the amount in the balancing account is owed to the SFPUC (a negative balance), the SFPUC shall not be obligated to apply all or any part of the negative balance in establishing wholesale rates for the immediately ensuring year. Instead, the SFPUC may prorate the negative balance in whole or in part over multiple years in order to avoid fluctuating increases and decreases in wholesale rates.

6.06. <u>Wholesale Revenue Coverage Reserve</u>

A. The SFPUC may include in wholesale rates for any fiscal year an additional dollar amount ("Wholesale Revenue Coverage"), which for any fiscal year shall equal the following:

1. The lesser of (i) 25% of the Wholesale Customers' share of Net Annual Debt Service for that fiscal year determined as described in Section 5.04.A, or (ii) the amount necessary to meet the Wholesale Customers' proportionate share of Debt Service coverage required by then-current Indebtedness for that fiscal year, minus

2. A credit for (i) the actual amounts previously deposited in the "Wholesale Revenue Coverage Reserve" (as defined in subsection B below), (ii) accrued interest on the amounts on deposit in the Wholesale Revenue Coverage Reserve, and (iii) an amount equal to any additional interest that would have accrued on the actual amounts previously deposited in the Wholesale Revenue Coverage Reserve assuming no withdrawals had been made therefrom.

B. During each fiscal year, the SFPUC will set aside and deposit that portion of revenue equal to Wholesale Revenue Coverage into a separate account that the SFPUC will establish and maintain, to be known as the "Wholesale Revenue Coverage Reserve." Deposits into the Wholesale Revenue Coverage Reserve shall be made no less frequently than monthly. The Wholesale Revenue Coverage Reserve shall be credited with interest at the rate specified in Section 6.05.B. The SFPUC may use amounts in the Wholesale Revenue Coverage Reserve for any lawful purpose. Any balance in the Wholesale Revenue Coverage Reserve in excess of the Wholesale Revenue Coverage amount as of the end of any fiscal year (as calculated in subsection 6.06(A) above) shall be applied as a credit against wholesale rates in the immediately following fiscal year unless otherwise directed by BAWSCA.

C. Within 180 days following the later of expiration of the Term or final payment of Debt Service due on Indebtedness issued during the Term to which Wholesale Customers were contributing, SFPUC shall rebate to the Wholesale Customers an amount equal to the Wholesale Revenue Coverage amount in effect for the fiscal year during which the Term expires or the final payment of Debt Service on Indebtedness is made based on each Wholesale Customer's Proportional Annual Use in the fiscal year during which the Term expires or the final payment of debt service on Indebtedness is made.

D. SFPUC shall provide a schedule of debt issuance (with assumptions), and the Wholesale Customers' share of Net Annual Debt Service (actual and projected) expected to be included in wholesale rates starting in 2009-10 through the expected completion of the WSIP. The schedule is to be updated annually prior to rate setting. If estimated Debt Service is used in rate setting, the SFPUC must be able to demonstrate that the Water Enterprise revenues will be sufficient to meet the additional bonds test for the proposed bonds and rate covenants for the upcoming year.

E. Conditions in the municipal bond market may change from those prevailing in 2009. If, prior to expiration of the Term, the SFPUC determines that it would be in the best financial interest of both Retail Customers and Wholesale Customers of the Regional Water System for the Debt Service coverage requirement to be increased in one or more series of proposed new Indebtedness above 1.25%, or for the coverage covenant to be strengthened in other ways, it will provide a written report to BAWSCA. The report will contain (1) a description of proposed covenant(s) in the bond indenture; (2) an explanation of how savings are expected to be achieved (e.g., increase in the SFPUC's credit rating over the then-current level; ability to

obtain credit enhancement, etc.); (3) the estimated all-in true interest cost savings; (4) a comparison of the Wholesale Revenue Requirements using the Debt Service coverage limitation in subsection A and under the proposed methodology; and (5) a comparison of the respective monetary benefits expected to be received by both Retail and Wholesale Customers. The SFPUC and BAWSCA agree to meet and confer in good faith about the proposed changes.

F. Any increase in Debt Service coverage proposed by the SFPUC shall be commensurate with Proportional Water Use by Retail and Wholesale Customers. If the SFPUC demonstrates that an increase in Debt Service coverage will result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, BAWSCA may agree to a modification of the Wholesale Revenue Coverage requirement in subsection A. If BAWSCA does not agree to a proposed modification in coverage requirements in the covenants for new Indebtedness, SFPUC may nevertheless proceed with the modification and the issuance of new Indebtedness. Any Wholesale Customer, or BAWSCA, may challenge an increase in the Wholesale Revenue Requirement resulting from the modification in Debt Service coverage through arbitration as provided in Section 8.01.A. If the arbitrator finds that the increase in Debt Service coverage (1) did not and will not result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, or (2) was not commensurate with Proportional Water Use, the arbitrator may order the Wholesale Revenue Requirement to be recalculated both retrospectively and prospectively to eliminate the differential impact to Wholesale or Retail Customers, subject to the limitation in Section 8.01.C.

6.07. Working Capital Requirement

A. The SFPUC maintains working capital in the form of unappropriated reserves for the purpose of bridging the gap between when the SFPUC incurs operating expenses required to provide service and when it receives revenues from its Retail and Wholesale Customers. The Wholesale Customers shall fund their share of working capital as part of the annual Wholesale Revenue Requirement calculation. The amount of wholesale working capital for which the Wholesale Customers will be responsible will be determined using the 60-day standard formula approach.

B. Applying this approach, annual wholesale working capital equals one-sixth of the wholesale allocation of operation and maintenance, administrative and general, and property tax

expenses for the Water and Hetch Hetchy Enterprises. Wholesale working capital shall be calculated separately for the Water and Hetch Hetchy Enterprises.

C. Each month, the sum of the Water Enterprise and Hetch Hetchy Enterprise working capital components will be compared with the ending balance in the Wholesale Revenue Coverage Reserve to determine if the Wholesale Customers provided the minimum required working capital. If the Wholesale Revenue Coverage Reserve is greater than the total Water Enterprise and Hetch Hetchy Enterprise working capital requirement, the Wholesale Customers will have provided their share of working capital. If the Wholesale Revenue Coverage Reserve is less than the total Water Enterprise and Hetch Hetchy Enterprise working capital requirement, the Wholesale Customers will be charged interest on the difference, which will be included in the adjustment to the Balancing Account under Section 6.05.B for the subsequent fiscal year.

6.08. Wholesale Capital Fund

A. The SFPUC currently funds revenue-funded capital projects through annual budget appropriations that are included in rates established for that fiscal year and transferred to a capital project fund from which expenditures are made. Consistent with the San Francisco Charter and Administrative Code, the SFPUC appropriates funds in advance of construction in order to maintain a positive balance in the capital project fund. The capital project fund also accrues interest and any unspent appropriations in excess of total project costs. It is the SFPUC's practice to regularly monitor the capital project fund balance to determine whether a surplus has accumulated, which can be credited against the next fiscal year's capital project appropriation.

B. The SFPUC shall establish a comparable Wholesale Revenue-Funded Capital Fund (Wholesale Capital Fund) to enable the Wholesale Customers to fund the wholesale share of revenue-funded New Regional Assets. The Wholesale Capital Fund balance is zero as of July 1, 2009. The SFPUC may include in wholesale rates for any fiscal year an amount equal to the wholesale share of the SFPUC's appropriation for revenue funded New Regional Assets for that year, which sum will be credited to the Wholesale Capital Fund. The wholesale share of other sources of funding, where legally permitted and appropriately accounted for under GAAP, will also be credited to the Wholesale Capital Fund, together with interest earnings on the Wholesale Capital Fund balance.

C. The SFPUC will expend revenues appropriated and transferred to the Wholesale Capital Fund only on New Regional Assets. The annual capital appropriation included in each fiscal year's budget will be provided to BAWSCA in accordance with Section 6.02 and will take into account the current and projected balance in the Wholesale Capital Fund, as well as current and projected unexpended and unencumbered surplus, as shown on attachment M-1, which will be prepared by the SFPUC each year.

D. Commencing on November 30, 2010 and thereafter in each fiscal year during the Term, the SFPUC will also provide an annual report to BAWSCA on the status of individual revenue-funded New Regional Assets, substantially in the form of Attachment M-2.

E. In order to prevent the accumulation of an excessive unexpended and unencumbered balance in the Wholesale Capital Fund, the status of the fund balance will be reviewed through the annual Compliance Audit, commencing in FY 2018-19. The FY 2018-19 Compliance Audit and the Wholesale Customer/BAWSCA review under Section 7.06 shall include Wholesale Capital Fund appropriations, expenditures and interest earnings for FY 2014-15 through 2017-18 for the purpose of determining whether a Balancing Account transfer is required. If the June 30 unencumbered balance of the Wholesale Capital Fund exceeds the lesser of the following: (i) the Target Balance; (ii) the unencumbered remaining cumulative appropriations, the amount of such excess shall be transferred to the credit of the Wholesale Customers to the Balancing Account described in Section 6.05.

In order to avoid funding delays for New Regional Asset capital projects resulting from prior year transfers of excess Wholesale Capital fund balances to the Wholesale Customers, if the June 30 unencumbered balance of the Wholesale Capital Fund is below the lesser of the following: (i) the Target Balance; (ii) the unencumbered remaining cumulative appropriation, such deficiency shall be posted to the Balancing Account described in Section 6.05 as a charge to the Wholesale Customers. Notwithstanding the foregoing, no such charge to the Wholesale Customers shall exceed $4 million annually.

Amended Attachment M-3 illustrates the process for determining the Wholesale Capital Fund balance as of June 30, 2019.

F. Three years prior to the end of the Term, the SFPUC and BAWSCA will discuss the disposition of the Wholesale Capital Fund balance at the end of the Term. Absent

agreement, any balance remaining in the Wholesale Capital Fund at the end of the Term shall be transferred to the Balancing Account, to the credit of the Wholesale Customers.

6.09. SFPUC Adoption of Regional Water System 10-Year Capital Improvement Program

A. **Established Level of Service Goals and Objectives**. In approving the WSIP, the Commission adopted Level of Service Goals and Objectives that are, in part, used to develop capital programs related to water, including the 10-Year Capital Improvement Program for the Regional Water System ("10-Year CIP"). BAWSCA and the Wholesale Customers shall have the opportunity to review and provide written or oral comments on any changes to the Level of Service Goals and Objectives that may be submitted to the Commission for approval.

B. **Submittal of an Asset Management Policy**. Prior to December 31, 2020, the SFPUC shall develop and submit to the Commission for approval an Asset Management Policy applicable to the Regional Water System.

C. **Coordination of 10-Year CIP and SFPUC Budget Meetings**. The Commission annually reviews, updates, and adopts a 10-Year CIP pursuant to Section 8B.123 of the San Francisco Charter. At two-year intervals, the Commission holds two budget meetings concerning the 10-Year CIP. Over the course of the two budget meetings, the SFPUC reviews its budget priorities, potential changes to projects in the previously adopted 10-Year CIP, and the potential financial implications of such changes. In the event that Charter amendments are placed on the ballot that could alter or amend the City's budget preparation and adoption efforts, BAWSCA shall be notified in advance of any proposed change that could result in a less robust CIP development effort, and BAWSCA and the SFPUC shall meet to consider BAWSCA's comments on maintaining a robust CIP development effort.

D. **Mid-cycle Changes to the 10-Year CIP**. The SFPUC shall include within the Water Enterprise Capital Improvement Program Quarterly Projects Reports that it provides to the Commission ("CIP Quarterly Projects Reports") discussion of any material changes proposed to projects that are included in the most recently adopted 10-Year CIP. The SFPUC defines a material change as a change that applies to a CIP project whose approved CIP budget is equal to or greater than $5,000,000 that results in one or more of the following:

1. Increases the cost of the CIP project by more than 10%.

2. Increases the schedule of the CIP project by extending said schedule by 12 calendar months or greater.

3. Affects the SFPUC's ability to meet the Level of Service Goals and Objectives.

The SFPUC shall also include within the CIP Quarterly Projects Reports discussion of any new capital project that is not included in the most recently adopted 10-Year CIP if the SFPUC has 1) begun spending on the project and 2) anticipates that it will require total funding in excess of $5,000,000. For such projects, the parties recognize that the work may be of an urgent nature and that details of those projects may be developing quickly to address a critical need. The SFPUC commits that, for these projects, an expanded discussion will be provided in quarterly reports generated 6 months following the creation of the project in the City's finance and accounting system. At a minimum, the discussion will include: 1) a detailed scope of work, 2) schedule, 3) cost breakdown, and 4) proposed source of funding. This level of detail shall continue to be included in subsequent quarterly reports through either the completion of the work or until the work is included as part of an adopted 10-Year CIP.

E. **BAWSCA and Wholesale Customer Notice and Review**. Beginning in 2020, at least 30 days before the first budget meeting, the SFPUC shall provide BAWSCA and the Wholesale Customers with written notice of the dates of the two budget meetings. At least 30 days before the first budget meeting, the SFPUC shall also provide BAWSCA and the Wholesale Customers with a draft of the 10-Year CIP and meet with those same parties to review potential candidate projects that it is considering for inclusion in the 10-Year CIP. Final materials for the first budget meeting will be made available to BAWSCA and the Wholesale Customers no less than 14 days prior to that budget meeting. Final materials for the second budget meeting will be made available to BAWSCA and the Wholesale Customers on the same date that they are made available to the Commission. Prior to the Commission's adoption of the 10-Year CIP at the second budget meeting, San Francisco shall respond, in writing, to all written comments by BAWSCA and the Wholesale Customers on the 10-Year CIP that were submitted prior to the date of the first budget meeting.

F. **Contents of Draft 10-Year CIP – Projects in Years One and Two of 10-Year Schedule**. The SFPUC's CIP projects generally fall into three categories: defined projects, placeholder concepts that could become projects, and programmatic spending for expenses likely to be made but for which there is no schedule. Projects in the near-term years of the 10-Year CIP have more definition than those in the outer years, and as a result more detailed information is available for them. For each project listed that has significant expected

expenditures identified in the first two years of the 10-Year CIP, the draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall include the following elements:

1. Project name.
2. Project description and justification.
3. Description of the project's relationship to the Level of Service Goals and Objectives.
4. Project asset classification for cost-allocation purposes, pursuant to Attachment R for Hetch Hetchy Enterprise assets, or as Regional or Retail for Water Enterprise assets.
5. Project schedule where applicable, broken down by phase, through to completion.
6. Total project budget estimate including a proposed inflation rate.

G. **Contents of Draft 10-Year CIP – Projects Listed After First Two Years of 10-Year Schedule**. For each project that is listed in years three through ten of the 10-Year CIP, the draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall include the following elements:

1. Project name.
2. Project description and justification.
3. Description of the project's relationship to the Level of Service Goals and Objectives.
4. Project asset classification for cost-allocation purposes, pursuant to Attachment R for Hetch Hetchy Enterprise assets, or as Regional or Retail for Water Enterprise assets.
5. Project schedule information that forms the basis for project planning if available.
6. Total project budget estimate.

H. **Additional Contents of Draft 10-Year CIP**. The draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall also include the following:

1. A discussion of any changes to projects in the previously adopted 10-Year CIP, the reasons for such changes, any impact of the proposed changes on the SFPUC's ability to achieve the Level of Service Goals

and Objectives, and the SFPUC's proposal for meeting the specific Level of Service Goals and Objectives in question.

2. A discussion of factors that have influenced the 10-Year CIP budget or identified projects, or have the potential to influence the overall budget or the number, cost and scale of identified projects, such as rate increase considerations, local rate setting policies, etc.
3. A discussion of how the CIP will be staffed.
4. A cash flow estimate for each project included as part of the first five years of the 10-Year CIP that considers historical spending and changes in the amount of work to be done.
5. Project spreadsheets that separate new projects from existing projects.
6. A summary roll-up for Regional costs, including all programmatic costs budgeted in the 10-Year CIP.

I. **Quarterly Reporting and Meetings**.

1. CIP Quarterly Projects Reports. The SFPUC shall include within the CIP Quarterly Projects Reports a detailed status update of each Regional project in the 10-Year CIP that has an estimated cost greater than $5 million and a summary of the work completed to date for such projects. The CIP Quarterly Projects Reports shall focus on the first two years' projects in the 10-Year CIP, but shall also demonstrate a connection to the 10-Year CIP asset classification and the Level of Service Goals and Objectives. The CIP Quarterly Projects Reports shall identify any Regional project in the 10-Year CIP with an estimated cost greater than $5 million that is behind schedule, and, for each project so identified, shall describe the SFPUC's plan and timeline for either making up the delay or adopting a revised project schedule. In each fourth quarter of the fiscal year CIP Quarterly Projects Report, the SFPUC will also address the status of Regional projects in the 10-Year CIP that have an estimated cost of less than $5 million, noting any such projects that are behind schedule and describing the SFPUC's plan and timeline for either making up the delay or adopting a revised project schedule.

2. Quarterly Meetings. If requested by BAWSCA, the SFPUC shall hold quarterly meetings with BAWSCA to review each CIP Quarterly Projects Report, during which the SFPUC shall present information and detail about the individual projects and overall implementation of the 10-Year CIP, as well as the need for re-prioritization and/or the proposal

of new candidate projects for consideration as part of the next update of the 10-Year CIP. As part of the meeting held in each fourth quarter of the fiscal year, the SFPUC shall provide additional information and detail regarding the CIP development schedule and associated coordination proposed with BAWSCA.

Article 7. Accounting Procedures; Compliance Audit

7.01. SFPUC Accounting Principles, Practices

A. **Accounting Principles**. San Francisco will maintain the accounts of the SFPUC and the Water and Hetch Hetchy Enterprises in conformity with Generally Accepted Accounting Principles. San Francisco will apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB) as well as statements and interpretations of the Financial Accounting Standards Board and Accounting Principles Board opinions issued on or before March 30, 1989, unless those pronouncements or opinions conflict with GASB pronouncements.

B. **General Rule**. San Francisco will maintain the accounting records of the SFPUC and the Water and Hetch Hetchy Enterprises in a format and level of detail sufficient to allow it to determine the annual Wholesale Revenue Requirement in compliance with this Agreement and to allow its determination of the Wholesale Revenue Requirement to be audited as provided in Section 7.04.

C. **Water Enterprise**. San Francisco will maintain an account structure which allows utility plant and operating and maintenance expenses to be segregated by location (inside San Francisco and outside San Francisco) and by function (Direct Retail, Regional and Direct Wholesale).

D. **Hetch Hetchy Enterprise**. San Francisco will maintain an account structure which allows utility plant and operating and maintenance expenses to be segregated into Water Only, Power Only and Joint categories.

E. **SFPUC**. San Francisco will maintain an account structure which allows any expenses of SFPUC bureaus that benefit only the Wastewater Enterprise, the Power-Only operations of the Hetch Hetchy Enterprise or Retail Customers to be excluded from the Wholesale Revenue Requirement.

F. **Utility Plant Ledgers**. San Francisco will maintain subsidiary plant ledgers for the Water and Hetch Hetchy Enterprises that contain unique identifying numbers for all assets included in the rate base and identify the original cost, annual depreciation, accumulated depreciation, date placed in service, useful life, salvage value if any, source of funding (e.g., bond series, revenues, grants), and classification for purposes of this Agreement.

G. **Debt.** San Francisco will maintain documentation identifying:

1. The portion of total bonded debt outstanding related to each series of each bond issue.

2. The portion of total interest expense related to each series of each bond issue.

3. The use of proceeds of each bond issue (including proceeds of commercial paper and/or other interim financial instruments redeemed or expected to be redeemed from bonds and earnings on the proceeds of financings) in sufficient detail to determine, for each bond issue, the proceeds and earnings of each (including proceeds and earnings of interim financing vehicles redeemed by a bond issue) and the total amounts expended on Direct Retail improvements and the total amounts expended on Regional improvements.

H. **Changes in Accounting**. Subject to subsections A thru G, San Francisco may change the chart of accounts and accounting practices of the SFPUC and the Water and Hetch Hetchy Enterprises. However, the allocation of any expense to the Wholesale Customers that is specified in the Agreement may not be changed merely because of a change in (1) the accounting system or chart of accounts used by SFPUC, (2) the account to which an expense is posted or (3) a change in the organizational structure of the SFPUC or the Water or Hetch Hetchy Enterprises.

I. **Audit**. San Francisco will arrange for an audit of the financial statements of Water and Hetch Hetchy Enterprises to be conducted each year by an independent certified public accountant, appointed by the Controller, in accordance with Generally Accepted Auditing Standards.

7.02. Calculation of and Report on Wholesale Revenue Requirement

A. Within five months after the close of each fiscal year, San Francisco will prepare a report showing its calculation of the Wholesale Revenue Requirement for the preceding fiscal year and the change in the balancing account as of the end of that fiscal year. The first such report will be prepared by November 30, 2010 and will cover fiscal year 2009-10 and the balancing account as of June 30, 2010.

B. The report will consist of the following items:

1. Statement of changes in the balancing account for the fiscal year being reported on, and for the immediately preceding fiscal year, substantially in the form of Attachment O.

2. Detailed supporting schedules 8.1 through 8.2 substantially in the form of Attachment N-2.

3. Description and explanation of any changes in San Francisco's accounting practices from those previously in effect.

4. Explanation of any line item of expense (shown on Attachment N-2, schedules 1 and 4) for which the amount allocated to the Wholesale Customers increased by (a) ten percent or more from the preceding fiscal year, or (b) more than $1,000,000.

5. Representation letter signed by the SFPUC General Manager and by other SFPUC financial staff shown on Attachment P, as the General Manager may direct, subject to change in position titles at the discretion of the SFPUC.

C. The report will be delivered to the BAWSCA General Manager by the date identified in Subsection A.

Once the report has been delivered to BAWSCA, San Francisco will, upon request:

1. Provide BAWSCA with access to, and copies of, all worksheets and supporting documents used or prepared by San Francisco during its calculation of the Wholesale Revenue Requirement;

2. Make available to BAWSCA all supporting documentation and calculations used by San Francisco in preparing the report; and

3. Promptly provide answers to questions from BAWSCA staff about the report.

7.03. Appointment of Compliance Auditor

A. **Purpose**. The purpose of this section is to provide for an annual Compliance Audit by an independent certified public accountant of the procedures followed and the underlying data used by San Francisco in calculating the Wholesale Revenue Requirement for the preceding fiscal year. The annual Compliance Audit shall also determine whether the Wholesale Revenue Requirement has been calculated in accordance with the terms of the Agreement and whether amounts paid by the Wholesale Customers in excess of or less than

the Wholesale Revenue Requirement have been posted to the balancing account, together with interest as provided in Section 6.05.

B. **Method of Appointment**. The Controller shall select an independent certified public accountant ("Compliance Auditor") to conduct the Compliance Audit described below. The Compliance Auditor may be the same certified public accountant engaged by the Controller to audit the financial statements of the Water and Hetch Hetchy Enterprises. Subject to approval by the Controller and the General Manager of the SFPUC, the Compliance Auditor shall have the authority to engage such consultants as it deems necessary or appropriate to assist in the audit. The terms of this Article shall be incorporated into the contract between San Francisco and the Compliance Auditor, and the Wholesale Customers shall be deemed to be third-party beneficiaries of said contract.

7.04. Conduct of Compliance Audit

A. **Standards**. The Compliance Auditor shall perform the Compliance Audit in accordance with Generally Accepted Auditing Standards. In particular, its review shall be governed by the standards contained in Section AU 623 (Reports on Specified Elements, Accounts or Items of a Financial Statement) of the AICPA, Professional Standards, as amended from time to time.

B. **Preliminary Meeting; Periodic Status Reports; Access to Data**. Prior to commencing the audit, the Compliance Auditor shall meet with San Francisco and BAWSCA to discuss the audit plan, the procedures to be employed and the schedule to be followed. During the course of the audit, the Compliance Auditor shall keep San Francisco and BAWSCA informed of any unforeseen problems or circumstances which could cause a delay in the audit or any material expansion of the audit's scope. The Compliance Auditor shall be given full access to all records of the SFPUC and the Water and Hetch Hetchy Enterprises that the Auditor deems necessary for the audit.

C. **Audit Procedures**. The Compliance Auditor shall review San Francisco's calculation of the Wholesale Revenue Requirement and the underlying data in order to carry out the purpose of the audit described in Section 7.03.A and to issue the report described in Section 7.05. At a minimum, the Compliance Auditor shall address the following:

1. Water Enterprise Operating and Maintenance Expenses. The Compliance Auditor shall review Water Enterprise cost ledgers to determine whether the

recorded operating and maintenance expenses fairly reflect the costs incurred, were recorded on a basis consistent with applicable Generally Accepted Accounting Principles, and were allocated to the Wholesale Customers as provided in this Agreement.

2. Water Enterprise Administrative and General Expenses. The Compliance Auditor shall review Water Enterprise cost ledgers and other appropriate financial records, including those of the SFPUC, to determine whether the recorded administrative and general expenses fairly reflect the costs incurred by or allocated to the Water Enterprise, whether they were recorded on a basis consistent with applicable Generally Accepted Accounting Principles, whether SFPUC charges were allocated to the Water Enterprise in accordance with this Agreement, and whether the amount of administrative and general expenses allocated to the Wholesale Customers was determined as provided by this Agreement.

3. Property Taxes. The Compliance Auditor shall review Water Enterprise cost ledgers to determine whether the amount of property taxes shown on the report fairly reflects the property tax expense incurred by San Francisco for Water Enterprise property outside of San Francisco and whether there has been deducted from the amount to be allocated (1) all taxes actually reimbursed to San Francisco by tenants of Water Enterprise property under leases that require such reimbursement and (2) any refunds received from the taxing authority. The Compliance Auditor also shall determine whether the amount of property taxes allocated to the Wholesale Customers was determined as provided in this Agreement.

4. Debt Service. The Compliance Auditor shall review SFPUC records to determine whether debt service, and associated coverage requirements, were allocated to the Wholesale Customers as provided in this Agreement.

5. Amortization of Existing Assets in Service as of June 30, 2009. The Compliance Auditor shall review both Water and Hetch Hetchy Enterprise records to determine whether the payoff amount for Existing Assets allocated to the Wholesale Customers as shown on Attachment K-1 through K-4 was calculated as provided in Section 5.03 of this Agreement.

6. Revenue-Funded Capital Appropriations/Expenditures. The Compliance Auditor shall review San Francisco's calculation of actual expenditures on the wholesale share of revenue-funded New Regional Assets and remaining unexpended and unencumbered project balances in the "Wholesale Capital Fund" described in Section 6.08, to determine whether the procedures contained in that section were followed.

7. Hetch Hetchy Expenses. The Compliance Auditor shall determine whether Hetch Hetchy Enterprise expenses were allocated to the Wholesale Customers as provided in this Agreement.

D. **Use of and Reliance on Audited Financial Statements and Water Use Data**

1. In performing the audit, the Compliance Auditor shall incorporate any adjustments to the cost ledgers recommended by the independent certified public accountant, referred to in Section 7.01.I, which audited the financial statements of the Water and Hetch Hetchy Enterprises. The Compliance Auditor may rely upon the work performed by that independent certified public accountant if the Compliance Auditor reviews the work and is willing to take responsibility for it as part of the compliance audit.

2. In performing the Compliance Audit and issuing its report, the Compliance Auditor may rely on water use data furnished by the Water Enterprise, regardless of whether the Wholesale Customers contest the accuracy of such data. The Compliance Auditor shall have no obligation to independently verify the accuracy of the water use data provided by San Francisco; however, the Compliance Auditor shall disclose in its report any information which came to its attention suggesting that the water use data provided by San Francisco are inaccurate in any significant respect.

E. Exit Conference. Upon completion of the audit, the Compliance Auditor shall meet with San Francisco and BAWSCA to discuss audit findings, including (1) any material weakness in internal controls and (2) adjustments proposed by the Compliance Auditor and San Francisco's response (i.e., booked or waived).

7.05. Issuance of Compliance Auditor's Report

A. San Francisco will require the Compliance Auditor to issue its report no later than nine months after the fiscal year under audit (i.e., March 31 of the following calendar year). The Compliance Auditor's report shall be addressed and delivered to San Francisco and BAWSCA. The report shall contain:

1. A statement that the Auditor has audited the report on the calculation of the Wholesale Revenue Requirement and changes in the balancing account, and supporting documents, prepared by San Francisco as required by Section 7.02.

2. A statement that the audit was conducted in accordance with auditing standards generally accepted in the United States of America, and that the audit provides a reasonable basis for its opinion.

3. A statement that in the Compliance Auditor's opinion the Wholesale Revenue Requirement was calculated by San Francisco in accordance with this Agreement and that the change in the balancing account shown in San Francisco's report was calculated as required by this Agreement and presents fairly, in all material respects, changes in and the balance due to (or from) the Wholesale Customers as of the end of the fiscal year under audit.

7.06. Wholesale Customer Review

A. One or more Wholesale Customers, or BAWSCA, may engage an independent certified public accountant (CPA) to conduct a review (at its or their expense) of San Francisco's calculation of the annual Wholesale Revenue Requirement and a review of changes in the balancing account.

B. If a Wholesale Customer or BAWSCA wishes such a review to be conducted it will provide written notice to SFPUC within 30 days of the date the Compliance Auditor's report is issued. The notice will identify the CPA or accounting/auditing firm that will conduct the review and the specific aspects of the Compliance Auditor's report that are the subject of the review. If more than one notice of review is received by the SFPUC, the requesting Wholesale Customers shall combine and coordinate their reviews and select a lead auditor to act on their behalf for the purposes of requesting documents and conducting on-site investigations.

C. San Francisco will cooperate with the CPA appointed by a Wholesale Customer or BAWSCA. This cooperation includes making requested records promptly available, making knowledgeable SFPUC personnel available to timely and truthfully answer the CPA's questions and directing the Compliance Auditor to cooperate with the CPA.

D. The Wholesale Customer's review shall be completed within 60 days after the date the Compliance Auditor's report is issued. At the conclusion of the review, representatives of San Francisco and BAWSCA shall meet to discuss any differences between them concerning San Francisco's compliance with Articles 5 or 6 of this Agreement during the preceding fiscal year or San Francisco's calculation of the Wholesale Revenue Requirement for the preceding fiscal year. If such differences cannot be resolved, the dispute shall be submitted to arbitration in accordance with Section 8.01.

Article 8. Other Agreements of the Parties

8.01. Arbitration and Judicial Review

A. **General Principles re Scope of Arbitration**. All questions or disputes arising under the following subject areas shall be subject to mandatory, binding arbitration and shall not be subject to judicial determination:

1. the determination of the Wholesale Revenue Requirement, which shall include both the calculations used in the determination and the variables used in those calculations;

2. the SFPUC's adherence to accounting practices and conduct of the Compliance Audit; and

3. the SFPUC's classification of new or omitted assets for purposes of determining the Wholesale Revenue Requirement.

All other questions or disputes arising under this Agreement shall be subject to judicial determination. Disputes about the scope of arbitrability shall be resolved by the courts.

B. **Demand for Arbitration**. If any arbitrable question or dispute should arise, any Wholesale Customer or the SFPUC may commence arbitration proceedings hereunder by service of a written Demand for Arbitration. Demands for arbitration shall set forth all of the issues to be arbitrated, the general contentions relating to those issues, and the relief sought by the party serving the Demand. Within 45 days after service of a Demand upon it, any Wholesale Customer or the SFPUC may serve a Notice of Election to become a party to the arbitration and a Response to the issues set forth in the Demand. The Response shall include the party's general contentions and defenses with respect to the claims made in the Demand, and may include any otherwise arbitrable claims, contentions and demands that concern the fiscal year covered by the Demand. If a timely Notice of Election and Response is not filed by any such entity, it shall not be a party to the arbitration but shall nonetheless be bound by the award of the arbitrator. If no party to this Agreement serves a timely Notice of Election and Response, the party seeking arbitration shall be entitled to the relief sought in its Demand for Arbitration without the necessity of further proceedings. Any claims not made in a Demand or Response shall be deemed waived.

If a Demand or Notice of Election is made by the SFPUC, it shall be served by personal delivery or certified mail to each Wholesale Customer at the address of such customer as set forth in the billing records of the SFPUC. If a Demand or Notice of Election is made by a Wholesale Customer, service shall be by certified mail or personal delivery to the General Manager, SFPUC, 525 Golden Gate Avenue, 13th Floor, San Francisco, California 94102, and to each of the other Wholesale Customers. If arbitration is commenced, the Wholesale Customers shall use their best efforts to formulate a single, joint position with respect thereto. In any event, with respect to the appointment of arbitrators, as hereinafter provided, all Wholesale Customers that take the same position as to the issues to be arbitrated shall jointly and collectively be deemed to be a single party.

C. **Limitations Period**. All Demands For Arbitration shall be served within twelve months of receipt by BAWSCA of the Wholesale Revenue Requirement Compliance Auditor's Report for that year. If a party fails to file a Demand within the time period specified in this subsection, that party waives all present and future claims with respect to the fiscal year in question. If no such Demand is served within the twelve month period specified above, the SFPUC's determination of the Wholesale Revenue Requirement for that year shall be final and conclusive. Whether any particular claim is barred by the twelve month limitations period provided for herein shall be for the arbitrator to determine. Prior to the expiration of the twelve month limitations period, the parties to the dispute may agree by written stipulation to extend the period by up to six additional months.

The Arbitrator may order the alteration or recalculation of underlying Water Enterprise and/or Hetch Hetchy Enterprise accounts or asset classifications. Such changes shall be used to calculate the Wholesale Revenue Requirement for the fiscal year in dispute and shall also be used to determine future Wholesale Revenue Requirements, if otherwise applicable, even though the existing entries in such accounts or the asset classifications, in whole or in part, predate the twelve month period described above, so long as a timely arbitration Demand has been filed in accordance with this subsection.

D. **Number and Appointment of Arbitrators**. All arbitration proceedings under this section shall be conducted by a single arbitrator, selected by the SFPUC and a designated representative of the Wholesale Customers or each group of Wholesale Customers that take the same position with respect to the arbitration, within 75 days after service of the Demand. If the parties to the arbitration cannot agree on an arbitrator within 75 days, any party may petition

the Marin County Superior Court for the appointment of an arbitrator pursuant to Code of Civil Procedure Section 1281.6 (or any successor provision).

E. **Guidelines for Qualifications of Arbitrators**. The Wholesale Customers and the SFPUC acknowledge that the qualifications of the arbitrator will vary with the nature of the matter arbitrated, but, in general, agree that such qualifications may include service as a judge or expertise in one or more of the following fields: public utility law, water utility rate setting, water system and hydraulic engineering, utility accounting methods and practices, and water system operation and management. The parties to the arbitration shall use their best efforts to agree in advance upon the qualifications of any arbitrator to be appointed by the Superior Court.

F. **Powers of Arbitrator; Conduct of Proceedings**

1. Except as provided in this section, arbitrations under this section shall be conducted under and be governed by the provisions of California Code of Civil Procedure Sections 1282.2 through 1284.2 (hereinafter, collectively, "Code sections"), and arbitrators appointed hereunder shall have the powers and duties specified by the Code sections.

2. Within the meaning of the Code sections, the term "neutral arbitrator" shall mean the single arbitrator selected by the parties to the arbitration.

3. Unless waived in writing by the parties to the arbitration, the notice of hearing served by the arbitrator shall not be less than 90 days.

4. The lists of witnesses (including expert witnesses), and the lists of documents (including the reports of expert witnesses) referred to in Code of Civil Procedure Section 1282.2 shall be mutually exchanged, without necessity of demand therefore, no later than 60 days prior to the date of the hearing, unless otherwise agreed in writing by the parties to the arbitration. Upon application of any party, or on his or her own motion, the arbitrator may schedule one or more prehearing conferences for the purposes of narrowing and/or expediting resolution of the issues in dispute. Strict conformity to the rules of evidence is not required, except that the arbitrator shall apply applicable law relating to privileges and work product. The arbitrator shall consider evidence that he or she finds relevant and material to the dispute, giving the evidence such weight as is appropriate. The arbitrator may limit testimony to exclude evidence that would be immaterial or unduly repetitive, provided that all parties are afforded the opportunity to present material and relevant evidence.

5. Within thirty days after the close of the arbitration hearing, or such other time as the arbitrator shall determine, the parties will submit proposed findings and a proposed remedy to the arbitrator. The parties may file objections to their adversary's proposed findings and remedy within a time limit to be specified by the arbitrator. The arbitrator shall not base his or her award on information not obtained at the hearing.

6. The arbitrator shall render a written award no later than twelve months after the arbitrator is appointed, either by the parties or by the court, provided that such time may be waived or extended as provided in Code of Civil Procedure Section 1283.8.

7. The provisions for discovery set forth in Code of Civil Procedure Section 1283.05 are incorporated into and made part of this Agreement, except that: (a) leave of the arbitrator need not be obtained for the taking of depositions, including the depositions of expert witnesses; (b) the provisions of Code of Civil Procedure Section 2034.010 et seq., relating to discovery of expert witnesses, shall automatically be applicable to arbitration proceedings arising under this Agreement without the necessity for a formal demand pursuant to Section 2034.210 and the date for the exchange of expert discovery provided by Sections 2034.260 and 2034.270 shall be not later than 60 days prior to the date for the hearing; and (c) all reports, documents, and other materials prepared or reviewed by any expert designated to testify at the arbitration shall be discoverable. In appropriate circumstances, the arbitrator may order any party to this Agreement that is not a party to the arbitration to comply with any discovery request.

8. For the purposes of allocation of expenses and fees, as provided in Code of Civil Procedure Section 1284.2, if any two or more Wholesale Customers join together in a single, joint position in the arbitration, those Wholesale Customers shall be deemed to be a single party. If any Wholesale Customer or customers join together with the SFPUC in a single joint position in the arbitration, those Wholesale Customers and the SFPUC together shall be deemed to be a single party.

9. Subject to any other limitations imposed by the Agreement, the arbitrator shall have power to issue orders mandating compliance with the terms of the Agreement or enjoining violations of the Agreement. With respect to any arbitration brought to redress a claimed wholesale overpayment to the SFPUC, the arbitrator's power to award monetary relief shall be limited to entering an order requiring that an adjustment be made in the amount posted to the balancing account for the fiscal year covered by the Demand.

10. All awards of the arbitrator shall be binding on the SFPUC and the Wholesale Customers regardless of the participation or lack thereof by any Wholesale Customer or the SFPUC as a party to the arbitration proceeding. The parties to an arbitration shall have the power to modify or amend any arbitration award by mutual consent. The arbitrator shall apply California law.

8.02. Attorneys' Fees

A. **Arbitration or Litigation Between San Francisco and Wholesale Customers Arising under the Agreement or Individual Water Sales Contracts**. Each party will bear its own costs, including attorneys' fees, incurred in any arbitration or litigation arising under this Agreement or the Individual Water Sales Contracts between San Francisco and the Wholesale Customers. Notwithstanding the foregoing, and subject to the limitations contained herein, the SFPUC may allocate to the Wholesale Customers as an allowable expense, utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses, any attorneys' fees and costs incurred by the SFPUC in connection with arbitration and/or litigation arising under this Agreement and/or the Individual Water Sales Contracts. Attorneys' fees incurred by the SFPUC for attorneys employed in the San Francisco City Attorney's office shall be billed at the hourly rates charged for the attorneys in question by the San Francisco City Attorney's Office to the SFPUC. Attorneys' fees incurred by the SFPUC for attorneys other than those employed in the San Francisco City Attorney's Office shall be limited to the hourly rates charged to the SFPUC for attorneys and paralegals with comparable experience employed in the San Francisco City Attorney's office and in no event shall exceed the highest hourly rate charged by any attorney or paralegal employed in the City Attorney's Office to the SFPUC.

B. **Arbitration or Litigation Outside of Agreement Concerning the SFPUC Water System or Reserved Issues**

1. The attorneys' fees and costs incurred by the SFPUC in litigation between San Francisco and one or more of the Wholesale Customers arising from matters outside of the Agreement, including, without limitation, litigation and/or arbitration concerning the issues specifically reserved in the Agreement, shall be allocated between the Retail Customers and the Wholesale Customers utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses.

2. If, in any litigation described in subsection B.1 above, attorneys' fees and costs are awarded to one or more of the Wholesale Customers as prevailing parties, the

SFPUC's payment of the Wholesale Customers' attorneys' fees and costs shall not be an allowable expense pursuant to subsection A.

3. If, in any litigation described in subsection B.1, the SFPUC obtains an award of attorneys' fees and costs as a prevailing party against one or more of the Wholesale Customers, any such award shall be reduced to offset the amount of the SFPUC's fees and costs, if any, that have already been paid by the Wholesale Customers in the current or any prior fiscal years pursuant to subsection B.1 and the provisions of Articles 5 and 6 of the Agreement.

4. Nothing contained in this Agreement, including this subsection, shall authorize a court to award attorneys' fees and costs to a prevailing party as a matter of contract and/or the provisions of Civil Code Section 1717, in litigation between San Francisco and one or more of the Wholesale Customers arising from matters outside of the Agreement, including, without limitation, litigation and/or arbitration concerning the issues specifically reserved in the Agreement.

C. **Attorneys Fees and Costs Incurred by the SFPUC in Connection with the Operation and Maintenance of the SFPUC Water Supply System**. All attorneys' fees and costs incurred by the SFPUC in connection with the operation and maintenance of the SFPUC's water supply system shall be allocated between Retail Customers and the Wholesale Customers utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses.

8.03. Annual Meeting and Report

A. The parties wish to ensure that the Wholesale Customers may, in an orderly way, be informed of matters affecting the Regional Water System, including matters affecting the continuity and adequacy of their water supply from San Francisco.

For this purpose, the General Manager of the SFPUC shall meet annually with the Wholesale Customers and BAWSCA during the month of February, commencing February 2010. At these annual meetings, the SFPUC shall provide the Wholesale Customers a report on the following topics:

1. Capital additions under construction or being planned for the Regional Water System, including the status of planning studies, financing plans, environmental reviews, permit applications, etc.;

2. Water use trends and projections for Retail Customers and Wholesale Customers;

3. Water supply conditions and projections;

4. The status of any administrative proceedings or litigation affecting San Francisco's water rights or the SFPUC's ability to deliver water from the watersheds which currently supply the Regional Water System;

5. Existing or anticipated problems with the maintenance and repair of the Regional Water System or with water quality;

6. Projections of Wholesale Revenue Requirements for the next five years;

7. Any other topic which the SFPUC General Manager places on the agenda for the meeting;

8. Any topic which the Wholesale Customers, through BAWSCA, request be placed on the agenda, provided that the SFPUC is notified of the request at least 10 days before the meeting.

B. The General Manager of the SFPUC, the Assistant General Manager of the Water Enterprise, and the Assistant General Manager of Business Services-CFO will use their best efforts to attend the annual meetings. If one or more of these officers are unable to attend, they will designate an appropriately informed assistant to attend in their place.

8.04. 8.04 Administrative Matters Delegated to BAWSCA

A. The Wholesale Customers hereby delegate the authority and responsibility for performing the following administrative functions contemplated in this Agreement to BAWSCA:

1. Approval of calculations of Proportional Annual Water Use required by Section 3.14 and Attachment J, "Water Use Measurement and Tabulation";

2. Approval of amendments to Attachments J and K-3 and K-4, "25-Year Payoff Schedules for Existing Rate Base";

3. Agreement that the Water Meter and Calibration Procedures Manual to be prepared by the SFPUC may supersede some or all of the requirements in Attachment J, as described in Section 3.14;

4. Conduct of Wholesale Customer review of SFPUC's calculation of annual Wholesale Revenue Requirement/Change in Balancing Account described in Section 7.06;

5. Approval of an adjustment to Wholesale Revenue Coverage as described in Section 6.06.

B. A majority of the Wholesale Customers may, without amending this Agreement, delegate additional administrative functions to BAWSCA. To be effective, such expanded delegation must be evidenced by resolutions adopted by the governing bodies of a majority of the Wholesale Customers. In 2014, all twenty-six Wholesale Customers adopted resolutions delegating authority to BAWSCA to initiate, defend and settle arbitration for the matters that, pursuant to Section 8.01 of this Agreement, are subject to mandatory, binding arbitration.

C. Unless otherwise explicitly stated, the administrative authority delegated to BAWSCA may be exercised by the General Manager/CEO of BAWSCA, rather than requiring action by the BAWSCA Board of Directors. In addition, the Wholesale Customers may, with the consent of BAWSCA, delegate to BAWSCA the initiation, defense, and settlement of arbitration proceedings provided for in Section 8.01.

8.05. Preservation of Water Rights; Notice of Water Rights Proceedings

A. It is the intention of San Francisco to preserve all of its water rights, irrespective of whether the water held under such water rights is allocated under this Agreement. Nothing in this Agreement shall be construed as an abandonment, or evidence of an intent to abandon, any of the water rights that San Francisco presently possesses.

B. San Francisco shall use its best efforts to give prompt notice to BAWSCA of any litigation or administrative proceedings to which San Francisco is a party involving water rights to the Regional Water System. The failure of San Francisco to provide notice as required by this section, for whatever reason, shall not give rise to any monetary liability.

8.06. SFPUC Rules and Regulations

The sale and delivery of all water under this Agreement shall be subject to such of the "Rules and Regulations Governing Water Service to Customers" of the Water Enterprise adopted by the Commission, as those rules and regulations may be amended from time to time, as are (1) applicable to the sale and delivery of water to the Wholesale Customers, (2) reasonable, and (3) not inconsistent with either this Agreement or with an Individual Water

Sales Contract. The SFPUC will give the Wholesale Customers notice of any proposal to amend the Rules and Regulations in a manner that would affect the Wholesale Customers. The notice will be delivered at least thirty days in advance of the date on which the proposal is to be considered by the Commission and will be accompanied by the text of the proposed amendment.

8.07. Reservations of, and Limitations on, Claims

A. **General Reservation of Raker Act Contentions**. The 1984 Agreement resolved a civil action brought against San Francisco by certain of the Wholesale Customers. Plaintiffs in that action contended that they, and other Wholesale Customers that are municipalities or special districts, were "co-grantees" within the meaning of Section 8 of the Act and were entitled to certain rights, benefits and privileges by virtue of that status. San Francisco disputed those claims.

Nothing in this Agreement, or in the Individual Water Sales Contracts, shall be construed or interpreted in any way to affect the ultimate resolution of the controversy between the parties concerning whether any of the Wholesale Customers are "co-grantees" under the Act and, if so, what rights, benefits and privileges accrue to them by reason of that claimed status.

B. **Claims Reserved but not Assertable During Term or Portions Thereof**. The following claims, which San Francisco disputes, are reserved but may not be asserted during the Term (or portions thereof, as indicated):

1. The Wholesale Customers' claim that the Act entitles them to water at cost.

2. The Wholesale Customers' claim that San Francisco is obligated under the Act or state law to supply them with additional water in excess of the Supply Assurance. This claim may not be asserted unless and until San Francisco decides not to meet projected water demands of Wholesale Customers in excess of the Supply Assurance pursuant to Section 4.06.

3. The claim by San Jose and Santa Clara that they are entitled under the Act, or any other federal or state law, to permanent, non-interruptible status and to be charged rates identical to those charged other Wholesale Customers. This claim may not be asserted unless and until San Francisco notifies San Jose or Santa Clara that it intends to interrupt or terminate water deliveries pursuant to Section 4.05.

4. he Wholesale Customers' claim that the SFPUC is not entitled to impose a surcharge for lost power generation revenues attributable to furnishing water in excess of the Supply Assurance. This claim may not be asserted unless and until SFPUC furnishes water in excess of the Supply Assurance during the Term and also includes such a surcharge in the price of such water.

5. Claims by Wholesale Customers (other than San Jose and Santa Clara, whose service areas are fixed) that SFPUC is obligated under the Act or state law to furnish water, within their Individual Supply Guarantee, for delivery to customers outside their existing service area and that Wholesale Customers are entitled to enlarge their service areas to supply those customers. Such claims may be asserted only after compliance with the procedure set forth in Section 3.03, followed by SFPUC's denial of, or failure for six months to act on, a written request by a Wholesale Customer to expand its service area.

C. **Waived Activities**. The Wholesale Customers (and the SFPUC, where specified) will refrain from the following activities during the Term (or portions thereof, as specified):

1. The Wholesale Customers and the SFPUC will not contend before any court, administrative agency or legislative body or committee that the methodology for determining the Wholesale Revenue Requirement (or the requirements for (a) amortization of the ending balance under the 1984 Agreement, or (b) contribution to the Wholesale Revenue Coverage) determined in accordance with this Agreement violates the Act or any other provision of federal law, state law, or San Francisco's City Charter, or is unfair, unreasonable or unlawful.

2. The Wholesale Customers will not challenge the transfer of funds by the SFPUC to any other San Francisco City department or fund, provided such transfer complies with the San Francisco City Charter. The transfer of its funds, whether or not permitted by the City Charter, will not excuse the SFPUC from its failure to perform any obligation imposed by this Agreement.

3. The Wholesale Customers and the SFPUC will not assert monetary claims against one another based on the 1984 Agreement other than otherwise arbitrable claims arising from the three fiscal years immediately preceding the start of the Term (i.e., FYs 2006-07, 2007-08 and 2008-09). Such claims, if any, shall be governed by the dispute resolution provisions of this Agreement, except that the time within which arbitration must be commenced shall be 18 months from delivery of the Compliance Auditor's report.

D. **Other**

1. This Agreement shall determine the respective monetary rights and obligations of the parties with respect to water sold by the SFPUC to the Wholesale Customers during the Term. Such rights and obligations shall not be affected by any judgments or orders issued by any court in litigation, whether or not between parties hereto, and whether or not related to the controversy over co-grantee status, except for arbitration and/or litigation expressly permitted in this Agreement. No judicial or other resolution of issues reserved by this section will affect the Wholesale Revenue Requirement which, during the Term, will be determined exclusively as provided in Articles 5, 6 and 7 of this Agreement.

2. Because delays in the budget process or other events may cause the SFPUC to defer the effective date of changes in wholesale rates until after the beginning of the fiscal year, this Agreement does not require the SFPUC to make changes in wholesale rates effective at the start of the fiscal year or at any other specific date.

3. he Wholesale Customers do not, by executing this Agreement, concede the legality of the SFPUC's establishing Interim Supply Allocations, as provided in Article 4 or imposing Environmental Enhancement Surcharges on water use in excess of such allocations. Any Wholesale Customer may challenge such allocation when imposed and/or such surcharges if and when levied, in any court of competent jurisdiction.

4. The furnishing of water in excess of the Supply Assurance by San Francisco to the Wholesale Customers shall not be deemed or construed to be a waiver by San Francisco of its claim that it has no obligation under any provision of law to supply such water to the Wholesale Customers, nor shall it constitute a dedication by San Francisco to the Wholesale Customers of such water.

8.08. Prohibition of Assignment

A. This Agreement shall be binding on, and shall inure to the benefit of, the parties and their respective successors and permitted assigns. Each Wholesale Customer agrees that it will not transfer or assign any rights or privileges under this Agreement, either in whole or in part, or make any transfer of all or any part of its water system or allow the use thereof in any manner whereby any provision of this Agreement will not continue to be binding on it, its assignee or transferee, or such user of the system. Any assignment or transfer in violation of this covenant, and any assignment or transfer that would result in the supply of water in violation of the Act, shall be void.

B. Nothing in this section shall prevent any Wholesale Customer (except the California Water Service Company and Stanford) from entering into a joint powers agreement or a municipal or multi-party water district with any other Wholesale Customer (except the two listed above) to exercise the rights and obligations granted to and imposed upon the Wholesale Customers hereunder, nor shall this section prevent any Wholesale Customer (except the two listed above) from succeeding to the rights and obligations of another Wholesale Customer hereunder as long as the Wholesale Service Area served by the Wholesale Customers involved in the succession is not thereby enlarged.

8.09. Notices

A. All notices and other documents that San Francisco is required or permitted to send to the Wholesale Customers under this Agreement shall be sent to each and all of the Wholesale Customers by United States mail, first class postage prepaid, addressed to each Wholesale Customer at the address to which monthly water bills are mailed by the Water Enterprise.

B. All notices or other documents which the Wholesale Customers are required or permitted to send to San Francisco under this Agreement shall be sent by United States mail, first class postage prepaid, addressed as follows:

General Manager
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94123

C. Each Wholesale Customer is a member of BAWSCA. San Francisco shall send a copy of each notice or other document which it is required to send to all Wholesale Customers to BAWSCA addressed as follows:

General Manager/CEO
Bay Area Water Supply and Conservation Agency
155 Bovet Road, Suite 650
San Mateo, CA 94402

The failure of San Francisco to send a copy of such notices or documents to BAWSCA shall not invalidate any rate set or other action taken by San Francisco.

D. Any party (or BAWSCA) may change the address to which notice is to be sent to it under this Agreement by notice to San Francisco (in the case of a change desired by a Wholesale Customer or BAWSCA) and to the Wholesale Customer and BAWSCA (in the case of a change desired by San Francisco).

The requirements for notice set forth in Section 8.01 concerning arbitration shall prevail over this section, when they are applicable.

8.10. Incorporation of Attachments

Attachments A through R, referred to herein, are incorporated in and made a part of this Agreement.

8.11. Interpretation

In interpreting this Agreement, or any provision thereof, it shall be deemed to have been drafted by all signatories, and no presumption pursuant to Civil Code Section 1654 may be invoked to determine the Agreement's meaning. The marginal headings and titles to the sections and paragraphs of this Agreement are not a part of this Agreement and shall have no effect upon the construction or interpretation of any part hereof.

8.12. Actions and Approvals by San Francisco

Whenever action or approval by San Francisco is required or contemplated by this Agreement, authority to act or approve shall be exercised by the Commission, except if such action is required by law to be taken, or approval required to be given, by the San Francisco Board of Supervisors. The Commission may delegate authority to the General Manager in accordance with the San Francisco City Charter and Administrative Code, except for actions that this Agreement requires to be taken by the Commission.

8.13. Counterparts

Execution of this Agreement may be accomplished by execution of separate counterparts by each signatory. San Francisco shall deliver its executed counterpart to BAWSCA and the counterpart which each Wholesale Customer executes shall be delivered to San Francisco. The separate executed counterparts, taken together, shall constitute a single agreement.

8.14. Limitations on Damages

A. Unless otherwise prohibited by this Agreement, general or direct damages may be recovered for a breach of a party's obligations under this Agreement. No party is liable for, or may recover from any other party, special, indirect or consequential damages or incidental damages, including, but not limited to, lost profits or revenue. No damages may be awarded for a breach of Section 8.17.

B. The limitations in subsection A apply only to claims for damages for an alleged breach of this Agreement. These limitations do not apply to claims for damages for an alleged breach of a legal duty that arises independently of this Agreement, established by constitution or statute.

C. If damages would be an inadequate remedy for a breach of this Agreement, equitable relief may be awarded by a court in a case in which it is otherwise proper.

D. This section does not apply to any claim of breach for which arbitration is the exclusive remedy pursuant to Section 8.01.A.

8.15. Force Majeure

A. **Excuse from Performance**. No party shall be liable in damages to any other party for delay in performance of, or failure to perform, its obligations under this Agreement, including the obligations set forth in Sections 3.09 and 4.06, if such delay or failure is caused by a "Force Majeure Event."

B. **Notice**. The party claiming excuse shall deliver to the other parties a written notice of intent to claim excuse from performance under this Agreement by reason of a Force Majeure Event. Notice required by this section shall be given promptly in light of the circumstances, and, in the case of events described in (c), (d) or (e) of the definition of Force Majeure Event only, not later than ten (10) days after the occurrence of the Force Majeure Event. Such notice shall describe the Force Majeure Event, the services impacted by the claimed event, the length of time that the party expects to be prevented from performing, and the steps which the party intends to take to restore its ability to perform.

C. **Obligation to Restore Ability to Perform**. Any suspension of performance by a party pursuant to this section shall be only to the extent, and for a period of no longer duration

than, required by the nature of the Force Majeure Event, and the party claiming excuse shall use its best efforts to remedy its inability to perform as quickly as possible.

8.16. No Third-Party Beneficiaries

This Agreement is exclusively for the benefit of the parties and not for the benefit of any other Person. There are no third-party beneficiaries of this Agreement and no person not a party shall have any rights under or interests in this Agreement.

No party may assert a claim for damages on behalf of a person other than itself, including a person that is not a party.

8.17. Good Faith and Fair Dealing

San Francisco and the Wholesale Customers each acknowledge their obligation under California law to act in good faith toward, and deal fairly with, each other with respect to this Agreement.

Article 9. Implementation and Special Provisions Affecting Certain Wholesale Customers

9.01. 9.01 General; Individual Water Sales Contracts

A. As described in Section 1.03, San Francisco previously entered into Individual Water Sales Contracts with each of the Wholesale Customers. The term of the majority of Individual Water Sales Contracts will expire on June 30, 2009, concurrently with the expiration of the 1984 Agreement. Except as provided below in this Article, each of the Wholesale Customers will execute a new Individual Water Sales Contract with San Francisco concurrently with its approval of the Agreement.

B. The Individual Water Sales Contracts will describe the service area of each Wholesale Customer, identify the location and size of connections between the Regional Water System and the Wholesale Customer's distribution system, provide for periodic rendering and payment of bills for water usage, and in some instances contain additional specialized provisions unique to the particular Wholesale Customer and not of general concern or applicability. A sample Individual Water Sales Contract is provided at Attachment F. The Individual Water Sales Contracts between San Francisco and the Wholesale Customers will not contain any provision inconsistent with Articles 1 through 8 of this Agreement except (1) as provided below in this Article or (2) to the extent that such provisions are not in derogation of the Fundamental Rights of other Wholesale Customers under this Agreement. Any provisions in an Individual Water Sales Contract which are in violation of this section shall be void.

9.02. California Water Service Company

A. The parties recognize that the California Water Service Company is an investor-owned utility company and, as such, has no claim to co-grantee status under the Act, which specifically bars private parties from receiving for resale any water produced by the Hetch Hetchy portion of the Regional Water System. Accordingly, the following provisions shall apply to the California Water Service Company, notwithstanding anything to the contrary elsewhere in this Agreement.

B. The total quantity of water delivered by San Francisco to the California Water Service Company shall not in any calendar year exceed 47,400 acre feet, which is the estimated average annual production of Local System Water. If San Francisco develops additional Local System Water after the Effective Date, it may (1) increase the maximum

delivery amount stated herein; and (2) increase the Supply Assurance, but not necessarily both. San Francisco has no obligation to deliver water to California Water Service Company in excess of the maximum stated herein, except as such maximum may be increased by San Francisco pursuant to this subsection. The maximum annual quantity of Local System Water set forth in this subsection is intended to be a limitation on the total quantity of water that may be allocated to California Water Service Company, and is not an Individual Supply Guarantee for purposes of Section 3.02. The maximum quantity of Local System Water set forth in this subsection is subject to reduction in response to (1) changes in long-term hydrology or (2) environmental water requirements that may be imposed by or negotiated with state and federal resource agencies in order to comply with state or federal law or to secure applicable permits for construction of Regional Water System facilities. San Francisco shall notify California Water Service Company of any anticipated reduction of the quantity of Local System Water set forth in this subsection, along with an explanation of the basis for the reduction.

C. Notwithstanding anything in Section 8.08 to the contrary, California Water Service Company shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of California Water Service Company under any contract between it and San Francisco applicable to any individual district of California Water Service Company in connection with the acquisition by such public agency of all or a portion of the water system of California Water Service Company in such district. In the event of any such assignment of all the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of all further obligations under such contract provided that the assignee public agency expressly assumes the obligations of California Water Service Company thereunder. In the event of such an assignment of a portion of the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of such portion of such obligations so assigned thereunder provided that the assignee public agency shall expressly assume such obligations so assigned to it.

D. Should California Water Service Company seek to take over or otherwise acquire, in whole or in part, the service obligations of another Wholesale Customer under Section 3.03.E, it will so inform San Francisco at least six months prior to the effective date of the sale and provide information concerning the total additional demand proposed to be served, in order that San Francisco may compare the proposed additional demand to the then-current estimate of Local System Water. In this regard, California Water Service Company has notified

the SFPUC that it has reached an agreement to acquire the assets of Skyline County Water District ("Skyline") and assume the responsibility for providing water service to customers in the Skyline service area. California Water Service Company has advised the SFPUC that, on September 18, 2008, the California Public Utilities Commission approved California Water Service Company's acquisition of Skyline. The SFPUC anticipates approving the transfer of Skyline's Supply Guarantee as shown on Attachment C to California Water Service Company and the expansion of California Water Service Company's service area to include the current Skyline service area before the Effective Date of this Agreement. All parties to this Agreement authorize corresponding modifications of Attachment C, as well as any of the Agreement's other provisions, to reflect the foregoing transaction without the necessity of amending this Agreement.

E. Nothing in this Agreement shall preclude San Francisco from selling water to any county, city, town, district, political subdivision, or other public agency for resale to customers within the service area of the California Water Service Company. Nothing in this Agreement shall require or contemplate any delivery of water to California Water Service Company in violation of the Act.

F. Nothing in this Agreement shall alter, amend or modify the Findings of Fact and Conclusions of Law and the Judgment dated May 25, 1961, in that certain action entitled City and County of San Francisco v. California Water Service Company in the Superior Court of the State of California in and for the County of Marin, No. 23286, as modified by the Quitclaim Deed from California Water Service Company to San Francisco dated August 22, 1961. The rights and obligations of San Francisco and California Water Service Company under these documents shall continue as therein set forth.

9.03. <u>City of Hayward</u>

A. San Francisco and the City of Hayward ("Hayward") entered into a water supply contract on February 9, 1962 ("the 1962 contract") which provides, inter alia, that San Francisco will supply Hayward with all water supplemental to sources and supplies of water owned or controlled by Hayward as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1962 contract "on a permanent basis." The service area map attached as Exhibit C to the 1962 contract was amended in 1974 to remove an area of land in the Hayward hills and in 2008 to make minor boundary adjustments identified in SFPUC Resolution No. 08-0035.

B. The intention of the parties is to continue the 1962 contract, as amended, in effect as the Individual Water Sales Contract between San Francisco and Hayward. Accordingly, it shall not be necessary for San Francisco and Hayward to enter into a new Individual Water Sales Contract pursuant to this Article and approval of this Agreement by Hayward shall constitute approval of both this Agreement and an Individual Water Sales Contract for purposes of Section 1.03. The 1962 contract, as amended, will continue to describe the service area of Hayward, while rates for water delivered to Hayward during the Term shall be governed by Article 5 hereof. The 1962 contract, as amended, will continue in force after the expiration of the Term.

9.04. Estero Municipal Improvement District

A. San Francisco and the Estero Municipal Improvement District ("Estero") entered into a water supply contract on August 24, 1961, the term of which continues until August 24, 2011 ("the 1961 Contract"). The 1961 Contract provides, inter alia, that San Francisco will supply Estero with all water supplemental to sources and supplies of water owned or controlled by Estero as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1961 Contract.

B. The intention of the parties is to terminate the 1961 Contract and replace it with a new Individual Water Sales Contract which will become effective on July 1, 2009. The new Individual Water Sales Contract will describe the current service area of Estero. The Individual Supply Guarantee applicable to Estero shall be 5.9 MGD, rather than being determined as provided in the 1961 Contract.

9.05. Stanford University

A. The parties recognize that The Board of Trustees of The Leland Stanford Junior University ("Stanford") operates a non-profit university, and purchases water from San Francisco for redistribution to the academic and related facilities and activities of the university and to residents of Stanford, the majority of whom are either employed by or students of Stanford. Stanford agrees that all water furnished by San Francisco shall be used by Stanford only for domestic purposes and those directly connected with the academic and related facilities and activities of Stanford, and no water furnished by San Francisco shall be used in any area now or hereafter leased or otherwise used for industrial purposes or for commercial purposes

other than those campus support facilities that provide direct services to Stanford faculty, students or staff such as the U.S. Post Office, the bookstore and Student Union.

Nothing in this Agreement shall preclude San Francisco from selling water to any county, city, town, political subdivision or other public agency for resale to Stanford or to customers within the service area of Stanford.

B. Notwithstanding anything in Section 8.08 to the contrary, Stanford shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of Stanford under this Agreement or the Individual Water Sales Contract between it and San Francisco in connection with the acquisition by such public agency of all or a portion of Stanford's water system. In the event of any such assignment of all the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of all further obligations under such contract, provided that the assignee public agency expressly assumes Stanford's obligations thereunder. In the event of such an assignment of a portion of the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of such obligations so assigned thereunder, provided that the assignee public agency shall expressly assume such obligations so assigned to it.

Nothing in this Agreement shall require or contemplate any delivery of water to Stanford in violation of the Act.

9.06. City of San Jose and City of Santa Clara

A. **Continued Supply on Temporary, Interruptible Basis**. During the term of the 1984 Agreement, San Francisco provided water to the City of San Jose ("San Jose") and the City of Santa Clara ("Santa Clara") on a temporary, interruptible basis pursuant to SFPUC Resolution No. 85-0256. Subject to termination or reduction of supply as provided in Section 4.05 of this Agreement, San Francisco will continue to supply water to San Jose and Santa Clara on a temporary, interruptible basis pending a decision by the Commission, pursuant to Section 4.05.H, as to whether to make San Jose and Santa Clara permanent customers of the Regional Water System. San Francisco will furnish water to San Jose and Santa Clara at the same rates as those applicable to other Wholesale Customers pursuant to this Agreement. Water delivered to San Jose and Santa Clara after July 1, 2009 may be limited by the SFPUC's ability to meet the full needs of all its other Retail and Wholesale Customers. The service areas of San Jose and Santa Clara set forth in their Individual Water Sales Contracts may not be

expanded using the procedure set forth in Section 3.03. The combined annual average water usage of San Jose and Santa Clara shall not exceed 9 MGD. The allocation of that total amount between San Jose and Santa Clara shall be as set forth in their Individual Water Sales Contracts.

B. **Reservation of Rights**. In signing this Agreement, neither San Jose nor Santa Clara waives any of its rights to contend, in the event that San Francisco (1) elects to terminate or interrupt water deliveries to either or both of the two cities prior to 2028 using the process set forth in Section 4.05, or (2) does not elect to take either city on as a permanent customer in 2028, that it is entitled to permanent customer status, pursuant to the Act or any other federal or state law. Santa Clara's reservation of rights is limited to its existing Service Area A, as shown on Attachment Q-2. Service Area B, south of Highway 101, was added in 2018 solely for the operational convenience of Santa Clara. Santa Clara waives its right to make claims described in this Section 9.06.B and Section 8.07.B.3 with respect to Service Area B. In signing this Agreement, San Francisco does not waive its right to deny any or all such contentions.

9.07. City of Brisbane, Guadalupe Valley Municipal Improvement District, Town of Hillsborough

A. The parties acknowledge that San Francisco has heretofore provided certain quantities of water to the City of Brisbane ("Brisbane"), Guadalupe Valley Municipal Improvement District ("Guadalupe") and the Town of Hillsborough ("Hillsborough") at specified rates or without charge pursuant to obligations arising out of agreements between the predecessors of San Francisco and these parties, which agreements are referred to in judicial orders, resolutions of the SFPUC and/or the 1960 contracts between San Francisco and Brisbane, Guadalupe and Hillsborough. The parties intend to continue those arrangements and accordingly agree as follows:

1. Nothing in this Agreement is intended to alter, amend or modify the terms of SFPUC Resolution No. 74-0653 or the indenture of July 18, 1908 between the Guadalupe Development Company and the Spring Valley Water Company.

2. Nothing in this Agreement is intended to alter, amend or modify the Findings of Fact and Conclusions of Law and Judgment dated May 25, 1961 in that certain action entitled City and County of San Francisco v. Town of Hillsborough in the Superior Court of the State of California in and for the County of Marin, No. 23282, as modified by the Satisfaction of Judgment filed October 23, 1961 and the Compromise and Release between

Hillsborough and San Francisco dated August 22, 1961. The rights and obligations of Hillsborough under these documents shall continue as therein set forth.

3. Nothing in this Agreement is intended to affect or prejudice any claims, rights or remedies of Guadalupe or of Crocker Estate Company, a corporation, or of Crocker Land Company, a corporation, or of San Francisco, or of their successors and assigns, respectively, with respect to or arising out of that certain deed dated May 22, 1884, from Charles Crocker to Spring Valley Water Works, a corporation, recorded on May 24, 1884, in Book 37 of Deeds at page 356, Records of San Mateo County, California, as amended by that certain Deed of Exchange of Easements in Real Property and Agreement for Trade in Connection Therewith, dated July 29, 1954, recorded on August 4, 1954, in Book 2628, at page 298, Official Records of said San Mateo County, or with respect to or arising out of that certain action involving the validity or enforceability of certain provisions of said deed entitled City and County of San Francisco v. Crocker Estate Company, in the Superior Court of the State of California in and for the County of Marin, No. 23281.

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AGREEMENT

FOR GROUNDWATER STORAGE AND RECOVERY FROM

THE SOUTHERN PORTION OF THE WESTSIDE BASIN

BY AND AMONG

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION,

THE CITY OF DALY CITY,

THE CITY OF SAN BRUNO

AND

CALIFORNIA WATER SERVICE COMPANY

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AGREEMENT
FOR GROUNDWATER STORAGE AND RECOVERY FROM THE SOUTHERN PORTION OF THE WESTSIDE BASIN

This Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Basin ("Agreement") is entered into by and among the San Francisco Public Utilities Commission ("SFPUC"), a department of the City and County of San Francisco ("San Francisco"), a California charter city, the City of Daly City ("Daly City"), a municipal corporation of the State of California, the City of San Bruno ("San Bruno"), a municipal corporation of the State of California, and California Water Service Company ("Cal Water"), a California investor-owned utility providing water service to the City of South San Francisco. Daly City, San Bruno and Cal Water are collectively referred to as "Participating Pumpers." The SFPUC and the Participating Pumpers are collectively referred to as "Parties" and individually as a "Party".

RECITALS

A. The SFPUC provides water ("SFPUC System Water") to San Francisco retail customers and 26 Bay Area wholesale customers, including the Participating Pumpers, through the operation of an integrated local Bay Area surface water supply system and a Tuolumne River surface water supply system. Deliveries to suburban wholesale customers are pursuant to the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo and Santa Clara Counties dated July 1, 2009 ("WSA"). The SFPUC's wholesale customers extend from Daly City south through the Peninsula to Santa Clara County, and up the southeast side of San Francisco Bay through Alameda County to Hayward. Some wholesale customers, such as the Participating Pumpers, have also developed other water supplies, including local surface water and groundwater, and some import surface water from the State Water Project.

B. The SFPUC has adopted a Water System Improvement Program (WSIP) to increase the reliability of the SFPUC water system through 2030 and to provide water to meet retail and wholesale water demands through the year 2018. The WSIP included the groundwater storage and recovery project ("Project") that is the subject of this Agreement, proposed by the SFPUC to benefit all customers purchasing SFPUC System Water. The environmental effects of WSIP implementation were analyzed in a Program environmental impact report (PEIR) certified by the San Francisco Planning Commission in Motion No. 17734 dated October 30, 2008, and approved by the SFPUC in Res. No. 08-200 dated October 30, 2008.

C. On August 7, 2014, the San Francisco Planning Commission certified the completion of the Final Environmental Impact Report for the Project in its Motion No. M-19209, and the SFPUC approved the Project on August 12, 2014 in resolution no. 14-0127, including the adoption of a mitigation, monitoring and reporting program. SFPUC resolution no. 14-0127 authorized the SFPUC

General Manager to negotiate and execute this Agreement following approval by the Participating Pumpers.

D. The Participating Pumpers supply water to retail customers within their respective service areas in San Mateo County through a combination of purchased water from the SFPUC ("Wholesale Water"); their own groundwater wells in the Basin; and recycled water. The Participating Pumpers purchase Wholesale Water pursuant to the terms of the WSA and Individual Water Supply Contracts. The southern portion of the Westside Groundwater Basin, shown on the map attached hereto as **Attachment A**, (hereinafter "Basin") has been a source of municipal and irrigation water supply for northern San Mateo County water users, including the Participating Pumpers. Groundwater from the Basin has also been a portion of the historical water supply for irrigation at golf courses in San Mateo County and around Lake Merced in San Francisco, and at cemeteries in Colma and San Bruno.

E. Groundwater pumping from the Basin over the past half-century has from time to time lowered water levels within the Basin, resulting in vacant storage capacity in the Basin. The purpose of the Project described in this Agreement is to enhance the use of the Basin as an underground reservoir to store water during periods when surface water supply can be made available to offset pumping by the Participating Pumpers, leading to an accumulation of stored groundwater in the Basin. The SFPUC would augment recharge in the Basin by delivering surface water to the Participating Pumpers to be used in lieu of groundwater pumping, thus allowing groundwater to accumulate in the Basin. Stored water would be recaptured by pumping during periods of insufficient surface water supplies, thereby increasing the overall supply of potable water from the Basin.

F. A Conjunctive Use Pilot Program conducted by the Parties demonstrated that water can be stored in the Basin through the SFPUC's delivery of In Lieu Water to replace groundwater that the Participating Pumpers refrain from pumping. The Project objective is to develop enough additional groundwater pumping capacity in order to produce up to an additional 8,100 acre feet per year (pumped at an annual average rate of 7.2 million gallons per day, or "mgd") for an anticipated total extraction of 61,000 acre feet of stored water under the Project to meet SFPUC System demands during a possible 8.5 year drought cycle.

G. In addition to being available during shortages caused by drought, Project Facilities would be available for use during shortages caused by natural disasters, SFPUC System rehabilitation, scheduled maintenance, or malfunction of the SFPUC System as provided for in the WSA, as well as for certain non-Project purposes by Participating Pumpers, as described in this Agreement.

H. The SFPUC, through its consulting engineering firm MWH, has completed the "*South Westside Basin Conjunctive Use Program Alternatives Analysis Report*" dated October 2007 ("AAR"), and the "South Westside Basin Conjunctive Use Program Conceptual Engineering Report dated November 2008 ("CER"). The

AAR evaluated well sites and distribution connection alternatives for Project Well sites, taking into account the availability of disinfection and treatment facilities, water quality blending options, and costs. The CER recommended 16 Project Well sites, and included preliminary site layouts and a schedule for subsequent phases of project design and potential implementation (i.e., pre-design site investigations, environmental review, design, and construction). The configuration of Project Facilities and Project Wells reflects the technical and engineering analyses contained in the CER and DEIR, and is as shown on the map attached hereto as **Attachment C**.

I. The CER updated the AAR well siting plan based upon well interference analyses conducted by the firm of Luhdorff & Scalmanini in a report entitled "*Conceptual Estimate of Static Water Level Response to Planned Conjunctive Use Operations South Westside Basin*" dated April 18, 2008. Based on this work, the Participating Pumpers and the SFPUC have improved their understanding of the possible effects associated with the operation of Project Wells.

J. A Groundwater Management Plan ("Management Plan") has been developed for the South Westside Basin with participation by San Bruno, Daly City, and Cal Water, and in collaboration with the SFPUC, under California Water Code section 10750 et. seq. The Management Plan has been adopted by San Bruno and Daly City, accepted by Cal Water, and has been received by the SFPUC.

K. It is the intent of the Parties that this Agreement be interpreted to apply only to the Groundwater Storage and Recovery Project contemplated herein and that this Agreement will have no effect whatsoever on the land use planning or land use permitting authority or decision-making of Daly City, San Bruno, South San Francisco or the City and County of San Francisco.

L. It is the intent of the Parties that this Agreement, unless expressly stated otherwise, shall not create, alter or impact the rights of the Parties to pump or utilize water from the Basin or the rights of the Participating Pumpers or Nonparticipating Pumpers as overlying owners, pumpers, appropriators, prescriptors or otherwise.

NOW, THEREFORE, in consideration of the foregoing Recitals, the Parties hereby agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, each of the following capitalized terms shall have the respective meaning given to it in this section unless expressly stated to the contrary where such term is used.

1.1. **"Aggregate Designated Quantity"** is the groundwater production allocation set forth in **Section 4.5** that the Participating Pumpers can pump from their Existing Facilities and any New Wells during the Term of this Agreement.

1.2. **"Agreement"** shall refer to this Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Basin.

1.3. **"Basin"** shall refer solely to the 31 square mile southern portion of the Westside Groundwater Basin, as delineated on the map attached hereto as **Attachment A.**

1.4. **"Basin Management Objectives"** refers to the groundwater quality and quantity objectives set forth in the Management Plan.

1.5. **"Conjunctive Use Pilot Program"** is the program reflected in the First and Second Amendments to Individual Water Supply Contract between the City and County of San Francisco and the City of Daly City for Purposes of Conducting an Aquifer Recharge Study, along with any subsequent letter agreements between the SFPUC and the Participating Pumpers prior to the Effective Date of this Agreement, that authorized the continued delivery of In Lieu Water for study purposes. San Bruno and Cal Water also participated in the Conjunctive Use Pilot Program under respective amendments to their Individual Water Supply Contracts dated December 11, 2002 and December 20, 2002.

1.6. **"Consumer Price Index"** refers to the United States Department of Labor's Bureau of Labor Statistics Consumer Price Index for All Urban Consumers, San Francisco-Oakland-San Jose, California, excluding the shelter component of said index. If the aforesaid Consumer Price Index ceases to be published, any similar index published by any other branch or department of the U.S. government shall be used as the index in this Agreement, and if none is published, another index generally recognized as authoritative shall be substituted therefore by the Parties.

1.7. **"Designated Quantity"** refers to each Participating Pumper's initial production allocation of the Aggregate Designated Quantity identified in **Section 4.5**, subject to adjustment by agreement of the Participating Pumpers as provided in **Section 4.5.**

1.8. **"Emergency"** means a sudden, non-drought event, such as an earthquake or other catastrophic event that results in an insufficient supply of water available to all or part of a Party's service area, or to the combined SFPUC System

wholesale and retail service area, for basic human consumption, firefighting, sanitation, and fire protection.

1.9. **"Existing Facilities"** means those wells and associated infrastructure owned by the Participating Pumpers and in existence as of the Effective Date of this Agreement shown on **Attachment B**, and any replacements of Existing Facilities irrespective of location that may be required to pump the share of the Aggregate Designated Quantity allocated to each Participating Pumper during the Term of this Agreement.

1.10. **"Force Majeure Event"** means an event, conditions or circumstances not the fault of, and beyond the reasonable control of, the Party claiming excuse which makes it impossible or impracticable for such Party to operate Project Facilities, Shared Facilities or Existing Facilities for Project purposes, by virtue of its effect on (1) Project Facilities, Shared Facilities or Existing Facilities and their continued operation; (2) employees essential to such performance; or (3) the financial viability of a Party's continued operation of Project Facilities, Shared Facilities or Existing Facilities for Project purposes. Force Majeure Events include (a) an "act of God" such as an earthquake, flood, earth movement, or similar catastrophic event, (b) an act of the public enemy, terrorism, sabotage, civil disturbance or similar event, (c) a strike, work stoppage, picketing or similar concerted labor action, (d) delays in construction caused by unanticipated negligence or breach of contract by a third party or inability to obtain essential materials after diligent and timely efforts; or (e) adopted legislation or a decision, order or regulation issued by a federal or state court or regulatory agency during the Term of this Agreement.

1.11. **"Hold Periods"** refers to all time periods during the Term of this Agreement that are not declared to be Storage Periods by the SFPUC under **Section 4.2** or deemed to be Recovery Periods under the circumstances described in **Section 5.1**.

1.12. **"In Lieu Water"** is SFPUC System Water, subject to the limitations set forth in WSA section 9.02 for water delivered to Cal Water, that the SFPUC delivers at no charge on an interruptible basis to the Participating Pumpers, up to a maximum rate of delivery of 5.52 mgd, to replace groundwater that the Participating Pumpers refrain from pumping using their Existing Facilities during Storage Periods. In Lieu Water is referred to in the Conjunctive Use Pilot Program agreements as "Supplemental Water".

1.13. **"Individual Water Supply Guarantee"** is the amount of the 184 mgd Supply Assurance guaranteed to an individual wholesale customer under §3.02 of the WSA, as shown for the Participating Pumpers on **Attachments D-1 through D-3**.

1.14. **"Management Plan"** refers to the South Westside Basin Groundwater Management Plan prepared by WRIME, Inc. on behalf of San Bruno, Daly City,

Cal Water, and adopted by San Bruno and Daly City, accepted by Cal Water and received by the SFPUC.

1.15. **"Minimum Groundwater Requirements"** means either (1) the minimum quantity of groundwater pumping that cannot be replaced by delivery of In Lieu Water due to constraints in a Participating Pumper's distribution system that a Participating Pumper must continue to pump from its Existing Facilities combined with pumping from any New Wells during Storage Periods; or (2) the minimum quantity of groundwater pumping needed for Existing Facility or New Well maintenance in accordance with prudent operating parameters, as set forth on **Attachments D-1 through D-3.**

1.16. **"Minimum Surface Water Requirements"** means the minimum quantity of SFPUC System Water that must continue to be supplied to each Participating Pumper during Recovery Periods for purposes of (1) blending with groundwater as may be required to meet drinking water standards promulgated by the California State Water Resources Control Board; or (2) meeting demands in an individual Participating Pumper's service area whose distribution system may not be configured to permit delivery of groundwater to all of its customers, as set forth in **Attachments D-1 through D-3**.

1.17. **"New Well"** means a new groundwater production well in the Basin proposed by a Party that is not intended to replace an existing well, subject to any necessary environmental review under CEQA as set forth in **Section 7.5.**

1.18. **"Nonparticipating Pumpers"** are groundwater users pumping water from the Basin that are not participating in this Agreement.

1.19. **"Operating Committee"** is the committee of SFPUC and Participating Pumper representatives formed pursuant to **Article 10** of this Agreement.

1.20. **"Over Production"** refers to the combined average pumping rate of the Participating Pumpers using their Existing Facilities, including pumping from any proposed New Wells, that exceeds the Aggregate Designated Quantity over the course of a five year period, as explained in **Section 4.5.**

1.21. **"Participating Pumpers"** are the groundwater pumpers in the Basin that are participating in this Agreement: Daly City, San Bruno and Cal Water.

1.22. **"Preexisting Conditions"** refers to conditions in Existing Facilities that, if not properly managed by a Participating Pumper, have the potential to reduce the extraction of Designated Quantities from its Existing Facilities, irrespective of the intermittent operation of Project Wells.

1.23. **"Project"** refers to the proposed Groundwater Storage and Recovery Project described in this Agreement.

1.24. **"Project Capital Costs"** means costs incurred for the construction and acquisition of Project Facilities along with all Project-related planning costs, such as engineering costs, engineering services, costs to obtain Project-related regulatory permits, fees for environmental consultants, legal fees, and other costs that are required to construct and acquire Project Facilities.

1.25. **"Project Facilities"** includes all Project assets, such as Project Wells and all related fixed assets (e.g., real property, water treatment, connecting pipelines) that are acquired or constructed by the SFPUC pursuant to this Agreement and operated as Regional Water Enterprise assets for the allocation of capital costs and operation and maintenance expenses under the WSA, as shown on the map attached as **Attachment C** and listed on **Attachment E.**

1.26. **"Project Operation and Maintenance Expenses"** means the cost of operating and maintaining Project Facilities and Shared Facilities in good working order or repairing those Facilities when necessary, including all Project-related expenses, such as labor, materials and supplies, water treatment, permitting, energy, water quality monitoring and other expenses directly attributable to operation of Project Facilities for Project purposes. Project Operation and Maintenance Expenses may also include expenses incurred by the Participating Pumpers in operating Existing Facilities and new wells provided that such expenses are recommended in advance by the Operating Committee under **Section 9.2.**

1.27. **"Project Wells"** are the wells proposed to be installed for Project purposes, as shown on the map attached as **Attachment C.**

1.28. **"Recovery Notice"** is the written notice issued by the SFPUC declaring a forecasted shortage of water in the SFPUC Water System due to drought, scheduled maintenance, or an Emergency, triggering Recovery of water stored in the SFPUC Storage Account by the Parties to this Agreement at such time as the SFPUC may direct.

1.29. **"Recovery" or "Recovery Periods"** refers to the act of pumping or to periods of pumping of water from the SFPUC Storage Account for Project purposes using Project Facilities as may be directed by the SFPUC or recommended by the Operating Committee under **Section 5.1**. Recovery does not include the pumping of Project Wells for non-Project purposes as described in **Section 8.8**, the pumping of Project Wells for non-Project Emergency purposes under **Section 8.9**, or any volume of Over Production by a Participating Pumper.

1.30. **"Replacement Water"** means the quantity of SFPUC System Water made available by the SFPUC, in accordance with **Section 4.7,** to some or all of the Participating Pumpers based on a determination by the Operating Committee that the Aggregate Designated Quantity in **Section 4.5** should be reduced based on the criterion set forth in **Section 4.7.**

1.31. **"SFPUC System"** is the surface water importation system operated by the SFPUC that diverts, delivers, and accounts for SFPUC System Water to wholesale and retail customers in the SFPUC service area.

1.32. **"SFPUC System Water"** is the water the SFPUC diverts from local Bay Area watersheds and the Tuolumne River for use within the SFPUC service area, and includes any positive balance in the SFPUC Storage Account that is available for pumping using Project Wells connected to SFPUC System transmission mains or to the Participating Pumpers' water distribution systems.

1.33. **"SFPUC Storage Account"** means the book account maintained by the SFPUC showing the amount of water stored in the Basin during Storage Periods under this Agreement, and the amounts described in **Section 6.3** that were previously stored as a result of participation in the Conjunctive Use Pilot Project, less the amount of water pumped by the Participating Pumpers and the SFPUC from Project Wells during Recovery Periods and less losses from the Basin, as determined by the Operating Committee as provided in **Section 6.5**.

1.34. **"Shared Facilities"** refers to an Existing Facility that is owned by a Participating Pumper, as upgraded though the expenditure of Regional capital costs under section 5.04 of the WSA and operated in part as a Project Facility.

1.35. **"Shortage"** means a reduction in SFPUC System Water available to the SFPUC System or portions thereof caused by drought, Emergencies, scheduled maintenance activities, or malfunction of the SFPUC System.

1.36. **"Shortage Allocation"** refers to each Participating Pumper's allocation of SFPUC System Water during periods of mandatory rationing as determined by the wholesale customers in Tier 2 of the Shortage Allocation Plan or any successor plan that may be agreed to by the SFPUC and its wholesale customers during the Term of this Agreement.

1.37. **"Shortage Allocation Plan"** is the Water Shortage Allocation Plan attached as Attachment H to the WSA that describes a method for allocating water between the SFPUC retail and wholesale customer classes during system-wide water shortages that require an average system-wide reduction in water use of up to twenty percent.

1.38. **"Storage" or "Storage Periods"** refers to the act of storing water, or to periods of time when such storage occurs, through the provision of In Lieu Water to the Participating Pumpers, as may be directed by the SFPUC in accordance with **Section 4.3**.

1.39. **"Supply Assurance"** is the total amount (184 mgd) that the SFPUC guarantees it will make available to its wholesale customers on an annual average basis under §3.01 of the WSA.

1.40. **"Supply Year"** refers to the period from July 1 to June 30.

1.41. **"Undesirable Effects"** means a substantial adverse physical change to the Basin caused by Project operation that would result in (1) seawater intrusion, land subsidence, or water quality degradation; (2) material reductions in well yield at, or the inability to pump from, without experiencing excessive pump lifts, one or more wells owned and operated by a Participating Pumper; (3) lowering of groundwater levels such that there would be a substantial (greater than 5%) reduction in the amount of water available in the SFPUC Storage Account; (4) a substantial lowering of groundwater levels such that the impacts identified in subparts (1), (2) or (3) above would result, or any other material adverse physical change on the water supply or operations of a participating pumper. For purposes of this Agreement, "Undesirable Effects" also includes material increases in the cost of operation of Existing or Project Facilities.

1.42. **"Wholesale Water"** is SFPUC System Water that the SFPUC delivers to a Participating Pumper pursuant to the WSA within a Participating Pumper's Individual Water Supply Guarantee, and does not include supplies of In Lieu Water delivered to the Participating Pumpers on an interruptible basis.

1.43. **"WSA"** refers to the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo and Santa Clara Counties dated July 1, 2009.

ARTICLE 2

EFFECTIVE DATE, TERM AND AMENDMENT

2.1. Effective Date

This Agreement shall be effective as of December 16, 2014, the date that the General Manager of the SFPUC signed this Agreement following approval by the Participating Pumpers (the "Effective Date").

2.2. Term

The term ("Term") of this Agreement shall be co extant with the term of the WSA, subject to the limitations and terms and conditions set forth herein. The Term shall begin on the Effective Date, and shall end on the expiration of the WSA, June 30, 2034. If the term of the WSA is extended as provided in section 2.02 thereof through the addition of any Extension Term(s), the term of this Agreement shall be automatically extended for an identical Extension Term.

2.3. Amendment

The Parties may agree to amend this Agreement in writing from time to time following duly authorized approval of their governing bodies. The matters to be determined by the Operating Committee under **Section 10.2**, and amendments to **Attachments A through G**, do not require the approval of the Parties' governing bodies.

2.4. Conditions Precedent in Article 3; Termination

In the event of the failure or non-waiver of any of the conditions precedent in **Article 3**, the Parties shall meet and confer on the feasibility of satisfying or waiving the conditions. If, after reasonable efforts by the Parties, the conditions precedent in **Article 3** cannot be satisfied or waived, this Agreement shall terminate automatically.

2.5. Consequences of Non-Extension or Termination

If the term of the WSA is not extended pursuant to **Section 2.2**, or if this Agreement terminates pursuant to **Sections 11.1 or 12.14**, the SFPUC shall continue to own and have access to all Project Facilities, and shall have the right to direct the Participating Pumpers to extract and use any remaining water reflected as a credit balance in the SFPUC Storage Account as provided in **Article 5** of this Agreement, until there is no remaining water in the SFPUC Storage Account. Alternatively, the SFPUC may in its sole discretion pump any remaining stored water reflected as a credit balance in the SFPUC Storage Account, subject only to the limitations contained in this Agreement until there is no remaining water in the SFPUC Storage Account. The SFPUC shall allocate the water supply benefit that accrues as a result of such pumping in accordance with Section 3.17 of the WSA. Upon the expiration of this Agreement, the SFPUC shall otherwise have no right, claim or interest in the Basin, or to water in the Basin, pursuant to this Agreement.

ARTICLE 3

CONDITIONS PRECEDENT TO IMPLEMENTATION OF PROJECT

The construction of Project Facilities, the Parties' obligations to operate Project Facilities, Existing Facilities and Shared Facilities in accordance with this Agreement, and the taking of any discretionary actions by any Party in accordance with this Agreement, are subject to the following conditions precedent:

3.1. Permits and Approvals

Compliance with CEQA (California Public Resources Code Section 21000 et seq.) and any other authorizations, consents, licenses, permits and approvals from any governmental authority or person required by applicable law to construct and operate the Project shall have been obtained.

In considering any proposed future discretionary actions that may be proposed in this Agreement, the Parties retain absolute discretion to: (1) make such modifications to any of the proposed discretionary actions as may be necessary to mitigate significant environmental impacts; (2) select feasible alternatives to the proposed discretionary actions that avoid significant adverse impacts; (3) require the implementation of specific measures to mitigate the significant adverse environmental impacts as part of the decision to approve the discretionary actions; (4) balance the benefits of the proposed discretionary actions against any significant environmental impacts before taking final actions to approve the proposed discretionary actions if such significant impacts cannot otherwise be avoided; or (5) determine not to proceed with the proposed discretionary actions.

3.2. No Force Majeure Event

No Force Majeure Event (as defined in **Section 1.10**) shall have occurred and be continuing.

ARTICLE 4

GROUNDWATER STORAGE PERIODS

4.1. SFPUC Storage Through In Lieu Water Deliveries

During Storage Periods the SFPUC may require the Participating Pumpers to store In Lieu Water in the Basin up to a maximum rate of 5.52 mgd. All quantities of In Lieu Water stored in the Basin shall be added to the SFPUC Storage Account, up to a total maximum storage of 61,000 acre feet. All quantities of In Lieu Water delivered to Cal Water shall be in accordance with the terms of the Raker Act and the requirements of WSA section 9.02.

4.2. Notice of In Lieu Deliveries; Duty to Take Delivery of In Lieu Water

The amount of In Lieu Water available for delivery to the Participating Pumpers shall be at the sole discretion of the SFPUC, taking into account hydrologic, operational and other conditions of concern to the SFPUC as the operator of the SFPUC System. If the SFPUC elects to declare a Storage Period and deliver In Lieu Water, the Participating Pumpers shall accept In Lieu Water delivered by the SFPUC in accordance with the terms and conditions of this Agreement.

In accordance with the schedule set forth in the Shortage Allocation Plan, the SFPUC informs its wholesale customers, including the Participating Pumpers, of its final estimate of available SFPUC System Water by April 15th (or sooner if adequate snow survey measurement data is available) to form a robust estimate of the water supply available to the retail and wholesale customer classes for the coming Supply Year. As a part of that annual determination, the SFPUC will give written notice to the Participating Pumpers and the Operating Committee on or before April 15th of the availability, anticipated quantities, and timing of SFPUC In Lieu Water deliveries.

4.3. Reduction in Pumping from Existing Facilities; Minimum Groundwater Requirements

If the SFPUC's notice of available SFPUC System Water states that In Lieu Water is available for delivery to the Participating Pumpers at the maximum total rate of 5.52 mgd, the Participating Pumpers shall each respond to the SFPUC in writing by May 15th regarding whether and to what extent they can accept delivery of In Lieu Water over the course of the coming Supply Year by reducing pumping of their Designated Quantities from their Existing Facilities to the amounts of their respective Minimum Groundwater Requirements shown in **Attachments D-1, D-2 and D-3**.

The Participating Pumpers' may indicate in their responses that they elect to pump groundwater from their Existing Facilities at rates higher than their individual Minimum Groundwater Requirements, up to a cumulative total exceedance of 1.9 mgd, as may be allocated based on mutual agreement of the Participating Pumpers. The Participating Pumpers shall take delivery of a minimum of 5 mgd of In Lieu Water during Storage Periods, or of any smaller quantity of In Lieu Water that is made available by the SFPUC in the notice issued on or before April 15th.

The Participating Pumpers shall decrease pumping from their Existing Facilities on such date as the Parties may agree but no later than July 1, at which time the SFPUC will commence delivery of In Lieu Water up to the amount made available by the SFPUC, and as requested by the Participating Pumpers. All quantities of In Lieu Water delivered by the SFPUC up to a rate of 5.52 mgd will be accounted for as credits in the SFPUC Storage Account.

The Participating Pumpers may operate their Existing Facilities to pump less than their individual Minimum Groundwater Requirements during Storage Periods. Deliveries of SFPUC System Water to offset pumping reductions below a Participating Pumper's Minimum Groundwater Requirement shall not be considered In Lieu Water and are subject to the provisions of **Section 6.4.** Increases in Minimum Groundwater Requirements may be made only with the approval of the Operating Committee under **Section 10.2.5**.

4.4. Location of Delivery of In Lieu Water to Participating Pumpers

The SFPUC shall deliver In Lieu Water to the Participating Pumpers at the existing service connections detailed in each Participating Pumper's Individual Water Supply contract with the SFPUC. To the extent that delivery of In Lieu Water under the Project requires additional service connections to the SFPUC System, such connections shall be considered Project Facilities for cost allocation purposes under **Article 9** of this Agreement.

4.5. Aggregate Designated Quantity; Initial Designated Quantities Assigned to Participating Pumpers

The Participating Pumpers agree to restrict the pumping of groundwater from the Basin utilizing their Existing Facilities, combined with any pumping from proposed New Wells, to the Aggregate Designated Quantity of 7,724 acre feet per year, extracted at an annual cumulative rate of 6.9 mgd. Subject to the limitation on Over Production expressed in **Section 4.8**, the Participating Pumpers may in their sole discretion exceed the 6.9 mgd annual cumulative pumping rate provided that the five-year moving average cumulative pumping rate, computed solely with reference to the previous five years of Recovery and Hold periods, shall not exceed 6.9 mgd. The initial Designated Quantities assigned to each of the Participating Pumpers over the first Supply Year during the Term of this Agreement are as follows:

4.5.1. Daly City: 3,842 acre feet per year, extracted at an annual average rate of 3.43 mgd.

4.5.2. Cal Water: 1,534 acre feet per year, extracted at an annual average rate of 1.37 mgd.

4.5.3. San Bruno: 2,350 acre feet per year, extracted at an annual average rate of 2.1 mgd.

The Designated Quantities set forth in this section may be freely altered, transferred, adjusted or allocated by agreement (collectively, "adjustments") of the Participating Pumpers in each Supply Year during the Term of this Agreement, provided that (1) the Aggregate Designated Quantity is not increased above 6.9 mgd using the five-year moving average described in this section; (2) the adjustments in Designated Quantities are reflected, to the extent possible, in the annual operating plans developed by the Operating Committee under **Section 8.6**; and (3) such adjustments do not exceed 10%, of each Participating Pumper's agreed upon Designated Quantity, plus or minus, for that Supply Year. The Operating Committee may consider an increase to the 10% limitation on adjustments to Designated Quantities expressed in this section in accordance with the criteria set forth in **Sections 4.6.1** and **4.6.2.**

4.6. Increase of Aggregate Designated Quantity

The future operation of the Basin for Project purposes, and continued water level monitoring by the Parties in accordance with the Management Plan, may result in mutual agreement that the Aggregate Designated Quantity set forth in **Section 4.5** may be below the yield of the Basin. Requests by the Participating Pumpers to extract groundwater above the Aggregate Designated Quantity may be approved by the Operating Committee as set forth in **Section 10.2.12**. As of the Effective Date of this Agreement, the Participating Pumpers are not planning to extract groundwater above the Aggregate Designated Quantity, but are incorporating a process for adjusting the Aggregate Designated Quantity should the Operating Committee decide to exercise its discretion to do so in the future, following compliance with CEQA to the extent required. Potential increases in the Aggregate Designated Quantity may be considered by the Operating Committee under any of the following circumstances:

4.6.1. Based on actual water level data and operational experience, or changed conditions, following the completion and acceptance of Project Facilities as reflected in a resolution of the SFPUC.

4.6.2. At any time following the permanent replacement of groundwater pumped by a Nonparticipating Pumper with water from another source, e.g. recycled water.

4.7. Reduction in Aggregate Designated Quantity; Provision of Replacement Water by the SFPUC

The Operating Committee may determine under **Section 10.2.12** that it is necessary to reduce the Aggregate Designated Quantity set forth in **Section 4.5**. Any decision of the Operating Committee to reduce the Aggregate Designated Quantity shall be based solely on a determination that continued pumping of the Aggregate Designated Quantity will result in the long term decline of Basin water levels absent Project operations in a manner that substantially interferes with the ability to extract water from the SFPUC Storage Account during Recovery Periods.

The determination of each Participating Pumper's share of any reduction in the Aggregate Designated Quantity shall be by agreement of the Participating Pumpers. In the event the Participating Pumpers are unable to reach agreement, Section 12.1 shall apply. Following such agreement, the SFPUC agrees that it will provide a total of up to 500 acre feet of Replacement Water per year to the Participating Pumpers at a cost of $226.53 per acre foot within 60 days of receipt of written notification by the affected Participating Pumper(s). The price of Replacement Water may be adjusted annually by the SFPUC based on the Consumer Price Index.

The supply of Replacement Water by the SFPUC shall not increase a Participating Pumper's Individual Water Supply Guarantee under the WSA and shall be consistent with section 9.02 of the WSA. In the event that the SFPUC offers to increase the Supply Assurance under section 4.06 of the WSA, and one or more Participating Pumpers receiving Replacement Water requests and receives an increase in its Individual Water Supply Guarantee, then the SFPUC's obligation to provide Replacement Water shall cease to the extent of the increase in the Participating Pumper's Individual Water Supply Guarantee that is offered by the SFPUC, and the corresponding amount of Replacement Water formerly supplied by the SFPUC shall be priced at the then-current SFPUC wholesale water rate. Alternatively, the SFPUC's obligation to provide a Replacement Water supply to one or more Participating Pumpers may be retired in whole or part if the SFPUC pays a mutually agreed upon one-time capital cost contribution towards a permanent replacement of groundwater pumped by a Nonparticipating Pumper with water from

another source in the Basin as provided in **Section 4.6.2.** Prior to making any decision to retire a Replacement Water obligation by making a capital cost contribution towards a permanent replacement of groundwater pumped from the Basin, the SFPUC agrees that it will solicit input and recommendations from the Bay Area Water Supply and Conservation Agency and the wholesale customers under WSA section 3.15.B. The provision of Replacement Water described in this section shall not be construed as precedent for the allocation of surface water by the SFPUC in any future water transfer or SFPUC System capital project involving other wholesale water customers of the SFPUC.

The notice(s) from the affected Participating Pumper(s) requesting delivery of Replacement Water shall, on an annual basis, select one of the following options:

4.7.1. An annual transfer of storage credits in the SFPUC Storage Account.

4.7.2. Provision of interruptible supplies of surface water from the SFPUC System, provided that the SFPUC determines, in its sole discretion, that such supplies are available.

4.8. Over Production of Water in Excess of Aggregate Designated Quantity

At the close of each Supply Year, beginning in the fifth year of Project operations, the Operating Committee will determine whether the Participating Pumpers engaged in Over Production, and if so, identify which Participating Pumper(s) were responsible for the Over Production by pumping more than its agreed upon Designated Quantity during the previous five year averaging period. Over Production shall never exceed an amount that is 10% over the Aggregate Designated Quantity (7.6 mgd) in any Supply Year or the five-year moving average amount of 6.9 mgd calculated as provided in **Section 4.5** above. No volume of Over Production shall result in any deduction of water from the SFPUC Storage Account. Any Participating Pumper determined by the Operating Committee to be responsible for Over Production shall take one of the following corrective actions:

4.8.1. reduce pumping below its Designated Quantity, not including Storage Periods, by a commensurate amount to restore water to the Basin in the amount of the Over Production which will result in the five year moving average basis of 6.9 mgd being achieved;

4.8.2. replace the quantity of water pumped in excess of the Designated Quantity with water from another source or supply, resulting in an equivalent amount of water being stored in the Basin, subject to the approval of the Operating Committee under **Section 10.2.12**; or

4.8.3. other appropriate measures proposed by the Parties, subject to the approval of the Operating Committee under **Section 10.2.12.**

A Participating Pumper that engages in Over Production shall propose its preferred method for remedying the Over Production by August 1st of the succeeding Supply Year and shall so inform the other members of the Operating Committee. If the proposed remedy for Over Production requires a decision of the Operating Committee under **Section 10.2.12,** the Operating Committee shall convene within 30 days of receipt of the proposal. The corrective measures set forth in **Sections 4.8.1 through 4.8.3** shall not be applicable to Over Production required solely due to an Emergency or for Project Management purposes as directed by the Operating Committee under **Section 5.2.3.**

ARTICLE 5

RECOVERY OF SFPUC STORAGE ACCOUNT WATER FROM PROJECT WELLS

5.1. Circumstances Triggering Recovery of SFPUC Storage Account Water by Participating Pumpers

Pursuant to **Section 5.2**, the SFPUC will determine the quantity of groundwater to be pumped from the SFPUC Storage Account using Project Wells in any of the following circumstances:

5.1.1. During Shortages caused by drought using the process set forth in the Shortage Allocation Plan, and as set forth in Section 5.2.1; or

5.1.2. During Shortages caused by an Emergency, SFPUC System rehabilitation, scheduled maintenance, or malfunction of the SFPUC System, any of which permit the SFPUC to temporarily reduce deliveries of Wholesale Water to all or some of its wholesale customers as set forth in WSA §3.11; or

5.1.3. Upon recommendation of the Operating Committee, including for purposes of managing the SFPUC Storage Account.

5.2. Timing of Recovery of Water from SFPUC Storage Account

5.2.1. Drought Recovery

The SFPUC may issue a Recovery Notice during droughts when the SFPUC determines that available water supplies from the SFPUC System are insufficient to meet customer purchase projections using the process set forth in the Shortage Allocation Plan. During Shortages caused by drought, the SFPUC may choose to exercise its dry year water supply options, including but not limited to Recovery of water from the SFPUC Storage Account; requesting voluntary reductions in water use or imposition of mandatory rationing; or any combination of these measures. Upon issuance of a Recovery Notice by the SFPUC, the Parties and the Operating Committee shall make plans and preparations for the possible Recovery of SFPUC Storage Account water commencing on July 1 or such later date as the Recovery Notice shall direct, pursuant to **Section 5.3** below. In successive dry years, the SFPUC's initial determination of water availability under the Shortage Allocation Plan shall include the remaining volume of water in the SFPUC Storage Account, and the SFPUC may direct the Participating Pumpers to continue Recovery from Project Wells under their operational control in each successive dry year until the total volume in the SFPUC Storage Account is exhausted.

5.2.2. Non-Drought Shortages

During Shortages that would be caused by SFPUC System rehabilitation or scheduled maintenance, the SFPUC's Recovery Notice shall provide not less than 60 days' advance notice to the Participating Pumpers and the Operating Committee that water must be pumped from the SFPUC Storage Account using Project Wells. During Emergencies or malfunctioning of the SFPUC System that

prevent the SFPUC from meeting water demands in its combined retail and wholesale service areas at established level of service goals for the delivery of SFPUC System Water, the SFPUC may issue a written Recovery Notice that requires Recovery by the Participating Pumpers as soon as is reasonably practicable.

5.2.3. Management of SFPUC Storage Account

For purposes of managing the SFPUC Storage Account, the Operating Committee may authorize pumping outside of Recovery Periods and shall develop a schedule of pumping pursuant to **Section 10.2.2** that provides adequate notice to the Parties of the need to pump water from the SFPUC Storage Account.

5.3. Issuance of Recovery Notice by the SFPUC

Based on the circumstances and timing set forth in **Sections 5.2.1 and 5.2.2**, the SFPUC may, in order to manage the limited supply of SFPUC System Water during Shortage, issue a Recovery Notice directing that groundwater be pumped by Participating Pumpers from Project Wells in the Basin, up to the cumulative total amount available in the SFPUC Storage Account and in accordance with the Operating Committee's (1) operating schedule developed pursuant to **Section 10.2.2** and (2) rules for accounting for storage losses from the Basin pursuant to **Sections 6.5** and **10.2.10**.

5.4. Quantities of Water Available to Participating Pumpers from Project Facilities and SFPUC System Connections During Shortages Caused by Drought

During Shortages caused by drought that require mandatory rationing, the quantity of groundwater pumped by each Participating Pumper from the SFPUC Storage Account using Project Facilities, plus each Participating Pumper's Minimum Surface Water Requirement, shall not exceed the volume of the Wholesale Water allocation that would have been available to that Participating Pumper under the methodology adopted by all of the wholesale customers under section 2.2 of the Shortage Allocation Plan. During Shortages caused by drought that require mandatory rationing, the Participating Pumpers may not take delivery of SFPUC Surface Water in excess of the volumes that would have been available to them under section 2.2 of the Shortage Allocation Plan as a substitute for reduced pumping from their Existing Facilities or from Project Wells under their operational control.

5.5. Minimum SFPUC System Water Deliveries to Participating Pumpers during Recovery Periods

During Recovery Periods, the SFPUC shall continue to supply each Participating Pumper with its Minimum Surface Water Requirements, as set forth in **Attachment D**. Changes in Minimum Surface Water Requirements may be made only with the approval of the SFPUC, which shall not be unreasonably withheld.

5.6. Recovery of Stored Water by the SFPUC

Project Facilities include Project Wells located on SFPUC System transmission line rights of way which may, in addition to Project Wells operated by the Participating Pumpers, be operated by the SFPUC for the Recovery of SFPUC Storage Account water pursuant to **Section 5.1**. These Project Wells are shown on **Attachment C**.

5.7. Limitations on Recovery

The Parties agree that Recovery will never exceed the cumulative amount of water available in the SFPUC Storage Account (taking into consideration Basin losses measured in accordance with the methodology adopted by the Operating Committee in accordance with **Section 6.5**), and that Recovery will never exceed 8,100 acre-feet per Supply Year withdrawn at an average rate of 7.2 mgd. The SFPUC further agrees that it will not pump or recover any water from the Basin unless there is a positive balance in the SFPUC Storage Account. If the SFPUC pumps or recovers any water from the Basin in excess of the balance available in the SFPUC Storage Account, the SFPUC must transfer a corresponding amount of SFPUC System Water to the Basin over the course of the succeeding Supply Year at no cost to the Participating Pumpers.

ARTICLE 6

PROJECT WATER ACCOUNTING

6.1. Accounting for Storage and Recovery

Accounting for Storage and Recovery of groundwater in the SFPUC Storage Account is to be performed on the following basis:

6.1.1. Storage Period Accounting. All quantities of In Lieu Water delivered to the Participating Pumpers will result in a corresponding credit to the SFPUC Storage Account. The SFPUC's calculation of Storage Account credits will be based on the volume of In Lieu Water delivered to each Participating Pumper through its service connections to the SFPUC System. The total volume of In Lieu Water delivered during Storage Periods will be measured based on the delta between the combined metered reductions in each Participating Pumper's annual Designated Quantity and its respective Minimum Groundwater Requirement. The Participating Pumpers will provide metered volumes of groundwater produced from their Existing Facilities to the SFPUC on a monthly basis. Quantities of In Lieu Water delivered to each Participating Pumper by the SFPUC will be reflected in the next SFPUC monthly billing to each Participating Pumper for Wholesale Water, along with the cumulative total of prior In Lieu Water deliveries during Storage Periods.

6.1.2. Recovery Period Accounting. All quantities of groundwater pumped from Project Wells by the Parties for Project purposes will result in a corresponding debit to the SFPUC Storage Account. Pumping for Project purposes includes pumping of up to 265 acre feet per year from Project Wells for purposes of maintaining well capacity when idle during Storage Periods and Hold Periods. The SFPUC's calculation of Storage Account debits will be based upon Project Well meter readings made by or provided to the SFPUC. During Recovery Periods, the SFPUC's monthly billings to each Participating Pumper for Wholesale Water will include the total metered extractions of SFPUC Storage Account Water from Project Wells by the Parties, along with the balance remaining in the SFPUC Storage Account.

6.1.3. Water Accounting for Use of Project Facilities for Non-Project Purposes or During Emergencies. The Participating Pumpers' use of Project Facilities for non-Project purposes under **Section 8.8** shall not result in a corresponding debit to the volume of water stored in the SFPUC Storage Account. A Participating Pumper's use of Project Facilities during a local Emergency under **Section 8.9** shall not result in a corresponding debit to the volume of water stored in the SFPUC Storage Account, unless the SFPUC determines, in its sole discretion, that such pumping is required under **Section 5.2.2** in order to maintain water deliveries from the SFPUC System to its combined wholesale and retail service area at the SFPUC's established level of service goals.

6.2. Accounting for Wholesale Water

Wholesale Water deliveries shall continue to be paid for by the Participating Pumpers pursuant to the WSA and shall not increase the credit balance in the SFPUC Storage Account. The SFPUC's delivery of Replacement Water, and interruptible supplies of In Lieu Water to a Participating Pumper in excess of its Individual Water Supply Guarantee, shall not be construed to create any liability, dedication to public use, or obligation on the part of the SFPUC to provide a greater volume of water to that Participating Pumper than its Individual Water Supply Guarantee, as set forth in Attachment C to the WSA.

Apart from changes in the timing of SFPUC System Water delivery and payment therefore in accordance with conjunctive operation of the Basin, and as is set forth in **Section 12.18** of this Agreement, nothing in this Agreement is intended to affect the Participating Pumpers' rights to, and payment for, Wholesale Water, including each Participating Pumper's share of payment for SFPUC System Regional asset capital costs and associated operating expense categories under the WSA.

6.3. Accounting for In Lieu Water Delivered during Conjunctive Use Pilot Program

During the Conjunctive Use Pilot Program, the SFPUC delivered In Lieu Water to the Participating Pumpers. The following quantities of water have been added to the SFPUC Storage Account as a result of the Conjunctive Use Pilot Program:

6.3.1. **Daly City** - During the Conjunctive Use Pilot Program, up until April 1, 2006, the SFPUC delivered 9,573 acre feet of In Lieu Water to Daly City, which paid for that water at the $0.35 per unit rate established under the Conjunctive Use Pilot Program. That water, which is included as a credit balance to the SFPUC Storage Account, shall be pumped first at no charge to Daly City upon the future initiation of Recovery.

From April 1, 2006 through March 31, 2011, the SFPUC continued to periodically deliver In Lieu Water to Daly City at no charge, resulting in an additional credit of 7,864 acre feet in the SFPUC Storage Account. Those deliveries shall be credited to the SFPUC Storage Account, and, when Recovery is initiated, and after Daly City has received, at no charge, 9,573 acre feet stored under the Conjunctive Use Pilot Program, Daly City shall pay for groundwater

pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

6.3.2. **Cal Water** - During the first phase of the Conjunctive Use Pilot Program, between February 1, 2003 and November 30, 2003, the SFPUC delivered 802 acre feet of In Lieu Water to Cal Water, which paid for that water at the $0.35 per unit rate established under the Conjunctive Use Pilot Program.

When the Conjunctive Use Pilot Program restarted on April 1, 2004, Cal Water did not participate and did not resume pumping any part of its Designated Quantity, but continued to rely on Wholesale Water for all of its water needs in its South San Francisco service area. This resulted in an increase in Basin water levels as if Cal Water had continued to participate in the Conjunctive Use Pilot Program, and a corresponding increase in the SFPUC Storage Account of 938 acre feet between April 1, 2004 and March 1, 2005. The SFPUC will reduce Cal Water's FY 2014-15 Wholesale Water billings by $315,323 (three hundred fifteen thousand three hundred twenty three dollars), representing the difference between the rate charged for 938 acre feet of water delivered under the Conjunctive Use Pilot Program and the established FY 2003-04 and FY 2004-05 SFPUC Wholesale Water rates paid by Cal Water, as if Cal Water had continued to participate in the Conjunctive Use Pilot Program between April 1, 2004 and March 1, 2005. The SFPUC will make the credit adjustment to Cal Water's FY 2014-15 Wholesale Water account by no later than June 30, 2015. Following the SFPUC's adjustment of Cal Water's Wholesale Water payment balance to reflect the previous storage of 938 acre feet in the SFPUC Storage Account, the total quantity of water delivered to Cal Water between February 1, 2003 - November 30, 2003 and April 1, 2004 – March 1, 2005 (1,740 acre feet) shall be pumped first at no charge to Cal Water upon the future initiation of Recovery. The SFPUC shall reimburse Cal Water an amount not to exceed $80,000 (eighty thousand dollars), based on invoices submitted and approved by the SFPUC, for design costs previously incurred by Cal Water as Project Capital Costs to evaluate the feasibility of co-locating Shared Facilities for Project Well no. 13 at Cal Water's existing South San Francisco water treatment facilities. Should Cal Water ultimately approve construction of these Shared Facilities, the SFPUC will contribute an additional amount not to exceed $500,000 (five hundred thousand dollars) towards the total costs of Cal Water's Shared Facilities as a Project Capital Cost, and shall reimburse Cal Water for design and construction costs as a lump sum payment prior to construction, for a total potential not to exceed amount of $580,000 (five hundred eighty thousand dollars). Operation and maintenance expenses incurred by Cal Water as a result of operating Shared Facilities for Project purposes as a Project Facility shall be reimbursed by the SFPUC as Project Operations and Maintenance Expenses in accordance with **Section 9.2.**

When Recovery is initiated, and after Cal Water has received, at no charge, 1,740 acre feet stored between February 1, 2003 and March 1, 2005, Cal Water shall

pay for groundwater pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

6.3.3. **San Bruno** - During the Conjunctive Use Pilot Program, up until March 1, 2005, the SFPUC delivered 3,915 acre feet of In Lieu Water to San Bruno, which paid for that water at the $0.35 per unit rate established under the Conjunctive Use Pilot Program. That water, which is included as a credit balance to the SFPUC Storage Account, shall be pumped first at no charge to San Bruno upon the future initiation of Recovery.

When Recovery is initiated, after San Bruno has received, at no charge, 3,915 acre feet stored under the Conjunctive Use Pilot Program, San Bruno shall pay for groundwater pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

San Bruno and SFPUC agree to execute a memorandum of understanding that reflects the SFPUC's intent to provide for, or to construct at the SFPUC's expense, facilities for the emergency storage of one million gallons of water in pressure zone 1/4, or equivalent, during Storage Periods since San Bruno's Existing Facilities would not be immediately available to supply water during an emergency.

6.4. Deferred Payment for Stored In Lieu Water Supplies

Except as expressly provided in **Section 6.3** of this Agreement, a Participating Pumper will not pay for In Lieu Water at the time of delivery. Rather, payment will be deferred until Recovery by pumping. The SFPUC will bill, and the Participating Pumper will pay, for groundwater pumped by the Participating Pumper from the SFPUC Storage Account using Project Facilities at the then-applicable Wholesale Water rate established by the SFPUC. During Storage Periods, each Participating Pumper shall pay the established SFPUC Wholesale Water rate for all quantities of Wholesale Water that are delivered to it as a result of pumping from Existing Facilities at a rate less than its Minimum Groundwater Requirement.

6.5. Accounting for Losses

Groundwater modeling performed by the Parties as well as the Management Plan have determined that the Basin is not a closed basin. Therefore, the Operating Committee shall develop and adopt, and periodically revise, if necessary, a proposal for accounting for losses from the Basin under **Section 10.2.10**, including, if necessary, a reduction in the Aggregate Designated Quantity under **Section 4.7** or to the volume of water in the SFPUC Storage Account, which shall be consistent with generally accepted principles of groundwater accounting and management.

ARTICLE 7

OWNERSHIP, OPERATION, MAINTENANCE AND REPLACEMENT OF EXISTING FACILITIES

7.1. Ownership, Operation, Maintenance and Replacement of Existing Facilities

Each Participating Pumper will continue to own, operate, maintain and replace, if necessary, its Existing Facilities during the Term of this Agreement. This Agreement does not authorize nor prohibit the replacement of Existing Facilities, which shall be based solely on the discretion of each Participating Pumper following environmental review under CEQA, if necessary. Each Participating Pumper further agrees that it is solely responsible for all costs associated with the operation, maintenance, repair and replacement of its Existing Facilities, except to the extent authorized in **Section 9.2**.

7.2. Operation and Maintenance of Existing Facilities

Each Participating Pumper agrees, to the extent practicable and economically feasible, to operate, maintain, repair and replace its Existing Facilities (1) in accordance with this Agreement and applicable laws, rules, regulations, guidelines, well encrustation studies and prudent utility operator standards, including management of any Preexisting Conditions to avoid interference with Recovery of water from the SFPUC Storage Account; (2) in accordance with its agreed upon share of the Aggregate Designated Quantity set forth in **Section 4.5;** and (3) in a manner that will not cause Undesirable Effects on Project Wells or the wells of other Participating Pumpers. The Participating Pumpers agree to use best efforts to maintain their Existing Facilities in good repair so as to be fully capable of producing the Aggregate Designated Quantity set forth in **Section 4.5** during Recovery Periods.

7.2.1. During the period following the SFPUC's issuance of a Recovery Notice for a potential drought pursuant to **Section 5.2.1**, each Participating Pumper shall conduct such testing and perform all maintenance or rehabilitation work on its Existing Facilities that may be required to produce its agreed upon Designated Quantity by the date specified in the Recovery Notice and over successive years if the drought continues. Within 30 days of receipt of the initial Recovery Notice under **Section 5.2.1**, and during each successive drought year, each Participating Pumper shall submit a written report to the Operating Committee signed by its licensed system operator that describes (1) the condition of its Existing Facilities; (2) whether its Existing Facilities are capable of producing its Designated Quantity by the date specified in the Recovery Notice; and (3) what steps must be undertaken by the Participating Pumper to improve its Existing Facilities in the event that it cannot produce its Designated Quantity by the date specified in the Recovery Notice.

7.2.2. In the event that the initial or subsequent reports reveal that a Participating Pumper's Existing Facilities are not capable of producing its share of the Aggregate Designated Quantity, the Participating Pumper shall provide additional reports on a quarterly basis to the Operating Committee until it has resolved the problem, as certified by its licensed system operator.

7.2.3. In the event of the temporary outage of Existing Facilities, the Participating Pumper owning the Existing Facility shall notify the Operating Committee of the

nature and extent of the outage. To the extent the Participating Pumper is able to obtain permission for the use of alternative facilities owned by Nonparticipating Pumpers (such as cemetery or golf course wells) for the production of its Designated Quantity, the Participating Pumper may utilize such alternative facilities after notification to and review by the Operating Committee.

7.3. Failure to Maintain, Repair, or Replace Existing Facilities

In the event that a Participating Pumper cannot provide certification by its licensed system operator that it has undertaken and completed the work identified in the initial report to the Operating Committee under **Section 7.2** by the date specified in the SFPUC's Recovery Notice under **Section 5.2.1**, the SFPUC shall have no obligation to increase the quantity of Wholesale Water available to the Participating Pumper under the Shortage Allocation Plan to make up any shortfall in the production of that Participating Pumper's Designated Quantity caused by the unavailability of its Existing Facilities.

7.4. Measurement of Water Pumped Using Existing Facilities

All Parties shall install, maintain and use adequate measuring devices on all water pumped from Existing Facilities, New Wells, and Project Wells, and shall report accurate measurements of all water pumped from Existing Facilities, New Wells and Project Wells to any Party and the Operating Committee upon request. All meters shall be maintained to be accurate within plus or minus 2%.

7.5. Drilling and Operation of New Wells by Parties

The SFPUC agrees not to construct or operate New Wells in the Basin other than (1) pursuant to this Agreement; (2) the certified Project final environmental impact report, and any addenda or supplements thereto; and (3) with the approval and agreement of the Participating Pumpers following amendment of this Agreement as provided in **Section 2.3**. Prior to drilling a test hole that may result in construction of a New Well, each Party proposing to construct and operate a New Well shall (i) provide written notice to the Operating Committee and the other Parties of its intent to do so; (ii) conduct environmental review to the extent required under CEQA of the impacts associated with construction and operation of the proposed New Well; (iii) if necessary, provide the Operating Committee with an analysis of mutual pumping interference effects between the proposed New Well and potentially affected Project Facilities and Existing Facilities operated by other Parties; and (iv) obtain a well construction permit from San Mateo County or the public entity with jurisdiction over well construction permits for the proposed New Well, if necessary. The Parties shall be given written notice and opportunity to comment on any environmental documentation prepared for a New Well within the time frame allowed for public comment under CEQA, and shall also be copied on any CEQA notices of exemption or notices of determination filed by a Party in connection with carrying out the approval of a New Well. All New Wells proposed by the Parties shall be located, constructed and operated in a manner that will not cause Undesirable Effects. Once operational, New Wells installed by the Participating Pumpers shall be considered to be Existing Facilities.

ARTICLE 8

OWNERSHIP, INSTALLATION, OPERATION, AND MAINTENANCE OF PROJECT FACILITIES

8.1. Project Facilities

Project Facilities, shown on the map attached as **Attachment C** and listed on **Attachment E**, are required to make use of 61,000 acre feet per year of the available storage capacity in the Basin by facilitating the simultaneous extraction of the Aggregate Designated Quantity by the Participating Pumpers from their Existing Facilities and stored SFPUC System Water by the Parties from Project Wells during Recovery Periods.

8.2. Real Property Interests Required for Project Implementation

Project Facilities may be located on lands within the service areas of the Participating Pumpers and/or on lands owned or acquired by the SFPUC. The SFPUC will acquire all real property interests that are necessary for the installation of, and access to, Project Facilities. The SFPUC agrees to grant suitable licenses to each Participating Pumper to the extent required for access to Project Facilities connected to a Participating Pumper's water distribution system. Each Participating Pumper agrees to grant the SFPUC suitable licenses for all Project Facilities on or across land owned by that Participating Pumper. All licenses exchanged by the Parties will follow the format used in **Attachment G**, subject to modification as necessary to address site specific needs and conditions. Each Participating Pumper further agrees to use reasonable best efforts to assist the SFPUC in securing fee title or easements for Project Facilities that may be located on property owned by other governmental entities within the service areas of the Participating Pumpers.

8.3. Ownership of Project Facilities

All Project Facilities will be owned by the SFPUC, subject to the limitations and restrictions within this Agreement.

8.4. Installation of Project Facilities

The SFPUC shall be solely responsible for the permitting, licensing, design, construction, and installation of Project Facilities under this Agreement. Each Participating Pumper shall have the right to approve the location of Project Facilities on land owned by such Participating Pumper, along with the design and the construction schedule for installation of any Project Facilities in its service area, which approvals shall not be unreasonably delayed or withheld. At the 10, 35, 65, 95 and 100% stages of design, the SFPUC will provide each Participating Pumper with the plans and specifications of work to be performed on the Participating Pumper's property or within its service area. Pending completion of design, the proposed location of Project Facilities is generally shown on the map attached as **Attachment C** and described in **Attachment E**. As set forth in **Section 12.3** of this Agreement, the SFPUC will require in all construction contracts for Project Facilities that the Participating Pumpers, and their respective officers, agents and employees, be named (1) as additional insureds on all required insurance policies, and (2) as additional indemnitees in any contractual indemnity provisions. Project Facilities constructed on land owned or acquired by the SFPUC shall be immune from San Bruno and Daly City planning,

zoning and building permit requirements pursuant to the doctrine of intergovernmental immunity set forth in the case law interpreting California Government Code §§53090 et seq.

8.5. Provision of As-Built Drawings; Modifications to Project Facilities Following Completion

Within three (3) months of completion and acceptance of Project Facilities (as reflected in a Resolution adopted by the SFPUC), the SFPUC shall deliver to each Participating Pumper a complete set of as-built drawings and specifications for all Project Facilities located within its service area. Should improvements and/or modifications be made to Project Facilities, the SFPUC will provide each Participating Pumper with revised as-built drawings and specifications within three (3) months of completing the improvements and/or modifications to Project Facilities.

8.6. Operation and Maintenance of Project Facilities; Potential Undesirable Effects Associated with Operation of Project Facilities as Designed

The Operating Committee will develop annual operation, maintenance and monitoring plans under the Project pursuant to Section 10.2.1. The Operating Committee will also develop annual operating schedules for each Supply Year during Recovery Periods, including projected groundwater storage and/or Recovery from Project Wells of any water available in the SFPUC Storage Account and pursuant to Section 10.2.2. Each Participating Pumper agrees to operate, maintain, and repair Project Facilities (except those Project Facilities connected to the SFPUC System transmission mains) that are connected to its distribution system as necessary to comply with the terms of this Agreement and to further the aims of the Project in accordance with applicable laws, rules, regulations, guidelines, and prudent utility operator and asset management standards, and in accordance with the annual operation, maintenance and monitoring plans approved by the Operating Committee under **Sections 10.2.1** and **10.2.2**. The SFPUC will operate, maintain and repair all Project Facilities connected to SFPUC System transmission mains. When the Project Facilities reach the end of their useful service lives, the SFPUC shall reasonably determine whether to replace or abandon all or any portion of Project Facilities.

8.6.1. The estimated pumping level drawdown effects upon Existing Facilities resulting from the future operation of Project Wells over a hypothetical seven and one-half year drought are set forth in **Attachments D-1, D-2 and D-3**. The Participating Pumpers agree that the estimated pumping water levels shown in **Attachments D-1, D-2 and D-3** are acceptable and will not cause any Undesirable Effects to their Existing Facilities.

8.6.2. Should actual operating experience of Project Wells cause greater pumping level drawdown effects than estimated in **Attachments D-1, D-2 or D-3**, that are determined by the Operating Committee to be Undesirable Effects, the Operating Committee shall have the authority to require the measures outlined in **Section 10.2.8** in order to eliminate or reduce the Undesirable Effect(s) to a less than significant level.

8.7. Modifications to Participating Pumpers' Water Supply Permits Issued by the California State Water Resources Control Board

Installation and operation of Project Facilities may require amendments to the Parties' drinking water supply permits issued by the Division of Drinking Water and Environmental Management

(DDWEM). The Parties will be solely responsible for obtaining any DDWEM permit modifications and for permit compliance related to the operation of Project Facilities connected to their water transmission and distribution systems. The SFPUC will assist in preparing exhibits required for the Participating Pumpers' permit amendment packages submitted to DDWEM. All costs incurred by the Parties in obtaining such permit modifications shall be considered Project Capital Costs. Each Party that operates Project Wells, and the downstream facilities that receive water from those Project Wells, shall be named as the Operator of Record in the modified water supply permits issued by DDWEM.

8.8. Use of Project Facilities by Participating Pumpers for Non-Project Purposes

The Participating Pumpers may use Project Facilities for non-Project purposes upon satisfaction of all of the following conditions precedent:

(a) the SFPUC has not issued a Recovery Notice directing the Participating Pumpers to pump water from the SFPUC Storage Account under **Section 5.3** of this Agreement;

(b) use of Project Facilities for non-Project purposes does not interfere with future Recovery under the Project, as determined by the Operating Committee;

(c) the quantity of water pumped using Project Facilities for non-Project purposes does not, when combined with pumping from Existing Facilities, exceed the Participating Pumper's Designated Quantity; and

(d) the Operating Committee has approved the proposed use of Project Facilities for non-Project purposes.

The Operating Committee will consider all requests for use of Project Facilities for non-Project purposes within 30 days. As of the Effective Date of this Agreement, the Parties do not contemplate any specific use of Project Facilities for non-Project purposes, but the Parties desire to incorporate a process for allowing such use should they decide to exercise their discretion to do so in the future following compliance with CEQA to the extent required. Except as approved by the Operating Committee, use of Project Facilities for non-Project purposes pursuant to this section shall not exceed thirty (30) days' duration. The approved use of Project Facilities for non-Project purposes is not subject to the limitation on Recovery set forth in **Section 5.7**, and groundwater pumped pursuant to this section will not be debited against the SFPUC Storage Account as provided in **Section 6.1.3**.

8.9. Use of Project Facilities During an Emergency

The Parties may use Project Facilities within their service areas without the advance approval of the Operating Committee for non-Project purposes during a local Emergency that does not result in the SFPUC issuing Recovery Notice under **Section 5.3**, provided that the Project Facilities are capable of operation during an Emergency. Such pumping may continue only for the duration of the Emergency. Within 48 hours of such Emergency, the Party or Parties shall notify and explain to the Operating Committee the basis of the Emergency. The Party will, at intervals established by the Operating Committee, report on its efforts to resolve the Emergency.

ARTICLE 9

PROJECT COST RECOVERY

9.1. Project Capital Costs

The SFPUC will provide all funding required for payment of Project Capital Costs. To the extent that the Participating Pumpers directly provide in-kind services, real property, equipment assets in furtherance of the construction of Project Facilities, and Shared Facilities for Project purposes, the value of these contributions shall be included within Project Capital Costs. All Project Facilities listed on **Attachment E** will be classified as Regional SFPUC System assets for purposes of cost recovery under the WSA, unless indicated otherwise. The capital costs and operation expenses of Shared Facilities that are used and useful to a Participating Pumper irrespective of Project operations shall be allocated between the SFPUC and that Participating Pumper on the basis of mutual agreement or as otherwise specified in this Agreement. On an annual basis during construction of Project Facilities and Shared Facilities, the SFPUC will include information detailing estimated and actual Project Capital Costs in accordance with the requirements of WSA sections 5.04 and 6.08.

9.2. Project Operation and Maintenance Expenses

The SFPUC shall annually reimburse each Participating Pumper for all Project Operation and Maintenance Expenses actually incurred in the operation and maintenance of Project Facilities and Shared Facilities for Project purposes. The SFPUC's reimbursement obligation does not extend to Project Operation and Maintenance Expenses incurred by the Participating Pumpers for the operation of Project Facilities for non-Project purposes permitted in **Sections 8.8** and **8.9**. By November First of each year during the Term, each Participating Pumper shall provide an estimated Project Operations and Maintenance Expenses budget to the Operating Committee for the coming Supply Year as referenced in **Section 10.2.1**. The Operating Committee, on a case-by-case basis, may also recommend that the SFPUC reimburse the Participating Pumpers for operations and maintenance expenses incurred in the operation of Existing Facilities that are attributable to Undesirable Effects caused by Project operations. A Participating Pumper requesting reimbursement of expenses for the operation and maintenance of Existing Facilities shall certify that it has been operating and maintaining its Existing Facilities in a reasonable and prudent manner, including but not limited to management of the effects of Preexisting Conditions. All Project Operation and Maintenance Expenses, including expenses incurred by the SFPUC for the operation and maintenance of Project Wells connected to SFPUC System transmission mains, shall be considered Regional operation and maintenance expenses under WSA section 5.05, as further detailed in **Attachment F**. Project Operation and Maintenance Expenses incurred by a Participating Pumper in the operation of Shared Facilities shall be allocated based on the proportionate use of Shared Facilities for Project purposes. After the close of each Supply Year on June 30, each Participating Pumper shall submit an accounting, including invoices and other documentation, supporting its actual Project Operation and Maintenance Expenses over the preceding Supply Year to the SFPUC. Accounting detail submitted by a Participating Pumper for reimbursement of annual Project Operation and Maintenance Expenses shall be of sufficient detail to permit the SFPUC to properly allocate these expenses between (1) the SFPUC's retail and wholesale water customers under the WSA and (2) Project Facilities, Shared Facilities, and the Participating Pumper's Existing Facilities. The SFPUC shall reimburse each Participating Pumper for incurred Project Operation and Maintenance Expenses within sixty (60) days of receipt of the annual accounting. In the alternative, the SFPUC may, with the agreement of the Participating Pumper, reimburse the Participating Pumper for the previous fiscal year's Project Operation and Maintenance Expenses as one or more credits on monthly invoices for Wholesale Water over the course of the following

Fiscal Year. Disputes between the SFPUC and one or more Participating Pumpers concerning the reimbursement or accuracy of accounting of annual Project Operation and Maintenance Expenses will be resolved by the Operating Committee, or pursuant to **Section 12.1.**

9.3. Use of Project Facilities by Participating Pumpers for Non-Project Purposes

If the temporary use of Project Facilities by a Participating Pumper for non-Project purposes is approved by the Operating Committee under **Section 8.8** of this Agreement, or is approved by the SFPUC during a local Emergency under **Section 8.9**, the Participating Pumper shall deduct a proportionate share of operation and maintenance expenses reflecting such operation from the annual total of Project Operations and Maintenance Expenses submitted to the SFPUC for reimbursement under **Section 9.2.**

9.4. Metering of Project Facilities Operated During Recovery Periods by the SFPUC

The metered volume of water pumped from Project Wells connected to SFPUC transmission mains pursuant to **Section 5.6** shall be used to account for pumping of water for Project purposes as provided in **Section 6.1.2.** Meters that measure the flow of water pumped during Recovery Periods that is added to SFPUC transmission lines shall be considered new "System Input Meters" in accordance with Section 3.14 and Attachment J of the WSA.

ARTICLE 10

OPERATING COMMITTEE

10.1. Composition of Operating Committee

Upon the Effective Date of this Agreement, the Parties shall form a four member Operating Committee comprised of one representative each from the Participating Pumpers and the SFPUC. For decisions requiring a majority vote, the Operating Committee shall select a neutral fifth member not currently employed by or serving as a consultant to any of the Parties to serve as a tie-breaker as necessary in the event of a deadlock between the other members of the Operating Committee. The neutral fifth member may be employed by, or a consultant to, the Bay Area Water Supply and Conservation Agency. If a majority of members of the Operating Committee cannot agree to the identity of the neutral fifth member, the name shall be selected at random from the list of names proposed by members of the Operating Committee. The fifth member of the Operating Committee shall have no voting authority apart from serving as a tie-breaker. All 5 members of the Operating Committee shall have experience and technical expertise in water supply, groundwater wells and pump operations.

10.2. Duties and Powers of Operating Committee

The Management Plan contains Basin Management Objectives that are consistent with the sustainable management of the Basin. The Operating Committee will consider, but not be bound by, (1) the Basin Management Objectives and (2) the Mitigation, Monitoring and Reporting Program adopted by the SFPUC as a binding commitment in Resolution No. 14-0127 in making the decisions authorized in Article 10 of this Agreement. The duties and powers of the Operating Committee are limited to the following.

10.2.1. Development of annual Project operation, maintenance and monitoring plans, and estimated budgets for these activities, as set forth in **Section 8.6** and **Section 9.2,** to ensure proper management of the Project, including protocols for reporting collected data back to the Operating Committee by the Parties, review of operation, maintenance and monitoring plans submitted by the Parties, and recovery of Project Operations and Maintenance Expenses. The annual plans required by this section shall be completed by December 1 of each year.

10.2.2. Development of Project Well operating schedules during Recovery Periods by May 1st of each drought year that projects Recovery, including where such pumping shall occur, in what quantities, and any redirection or reduction in pumping to avoid Undesirable Effects or well interference impacts identified in the Project Mitigation, Monitoring and Reporting Program, subject to the sole discretion of the SFPUC to determine the volumes of In Lieu Water available for Storage and subsequent Recovery of any water available in the SFPUC Storage Account under **Articles 4** and **5** of this Agreement. Project Well operating schedules for non-drought Shortages under **Sections 5.2.2** and **5.2.3** shall be developed and approved by the Operating Committee on an as-needed basis.

10.2.3. Review of (1) annual reports submitted by the Participating Pumpers' licensed operators certifying that the Existing Facilities within their respective service areas are capable of operation during droughts in compliance with the standards set forth in **Section 7.2** of this Agreement; and (2) a Participating Pumper's proposed use of facilities owned by Nonparticipating Pumpers as required to pump Designated Quantities due to the unavailability of the Participating Pumper's Existing Facilities referenced in **Section 7.2** of this Agreement.

10.2.4. Review and approval of a request by a Participating Pumper to use Project Facilities for non-Project purposes, under the conditions set forth in **Section 8.8**.

10.2.5. Review and approval of a Participating Pumper's request for an increase in its Minimum Groundwater Requirement, pursuant to **Section 4.3**.

10.2.6. Monitoring pumping from all Existing and Project Facilities within the Basin to evaluate water quality trends and whether increases in the volume of water produced are occurring, including any Over Production in pumping from Existing Facilities resulting from higher Basin operating levels attributable to Storage under the Project. In response to changed conditions within the Basin, the Operating Committee may make recommendations to the Parties as to whether any action or changes in Project water accounting rules set forth in **Section 6.1** may be necessary to protect the Recovery of SFPUC Storage Account Water and Designated Quantities or to ensure the recovery of Project costs in accordance with Article 9 of this Agreement.

10.2.7. Approval of pumping Project Wells outside of Recovery Periods for Project management pursuant to **Section 5.2.3.**

10.2.8. Determining whether the operation of Project Wells caused Undesirable Effects on Existing Facilities under **Section 8.6** and identifying measures that the SFPUC must take to reduce or eliminate such Undesirable Effects and otherwise avoid harm to the Participating Pumpers and ensure long-term viability of the Basin as a drinking water supply. To the extent that the Operating Committee determines that the pumping of any Project Well caused Undesirable Effects, the Operating Committee may require one or more of the following actions, subject to necessary CEQA compliance: (1) redirect pumping to other Project Facilities; (2) reduce pumping at particular Project Well(s) while preserving the cumulative ability of the SFPUC to order the extraction of up to 8,100 acre feet annually from the SFPUC Storage Account; (3) modification of Existing Facilities as a Project Capital Cost (e.g., resetting pumps, installing water treatment facilities, vacuum pumps etc.); (4) reimbursement of additional cost as a Project Operation and Maintenance Expense under **Section 9.2**; or (5) such other remedy as may be appropriate.

10.2.9. Request and approval of studies and such technical support as is necessary to assist in Project management, conduct required monitoring, to refine Project goals and operations, to use the Basin more effectively, and to identify and address potential problems. Technical support may be provided by employees of the Parties or by third-party contractors. The costs of all technical support authorized by the Operating Committee shall be deemed a Project Operations and Maintenance Expense.

10.2.10. Determine the appropriate methodology of accounting for losses from the Basin under **Section 6.5.**

10.2.11. Review of information provided by the Parties required under **Section 7.5** concerning proposed New Wells.

10.2.12. Increases in the limitation on adjustments to Designated Quantities expressed in **Section 4.5** and the Aggregate Designated Quantity, using the criteria set forth in **Section 4.6**; reductions in the Aggregate Designated Quantity as provided in **Section 4.7**, and the approval of actions to remedy Over Production that is delegated to the Operating Committee under **Section 4.8.3**.

10.3. Operating Committee Decision-Making

The development of Project Well operating schedules under **Section 10.2.2** during Recovery Periods, and the decisions delegated to the Operating Committee in **Sections 10.2.5, 10.2.7, 10.2.10,** and **10.2.12**, shall require unanimous approval of the Operating Committee. All other decisions of the Operating Committee shall be by majority vote of the members of the Operating Committee, utilizing the fifth tie-breaker vote as necessary. For all matters, each member of the Operating Committee shall: (a) act in good faith; (b) utilize the best available scientific evidence relevant to the matter including but not limited to data and analysis generated by numeric models that meet prevailing industry standards for accuracy and reliability; and (c) ensure that the Storage and Recovery of water under the Project avoids Undesirable Effects to the Basin as well as ensure the long-term viability of the Basin as a drinking water supply. A minority of Operating Committee members may request voluntary mediation of certain disputes as described in **Section 12.1** of this Agreement.

10.4. Schedule for Meetings of Operating Committee

The Operating Committee shall meet within thirty days after the Effective Date of this Agreement, and thereafter as often as necessary to implement operations and take other action under this Agreement, but shall meet at least twice a year.

10.5. Minutes of Operating Committee Meetings

Minutes of all Operating Committee Meetings shall be kept and shall reflect a summary of all proceedings, actions and recommendations taken by the Operating Committee. Copies thereof shall be furnished to all Parties.

10.6. Duty of Each Party to Monitor Conjunctive Use Project Performance

Each Party has an independent obligation to review all monitoring information reported to the Operating Committee. If any Party believes that the Storage and Recovery of water under the Project is causing Undesirable Effects to its Existing Facilities, that Party shall promptly advise the Operating Committee.

ARTICLE 11

DEFAULTS AND REMEDIES

11.1. Remedies upon Termination

Notwithstanding anything to the contrary herein, if one or more of the Participating Pumpers breaches any provision of this Agreement, or invokes the existence of a Force Majeure Event under **Section 12.14**, the SFPUC may terminate this Agreement with respect to the Party or Parties by written notice to the Participating Pumpers.

11.1.1. If the SFPUC terminates this Agreement due to the occurrence of a Force Majeure Event or breach by one or more of the Participating Pumpers, any credit balance in the SFPUC Storage Account shall remain the property of the SFPUC, along with the ownership of all Project Facilities within such Party or Party's service area(s). Upon such termination, the SFPUC may in its sole discretion extract any stored water reflected as a credit balance in the SFPUC Storage Account using the Project Wells referenced in **Section 5.6** of this Agreement until there is no remaining water in the SFPUC Storage Account. Alternatively, in its sole discretion, the SFPUC may require the breaching Party or Parties, or Party(ies) subject to a Force Majeure Event, to purchase from the SFPUC the remaining balance of any water in the SFPUC Storage Account that is attributable to Storage of In Lieu Water by that Party, based on the applicable wholesale water rate for that water as provided in **Section 6.4** of this Agreement.

11.1.2. In the event that this Agreement is terminated under this section 11.1 or Section 12.14, the provisions of WSA Section 3.17, as it may be amended by the SFPUC and its wholesale customers, shall govern (1) the disposition of the balance of water in the SFPUC Stored Water Account; (2) the allocation of outstanding eligible Project Operations and Maintenance Expenses; and (3) the disposition of investments in Project Capital Costs by the SFPUC should the Project Facilities no longer be used to benefit wholesale or retail customers of the

SFPUC System. Upon the termination of this Agreement the SFPUC shall otherwise have no right, claim or interest in the Basin, credit or storage balances in the Basin, or water in the Basin, pursuant to this Agreement.

11.2. Remedies are Cumulative

The rights and remedies or the Parties are cumulative, and the exercise by any Party of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same breach or any other breach by the other Party.

ARTICLE 12

MISCELLANEOUS PROVISIONS

12.1. Dispute Resolution

If (1) any dispute arises between or among the Parties regarding interpretation or implementation of this Agreement that does not concern a decision of the Operating Committee; or (2) one or more Parties file a written appeal with the Operating Committee within 14 days of an Operating Committee decision or action subject to majority vote; or (3) the members of the Operating Committee cannot achieve unanimity as described in **Section 10.3**; or (4) one or more Parties decline to follow a decision or action of the Operating Committee; or (5) one or more Parties asserts that the Operating Committee is acting beyond the scope of its authority as specified in this Agreement, the Parties will, in the first instance, attempt in good faith to resolve the dispute through their chief executive officers or their designees. If the chief executive officers cannot forge a consensus on the disputed issue, the matter shall be referred for non-binding mediation to a single mediator who will have technical expertise in groundwater management and/or public utility accounting practices. The mediator will be selected by unanimous consent of the Parties, but if unanimous consent of the Parties cannot be obtained the mediator will be selected by a majority vote of the Parties from a list of mediators maintained by the Operating Committee based on the qualifications set forth in this **Section 12.1.** Any Party may commence mediation by providing to the other Parties a written request for mediation, setting forth the subject of the dispute and the relief requested. The non-binding mediation will be governed by the American Arbitration Association's Commercial Mediation Procedures. If the dispute is not resolved by mediation, each Party will be free to pursue whatever legal or equitable remedies may be available. The fees and expenses incurred as a result of any dispute resolution activities, including attorney's fees, mediator fees and costs, expert costs, and other expenses, shall be borne solely by the Parties involved in the dispute. The Parties involved in the dispute will share the mediator's expenses on an equal basis.

12.2. Mutual Indemnity

Each Party agrees to indemnify, defend, and hold the other Parties and their respective officers, employees and agents free and harmless from and against any and all loss, liability, expense, claims, costs, suits and damages, including attorney's fees, arising out that Party's willful misconduct or negligent acts, errors, or omissions in its operation and maintenance of Existing Facilities, Shared Facilities or Project Facilities under **Articles 7** and **8** of this Agreement.

12.3. Insurance and Indemnity Provisions Applicable to Construction of Project Facilities

The SFPUC and the Participating Pumpers agree to the following provisions concerning insurance coverage and indemnity during the construction of Project Facilities.

12.3.1. Commencing from the date of Project approval by the SFPUC, every contract issued by the SFPUC for construction of Project Facilities (including associated professional services, environmental consultants, and other contracts required for construction of Project Facilities) shall require the contractor to maintain in force during the course of the contract all customary insurance required by the SFPUC, and shall include coverage for worker's compensation, commercial general liability insurance, automobile liability insurance and professional liability insurance. Each contractor's general, automobile, and professional liability insurance policies shall name as additional insured each Participating Pumper, and its officers, agents and employees.

12.3.2. Commencing from the date of Project approval by the SFPUC, every contract issued by the SFPUC for construction of Project Facilities (including associated professional services, environmental consultants, and other contracts required for construction of the Project) shall contain language requiring the contractor to indemnify, defend and hold harmless the SFPUC and each Participating Pumper for any and all claims for bodily injury or property damage arising out of the contractor's performance of work in constructing or installing Project Facilities or providing support services required for Project implementation.

12.4. Workers' Compensation Insurance for Project Operation

Each Party will provide to the other Parties evidence of Workers' Compensation insurance prior to entering into this Agreement. With respect to employees of a particular Party who are employed as operators of Project Facilities, the other Parties shall not be considered joint employers of any such employees, who shall be solely managed and controlled by each individual Party. Each Party agrees to maintain in force, during the term of this Agreement, Workers' Compensation insurance, in statutory amounts, with Employers' Liability Limits of not less than $1,000,000 each accident.

The cost of Workers' Compensation insurance applicable to the Parties' operation of Project Facilities shall be considered a Project Operations and Maintenance Expense. Approval of Workers' Compensation insurance by the SFPUC shall not relieve or decrease the liability of each Participating Pumper hereunder. In the event that any employee of a Party files a Workers' Compensation claim against another Party, the Party whose employee filed the claim agrees to indemnify, defend and hold harmless the other Parties for any such claims as provided in **Section 12.2** of this Agreement.

12.5. Right to Adjudicate; Limited Waiver of Prescriptive Rights Claims; No Intent to Abandon

12.5.1. Each Party reserves all rights to initiate or participate in a general adjudication of Basin groundwater rights. Nothing in this Agreement shall limit in any way any rights or interests that the Parties may assert related to the use or management of the Basin in the event of a general adjudication of Basin

groundwater rights, apart from the waiver of prescriptive rights claims set forth in section 12.5.2.

12.5.2. In the event of a general adjudication of Basin groundwater rights, including adjudication of issues pertaining to Basin use or management, (i) unless directed otherwise by a court or regulatory agency, the Participating Pumpers agree that the SFPUC will retain the right to any credit balance in the Storage Account, and the right to continue Storage and Recovery of up to 61,000 acre feet of water in the Basin using Project Facilities; (ii) the SFPUC expressly waives the right to store additional water in the Basin without the express written consent of all Parties effective through written amendment of this Agreement in accordance with **Section 2.2**; and (iii) each Party to this Agreement expressly waives any and all claims to prescriptive groundwater rights against the other Parties based on the production or use of groundwater pursuant to this Agreement; provided, however, that the Participating Pumpers reserve and retain all other claims to prescriptive groundwater rights which they may possess as of the Effective Date.

12.5.3. The failure of any Participating Pumper to use all of its Designated Quantity for any amount of time during periods of In Lieu Water delivery shall not be deemed to be or constitute an abandonment of such Participating Pumper's Designated Quantity.

12.5.4. The Parties agree that each Participating Pumper may file notices of reduction of groundwater use as a result of the use of an alternative supply of water from a nontributary source, pursuant to California Water Code Section 1005.1.

12.5.5. The SFPUC recognizes that it cannot and will not assert any claim to water in the Basin, including, but not limited to, as an overlying owner, pumper, or appropriator, except as expressly authorized under this Agreement or to the extent any such right exists as a result of the SFPUC's rights to the North Westside Basin.

12.6. Nonparticipating Pumpers

A Nonparticipating Pumper may become a Party to this Agreement if agreed to by all Parties in a written modification to this Agreement, as provided for in **Section 2.3**, subject to any additional terms or conditions agreed to by the Parties.

12.7. More Favorable Terms

If, at any time during the term of this Agreement, the SFPUC enters into an agreement with another party who is not signatory to this Agreement with respect to use of the Basin for a conjunctive use Project, and such agreement contains price, quantity, or other material terms that are more favorable than the terms extended to a Participating Pumper under this Agreement, the Parties will immediately modify this Agreement to extend the more favorable terms to Participating Pumpers.

12.8. Assignment

No Party shall transfer this Agreement, in whole or in part, or any of its interests, to any other person or entity without the prior written consent of the other Parties. Any attempt to transfer or

assign this Agreement, or any privilege hereunder, without such written consent shall be void and confer no right on any person or entity not a Party to this Agreement.

12.9. Successors

This Agreement shall bind and inure to the benefit of the Parties and their respective successors and permitted assigns.

12.10. Entire Agreement

This Agreement constitutes the entire agreement between the Parties pertaining to the matters provided for herein and, except as herein provided, supersedes all prior and/or contemporaneous agreements and understandings, whether written or oral, between the Parties related to the matters provided for herein.

12.11. Severability

Should any provision of this Agreement prove to be invalid or illegal, such invalidity or illegality shall in no way affect, impair or invalidate any other provisions hereof, and such remaining provisions shall remain in full force and effect; provided, however, if the illegality or invalidity of any provision undermines the intent of the Parties, then the Parties shall attempt in good faith to amend the Agreement in order to fulfill the intent of the Parties. If the Parties are unable to so amend the Agreement, then the Agreement shall terminate and be of no further force or effect.

12.12. Counterparts

This Agreement, and any document or instrument entered into, given or made pursuant to this Agreement or authorized hereby, and any amendment or supplement thereto, may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

12.13. Notice

Formal written notices, demands, correspondence and communications between the Parties authorized by this Agreement shall be sufficiently given if personally delivered or dispatched by registered or certified mail, first-class, postage prepaid, return receipt requested, to the Parties as follows:

To the SFPUC:

Steve Ritchie
Assistant General Manager, Water Enterprise
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
email: sritchie@sfwater.org

With a copy to:
San Francisco City Attorney's Office
Attn.: Utilities General Counsel
Room 234 City Hall
1 Carlton B. Goodlett Place
San Francisco, CA 94102

To Daly City:

Patrick Sweetland
Director of Water and Wastewater Resources
City of Daly City
153 Lake Merced Blvd.
Daly City, CA 94015
email: psweetland@dalycity.org

With a copy to:
Rose Zimmerman
City Attorney
City of Daly City
233 90th Street
Daly City, CA 94015
email: rzimmerman@dalycity.org

To San Bruno:

Constance C. Jackson
City Manager
567 El Camino Real
San Bruno, CA 94066

With a copy to:
Marc Zafferano
City Attorney
567 El Camino Real
San Bruno, CA 94066

To Cal Water:

Anthony Carrasco, District Manager
California Water Service Company
Bayshore District
341 North Delaware Avenue
San Mateo, CA 94401-1727
email: acarrasco@calwater.com

With a copy to:
Lynne McGhee, Corporate Secretary and Associate
Corporate Counsel
1720 North First Street
San Jose, CA 95112-4508

email: lmcghee@calwater.com

12.14. Force Majeure

12.14.1. Excuse from Performance. No Party shall be liable in damages to any other Party for delay in performance of, or failure to perform, its obligations under this Agreement, if such delay or failure is caused by a Force Majeure Event.

12.14.2. Notice. The Party claiming excuse shall deliver to the other Parties a written notice of intent to claim excuse from performance under this Agreement by reason of a Force Majeure Event. Notice required by this section shall be

given as promptly and as reasonably possible in light of the circumstances. Such notice shall describe the Force Majeure Event, the services impacted by the claimed event, the length of time that the Party expects to be prevented from performing, and any steps which the Party intends to take to attempt to restore its ability to perform.

12.14.3. Ability to Perform. Any suspension of performance by a Party pursuant to this section shall be only to the extent, and for a period of no longer duration than, required by the nature of the Force Majeure Event, and the Party claiming excuse shall use its best efforts to remedy its inability to perform as quickly as possible.

12.14.4. If the Party claiming a Force Majeure Event is not able to restore its ability to perform its obligations within one year after giving notice pursuant to Section 12.14.2, it may elect to terminate its participation in the Project. The Party claiming excuse will thereafter give an additional 60 days written notice of said termination to the Parties and the Operating Committee.

12.14.5. In the event that a Party terminates participation in this Agreement under section 12.14.4, the provisions of WSA Section 3.17 and section 11.1 of this Agreement shall govern the disposition of investments in Project Capital Costs, allocation of outstanding eligible Project Operations and Maintenance Expenses, and the balance of water in the SFPUC Storage Account.

12.15. Maintenance and Inspection of Books, Records and Reports

The Participating Pumpers shall maintain careful, accurate and complete records of all receipts and disbursements made for (1) reimbursable Project Operations and Maintenance Expenses authorized under **Section 9.2** and detailed in **Attachment F**; and (2) expenses related to use of Project Facilities for non-Project purposes authorized under **Section 9.3.** During regular office hours, and upon reasonable notice, the Parties shall have the right to inspect and make copies of any books, records, and reports pertaining to this Agreement or related matters in the possession of the other Parties at the inspecting Party's cost. The SFPUC and its agents may conduct audits of the Participating Pumpers during the term of this Agreement for the purpose of ensuring that Project Operations and Maintenance Expenses incurred by the Participating Pumpers are eligible for reimbursement in accordance with **Attachment F**, and to ensure that any expenses incurred by the SFPUC due to the Participating Pumpers' operation of Project Wells for non-Project purposes are repaid to the SFPUC. The Participating Pumpers agree to cooperate with the SFPUC in connection with any such audit. All costs incurred by the Participating Pumpers that are associated with responding to an audit by the SFPUC shall be considered Project Operation and Maintenance Expenses.

12.16. Governing Law; Venue

The laws of the State of California shall govern the interpretation and enforcement of this Agreement. The Parties agree that Santa Clara County is an appropriate neutral county in the event one Party seeks to change venue under Code of Civil Procedure section 394.

12.17. Effect of Agreement on WSA

The provisions of this Agreement do not affect, change or modify any section, term or condition of the WSA. In the event of any conflict between this Agreement and the terms of the WSA, the terms of the WSA shall control.

12.18. Compliance with Raker Act

Nothing in this Agreement shall be construed to authorize or result in delivery of SFPUC System Water to the California Water Service Company in violation of section 6 of the Raker Act (38 Stat. 242).

12.19. Cooperation in Implementation of Project Mitigation Measures

The Participating Pumpers acknowledge the mitigation measures set forth in the Project final environmental impact report and Mitigation, Monitoring and Reporting Program adopted by the SFPUC as part of Project approval, and agree to cooperate with the SFPUC in complying with such measures to the extent that they are under the control of, or are the responsibility of, one or more of the Participating Pumpers. Any costs or expenses associated with such compliance and cooperation shall be the responsibility of the SFPUC, and the SFPUC must reimburse the Participating Pumpers for such costs and expenses as a component of Project Capital Costs.

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

By: _____
Harlan L. Kelly, Jr.
General Manager

Authorized by SFPUC Res. No. 14-0127 Dated August 12, 2014

Approved as to form:

DENNIS J. HERRERA
City Attorney

_____
By: Joshua D. Milstein
Deputy City Attorney

CITY OF DALY CITY

By: _____
Patricia Martel
City Manager

Authorized by City Council Res. No. 14-153 Dated: September 8, 2014

Approved as to form:

_____
Rose Zimmerman
City Attorney

CITY OF SAN BRUNO

By: _____
Constance Jackson
City Manager

Authorized by City Council Res. No. 2014-103 Dated: September 23, 2014

Approved as to form:

_____
Marc Zafferano
City Attorney

CALIFORNIA WATER SERVICE COMPANY

By: _____ FOR

Martin Kropelnicki, President and Chief Executive Officer

Dated: 12-16-14

Approved as to form:

_____

Lynne McGhee, Vice President and General Counsel

Appendix C

SFPUC Memorandum Re: Regional Water System Supply Reliability and UWMP 2020

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

TO: SFPUC Wholesale Customers

FROM: Steven R. Ritchie, Assistant General Manager, Water

DATE: June 2, 2021

RE: Regional Water System Supply Reliability and UWMP 2020

This memo is in response to various comments from Wholesale Customers we have received regarding the reliability of the Regional Water System supply and San Francisco's 2020 Urban Water Management Plan (UWMP).

As you are all aware, the UWMP makes clear the potential effect of the amendments to the Bay-Delta Water Quality Control Plan adopted by the State Water Resources Control Board on December 12, 2018 should it be implemented. Regional Water System-wide water supply shortages of 40-50% could occur until alternative water supplies are developed to replace those shortfalls. Those shortages could increase dramatically if the State Water Board's proposed Water Quality Certification of the Don Pedro Federal Energy Regulatory Commission (FERC) relicensing were implemented.

We are pursuing several courses of action to remedy this situation as detailed below.

Pursuing a Tuolumne River Voluntary Agreement

The State Water Board included in its action of December 12, 2018 a provision allowing for the development of Voluntary Agreements as an alternative to the adopted Plan. Together with the Modesto and Turlock Irrigation Districts, we have been actively pursuing a Tuolumne River Voluntary Agreement (TRVA) since January 2017. We believe the TRVA is a superior approach to producing benefits for fish with a much more modest effect on our water supply. Unfortunately, it has been a challenge to work with the State on this, but we continue to persist, and of course we are still interested in early implementation of the TRVA.

Evaluating our Drought Planning Scenario in light of climate change

Ever since the drought of 1987-92, we have been using a Drought Planning Scenario with a duration of 8.5 years as a stress test of our Regional Water System supplies. Some stakeholders have criticized this methodology as being too conservative. This fall we anticipate our Commission convening a workshop

London N. Breed
Mayor

Sophie Maxwell
President

Anson Moran
Vice President

Tim Paulson
Commissioner

Ed Harrington
Commissioner

Newsha Ajami
Commissioner

Michael Carlin
Acting
General Manager

regarding our use of the 8.5-year Drought Planning Scenario, particularly in light of climate change resilience assessment work that we have funded through the Water Research Foundation. We look forward to a valuable discussion with our various stakeholders and the Commission.

Pursuing Alternative Water Supplies

The SFPUC continues to aggressively pursue Alternative Water Supplies to address whatever shortfall may ultimately occur pending the outcome of negotiation and/or litigation. The most extreme degree of Regional Water System supply shortfall is modeled to be 93 million gallons per day under implementation of the Bay-Delta Plan amendments. We are actively pursuing more than a dozen projects, including recycled water for irrigation, purified water for potable use, increased reservoir storage and conveyance, brackish water desalination, and partnerships with other agencies, particularly the Turlock and Modesto Irrigation Districts. Our goal is to have a suite of alternative water supply projects ready for CEQA review by July 1, 2023.

In litigation with the State over the Bay-Delta Plan Amendments

On January 10, 2019, we joined in litigation against the State over the adoption of the Bay-Delta Water Quality Control Plan Amendments on substantive and procedural grounds. The lawsuit was necessary because there is a statute of limitations on CEQA cases of 30 days, and we needed to preserve our legal options in the event that we are unsuccessful in reaching a voluntary agreement for the Tuolumne River. Even then, potential settlement of this litigation is a possibility in the future.

In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

The State Water Board staff raised the stakes on these matters by issuing a Water Quality Certification for the Don Pedro FERC relicensing on January 15, 2021 that goes well beyond the Bay-Delta Plan amendments. The potential impact of the conditions included in the Certification appear to virtually double the water supply impact on our Regional Water System of the Bay-Delta Plan amendments. We requested that the State Water Board reconsider the Certification, including conducting hearings on it, but the State Water Board took no action. As a result, we were left with no choice but to once again file suit against the State. Again, the Certification includes a clause that it could be replaced by a Voluntary Agreement, but that is far from a certainty.

I hope this makes it clear that we are actively pursuing all options to resolve this difficult situation. We remain committed to creating benefits for the Tuolumne River while meeting our Water Supply Level of Service Goals and Objectives for our retail and wholesale customers.

cc.: SFPUC Commissioners
Nicole Sandkulla, CEO/General Manager, BAWSCA