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PALM SPRINGS
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RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 1, 2025

TO: Steven Martinez, Planner, City of Fresno

FROM: Kyle Simpson, Principal
Cara Cunningham, Associate

SUBJECT: California Environmental Quality Act (CEQA) Addendum for the 2740 West Nielsen Avenue Office/Warehouse Project Environmental Impact Report (EIR)

This Addendum has been prepared to evaluate the proposed revisions to the 2740 West Nielsen Office/Warehouse Project (Development Permit Application No. P21-02699 and Tentative Parcel Map Application No. P21-05930) proposed by Scannell Properties (Project Applicant). The revised proposed project, as revised by the Project Applicant's proposed modifications, is referred to herein as the "proposed project." The approximately 48.03-acre project site is located in the City of Fresno, on the northeast corner of the intersection of North Marks Avenue and West Nielsen Avenue (Assessor's Parcel Numbers [APNs] 458-020-71 and 458-020-72).

The 2740 West Nielsen Office/Warehouse Project EIR was certified by the City of Fresno on February 22, 2024[1] (certified EIR). This Addendum to the EIR evaluates whether the proposed minor modification to the proposed project would result in new or substantially more adverse significant effects or require new mitigation measures not identified in the certified EIR. Attachment A to this Addendum provides a complete description of the proposed project, its location, existing site characteristics, proposed development, and required approvals and entitlements. The City is the lead agency for the proposed project under the California Environmental Quality Act (CEQA). In accordance with CEQA Section 21093(b) and *State CEQA Guidelines* Section 15152(a), this Addendum tiers off the certified EIR, which is hereby incorporated by reference.

INTRODUCTION

The previously approved 2740 West Nielsen Office/Warehouse Project (approved project) included the construction of four office/warehouse buildings that would be configured for heavy industrial uses by tenants that have not been identified. The buildings would result in a total gross floor area of approximately 901,438 square feet. The four buildings would be comprised of the following: Building 1 would be 468,812 square feet and would provide 122 loading dock doors; Building 2 would be 248,786 square feet and would provide 46 loading dock doors; Building 3 would be 93,074 square feet and would provide 18 loading dock doors; and Building 4 would be 90,766 square feet and would provide 15 loading dock doors. The approved project would also subdivide the project site into four

[1] Fresno, City of. 2024. *2740 West Nielsen Avenue Office/Warehouse Project Environmental Impact Report.*

separate parcels and would consist of each building on a separate parcel. The approved project included a total of 594 on-site parking spaces that would be provided for vehicles and trucks. Of the 594 parking spaces, 385 spaces would be dedicated for standard vehicles, 11 spaces would be dedicated for accessible standard vehicles, and 10 spaces would be dedicated for accessible vans. The remaining 188 spaces would be dedicated for trailers and would be located along the eastern and western edges of the project site and would be located behind two 8-foot-tall gates, which would be installed to separate the general parking area from the truck storage and dock loading area.

The proposed project represents a modification of the site plan (Development Permit Application No. P25-00886). The proposed project includes a total of three office/warehouse buildings. Buildings 1 and 3 would remain the same as approved, and the only changes to Building 2 would be the reduction of loading dock doors from 46 dock doors to 17 dock doors. In lieu of Building 4, the proposed project would include an additional parking lot to be used by the tenant of Building 2, which would be approximately 4 acres in size and would consist of approximately 443 parking spaces.

A total of 821 on-site parking spaces would be provided for vehicles and trucks. Truck and trailer parking would be located along the eastern and western edges of the project site and would be located behind two 8-foot-tall gates, which would be installed to separate the general parking area from the truck storage and dock loading area. The proposed project would result in an increase in 483 parking spaces compared to the approved project.

This Addendum has been prepared pursuant to *State CEQA Guidelines* Section 15164 which states: "The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Section 15162 specifies that "no subsequent EIR shall be prepared for that project unless the lead agency determines … one or more of the following:"

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous EIR;

    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Pursuant to *State CEQA Guidelines* Section 15164(e), the purpose of this Addendum is to describe and evaluate the proposed project, assess the proposed modifications to the project evaluated in the certified EIR, and identify the reasons for the City's conclusion that changes introduced by the proposed project and associated environmental effects do not meet the conditions described in *State CEQA Guidelines* Section 15162 calling for the preparation of a subsequent or supplemental EIR.

Attachment A to this Addendum provides a complete description of the proposed project, its location, its existing site characteristics, and required approvals and entitlements.

Attachment B to this Addendum provides the Environmental Checklist prepared for the proposed project. This checklist provides information to: (1) compare the environmental impacts of the proposed project with impacts expected to result from development approved in the certified EIR; (2) demonstrate that the proposed project would not result in new or more severe significant environmental impacts, and; (3) identity if substantial changes with respect to the circumstances under which the proposed project would be undertaken would result in new or more severe significant environmental effects that were not identified when the EIR was certified.

COMPARISON TO THE CONDITIONS LISTED IN *STATE CEQA GUIDELINES* SECTIONS 15162 AND 15163

The following discussion summarizes the reasons that a subsequent or supplemental EIR, pursuant to *State CEQA Guidelines* Sections 15162 and 15163, is not required and an Addendum to the certified EIR is the appropriate CEQA document.

Substantial Changes

Per the analysis included in Attachment B, Environmental Checklist, the proposed project would not result in new significant impacts beyond those identified in the certified EIR, would not substantially increase the severity of impacts identified in the certified EIR, and would not require major revisions to the certified EIR. Therefore, the proposed changes to the project would be minor modifications, not substantial changes, and an Addendum is the appropriate document to address these minor modifications rather than a subsequent or supplemental EIR.

Substantial Changes in Circumstances

As described in the Environmental Checklist for each topic, environmental conditions in and around the project site have not changed such that implementation of the proposed project's minor modifications to the certified EIR would result in new significant environmental effects or a substantial

increase in the severity of environmental effects identified in the certified EIR, and thus would not require major revisions to the certified EIR.

New Information

No new information of substantial importance, which was not known or could not have been known when the EIR was certified, has been identified which shows that the proposed project's minor modifications to the certified EIR would be expected to result in: (1) new significant environmental effects not identified in the certified EIR; (2) substantially more severe environmental effects than shown in the certified EIR; (3) mitigation measures or alternatives previously determined to be infeasible would in fact be feasible and would substantially reduce one or more significant effects of the proposed project, but the City declines to adopt the mitigation measure or alternative; or (4) mitigation measures or alternatives which are considerably different from those analyzed in the certified EIR would substantially reduce one or more significant effects on the environment, but the City declines to adopt the mitigation measure or alternative. In addition, the proposed project's minor modifications would require no new mitigation measures, as described throughout the Environmental Checklist, because no new or substantially more severe impacts are expected beyond those identified in the certified EIR.

CONCLUSION

The proposed project's minor modifications described in this Addendum would not require major revisions to the certified EIR due to new or substantially increased significant environmental effects. The analysis contained in the Environmental Checklist confirms that the proposed project's minor modifications are within the scope of the certified EIR and would have no new or more severe significant effects and no new mitigation measures are required. Therefore, no subsequent or supplemental EIR or further CEQA review is required prior to approval of the proposed project, as described in this Addendum.

Attachments A: Project Description
B: Environmental Checklist

ATTACHMENT A

PROJECT DESCRIPTION

ATTACHMENT A
PROJECT DESCRIPTION

This Addendum has been prepared to evaluate the proposed revisions to the 2740 West Nielsen Office/Warehouse Project (Development Permit Application No. P21-02699 and Tentative Parcel Map Application No. P21-05930) proposed by Scannell Properties (Project Applicant). The revised proposed project (Development Permit Application No. P25-00886), as revised by the Project Applicant's proposed modifications, is referred to herein as the "proposed project."

This project description is part of the preparation of an Addendum to the 2740 West Nielsen Office/Warehouse Project Environmental Impact Report (EIR), which was certified by the City of Fresno in February 2024.[1] The City of Fresno (City) is the Lead Agency for review of the proposed project under the California Environmental Quality Act (CEQA). In addition to the description of the proposed project itself, this project description includes a summary description of the project's location, existing site characteristics, and a brief discussion of the previously approved 2740 West Nielsen Office/Warehouse Project (approved project).

PROJECT LOCATION

The following section describes the location and characteristics of the project site and provides a brief overview of the existing land uses within and in the vicinity of the project site.

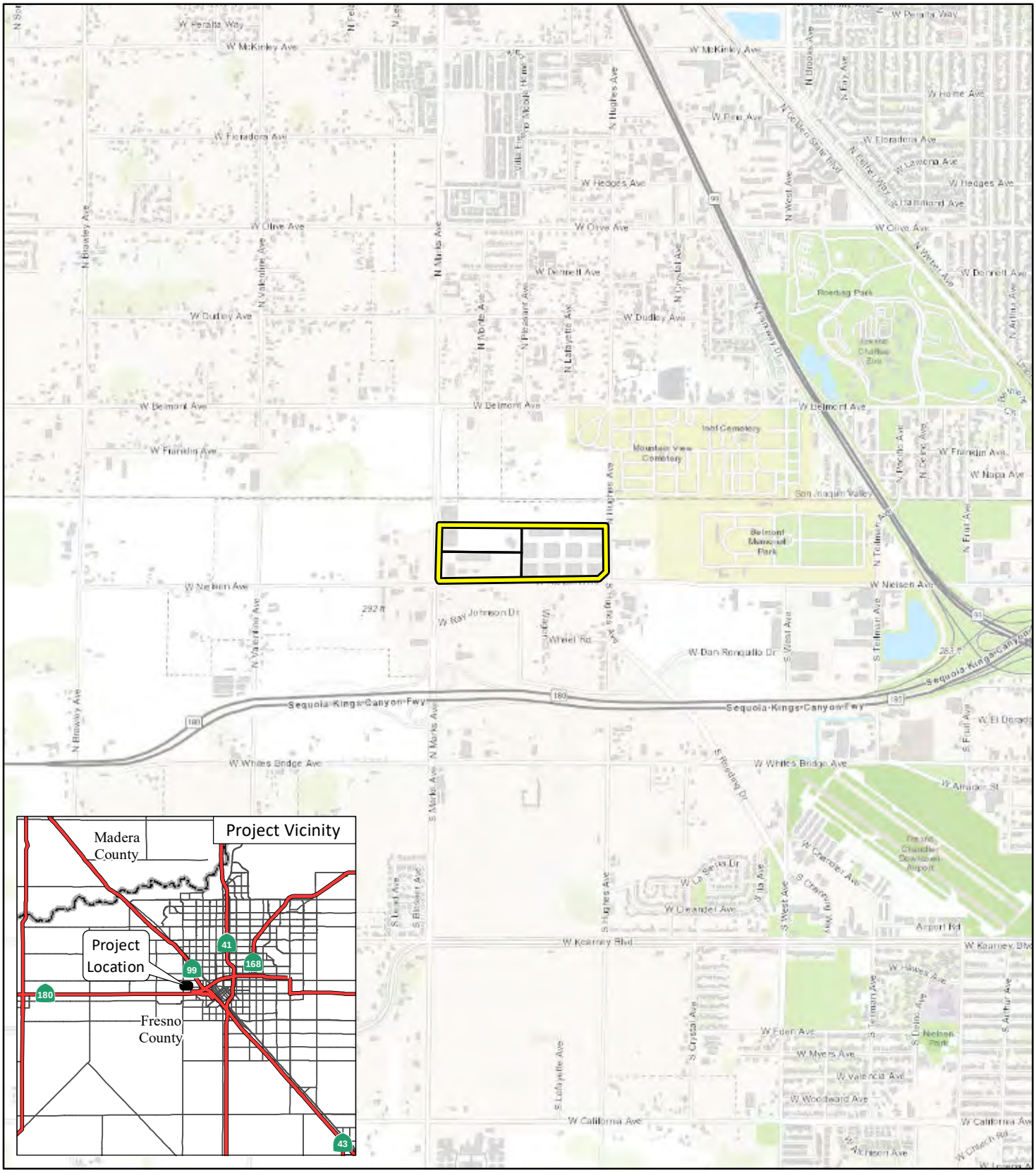
Regional Location and Access

The approximately 48.03-acre project site is located in the City of Fresno, on the northeast corner of the intersection of North Marks Avenue and West Nielsen Avenue (Assessor's Parcel Numbers [APNs] 458-020-71 and 458-020-72). The project site itself is generally bounded to the north by vacant, undeveloped land and industrial uses, to the east by North Hughes Avenue, to the south by West Nielsen Avenue, and to the west by North Marks Avenue. Figure 1 shows the project site's regional and local context.

Regional access to the site is provided by State Route 180 (SR-180), which is located approximately 0.3 mile south of the project site and traverses the City in an east-west direction, and State Route 99 (SR-99), which is located approximately 0.8 mile east of the project site and traverses the City in a north-south direction.

The City of Fresno is located in Fresno County in the central San Joaquin Valley. The City is located approximately 200 miles north of Los Angeles, and 170 miles south of Sacramento. To the north of Fresno is Madera County; to the northeast and adjacent to Fresno, is the City of Clovis. Unincorporated land is located to the east, south, and west of Fresno. The Fresno Chandler Executive Airport is located approximately 0.8 mile from the project site, the Sierra Sky Airport is located approximately 6.7 miles from the project site, and the Fresno International Airport is located approximately 7.1 miles from the project site.

[1] Fresno, City of. 2024. *2740 West Nielsen Avenue Office/Warehouse Project Environmental Impact Report.*



LSA

LEGEND

Project Location

Proposed Parcels

FIGURE 1

N

0 1000 2000

FEET

2740 West Nielsen Avenue Office/Warehouse Project

Regional Project Location

SOURCE: Esri Topographic Map (2023)

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Fresno Area Express (FAX) is the Transportation Service Agency within the City and is responsible for coordinating transit services within its service area. FAX provides services via Route 1/Q (Bus Rapid Transit) as well as 17 other routes throughout the City, and four routes for Clovis Transit. There are currently no transit routes present within the project area.

Site Characteristics and Existing Site Conditions

The project site is zoned within the Heavy Industrial District (IH). The IH district allows for manufacturing, assembly, wholesaling, distribution, and storage activities that are essential to the development of a balanced economic base. Small-scale commercial services and ancillary office uses are also permitted. The Heavy Industrial (IH) zoning districts are intended to accommodate the broadest range of industrial uses on sites identified in the General Plan.

The project site is designated Heavy Industrial in the City of Fresno General Plan. This land use is intended to accommodate the broadest range of industrial uses including manufacturing, assembly, wholesaling, distribution, and storage activities that are essential to the development of a balanced economic base. Small-scale commercial services and ancillary office uses are also permitted. The maximum floor area ratio (FAR) is 1.5.

Surrounding Land Uses

The project site is surrounded by low density residential, light and heavy industrial, and cemetery uses, as well as vacant, undeveloped land, as indicated in Table A. Figure 2 shows the project site and surrounding land uses.

Table A: Surrounding Land Uses and Setting

	Planned Land Use	Existing Zoning	Existing Land Use
North	Heavy Industrial	Heavy Industrial (IH)	Heavy Industrial
East	Light Industrial	Light Industrial (IH) / Public and Institutional (PI)	Light Industrial / Public Facilities
South	Highway & Auto/ Business Park	Commercial Highway & Auto (CH) / Business Park (BP)	Highway & Auto / Business Park
West	Light Industrial	Light Industrial (IH)	Light Industrial

Source: Compiled by LSA (September 2022).

As indicated in Table A above, the areas adjacent to the project site include the following uses:

- **North:** Existing vacant, undeveloped land and industrial uses;
- **East:** Cemetery and industrial uses opposite North Hughes Avenue;
- **South:** Existing single-family residential and industrial uses and vacant, undeveloped land opposite West Nielsen Avenue; and
- **West:** Existing industrial uses opposite North Marks Avenue.

LSA

FIGURE 2

Project Site

Proposed Parcels

N

0 500 1000

FEET

2740 West Nielsen Office/Warehouse Project

Aerial Photograph of Project Site and Surrounding Land Uses

SOURCES: Google Earth, 9/9/2019; LSA 2021

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PROJECT OBJECTIVES

The objectives of the proposed project are to:

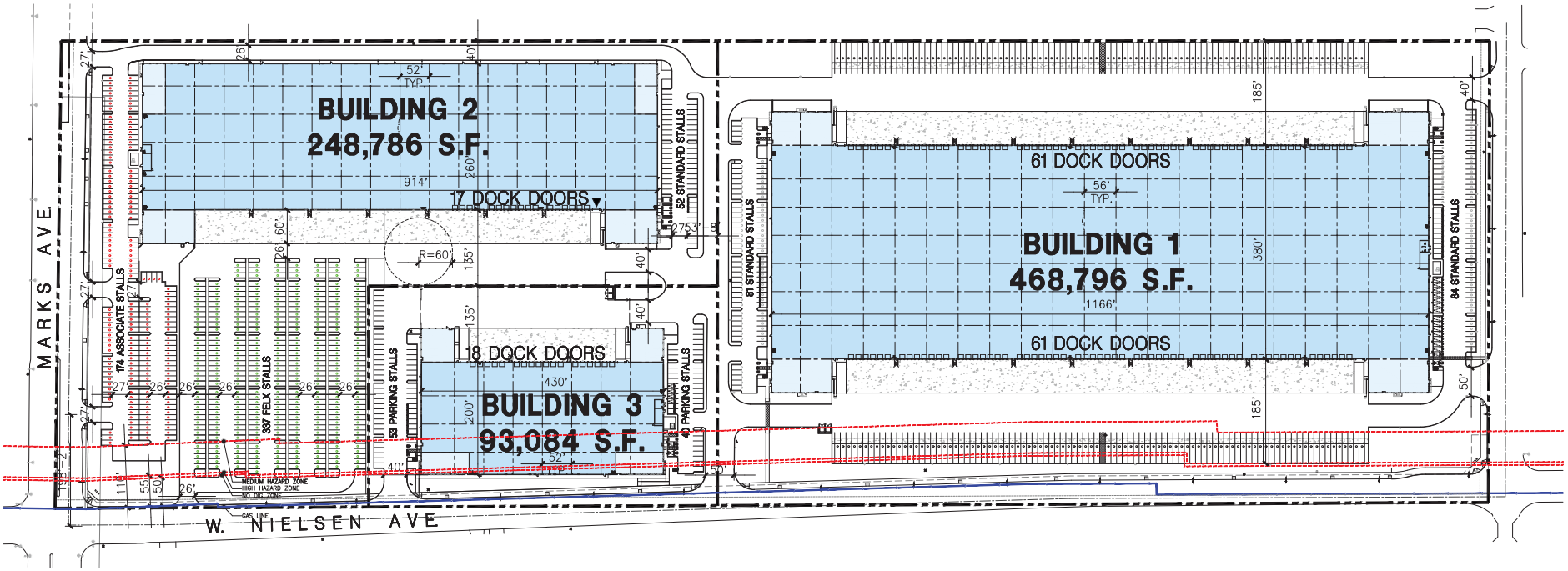
- Provide industrial warehousing consistent with the General Plan land use and zoning designation and that helps fulfil the unmet demands of businesses located in the City;
- Provide a variety of new employment opportunities for the residents of Fresno and surrounding communities;
- Provide new industrial development that is attractive and minimizes conflicts with the surrounding existing uses; and
- Promote sustainable development and operations.

PROJECT BACKGROUND

The previously approved 2740 West Nielsen Office/Warehouse Project (approved project) included the construction of four office/warehouse buildings that would be configured for heavy industrial uses by tenants that have not been identified. The buildings would result in a total gross floor area of approximately 901,438 square feet. The buildings' exterior would be up to 44 feet high with an interior height of up to 36 feet and designed with a total of 201 loading dock doors on the north and south sides of the buildings. The four buildings would be comprised of the following: Building 1 would be 468,812 square feet and would provide 122 loading dock doors; Building 2 would be 248,786 square feet and would provide 46 loading dock doors; Building 3 would be 93,074 square feet and would provide 18 loading dock doors; and Building 4 would be 90,766 square feet and would provide 15 loading dock doors. The approved project would also subdivide the project site into four separate parcels and would consist of each building on a separate parcel. The approved project included a total of 594 on-site parking spaces would be provided for vehicles and trucks. Of the 594 parking spaces, 385 spaces would be dedicated for standard vehicles, 11 spaces would be dedicated for accessible standard vehicles, and 10 spaces would be dedicated for accessible vans. The remaining 188 spaces would be dedicated for trailers and would be located along the eastern and western edges of the project site and would be located behind two 8-foot-tall gates, which would be installed to separate the general parking area from the truck storage and dock loading area.

PROPOSED PROJECT

The proposed project includes a total of three office/warehouse buildings. Buildings 1 and 3 would remain the same as approved and the only changes to Building 2 would be the reduction of loading dock doors from 46 dock doors to 17 dock doors. In lieu of Building 4, the proposed project would include an additional parking lot to be used by the tenant of Building 2, which would be approximately 4 acres in size and would consist of approximately 443 parking spaces. Figure 3 shows the project site plan.



Legend

- POTENTIAL OFFICE
- WAREHOUSE
- DRIVE THRU DOOR

LSA

FIGURE 3

0 160 320

FEET

SOURCE: HPA Architecture, Inc., 2024

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2740 West Nielsen Avenue Office/Warehouse Project

Site Plan

Project Description

The project would result in the construction of three office/warehouse buildings that would be configured for heavy industrial uses. The proposed buildings would result in a total gross floor area of approximately 810,666 square feet. The buildings' exterior would be up to 44 feet high with an interior height of up to 36 feet and designed with a total of 157 loading dock doors on the northern and southern sides of the buildings. The three buildings would be comprised of the following: Building 1 would be 468,796 square feet and would provide 122 loading dock doors; Building 2 would be 248,786 square feet and would provide 17 loading dock doors; and Building 3 would be 93,084 square feet and would provide 18 loading dock doors. The proposed project would also subdivide the project site into three separate parcels and would consist of each proposed building on a separate parcel. Figure 3 shows the project site plan.

This analysis conservatively assumes that the proposed project would be operational 24 hours per day, 7 days per week; however, it is possible that future tenants may operate fewer hours.

The proposed project would comply with the latest California Green Building Standards Code (CALGreen) building measures and 2022 Title 24 Building Energy Efficiency Standards (Title 24 Standards). The proposed project would also include cool roof materials.

Access, Circulation, and Parking

As shown in Figure 3, vehicular access to the site would be provided by North Hughes Avenue, West Nielsen Avenue, and North Marks Avenue.

A total of 821 on-site parking spaces would be provided for vehicles and trucks. Truck and trailer parking would be located along the eastern and western edges of the project site and would be located behind two 8-foot-tall gates, which would be installed to separate the general parking area from the truck storage and dock loading area.

Open Space and Landscaping

Consistent with City requirements, landscaping would be provided throughout the project site. The project would also include a vegetative plan that would include the planting of trees and other landscaping materials throughout the perimeter of the project site.

Utilities and Infrastructure

The project site is located in an urban area and is currently served by existing utilities, including: water, sanitary sewer, storm drainage, electricity, and natural gas infrastructure. Proposed utility connections are discussed below.

Water

Water service to the project site would be provided by the City. New water within the project site would connect to the existing 14-inch main located on North Marks Avenue, the 14-inch main on West Nielsen Avenue, and the 16-inch main on North Hughes Avenue. The project would also include an on-site private 12-inch main.

Wastewater

The City would provide wastewater collection and treatment for the proposed project, and maintains an existing 12- to 18-inch line located in West Nielsen Avenue, a 36-inch main on North Marks Avenue, and an 8-inch main located on North Hughes Avenue. The proposed project includes the installation of a new on-site private 8-inch wastewater line that would connect to the City's existing lines.

Stormwater

The proposed project would include construction of a new curb and gutter along North Marks Avenue, West Nielsen Avenue, and North Hughes Avenue that would connect to the existing Fresno Metropolitan Flood Control District (FMFCD) stormwater system.

Solid Waste

Solid waste collection for the project site would be provided by the City of Fresno through the Department of Public Utilities (DPU) Solid Waste and Recycling Division.

Electricity, Natural Gas, and Telecommunication

Electricity and natural gas services to the site are provided by Pacific Gas and Electric Company (PG&E). Existing underground utility connections and gas mains provide electricity and gas to the project site. New underground electrical lines would be installed. Telecommunication services to the project site would be provided by Comcast and AT&T.

Grading and Construction

The proposed project would include demolition of the existing asphalt on the project site, which would be collected and hauled off site for disposal. Construction of the proposed project is anticipated to take place in two phases occurring over a total 24-month period starting in the second quarter of 2025 and ending in 2027. The first phase would include the construction of Buildings 2 and 3 and would occur for 12 months. The second phase would include the construction of Building 1 and would occur for 12 months. The proposed project would not require any soil import or export.

APPROVALS/PERMITS

While the City is the CEQA Lead Agency for the project, other agencies also have discretionary authority related to the project and approvals, or serve as a responsible and/or trustee agency in connection to the project. A list of these agencies and potential permits and approvals that may be required is provided below:

- City of Fresno, Certification of an Addendum
- City of Fresno, Design Review
- City of Fresno, Tentative Parcel Map
- City of Fresno, water connection(s)

- City of Fresno, sanitary sewer connection(s)
- Pacific Gas & Electric (PG&E), electrical and natural gas connection(s)
- Central Valley Regional Water Quality Control Board (RWQCB) Storm Water Pollution Prevention Plan
- San Joaquin Valley Air Pollution Control District (SJVAPCD) (e.g., Dust Control Plan Approval letter and compliance with Rule 9510 – Indirect Source Review)

ATTACHMENT B

ENVIRONMENTAL CHECKLIST

ATTACHMENT B
ENVIRONMENTAL CHECKLIST
PURSUANT TO *STATE CEQA GUIDELINES* SECTION 15164

Pursuant to *State CEQA Guidelines* 15164(e), this checklist was prepared to confirm that the proposed amendments to the 2740 West Nielsen Office/Warehouse Project (proposed project) described in Attachment A are within the scope of the previously certified Environmental Impact Report (EIR), which was certified by the City of Fresno (City) in February 2024.[1] The proposed project would not result in new or substantially more severe significant effects, and no new mitigation measures are required for the proposed project.

In accordance with CEQA Section 21093(b) and *State CEQA Guidelines* Section 15152(a), this Addendum tiers off the certified EIR, which is hereby incorporated by reference.

This environmental checklist is used to: (1) compare the environmental impacts of the proposed project with impacts expected to result from development previously approved and evaluated in the certified EIR; (2) identify whether the proposed project would result in new or more severe significant environmental impacts; (3) identify if new or revised mitigation measures would be required by the project applicant; and (4) identity if substantial changes with respect to the circumstances under which the project would be undertaken since the previous EIR was certified would result in new or more severe significant environmental effects.

In summary, no new or more severe significant impacts were identified for the proposed project that were not identified and mitigated in the certified EIR, and no new mitigation measures would be required for the proposed project. For all environmental topics addressed in the following checklist, there have been no substantial changes in environmental circumstances that would result in new or more severe significant environmental effects than were identified and evaluated in the certified EIR. Therefore, no subsequent EIR or CEQA evaluation is required for the 2740 West Nielsen Office/ Warehouse Project.

[1] Fresno, City of. 2024. *2740 West Nielsen Avenue Office/Warehouse Project Environmental Impact Report.*

1. AESTHETICS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Discussion

Scenic Vistas

As discussed in the certified EIR, a scenic vista is generally defined as a public vantage point with an expansive view of a significant landscape feature. An impact on scenic vistas is considered significant if it substantially diminishes, blocks, or impedes an expansive view of a significant landscape feature from a public vantage point. Although the General Plan identifies six locations as publicly valued scenic features along the San Joaquin River bluffs, the river bluffs are not visible from the project site due to the flat topography of the City and the distance, approximately 8 miles, between the project site and the river bluffs. Additionally, there are several locations throughout the eastern portion of the city that provide distant views of the Sierra Nevada foothills. The project site is located in a partially developed area of the city and is not located in an area with expansive or far field views. There are no significant trees, rock outcroppings, and/or historic buildings located on or adjacent to the project site that have been identified as important scenic resources or that would otherwise constitute significant landscape features. Therefore, the proposed project would not substantially diminish any scenic vistas within or near the project area and would likewise not substantially block or impede surrounding views. Therefore, impacts associated with the proposed project would not result in new impacts to scenic vistas or substantially increase the severity of impacts identified in the certified EIR.

Scenic Resources

As discussed in the certified EIR, according to Caltrans mapping of State Scenic Highways,[2] the County of Fresno has one officially designated State Scenic Highway located along State Route 180 (SR-180), east of the City of Fresno. Three eligible State Scenic Highways are also located within the County of

[2] California Department of Transportation (Caltrans). n.d. State Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed on September 1, 2022).

Fresno, the nearest of which is located along State Route 168 (SR-168) east of the City of Clovis. None of these are in the immediate vicinity of the project site. Since there are no eligible or officially designated State Scenic Highways within the immediate vicinity of the project site, the project would not impact a designated State Scenic Highway. Furthermore, the eligibility of the three State Scenic Highways, scenic resources located within the highway segments or its viewshed would not be impacted by the proposed project. Therefore, no impact on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway would occur as a result of the proposed project. Therefore, impacts associated with the proposed project would not result in new impacts to scenic resources or substantially increase the severity of impacts identified in the certified EIR.

Visual Character

The certified EIR determined that the project site is located in a primarily urbanized area surrounded by existing developed uses and is generally level with no existing structures and is disturbed. Nearby parcels consist mostly of low-density residential, light and heavy industrial, cemetery, and vacant, undeveloped uses. Surrounding buildings generally consist of one-story, ranch single-family residences and low rise, primarily one- to two-story industrial buildings. The proposed project would include three office/warehouse buildings. Although the proposed project would change the visual characteristics of the project site by developing the site with industrial buildings, the design of the project would be consistent with the visual character within the project area. Additionally, the proposed project would not require a change of the project site's current General Plan land use designation or current zoning and would be consistent with the City's General Plan and Zoning Ordinance. As such, the proposed project would not conflict with any applicable zoning or other regulations governing scenic quality. Therefore, the proposed project would not degrade the visual character of the project site or result in a potential impact to the visual character or quality of public views of the site or the surroundings that would be more severe than the impacts identified in the certified EIR.

Light and Glare

As discussed in the certified EIR, the project site is located in a primarily urbanized area, which is subject to preexisting exterior lighting from surrounding development and existing street lighting. Construction of the proposed project would include temporary light and glare resulting from construction activities that could adversely affect day or nighttime views. Sources of construction-related light and glare include usage of construction vehicles and equipment; however, construction activities are anticipated to occur primarily during daylight hours and once construction is completed, light and glare from these activities would cease to occur.

Additionally, the certified EIR found that the approved project would increase the amount of nighttime light and glare in the City. Consistent with the findings of the certified EIR, all exterior lighting at the project site would be pointed downward toward the project site to minimize lighting levels at nearby uses. In addition, the proposed project would be required to comply with Article 25, Performance Standards, of the Zoning Ordinance, which includes standards related to lighting and glare. Further, Mitigation Measures AES-1 through AES-3 identified in the certified EIR would ensure that the proposed project's lighting systems do not create a substantial new source of light by requiring shielding mechanisms to direct light away from nearby uses. As a result, any new sources of

light resulting from the proposed project would not be substantial in the context of existing lighting sources. Implementation of Mitigation Measure AES-4 identified in the certified EIR would ensure that the proposed project's lighting systems do not create a substantial new source of light by imposing a cap on the intensity of lighting systems based on the average intensity of the surrounding streets. Additionally, while the project does not propose the use of highly reflective glass elements or building materials, Mitigation Measure AES-5 as identified in the certified EIR requires materials used on building façades to be non-reflective. Therefore, any new source of glare would not be substantial. With implementation of Mitigation Measures AES-1 through AES-5, the proposed project would not create impacts related to light and glare more severe than impacts identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measures AES-1 through AES-5 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the aesthetic impacts of the proposed project. Therefore, there would be no new impacts related to aesthetics associated with the proposed project, and additional mitigation is not required.

2. AGRICULTURE AND FORESTRY RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

As discussed in the certified EIR, the project site is located within an urbanized area of Fresno. There are no agricultural uses located within or adjacent to the project site. Additionally, the site is classified as "Urban and Built-Up Land" by the State Department of Conservation.[3] Therefore, development of the proposed project would not convert agricultural land to a non-agricultural use. The proposed project would result in no impact to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. Additionally, the project site is not subject to a Williamson Act contract. Therefore, development of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. As such, the proposed project would have no impacts on agriculture or forestry resources. Therefore, the proposed project would not result in new impacts to agricultural and forestry resources or substantially increase the severity of impacts identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

[3] Department of Conservation. n.d. Farmland Mapping & Monitoring Program. Website: https://www.conservation.ca.gov/dlrp/fmmp (accessed June 2021).

Conclusion

The certified EIR adequately evaluated the agriculture and forestry resources impacts of the proposed project. Therefore, there would be no new impacts related to agricultural and forestry resources associated with the proposed project, and additional mitigation is not required.

3. AIR QUALITY

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Discussion

The City of Fresno is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State of California (State) and the federal government have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter ($PM_{2.5}$ and PM_{10}). The SJVAB is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the U.S. Environmental Protection Agency (USEPA) to identify regions as “attainment” or “nonattainment” depending on whether the regions meet the requirements stated in the applicable National Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The SJVAB attainment statuses for each of the criteria pollutants are listed in Table 3.A.

Table 3.A: SJVAB Air Quality Attainment Status

Pollutant	State	Federal
Ozone (1-hour)	Severe/Nonattainment	Standard Revoked
Ozone (8-hour)	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	No Federal Regulation
Hydrogen Sulfide	Unclassified	No Federal Regulation

Source: San Joaquin Valley Air Pollution Control District (2016).
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SJVAB = San Joaquin Valley Air Basin

Clean Air Plan Consistency

As discussed in the certified EIR, an air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the 2016 Plan for the 2008 8-hour ozone standard in June 2016 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.[4]

To assure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007.[5] The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ standards in November 2018 to address the USEPA 1997 annual $PM_{2.5}$ standard of 15 µg/m^3 and 24-hour $PM_{2.5}$ standard of 65 µg/m^3, the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m^3, and the 2012 annual $PM_{2.5}$ standard of 12 µg/m^3.[6]

As discussed in the certified EIR, CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan as it relates to a region's non-attainment status. An air quality plan describes air pollution control strategies to be implemented in a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. As discussed above, the SJVAB is designated as non-

4 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: https://ww2.valleyair.org/rules-and-planning/air-quality-plans/ozone-plans/2016-plan-for-the-2008-8-hour-ozone-standard/ (accessed December 2024).

5 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2007. *2007 PM_{10} Maintenance Plan and Request for Redesignation*. Website: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed December 2024).

6 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2018. *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*. November 15. Website: valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed December 2024).

attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. As discussed in the certified EIR, for a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. Thus, the certified EIR found that implementation of the previously analyzed project would not conflict with or obstruct implementation of the applicable air quality plan would be less than significant with implementation of Mitigation Measure AIR-1. Mitigation Measure AIR-1 as identified in the certified EIR requires the implementation of measures required under SJVAPCD's Regulation VIII to further reduce construction dust impacts.

As demonstrated below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance, consistent with the findings of the certified EIR. Consistent with the certified EIR, Mitigation Measure AIR-1 would further reduce construction dust impacts. As shown later in the operation emissions table, long-term operational emissions associated with the proposed project would also not exceed SJVAPCD established significance thresholds. Therefore, impacts related to the proposed project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, the proposed project would not result in new or more significant impacts related to clean air consistency than were identified in the certified EIR.

Criteria Pollutant Analysis

Short-Term Construction Emissions. The certified EIR identified that during construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), nitrous oxides (NO_x), reactive organic gases (ROG), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

The certified EIR found that with implementation of Mitigation Measure AIR-1, construction of the approved project would result in a less than significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard.

As with the approved project, the proposed project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed,

and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

As discussed in the certified EIR, water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has implemented Regulation VIII measures for reducing fugitive dust emissions (PM_{10}). Regulation VIII is a series of rules designed to reduce fugitive dust from construction sites, parking and staging areas, open areas, material storage areas, etc. No permits are required by Regulation VIII, but failure to comply can result in fines and penalties. The SJVAPCD provides a synopsis describing requirements and exemptions from Regulation VIII when commenting on proposed projects. In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROG, and some soot particulates ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Consistent with the analysis prepared in the certified EIR, construction emissions for the proposed project were analyzed using the California Emissions Estimator Model (CalEEMod) version 2022.1. Construction of the proposed project is anticipated to occur in two phases occurring over a total 24-month period starting in the second quarter of 2025 and ending in 2027. To be conservative, this analysis assumes that construction phases would occur simultaneously. The proposed project would include demolition of the existing asphalt on the project site, which would be collected and hauled off site for disposal. The proposed project would not require any soil import or export, which was included in CalEEMod. In addition, this analysis assumes that the proposed project would be constructed using Tier 2 construction equipment, which was included in CalEEMod. Other precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction worker and truck trips and construction fleet activities) from CalEEMod were used. Construction-related emissions are presented in Table 3.B. CalEEMod output sheets are included in Appendix A.

Table 3.B: Project Construction Emissions (Tons Per Year)

Project Construction	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
2025	0.1	2.7	2.4	<0.1	0.8	0.4
2026	1.1	3.2	3.9	<0.1	0.6	0.2
2027	1.2	1.4	1.6	<0.1	0.2	0.1
Maximum Annual Construction Emissions	**1.2**	**3.2**	**3.9**	**<0.1**	**0.8**	**0.4**
SJVAPCD Thresholds	**10.0**	**10.0**	**100.0**	**27.0**	**15.0**	**15.0**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (February 2025).

CO = carbon monoxide
NO_X = nitrous oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_2 = sulfur dioxide

As shown in Table 3.B, construction emissions for the proposed project would not exceed the SJVAPCD annual threshold for construction emissions. Consistent with the findings of the certified EIR, the proposed project would require the implementation of the fugitive dust control measures outlined in Mitigation Measure AIR-1 as identified in the certified EIR, which would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts. Therefore, with implementation of Mitigation Measure AIR-1, construction of the proposed project would result in a less than significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. As a result, the proposed project would not result in new or more severe construction-related air quality impacts than were identified in the certified EIR.

Long-Term Operational Emissions. According to the findings of the EIR, long-term air pollutant emission impacts associated with the previously analyzed project would be those related to (1) mobile sources (e.g., vehicle trips), (2) energy sources (e.g., electricity and natural gas), and (3) area sources (e.g., architectural coatings, consumer products, and the use of landscape maintenance equipment). The certified EIR found that operation of the approved project would not generate air pollutant emissions that exceed SJVAPCD's regional significance thresholds for ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ and would result in a less than significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in nonattainment under an applicable federal or State ambient air quality standard.

As with the previously analyzed project, long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources.

Mobile source emissions include ROG and NO_X emissions that contribute to the formation of O_3. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. The proposed project would result in the construction of three office/warehouse buildings. The proposed buildings would result in a total gross floor area of approximately 810,666 square feet and a total of 821 parking spaces. Therefore, the proposed project analysis was conducted using the land use codes *Unrefrigerated Warehouse-No-Rail and Parking Lot.* Trip generation rates and vehicle fleet mix used in CalEEMod for the project were based on the project's trip generation estimate, as identified in Section 17, Transportation, of this Addendum. As discussed in Section 17, the proposed project would generate approximately 2,229 daily trips, including 274 two-axle-to-three-axle truck trips and 418 four-axle truck trips. When project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions. Model results are shown in Table 3.C.

The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the project, emissions are released in other areas of the SJVAB. The annual emissions associated with project operational trip generation, energy, and area sources are identified in Table 3.C for ROG, NO_X, CO, SO_x, PM_{10}, and $PM_{2.5}$. CalEEMod output sheets are included in Appendix A.

Table 3.C: Project Operation Emissions (Tons Per Year)

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	1.0	5.2	8.8	<0.1	3.0	0.8
Area Sources	3.9	<0.1	3.2	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.2	0.2	<0.1	<0.1	<0.1
Total Project Operation Emissions	**4.9**	**5.4**	**14.3**	**0.1**	**5.2**	**1.5**
SJVAPCD Significance Threshold	**10.0**	**10.0**	**100.0**	**27.0**	**15.0**	**15.0**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (February 2025).
Note: Some values may not appear to add up correctly due to rounding.
CO = carbon monoxide
NO_X = nitrous oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxide

The results shown in Table 3.C indicate the proposed project's operational emissions would not exceed the significance criteria for annual ROG, NO_X, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions. Therefore, consistent with the findings of the certified EIR, operation of the proposed project would result in a less than significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. Therefore, the proposed project would not result in any new or more severe impacts related to operational air quality than were identified in the certified EIR.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The closest sensitive receptors include the single-family residences located approximately 110 feet south of the project site across West Nielsen Avenue.

As discussed in the certified EIR, a Health Risk Assessment (HRA), was performed for the previously analyzed project to evaluate health risk to off-site receptors. The certified EIR found that during construction of the approved project, the cancer risk at the residential maximally exposed individual (MEI) would be 41.59 in one million, which would exceed the SJVAPCD cancer risk threshold of 20 in one million. Therefore, the certified EIR determined that implementation of Mitigation Measure AIR-2 was required to reduce substantial pollutant concentrations during project construction by requiring the use of Tier 4 construction equipment. As identified in the certified EIR, the mitigated cancer risk at the sensitive receptor MEI would be 4.33 in one million, which would not exceed the SJVAPCD cancer risk of 20 in one million. As such, with implementation of Mitigation Measure AIR-2, the certified EIR found that the approved project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations during construction.

Additionally, the certified EIR found that the health risk levels to nearby residents from operation-related emissions of TACs associated with the approved project would be 6.154 in one million, which

is below the SJVAPCD's cancer risk threshold of 20 in one million. However, as described in the certified EIR, the project site has a pollution burden percentile of 97 and is designated as a Senate Bill (SB) 535 disadvantaged community. Therefore, to reduce the cumulative health risk, implementation of Mitigation Measure AIR-3 would be required. Mitigation Measure AIR-3 requires the Project Applicant to ensure that the project would provide the infrastructure for AC and/or DC chargers for electric heavy-duty trucks, which would further reduce TAC emissions. The infrastructure provided shall accommodate a minimum of one future charger per 50,000 square feet. With implementation of Mitigation Measure AIR-3, cumulative health risk impacts would be less than significant related to the exposure of sensitive receptors to substantial pollutant concentrations during operation of the previously analyzed project.

Similar to the approved, an HRA was performed to evaluate impacts associated with the proposed project. The sections below describe the potential impact on sensitive receptors from construction and operation of the proposed project. Results are based on the updated HRA prepared for the proposed project, included in Appendix B.[7]

Project Construction. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including diesel particulate matter), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the California Air Resources Board's (CARB) exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

Table 3.D, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment (the minimum required under current standards), at the maximally exposed individual (MEI), which is the nearest sensitive receptor. Model snapshots of the sources are shown in Appendix B of this EIR.

Table 3.D: Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	14.22	0.011	0.000
Worker Receptor Risk	1.20	0.042	0.000
Threshold	**20.0**	**1.0**	**1.0**
Exceed?	**No**	**No**	**No**

Source: Compiled by LSA (February 2025).
$\mu g/m^3$ = micrograms per cubic meter
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

[7] LSA Associates, Inc. (LSA). 2025a. *Health Risk Assessment for the 2740 West Nielsen Avenue Office/ Warehouse Project*. January 30.

As shown in Table 3.D, the maximum cancer risk for the sensitive receptor MEI would be 14.22 in 1 million and the worker MEI would be lower, at 1.20 in 1 million, which would not exceed the threshold. The total chronic hazard index would be 0.011 for the sensitive MEI and 0.042 for the worker MEI, which would both be below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, consistent with the findings of the certified EIR, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations. As mentioned above, the certified EIR found that Mitigation Measure AIR-2 would be required under the approved project to reduce impacts to substantial pollutant concentrations during project construction by requiring the use of Tier 4 construction equipment. As with the approved project, impacts associated with the proposed project would be below thresholds with the use of Tier 2 construction equipment. Since the proposed project would not exceed the SJVAPCD threshold, implementation of Mitigation Measure AIR-2 would not be required. Therefore, construction of the proposed project would not result in any new or more significant operational air quality impacts beyond those identified in the EIR.

Project Operations. To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, the operational HRA was updated for the proposed project (Appendix B). This HRA has been conducted using three models: (1) EMFAC2021 for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the USEPA AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The carcinogenic and chronic health risks from the proposed project are shown in Table 3.E. The residential risk incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 70 years (considered a conservative period of time for an individual to live in any one residence).

Table 3.E: Health Risks Levels from Project Operation to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	16.12	0.004	<0.001
Worker Receptor Risk	1.74	0.004	<0.001
Threshold	**20**	**1.00**	**1.0**
Exceed?	**No**	**No**	**No**

Source: Compiled by LSA (February 2025).
$\mu g/m^3$ = micrograms per cubic meter
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

As shown in Table 3.E, the maximum cancer risk for the sensitive MEI would be 16.12 in one million, less than the threshold of 20 in one million. The worker receptor risk would be lower at 1.74 in one

million. The total chronic hazard index would be 0.004 for both the worker MEI and the sensitive MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0. Although the proposed project cancer risk would be higher from what was identified in the EIR, as these results show, health risk levels to nearby residents from operation-related emissions of TACs would be below the SJVAPCD's HRA thresholds. Therefore, this would not be a substantial increase in health risk from what was identified in the certified EIR, and no significant health risk would occur from project operational emissions.

As discussed in the certified EIR, CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Pollution Burden scores for each census tract are derived from the average percentiles of the seven exposures indicators (ozone and $PM_{2.5}$ concentrations, diesel PM emissions, drinking water contaminants, pesticide use, toxic releases from facilities, and traffic density) and the five Environmental Effects indicators (cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities). According to the CalEnviroScreen 4.0 Map,[8] the project site has a pollution burden percentile of 97. Surrounding areas have pollution burdens ranging from 56 to 100.0. In addition, according to the SB 535 Disadvantaged Communities Map,[9] the project area is designated as an SB 535 disadvantaged community. Based on the CalEnviroScreen results, the project area is already at an elevated risk level. Therefore, although the maximum cancer risk for the MEI would be 16.12 in one million is less than the project risk criteria, any additional risk increase is cumulatively potentially significant. Therefore, similar to the approved project, implementation of Mitigation Measure AIR-3 would be required to reduce the cumulative health risk for the proposed project. With Mitigation Measure AIR-3, cumulative health risk impacts would be less than significant related to the exposure of sensitive receptors to substantial pollutant concentrations during project operation. Therefore, operational impacts associated with implementation of the proposed project would not result in any new or more significant health risk impacts beyond those identified in the certified EIR.

Objectionable Odors

The certified EIR found that the previously analyzed project would not result in odors that would adversely affect a substantial number of people during construction and operation.

As with the approved project, during construction of the proposed project, the various diesel-powered vehicles and equipment in use on site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. In addition, odors would be regulated under SJVAPCD Regulation IV, Prohibitions, Rule 4102, Nuisance. Because the proposed project's potential construction-related odor impacts are localized and temporary, they would not adversely affect a substantial number of people. Therefore, as with the

[8] Office of Environmental Health Hazard Assessment (OEHHA). 2021. *CalEnviroScreen 4.0.* Website: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40 (accessed May 2021).

[9] Office of Environmental Health Hazard Assessment (OEHHA). 2022. *SB 535 Disadvantaged Communities using CalEnviroScreen 4.0 results.* Website: https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/.pdf (accessed October 2022).

approved project, the proposed project's potential construction-related odor impacts would be less than significant.

Once operational, the proposed project would include truck activity, which could result in diesel odor impacts. Idling of trucks would be limited by the CARB's In-Use Off-Road Diesel Vehicles regulation, which limits idling to 5 minutes or less. Minimizing idling time would reduce odors, as unburned fuel and products of combustion from some engines condense in the exhaust, particularly during warmup or shortly after engine startup, resulting in more intense odors.[10] Therefore, the proposed project would result in a less than significant impact related to other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, the proposed project would not result in new or more severe impacts related to odors than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measures AIR-1 and AIR-3 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The EIR adequately evaluated the air quality impacts of the proposed project. Therefore, there would be no new impacts related to air quality associated with the proposed project, and additional mitigation is not required.

[10] United States Environmental Protection Agency (USEPA). 1971. *Guide to Reduction of Smoke and Odor from Diesel-Powered Vehicles*. September. Website: https://nepis.epa.gov/Exe/ZyPDF.cgi/9100JLQ0.PDF?Dockey=9100JLQ0.PDF (accessed April 2022).

4. BIOLOGICAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
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 Wildlife 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 Wildlife 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?	☐	☐	☐	☒

Discussion

Candidate, Sensitive, or Special-Status Species

As discussed in the certified EIR, the Fresno region supports various special-status natural communities, plants, and animals. The certified EIR found that ten special-status vascular plant species are known to occur in the region. However, no special-status plants exist within the project site or in adjacent parcels. The project site does not contain suitable habitat and is situated outside of the species' known distribution. Therefore, as the project site does not contain any special-status plants, special-status plants would not be impacted by the proposed project.

In addition, the certified EIR found that in total 20 special-status species could potentially occur in the project vicinity; however, 18 are considered absent or unlikely to occur on the project site due to past and ongoing disturbance of the site and surrounding lands, the absence of suitable habitat, and/or the project site being situated outside of the species' known distribution. The 18 species considered absent or unlikely to occur on the project site include vernal pool fairy shrimp *(branchinecta lynchi)*, Crotch's bumble bee *(bombus crotchii)*, valley elderberry longhorn beetle *(desmocerus californicus dimorphus)*, California tiger salamander *(ambystoma californiense)*, giant garter snake *(thamnophis*

gigas), least Bell's vireo *(vireo bellii pusillus)*, Swainson's hawk *(buteo swainsoni)*, tricolored blackbird *(agelaius tricolor)*, western yellow-billed cuckoo *(coccyzus americanus occidentalis*), Fresno kangaroo rat *(dipodomys nitratoides exilis)*, San Joaquin kit fox *(vulpes macrotis mutica)*, western spadefoot *(spea hammondii)*, western pond turtle (*emys marmorata*), coast horned lizard *(phrynosoma blainvillii)*, northern California legless lizard *(anniella pulchra)*, California glossy snake *(Arizona elegansoccidentalis)*, burrowing owl *(athene cunicularia hypugaea)* and American badger *(taxidea taxus)*. The proposed project does not have the potential to impact these species through project-related mortality or loss of habitat as there is little or no likelihood that they are present or would be present during construction activity.

The two special-status species that have the potential to forage over the project site from time to time, but would not roost on the site, include western mastiff bat *(eumops perotis ssp. californicus)* and pallid bat *(antrozous pallidus)*. These two bat species would not be adversely affected from project-related loss of habitat nor is foraging habitat uniquely important for these species. These species would not be vulnerable to construction-related injury or mortality while foraging because they are highly mobile during foraging and are expected to avoid active construction zones. These bats would be expected to continue to use the project site for foraging after redevelopment. No other special-status species were determined to have a moderate or high probability of occurrence on the project site.

However, the project site does contain suitable nesting habitat for a few urban adapted native avian species. The on-site trees and shrubs have the potential to support nesting birds such as northern mockingbird or mourning dove. In addition, the project site also has the potential to support the ground-nesting and disturbance-tolerant killdeer. Nearly all native birds are protected by the Federal Migratory Bird Treaty Act, the California Migratory Bird Protection Act, and the California Fish and Game Code. Construction activities that occur during the nesting bird season (typically February 1 through August 31) have the potential to result in the mortality/disturbance of nesting birds.

The certified EIR found that without avoidance or mitigation, these potential impacts on nesting birds could be considered potentially significant. However, avoidance, conducting pre-construction surveys, and establishing buffers would prevent or compensate for impacts on special-status bird species. Therefore, the certified EIR required implementation of Mitigation Measure BIO-1, which would require avoidance, conducting pre-construction surveys, and establishing buffers, would effectively mitigate any impacts on special-status species to less than significant levels. Mitigation Measure BIO-1 would also be required for the proposed project. With implementation of Mitigation Measure BIO-1, the proposed project would not result in impacts to candidate, sensitive, or special-status species more severe than impacts identified in the certified EIR.

Riparian Habitat

As discussed in the certified EIR, habitat values of the urban project site have been severely diminished due to the extensive hardscape, scarcity of vegetation, and perimeter chain-link fencing. No riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulation by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS) is present on the project site. Designated critical habitat, sensitive natural communities, and other sensitive habitats are absent from the project site and adjacent lands.

Therefore, the proposed project would not result in impacts to riparian habitat more severe than impacts identified in the certified EIR.

Wetlands

Consistent with the findings identified in the certified EIR, no aquatic resources occur within the project site, or within the vicinity of the project site. The project site consists entirely of previously developed areas. As a result, the proposed project would not result in impacts to wetlands more severe than impacts identified in the certified EIR.

Wildlife Movement Corridors

Wildlife movement corridors are linear habitats that function to connect two or more areas of significant wildlife habitat. The certified EIR found that the project site does not contain any features that would function as wildlife movement corridors for resident or migratory wildlife species. In addition, the perimeter chain-link fence would inhibit the movement of native or migratory wildlife. Therefore, the proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. The proposed project would not result in impacts to wildlife more severe than impacts identified in the certified EIR.

Conflict with Local Policies

The proposed project would not conflict with any local policies or ordinances protecting biological resources. As stated in the certified EIR, buildout of the proposed project would not impact any biological resources protected by local policies or ordinances. Therefore, the proposed project would not create impacts more severe than impacts identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measure BIO-1 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the biological resources impacts of the proposed project. Therefore, there would be no new impacts related to biological resources associated with the proposed project, and additional mitigation is not required.

5. CULTURAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Discussion

Historic Resources

To characterize the setting for cultural resources at the project site, the following tasks were completed in order to adequately assess any potential impacts to cultural resources in the certified EIR: (1) a records search at the Southern San Joaquin Valley Information Center (SSJVIC) to identify prior cultural resource studies and previously recorded cultural resources in the project area and surrounding 0.5-mile area; (2) a search of the Native American Heritage Commission (NAHC) Sacred Lands File; (3) additional background research including a review of aerial photographs and historic-period maps that include the project site; and (4) a pedestrian field survey of the project area to identify potential historical resources within the project area. None of the tasks identified any historic or cultural resources within the project site.

As discussed in the certified EIR, no historical resources were identified within or adjacent to the project site. In the event that unknown resources are discovered during project construction, existing federal, State, and local laws and regulations would require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified professional. Additionally, implementation of Mitigation Measure CUL-1 identified in the certified EIR would require consultation with a historical resources specialist to assess if the discovered resource qualifies as a historical resource and to identify appropriate mitigation measures, if applicable. With implementation of Mitigation Measure CUL-1 as identified in the certified EIR, the proposed project would not result in new or more severe impacts to historical resources beyond those identified in the certified EIR.

Archeological Resources

As discussed in the certified EIR, no archaeological resources were identified in the project site. However, the certified EIR found that there is a potential for unknown archaeological resources to be discovered during construction of the proposed project. The certified EIR identified Mitigation Measure CUL-1, which requires that if unknown archaeological resources are discovered during construction, work in the area would halt and a qualified archaeologist would be contacted and consulted regarding how to appropriately address the situation. Implementation of Mitigation Measure CUL-1 would minimize or eliminate any potential for an adverse change to the significance of any discovered archaeological resources. With implementation of Mitigation Measure CUL-1, the

proposed project would not result in new or more severe impacts to archaeological resources beyond those identified in the certified EIR.

Disturbance of Human Remains

As described in the certified EIR, the disturbance of human remains outside of formal cemeteries would result in a significant impact. No human remains are known to occur on the project site. If human remains are identified during project construction, Section 7050.5 of the California Health and Safety Code and Public Resources Code (PRC) Section 5097.98 shall apply, as appropriate. The certified EIR identified Mitigation Measure CUL-2, which requires adherence to Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98. With implementation of Mitigation Measure CUL-2, the proposed project would not result in new or more severe impacts to the disturbance of human remains beyond those identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measures CUL-1 and CUL-2 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the cultural resources impacts of the proposed project. Therefore, there would be no new impacts related to cultural resources associated with the proposed project, and additional mitigation is not required.

6. ENERGY

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion

Consumption of Resources

Consistent with the certified EIR, the following analysis focuses on the four sources of energy that are relevant to the proposed project: natural gas, electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Fresno County. The electricity and natural gas use of the proposed project is analyzed on an annual basis. Electricity and natural gas use was estimated for the project using default energy intensities by land use type in CalEEMod.

Construction-Period Energy Use. The certified EIR found that construction activities associated with the approved project would not result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Therefore, fuel consumption during construction would not be any more inefficient, wasteful, or unnecessary than other similar development projects, and impacts would be less than significant.

Similar to the approved project, the anticipated construction schedule for the proposed project assumes that the project would be built in approximately 24 months. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

As with the approved project, construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, similar to the previously analyzed project, construction activities for the proposed project are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. As such, consistent with the findings of the certified EIR, the proposed

project would not result in any new or more severe construction-period energy use impacts than identified in the certified EIR.

Operational Energy Use. The certified EIR found that the expected energy consumption during operation of the approved project would be consistent with typical usage rates for industrial uses and would negligibly increase the annual natural gas and electricity consumption in Fresno County. In addition, gasoline and diesel fuel demand generated by vehicle trips associated with the approved project would be a minimal fraction of gasoline and diesel fuel consumption in Fresno County. Therefore, the certified EIR found that the approved project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project operation.

Similar to the approved project, energy use associated with the proposed project would consist of natural gas, electricity, and vehicle fuel use associated with project operations.

Table 6.A shows the estimated potential increased natural gas, electricity, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with United States Department of Transportation (USDOT) fuel efficiency data and using the USEPA's fuel economy estimates for 2020, and the California diesel fuel economy estimates for 2021.

Table 6.A: Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh per year)	Natural Gas Use (therms per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	9,087,989	43,242	224,514	342,102

Source: Compiled by LSA (January 2025).
kBTU = thousand British thermal units
kWh = kilowatt hours

The total estimated increase in electricity demand associated with the approved project was 8,448,500 kilowatt hours (kWh). As shown in Table 6.A, the estimated increase in electricity demand associated with the operation of the proposed project would be 9,087,989 kWh per year. Total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh;[11] therefore, operation of the proposed project would negligibly increase the annual electricity consumption in Fresno County by approximately 0.1 percent. Although electricity consumption is higher for the proposed project, this would not be a substantial increase in energy consumption from what was identified in the certified EIR due to the negligible annual countywide increase in electricity consumption.

The certified EIR found that the total estimated increase in natural gas demand associated with the approved project was 161,487 therms per year. As shown in Table 6.A, the estimated increase in natural gas demand associated with the operation of the proposed project would be 43,242 therms per year. Natural gas consumption for the proposed project would be lower than the total natural gas usage associated with the approved project as identified in the certified EIR. Total natural gas

[11] California Energy Commission (CEC). 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

consumption in Fresno County in 2022 was 319,435,645 therms;[12] therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Fresno County by approximately less than 0.1 percent.

In addition, the proposed project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. The certified EIR found that the approved project would result in the consumption of 175,434.7 gallons of gasoline and 144,777.4 gallons of diesel. As shown above in Table 6.A, the proposed project would result in the consumption of 224,514 gallons of gasoline and 342,102 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 343.3 million gallons of gasoline and approximately 155.8 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2027. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in Fresno County by approximately 0.1 percent for gasoline fuel usage and approximately 0.2 percent for diesel fuel usage. Although fuel consumption is higher for the proposed project, this would not be a substantial increase in energy consumption from what was identified in the certified EIR due to the minimal increase in annual fuel usage countywide. As with the approved project, the proposed project would result in fuel usage that is a small fraction of current annual fuel use in Fresno County, and fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California. Therefore, the proposed project would not result in any new or more severe operational fuel consumption impacts than identified in the certified EIR.

As demonstrated in Table 6.A, electrical and natural gas demand associated with the proposed project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. In addition, the proposed project would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, California Code of Regulations (CCR) Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential uses. As such, consistent with the approved project, the proposed project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, the proposed project would not result in any new or more severe operational energy usage impacts than identified in the certified EIR.

State and Local Plans

As described in the EIR, in 2002, the Legislature passed SB 1389, which required the California Energy Commission (CEC) to develop an integrated energy policy report for electricity, natural gas, and

[12] California Energy Commission (CEC). 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

transportation fuels every two years. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the lowest cost to the environment and energy sources. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and associated infrastructure needs, and encouraging urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

The certified EIR found that the approved project would not conflict with California's energy conservation plans as described in the CEC's 2021 Integrated Energy Policy Report[13] and 2022 Integrated Energy Policy Report Update[14]. In addition, the approved project would comply with the California Green Building Standards Code (CALGreen Code) (CCR Title 24, Part 11), the California Energy Code (CCR Title 24, Part 6), and with objectives and policies included in the City's General Plan that are aimed at reducing energy consumption. Therefore, the approved project was determined to be consistent with applicable State and local plans related to renewable energy and energy efficiency and was determined to have a less than significant impact.

The most recently CEC adopted energy report is the 2023 Integrated Energy Policy Report.[15] The Integrated Energy Policy Reports provide the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The Integrated Energy Policy Reports cover a broad range of topics, including implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, the proposed project is not expected to substantially increase construction-period or operational energy usage at the project site compared to the approved project. Therefore, consistent with the findings of the certified EIR, the proposed project would not conflict with California's energy conservation plans as described in the CEC's Integrated Energy Policy Reports. Similar to the approved project, the proposed project would also comply with the CALGreen Code (CCR Title 24, Part 11) and the California Energy Code (CCR Title 24, Part 6), which includes provisions related to insulation and design aimed at minimizing energy consumption. The California Energy Code includes solar photovoltaic system requirements for all newly constructed low-rise residential buildings; however, it currently does not include solar requirements for nonresidential buildings. The proposed project would also comply with objectives and policies included in the City's General Plan

13 California Energy Commission (CEC). 2021. 2021 Integrated Energy Policy Report. California Energy Commission. Docket # 21-IEPR-01.

14 California Energy Commission (CEC). 2022a. 2022 Integrated Energy Policy Report Update. California Energy Commission. Docket # 22-IEPR-01.

15 California Energy Commission (CEC). 2023. *2023 Integrated Energy Policy Report.* California Energy Commission. Docket # 23-IEPR-01.

that are aimed at reducing energy consumption. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be less than significant. Therefore, the proposed project would not result in new or more severe impacts related to consistency with energy plans beyond those already analyzed in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was prepared leading to new or more severe significant impacts, and no new mitigation would be required.

Conclusion

The EIR adequately evaluated the energy impacts of the proposed project. Therefore, there would be no new impacts related to energy associated with the proposed project, and additional mitigation is not required.

7. GEOLOGY AND SOILS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Discussion

Seismicity and Seismic Hazards

Fault Rupture. As discussed in the certified EIR, fault rupture is generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The project site is not located within an Alquist-Priolo Earthquake Fault Zone. In addition, no known active or potentially active faults or fault traces are located in the project vicinity. As a result, the proposed project would have no impact related to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault would occur. Therefore, the proposed project would not result in new or more severe impacts related to fault rupture than were identified in the certified EIR.

Strong Seismic Ground Shaking. The City of Fresno is located in an area with historically low to moderate level of seismicity. However, as discussed in the certified EIR, strong ground shaking could occur within the project site during seismic events and occurrences have the possibility to result in

significant impacts. Major seismic activity along the nearby Great Valley Fault Zone or the Nunez Fault, or other associated faults, could affect the project site through strong seismic ground shaking. Strong seismic ground shaking could potentially cause structural damage to the proposed project. However, due to the distance to the known faults, hazards due to ground shaking would be minimal. In addition, compliance with the California Building Code (Title 24 CCR) would ensure that geotechnical design of the proposed project would minimize or eliminate potential impacts related to strong seismic ground shaking. Therefore, the project would not directly or indirectly cause substantial adverse effects related to strong seismic ground shaking. The proposed project would not result in new or more severe impacts related to strong seismic ground shaking than were identified in the certified EIR.

Seismic-Related Ground Failure and Liquefaction. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. The certified EIR found that based on the predicted seismic accelerations, and soil and groundwater conditions typically encountered in the region, general liquefaction potential is low in the City of Fresno. Additionally, as identified in the certified EIR, compliance with the City of Fresno Municipal Code and the California Building Code would ensure potential impacts associated with seismic-related ground failure, including liquefaction, would not directly or indirectly cause substantial adverse effects. Therefore, the proposed project would not result in new or more severe impacts related to liquefaction than were identified in the certified EIR.

Landslides. As discussed in the certified EIR, a landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The project site is located on a relatively flat area and is not located next to any hills. In general, the potential for land sliding or slope failure in the City of Fresno is very low and the project site would not be susceptible to landslides. As such, the risk of landslides is considered to be unlikely. Therefore, the proposed project would not result in new or more severe impacts related to landslides than were identified in the certified EIR.

Erosion/Loss of Top Soil

As discussed in the certified EIR, the total project site is 48.03 acres, which would be disturbed/ developed during proposed grading and construction activities. Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project site. However, this impact would not be substantial because the project is required to comply with water quality control measures, which include preparation of a Stormwater Pollution Prevention Plan (SWPPP). Although designed primarily to protect stormwater quality, the SWPPP would incorporate Best Management Practices (BMPs) to minimize erosion. With implementation of the SWPPP and BMPs, the proposed project would not result in new or more severe impacts related to soil erosion or loss of top soil than were identified in the certified EIR.

Unstable and Expansive Soils

As identified above, soils on the project site would not be subject to liquefaction, lateral spreading, or landslides. Additionally, the proposed project would be required to conform with the California Building Code, which would reduce risks related to unstable soils.

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. As identified in the certified EIR, soil on the project site has mostly been paved over. A few areas of exposed soil occur on-site; however, the soils have been disturbed through previous industrial and agricultural activity and are unlikely to exhibit native soil characteristics. Compliance with the California Building Code requires that geotechnical design of the proposed project minimize or eliminate potential impacts related to expansive soils. As such, the risk of expansive soil affecting the proposed project is low. Therefore, the proposed project would not result in new or more severe impacts related to unstable and expansive soils than were identified in the certified EIR.

Septic Tanks/Wastewater Disposal

The project site is currently served by a wastewater conveyance system maintained by the City of Fresno. Wastewater from the City's collection system is treated at the City's wastewater treatment plant. Similar to the findings identified in the certified EIR, the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would not result in new or more severe impacts related to septic tanks/wastewater disposal than were identified in the certified EIR.

Paleontological Resources

As discussed in the certified EIR, no paleontological resources or unique geological features are known to exist within or near the project site, and the proposed project is not expected to alter or destroy a paleontological resource, site, or unique geologic feature. Furthermore, the proposed project would not require excavation to depths that have not already been disturbed by previous construction. However, should unknown paleontological resource or unique geologic feature be discovered within the project site, the certified EIR required Mitigation Measure GEO-1 to reduce potential impacts to directly or indirectly destroy a unique paleontological resource. With implementation of Mitigation Measure GEO-1, the proposed project would not result in new or more severe impacts related to paleontological resources than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measure GEO-1 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the geology and soils impacts of the proposed project. Therefore, there would be no new impacts related to geology and soils associated with the proposed project, and additional mitigation is not required.

8. GREENHOUSE GAS EMISSIONS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur Hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

Section 15064.4 of the *State CEQA Guidelines* states, "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a state-wide, regional, or local plan for the reduction or mitigation of GHG emissions.

The City of Fresno's first GHG Reduction Plan was adopted in December 2014 to reduce local community GHG emissions to 1990 levels by the year 2020, consistent with the State objectives set forth in Assembly Bill (AB) 32. In 2020, the City of Fresno updated its 2014 GHG Reduction Plan (GHG Reduction Plan Update) to conform with existing applicable State climate change policies and regulations to reduce local community GHG emissions to 40 percent below 1990 levels by the year 2030, consistent with the State objectives set by SB 32 and the 2017 Scoping Plan. The GHG Plan Update outlined strategies that the City would undertake to achieve its proportional share of GHG emission reductions. The GHG Reduction Plan Update was recently rescinded.

This analysis evaluates whether the proposed project would result in new or more severe impacts than those identified in the certified EIR.

Generation of Greenhouse Gas Emissions

Construction GHG Emissions. As described in the certified EIR and similar to the approved project, construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. The certified EIR found that the approved project would generate approximately 1,961.0 metric tons of CO_2e during construction. These emissions would be temporary in nature and would only occur for the duration construction.

Using CalEEMod, it is estimated that the annual emissions associated with construction of the proposed project would be approximately 1,999.7 metric tons of CO_2e per year. Similar to the approved project, these emissions would be temporary in nature and would only occur for the duration construction. Construction GHG emissions for the proposed project were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized

over the life of the project, amortized construction emissions would be approximately 66.7 metric tons (MT) of CO_2e per year.

Operational GHG Emissions. As described in the certified EIR, long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The certified EIR found that the approved project would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment and impacts would be less than significant.

As with the approved project, emissions estimates associated with operation of the proposed project were calculated using CalEEMod. Table 8.A shows the emissions sources by category. Based on the analysis results, the proposed project would result in emissions of approximately 6,556.5 MT CO_2e per year. CalEEMod output sheets are provided in Appendix A.

Table 8.A: Operational Greenhouse Gas Emissions

Emissions Category	Operational Emissions (Metric Tons per Year)			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
Mobile Sources	4,680.1	0.1	0.5	4,836.6
Area Sources	11.8	<0.1	<0.1	11.9
Energy Sources	1,070.3	0.2	<0.1	1,079.3
Water Sources	127.8	6.1	0.1	324.1
Waste Sources	68.0	6.8	0.0	237.9
Amortized Construction Emissions				66.7
Total Operational				**6,556.5**

Source: Compiled by LSA (February 2025).
Note = Some values may not appear to add up correctly due to rounding.
CH_4 = methane
CO_2e = carbon dioxide equivalent
CO_2 = carbon dioxide
N_2O = nitrous oxide

Based on the results shown in Table 8.A, the proposed project would result in 6,556.5 MT CO_2e per year. The approved project would result in emissions of 4,967.0 MT CO_2e per year. However, the emissions estimate for the proposed project represents a conservative estimate and potentially overstates the emissions that may occur due to proposed project operations because as described in Section 3, Air Quality, the proposed project would be required to implement Mitigation Measure AIR-3, consistent with the approved project. Mitigation Measure AIR-3 requires the Project Applicant to

ensure that the project would provide the infrastructure for AC and/or DC chargers for electric heavy-duty trucks. With implementation of Mitigation Measure AIR-3, the proposed project would support the operation of zero emissions trucks at the project site as such technology is commercially developed and available. Electric chargers are an effective measure to support the reduction of GHG emissions related to mobile source operational activities, because they would enable drivers of trucks associated with the proposed project to operate a larger share of miles in electric mode, as opposed to gasoline powered mode, thereby displacing GHG emissions from diesel consumption with a lesser amount of indirect emissions from electricity. Therefore, with implementation of Mitigation Measure AIR-3, the proposed project would have the potential to further lower mobile source emissions associated with operation of the proposed project. There is currently not enough information to quantify the potential emissions reductions from EV charging stations. Therefore, the mobile source emissions associated with the proposed project shown in Table 8.A represent a conservative scenario since emissions are likely to be lower.

While the emissions estimates included in Table 8.A indicate that there would be some increase in GHG emissions above those estimated to occur with implementation of the approved project, this would not represent a large increase as compared to the GHG emissions inventory in for the City of Fresno. The proposed project is anticipated to be operational in 2028. Based on the City's 2016 GHG inventory, the forecasted business as usual (BAU) emissions are approximately 3,500,204 MT CO_2e for 2030 and 3,697,738 MT CO_2e for 2035. Therefore, operation of the proposed project would represent approximately 0.2 percent of the forecasted BAU emissions for 2030 and 2035. As such, implementation of the proposed project would not represent a substantial increase from the City's forecasted GHG emissions. Similarly, the approved project's emissions would represent approximately 0.1 percent of the City's forecasted BAU emissions for 2030 and 2035. Although the emissions associated with the proposed project are higher, this would not be a substantial increase in emissions from those that were identified in the certified EIR. Therefore, the proposed project would not result in new impacts related to GHG emission or substantially increase the severity of impacts identified in the certified EIR due to the negligible increase in GHG emissions from the City's BAU forecasted emissions for 2030 and 2035.

Consistency with Greenhouse Gas Reduction Plans

The certified EIR included an evaluation of the CARB Scoping Plan. It was determined that the approved project would be consistent with the goals and strategies of the CARB Scoping Plan. Therefore, the certified EIR considered this impact to be less than significant.

As with the approved project, the proposed project was analyzed for consistency with the goals of Executive Order (EO) B-30-15, SB 32, AB 197, AB 1279, and the 2022 Scoping Plan.

Similar to the approved project, the proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation, green building standards, and water conservation measures. As such, with compliance with the CALGreen Code, the proposed project would not conflict with the State's energy goals and water conservation efficiency measures. Therefore, similar to the approved project, the proposed project would comply with applicable energy and water conservation measures from the Scoping Plan. As with the approved project, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean

Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures from the Scoping Plan. As such, similar to the approved project, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in EO B-30-15, SB 32, and AB 197, and would be consistent with applicable plans and programs designed to reduce GHG emissions. In addition, Mitigation Measure AIR-1, as identified in Section 3, Air Quality, and required by the certified EIR, requires the infrastructure for AC and/or DC chargers for electric heavy-duty trucks, which would be consistent with the State's advanced clean fleets rule, which has a goal of achieving a zero-emission truck and bus California fleet by 2045. Therefore, as with the approved project, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant. Therefore, the proposed project would not result in new or more severe impacts related to consistency with GHG reduction plans more severe than impacts identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was prepared leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measures AIR-3 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The EIR adequately evaluated the GHG impacts of the proposed project. Therefore, there would be no new impacts related to GHG associated with the proposed project and additional mitigation is not required.

9. HAZARDS AND HAZARDOUS MATERIALS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Discussion

Transport, Use, Storage, and Disposal of Hazardous Materials

The proposed project would be required to comply with all applicable federal, local, and state regulations governing the transportation, use, storage, and disposal of hazardous materials. Compliance with these regulations would ensure that any use of hazardous materials by the proposed project would be a less than significant impact. Construction of the proposed project is only expected to require limited amounts of potentially hazardous materials, including but not limited to, solvents, paints, fuels, oils, and transmission fluids. No uses utilizing large amounts of hazardous materials are anticipated to occur within the project site during its operation. As discussed in the certified EIR, in the event that future tenants of the project site introduce uses that require large quantities of hazardous materials or generate large quantities of hazardous waste, those tenants would be required to obtain a conditional use permit and undergo further environmental review, as required by the City. The proposed project would not result in new or more severe impacts related to the transport, use, storage, and disposal of hazardous materials than were identified in the certified EIR.

Release of Hazardous Materials and Risk of Upset

As identified above, operation of the proposed project is not expected to require the use of large amounts of hazardous materials. The certified EIR included both a Phase I and Phase II Environmental Site Assessment (ESA) in order to establish a baseline for the environmental conditions on the project site. The Phase II study determined that the project site is suitable for unrestricted use and no engineering controls (i.e., volatile organic compound vapor barrier) are required. However, the Phase II ESA determined that a Soil Management Plan (SMP) shall be prepared prior to construction to address soil management procedures that may arise based on historical use of the project site. Therefore, implementation of Mitigation Measures HAZ-1 as prescribed by the certified EIR, which would require preparation of an SMP, would effectively mitigate any impacts related to a significant hazard to the public or the environment, including release and risk of upset, to less than significant levels. Therefore, the proposed project would not result in new or more severe impacts related to the release of hazardous materials and risk of upset than were identified in the certified EIR.

Emissions of Hazardous Waste within 0.25 Mile of a School

As identified in the certified EIR, there are no schools located within 0.25 mile of the project site. The closest existing school to the project site is Addams Elementary School, located approximately 1.2 miles from the project site. As previously discussed, the proposed project does not involve substantial quantities of hazardous materials that would pose a human or environmental health risk. In addition, all materials would be handled, stored, and disposed of in accordance with applicable standards and regulations. Therefore, the proposed project would not result in new or more severe impacts related to the emissions of hazardous materials within 0.25 mile of a school than were identified in the certified EIR.

Hazardous Materials Site Pursuant to Government Code Section 65962.5

According to the Department of Toxic Substances Control (DTSC) EnviroStor and the State Water Resources Control Board (SWRCB) GeoTracker databases, the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[16] As a result, no impacts related to hazardous materials sites pursuant to Government Code Section 65962.5 would occur. Therefore, the proposed project would not result in new or more severe impacts related to the possible past release of hazardous materials than were identified in the certified EIR.

Aviation Hazards

As identified in the certified EIR, the nearest airports include the Fresno Chandler Executive Airport, located approximately 0.8 mile from the project site, the Sierra Sky Airport, located approximately 6.7 miles from the project site, and the Fresno International Airport, located approximately 7.1 miles from the project site. Portions of the project site are in the Traffic Pattern Zone (TPZ) and Outer

[16] California Environmental Protection Agency (CalEPA). 2018. Government Code Section 65962.5(a) Hazardous Waste and Substances Site List. Website: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/ (accessed June 2021).

Approach/Departure Zone (OADZ) for the Fresno Chandler Executive Airport. OADZs have a moderate risk level because approximately 5 percent of crashes occur in this area, while TPZs have a low risk level. Based on this risk level, the Fresno County Airport Land Use Compatibility Plan[17] (ALUCP) proposes certain criteria for projects within TPZs and OADZs.

Although the project site is within 2 miles of the Chandler Executive Airport, operations at the local airports are not expected to pose a safety hazard for people working at or visiting the project site nor does any aspect of the project conflict with the requirements in the ALUCP for TPZs and OADZs. In addition, the proposed project would not include any structures higher than 70 feet, hazardous uses, hazards to flight, or other land uses prohibited in TPZs or OADZs. Therefore, the proposed project would result in a less than significant impact related to a safety hazard for people residing or working in the project area. Therefore, the proposed project would not result in new or more severe impacts related to aviation hazards than were identified in the certified EIR.

Emergency Response or Evacuation Plan

The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. As discussed in the certified EIR, the City's full-time Emergency Preparedness Officer (EPO) is responsible for ensuring that Fresno's emergency response plans are up-to-date and implemented properly. The EPO also facilitates cooperation between City departments and other local, State and federal agencies that would be involved in emergency response operations. The City of Fresno Emergency Operations Center (EOC) serves as the coordination and communication between the City of Fresno and Fresno County Operational Area EOC. The proposed project would not result in any alterations of existing roadways. Therefore, the proposed project would not result in new or more severe impacts related to emergency response or evacuation plans than were identified in the certified EIR.

Wildfire

According to the California Department of Forestry and Fire Protection (CAL FIRE) Very High Fire Hazard Severity Zone (VHFHSZ) Map for Fresno County, the project site is not located within a High or Very High Fire Hazard Severity Zone.[18] As discussed in the certified EIR, the project site is located in a primarily developed urban area and is not located adjacent to wildland areas, and therefore the proposed project is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The proposed project would not result in new or more severe impacts related to wildfire than were identified in the certified EIR.

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17 Fresno County Airport Land Use Commission. 2018. Fresno County Airport Land Use Compatibility Plan. Websites: https://www.fresnocog.org/wp-content/uploads/2019/01/fresno-draft-ALUCP-12-04-17c.pdf, and https://2ave3l244ex63mgdyc1u2mfp-wpengine.netdna-ssl.com/wp-content/uploads/2019/01/fresno-final-alucp-113018-r_part2.pdf (accessed December 2024).

18 California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Fresno County Very High Fire Hazard Severity Zones in LRA.* October 2. Website: https://osfm.fire.ca.gov/media/6673/fhszl06_1_map10.pdf (accessed September 2, 2022).

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measure HAZ-1 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the hazards and hazardous materials impacts of the proposed project. Therefore, there would be no new impacts related to hazards and hazardous materials associated with the proposed project, and additional mitigation is not required.

10. HYDROLOGY AND WATER QUALITY

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv. Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Discussion

Water Quality Standards

Construction. As discussed in the certified EIR, pollutants of concern during construction of the proposed project include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed to wind and water erosion, which could result in temporary increases in sediment load in nearby water bodies. Because the project would disturb greater than 1 acre of soil, it is required to comply with the State Water Resources Control Board's National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002) (Construction General Permit). The project is also subject to Article 7, Urban Storm Water Quality Management and Discharge Control, Section 6-714, *Requirement to Prevent, Control, and Reduce Storm Water Pollutants* of the City's Municipal Code.

The Construction General Permit requires the preparation of a SWPPP and implementation of Construction BMPs. Construction BMPs would include, but are not limited to, erosion and sediment control, designed to minimize erosion and retain sediment on-site, and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

Additionally, Section 6-714 of the City's Municipal Code also requires the implementation of BMPs to the maximum extent technologically and economically feasible to prevent and reduce pollutants from entering stormwater during construction. Therefore, adherence to the required SWPPP and the City's Municipal Code and implementation of construction BMPs, would reduce the potential for the discharge of pollutants during construction and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant.

During construction, it is likely that dewatering would be required. If groundwater is encountered during construction, the project would be required to obtain coverage under the Regional Water Quality Control Board (RWQCB) Central Valley Region's NPDES Waste Discharge Requirements for Limited Threat Discharges to Surface Water (Order R5-2022-0006, NPDES No. CAG995002). With adherence to the Waste Discharge Requirements pertaining to Limited Threat Discharges to Surface Water, project construction would not violate groundwater quality standards or waste discharge requirements and impacts would be less than significant.

Operation. Operation of the proposed project could result in surface water pollution associated with chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff during periods of heavy precipitation into nearby water bodies. The project site is served by Fresno Metropolitan Flood Control District (FMFCD) retention basins. Water quality treatment for post-construction discharges to stormwater in the FMFCD urban flood control system area is provided by retention basins.

The City of Fresno operates under the California RWQCB, Central Valley Regional NPDES Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (Order No. R5-2016-0040-014, NPDES No. CAS0085324). Consistent with the City of Fresno's MS4 Permit, the project would implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines. If applicable, the project would also be subject to the Statewide General Permit for Stormwater Discharges Associated with Industrial Activities (Order 2014-0057-DWQ as amended in 2015 and 2018) (Industrial General Permit) and would be required to develop and implement a storm water pollution prevention plan, eliminate non-stormwater discharges, conduct routine site inspections, train employees in permit compliance, sample storm water runoff and test for pollutant indicators, and submit an annual report to the State Water Resources Control Board.

Adherence to the City of Fresno's MS4 Permit, would reduce the potential for the discharge of pollutants during project operations and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant. The majority of the project site would be impervious surface, and it is not expected that stormwater would infiltrate during project operations. Therefore, project operations would not violate groundwater quality standards or waste discharge requirements and impacts would be less than significant.

As described above, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant, and the proposed project would not result in new or more severe impacts related to water quality standards than were identified in the certified EIR.

Deplete Groundwater Supplies

As discussed in the certified EIR, the City of Fresno is underlain by the Kings River Subbasin, which, along with six other subbasins, comprises the San Joaquin Valley Groundwater Basin. The seven Groundwater Sustainability Agencies (GSAs) operate cooperatively across the basin via a coordination agreement that ensures common approaches to sustainability items such as similarity of data usage and methodologies, consistent interpretations of the basin setting, and common assumptions and development of water budgets, monitoring networks, sustainable management criteria, and data management systems.

Temporary dewatering from excavations could be necessary during construction of the proposed project. Construction-related dewatering would be temporary and limited to the area of excavations on the project site and would not substantially contribute to depletion of groundwater supplies. Operation of the project would not require groundwater extraction. Following project implementation, there would be a minor increase in impervious surface area. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, the small increase in impervious area would not substantially decrease any infiltration that currently may occur on the site. Therefore, the project would not impede the Central Valley RWQCB's ability to manage groundwater.

Additionally, the City's Urban Water Management Plan (UWMP), addresses the City's water service reliability, future challenges, and strategies for managing risks to water reliability through 2045. The project would also be required to comply with the City's General Plan policies related to conservation which include landscaping standards for drought tolerance, irrigation control devices, leak detection and retrofits, and water audits. A Water Supply Assessment (WSA)[19] was prepared for the approved project, which concluded that the City of Fresno's water system has sufficient capacity to supply the project and other projected demands within the City's service area through the year 2045. The proposed project would have less total building square footage; therefore, the proposed project would not exceed the capacity identified in the WSA.

Consistent with the findings of the certified EIR, the proposed project's compliance with all applicable regulations regarding groundwater supplies and sustainability, including those established by the RWQCB and the City of Fresno, would reduce any potential impacts on groundwater supplies by the proposed project to a less than significant level. As such, the proposed project would not result in new or more severe impacts than were identified in the certified EIR.

Drainage Pattern and Surface Runoff

During construction of the proposed project, excavated soil would be exposed and disturbed, drainage patterns would be temporarily altered, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed previously, the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented as part of the project to reduce impacts to water quality during construction, including those impacts

[19] LSA Associates, Inc. (LSA). 2022. *SB 610 Water Supply Assessment, 2740 West Nielsen Avenue Office/Warehouse Project, Fresno, California*. July.

associated with soil erosion and siltation. With compliance with the requirements in the Construction General Permit and implementation of the construction BMPs, and with compliance with the City's Municipal Code, construction impacts related to on- or off-site erosion or siltation would be less than significant.

The proposed project would increase the amount of impervious surface, which would increase the volume of runoff during a storm, and which can more effectively transport sediments to receiving waters. At project completion, much of the project site would be impervious surface area and not prone to on-site erosion or siltation. The remaining portion of the site containing pervious surface area would contain landscaping that would minimize on-site erosion and siltation. Additionally, the Project Applicant would be required to establish and maintain existing drainage patterns of the site. Therefore, the proposed project would not alter the existing drainage pattern of the site or increase the rate or amount of surface runoff in a manner that would result in an impact related to substantial erosion or siltation on- or off-site. Compliance with existing regulatory requirements would reduce or eliminate the proposed project's potential to substantially alter the existing drainage pattern of the site. Therefore, the proposed project would not result in new or more severe impacts related to drainage patterns than were identified in the certified EIR.

Inundation by Seiche, Tsunami, or Mudflow

As discussed in the certified EIR, the project site is not located in flood hazard, tsunami, or seiche zones. Additionally, as discussed above in Section 9, Hazards and Hazardous Materials, the proposed project would comply with applicable federal, State, and local laws and regulations regarding the use of hazardous materials within the project site. As a result, a less than significant impact would occur related to the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. The proposed project would not result in new or more severe impacts related to inundation by seiche, tsunami, or mudflow, or create impacts more severe than those identified in the certified EIR.

Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan

The City is located within the Kings Subbasin, which is part of the larger San Joaquin Valley Groundwater Basin. The planning documents regarding water resources for the City include Kings Integrated Regional Water Management Plan (IRWMP), the City of Fresno UWMP, the Fresno-Area Regional Groundwater Management Plan, and the City of Fresno Metropolitan Water Resource Management Plan. As noted above, the proposed project would be required to adhere to NPDES drainage control requirements during construction and operation as well as to FMFCD drainage control requirements. As a result, consistent with the findings identified in the certified EIR, the proposed project would not include any other waste discharges that could conflict with the IRWMP. As previously discussed, the proposed project would be required to comply with all applicable federal, State, and local policies related to water quality and sustainability. The certified EIR concluded that the City's water system has sufficient capacity to supply the project and other projected demands within the City's service area through the year 2045. The proposed project would be required to obtain all necessary construction permits, prepare a SWPPP, and implement Construction BMPs. Therefore, the proposed project would not result in any new or more severe impacts related to a conflict or obstruction of a water quality control plan or sustainable groundwater management plan than those identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the hydrology and water quality impacts of the proposed project. Therefore, there would be no new impacts related to hydrology and water quality associated with the proposed project, and additional mitigation is not required.

11. LAND USE AND PLANNING

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

Divide an Established Community

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

As discussed in the certified EIR, the project site consists of a former industrial warehouse site that has previously been demolished. Nearby parcels consist mostly of low residential, light and heavy industrial, cemetery, and vacant, undeveloped uses. The proposed project would include three office/warehouse buildings. These improvements would not affect connectivity, and would not divide an established community. The proposed project would not result in new or more severe impacts related to dividing an established community or create impacts than those identified in the certified EIR.

Conformance with Land Use Plans

The project site is designated Heavy Industrial in the General Plan. This land use is intended to accommodate the broadest range of industrial uses including manufacturing, assembly, wholesaling, distribution, and storage activities that are essential to the development of a balanced economic base. Small-scale commercial services and ancillary office uses are also permitted. The maximum FAR is 1.5.

The project site is located in a Heavy Industrial (IH) zoning district which allows for manufacturing, assembly, wholesaling, distribution, and storage activities that are essential to the development of a balanced economic base. Small-scale commercial services and ancillary office uses are also permitted. The Heavy Industrial (IH) zoning districts accommodate the broadest range of industrial uses on sites identified in the General Plan.

As discussed in the certified EIR, the project would not require a change the General Plan land use designation or the current zoning and would be consistent with the City's General Plan and Zoning Ordinance. Additionally, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating

an environmental effect. Therefore, the proposed project would not result in new or more severe impacts related to conformity with land use plans beyond those already analyzed in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the land use and planning impacts of the proposed project. Therefore, there would be no new impacts related to land use and planning associated with the proposed project, and additional mitigation is not required.

12. MINERAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

The certified EIR found that the project site is located within an urban area on a previously developed site. There are no known mineral resources within or in the vicinity of the project site. The principal area for mineral resources in the City is along the San Joaquin River Corridor. The City's Resource Conservation and Resilience Element of the City's General Plan includes several policies to conserve aggregate mineral resources. However, the project is located approximately 8 miles from the San Joaquin River Corridor. As a result, the proposed project would not result in the loss of availability of a known mineral resource of value to the region or residents of the State. Additionally, the proposed project would not result in the loss of availability of any known locally-important mineral resource recovery sites. Therefore, the proposed project would not result in new or more severe impacts related to mineral resources beyond those already analyzed in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the mineral resources impacts of the proposed project. Therefore, there would be no new impacts related to mineral resources associated with the proposed project, and additional mitigation is not required.

13. NOISE

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

The analysis in this section is based on the Noise Impact Analysis Memorandum[20] prepared for the proposed project (Appendix C).

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time

[20] LSA Associates, Inc. (LSA). 2025b. *Noise Impact Analysis Memorandum for the 2740 West Nielsen Avenue Office/Warehouse Project*. January 30.

varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Fresno.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Adjacent parcels consist mostly of residential, light and heavy industrial, cemetery, and vacant, undeveloped uses. The closest sensitive receptors to the proposed project include the single-family residences located approximately 110 feet south of the project site across West Nielsen Avenue.

Construction Noise

As discussed in the certified EIR, project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from 1 day to several days, depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 13.A lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, taken from the Federal Highway Administration (FHWA) *Roadway Construction Noise Model User's Guide*.[21]

As discussed in the certified EIR, two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table 13.A, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA maximum instantaneous sound level (L_{max}) with trucks passing at 50 feet.

[21] Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model User's Guide. January. Washington, D.C.

Table 13.A: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (Federal Highway Administration 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

In addition to the reference maximum noise level, the usage factor provided in Table 13.A is used to calculate the hourly noise level impact for each piece of equipment. Each piece of construction equipment operates as an individual point source. A composite noise level can be calculated when multiple sources of noise operate simultaneously. Based on the reference information in Table 13.A and the construction equipment list provided, the composite noise level of the two loudest pieces of equipment for each construction phase was calculated. The project construction composite noise levels at a distance of 50 feet would range from 74 dBA L_{eq} to 88 dBA L_{eq}, with the highest noise levels occurring during the site preparation and grading phases. This estimated noise level associated with construction of the proposed project is consistent with construction noise levels estimated for the approved project in the certified EIR.

As discussed in the certified EIR, once composite noise levels are calculated, reference noise levels can then be adjusted for distance using the following equation. In general, doubling the distance would decrease noise levels by 6 dBA, while halving the distance would increase noise levels by 6 dBA.

While construction noise will vary, it is expected that composite noise levels during construction at the nearest off-site sensitive residential use to the south would reach an average noise level of 64 dBA L_{eq} during daytime hours. While construction-related, short-term noise levels have the potential to be higher than quieter daytime ambient noise levels in the project area under existing conditions, the

construction noise impacts would be approximately 1.7 dBA greater than the existing average daytime noise level of 64.7 dBA L_{eq} during the allowable hours of construction. When logarithmically combined with the existing average ambient noise level, the total noise level would be 66.2 dBA L_{eq} resulting in an increase of 3.9 dBA L_{eq}. As identified above, this estimated noise level associated with construction of the proposed project is consistent with construction noise levels estimated for the approved project in the certified EIR. Therefore, because the increase would be less than 5 dBA, construction noise would remain less than significant.

Consistent with the findings of the certified EIR and the applicable noise provisions of the Fresno Municipal Code, construction work would only take place between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday. No construction work would take place on Sundays.

Nevertheless, to ensure that the project's potential construction-related noise impacts are less than significant, the certified EIR identified Mitigation Measure NOI-1, which requires the project to equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards, which would reduce the potential impacts associated with construction equipment. Additionally, Mitigation Measure NOI-1, as identified in the certified EIR, requires the project to designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem. These measures would ensure that the project's potential construction-related noise impacts are mitigated to less than significant levels. Therefore, the proposed project would not result in new or more severe impacts related to construction noise beyond those already analyzed in the certified EIR.

Long-Term Operational Noise

The following sections address possible noise level increases in the project vicinity resulting from implementation of the proposed project, including mobile and stationary noise sources. Mobile noise sources include traffic noise. Stationary noise sources include heating, ventilation, and air conditioning (HVAC) equipment, parking lot activities, and truck delivery and truck unloading activities.

Traffic Noise Impacts to Off-Site Receivers. Consistent with the certified EIR, the guidelines included in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) were used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. Table 13.B provides the traffic noise levels for the existing with and without project, and opening year with and without project scenarios. These noise levels represent the worst-case scenario, which assumes no shielding is provided between the traffic and the location where the noise contours are drawn.

The without and with project scenario traffic volumes were obtained from the *Traffic Impact Study, 2740 West Nielsen Avenue Warehouse Project* (LSA 2025c).

Table 13.B: Traffic Noise Levels Without and With Proposed Project

Roadway Segment	Existing		Existing With Project			Near Term		Near Term with Project			Cumulative Year 2046		Cumulative Year 2046 With Project		
	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	Increase from Existing Conditions	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	Increase from Near-Term Conditions	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 feet from Centerline of Nearest Lane	Increase from Year 2035 Conditions
Marks Avenue between Belmont Avenue and Nielsen Avenue	8,472	71.3	8,746	71.4	0.1	8,626	71.3	8,900	71.5	0.2	8,892	71.5	9,166	71.6	0.1
Marks Avenue between Nielsen Avenue and Ray Johnson Drive	9,006	71.5	10,438	72.2	0.7	9,158	71.6	10,590	72.2	0.6	9,389	71.7	10,821	72.3	0.6
Marks Avenue between Ray Johnson Drive and SR-180 Westbound Ramps	9,267	71.6	10,700	72.3	0.7	9,419	71.7	10,852	72.3	0.6	9,626	71.8	11,059	72.4	0.6
Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	9,320	71.7	10,087	72.0	0.3	9,612	71.8	10,379	72.1	0.3	10,532	72.2	11,299	72.5	0.3
Belmont Avenue between Marks Avenue and Hughes Avenue	4,846	68.5	4,846	68.5	0.0	5,400	68.9	5,400	68.9	0.0	5,455	69.0	5,455	69.0	0.0
Nielsen Avenue between Marks Avenue and Hughes Avenue	1,520	63.0	2,922	65.9	2.9	1,520	63.0	2,922	65.9	2.9	1,596	63.2	2,998	66.0	2.8
Hughes Avenue between Nielsen Avenue and Belmont Avenue	3,029	66.2	3,995	67.4	1.2	3,083	66.3	4,049	67.5	1.2	3,744	67.1	4,710	68.1	1.0

Source: Compiled by LSA (January 2025).
Note: Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.
Shaded cells indicate roadway segments adjacent to the project site.
ADT = average daily traffic
CNEL= Community Noise Equivalent Level
dBA = A-weighted decibels
SR = State Route

Table 13.B shows that the increase in traffic noise associated with the proposed project would be no greater than 2.9 dBA, while the certified EIR found that the noise increase in project-related traffic noise associated with the approved project would be no greater than 2.2 dBA. Noise level increases less than 3.0 dBA are not considered perceptible to most people in an outdoor environment. Because this is also consistent with General Plan Policy NS-1-j: Significance Threshold, which states that an increase of 3 dBA CNEL or more is considered significant, traffic noise impacts from project-related traffic on off-site sensitive receptors would remain less than significant. Therefore, the proposed project would not result in new or more severe impacts related to traffic noise beyond those already analyzed in the certified EIR.

Stationary Noise Impacts to Off-Site Receivers. Noise impacts associated with the long-term operation of the project must comply with the noise standards specified in the City's General Plan and the Municipal Code consistent with the analysis contained in the certified EIR. Adjacent off-site land uses would be potentially exposed to stationary-source noise impacts from the proposed HVAC equipment, truck deliveries, and loading and unloading activities. The potential noise impacts to off-site sensitive land uses from the proposed operations are discussed below. To provide a conservative analysis, it is assumed that operations would occur equally during all hours of the day and that half the 157 loading docks would be active at all times. Additionally, consistent with the certified EIR, the analysis assumed that within any given hour, 48 heavy trucks would maneuver to park near or back into one of the proposed trailer parking stalls. HVAC equipment is expected to run continuously for the duration of a 24-hour period. To determine the future noise impacts from project operations to the noise sensitive uses, the 3-D noise model, SoundPLAN, was used for the evaluation. The model incorporates the site topography as well as the shielding from the proposed building on-site. Results from the model analysis for each of the anticipated stationary sources are summarized below.

Heating, Ventilation, and Air Conditioning Equipment. Consistent with the findings of the certified EIR, it is estimated that the proposed project would have four rooftop HVAC units on each of the proposed buildings to provide ventilation to the proposed office and warehouse spaces. The analysis assumes that the HVAC equipment would operate 24 hours per day and would generate sound power levels (SPL) of up to 87 dBA SPL or 72 dBA L_{eq} at 5 feet, based on manufacturer data. [22]

Truck Deliveries and Truck Loading and Unloading Activities. Consistent with the approved project, noise levels generated by delivery trucks associated with the proposed project would be similar to noise readings from truck loading and unloading activities, which generate a noise level of 75 dBA L_{eq} at 20 feet based on measurements taken by LSA.[23] Delivery trucks would arrive on site and maneuver their trailers so that trailers would be parked within the loading docks. During this process, noise would be associated with the truck engine, air brakes, and back-up alarms while the truck is backing into the dock. These noise sources would occur for a short period of time (less than 5 minutes). After a truck enters the loading dock, the doors would be closed, and the remainder of the truck loading activities would be enclosed and therefore much less perceptible. To present a conservative assessment, consistent with analysis in the certified EIR,

22 Trane. n.d. Fan Performance - Product Specifications RT-PRC023AU-EN.

23 LSA Associates, Inc. (LSA). 2016. *Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center*.

the model analysis assumes that unloading activities would occur at half of the 192 docks simultaneously for a period of more than 30 minutes in a given hour. Maximum noise levels that occur during the docking process were measured to be 86 dBA L_{max} at a distance of 20 feet.

Table 13.C shows the combined hourly noise levels generated by the proposed project at the closest off-site land uses. The project-related hourly noise level impacts associated with the proposed project would be 57.2 dBA L_{eq} at the outdoor activity area of the residence south of Building 1 (compared to 58.2 dBA L_{eq} associated with the approved project). When propagated to the outdoor activity area of the residential property south of Building 1, the average daytime noise level is 56.8 dBA L_{eq} and the average nighttime noise level is 53.6 dBA L_{eq}, consistent with the findings of the certified EIR. As specified in the City's Noise Element, if existing ambient noise levels exceed the City's noise standards, a project impact would occur when project related noise levels cause a 5 dBA or more increase. When compared to existing noise levels, project operations would not create an impact during daytime hours but would generate an increase of greater than 5 dBA during nighttime hours, resulting in a potentially significant impact. Mitigation would be required, consistent with the findings of the certified EIR.

Table 13.C: Hourly Exterior Noise Level Impacts

Receptor	Direction	Existing Daytime Noise Level (dBA L_{eq})	Existing Nighttime Noise Level (dBA L_{eq})	Project Noise Level (dBA L_{eq})	Daytime Noise Level Increase (dBA L_{eq})	Nighttime Noise Level Increase (dBA L_{eq})	Potential Operational Noise Impact? (Daytime / Nighttime)[1]
Residential	South	56.8	53.6	57.7	3.5	5.5	No / Yes

Source: Compiled by LSA (2025).
[1] Because ambient noise levels exceed the City of Fresno's stationary noise criteria, a potential operational noise impact would occur if operational noise would increase ambient noise by 5 dBA or more.
dBA = A-weighted decibels
L_{eq} = equivalent noise level

Table 13.D shows the modeled maximum exterior noise levels. The maximum noise levels generated would approach 66.5 dBA L_{max} at the surrounding sensitive receptors, consistent with the findings of the certified EIR. This noise level would be below the City's exterior maximum daytime noise standard of 70 dBA L_{max} but would exceed the 60 dBA L_{max} for nighttime hours. Similar to the hourly noise impacts, project operations would not generate a significant impact related to maximum noise levels during daytime hours but would generate a significant impact during nighttime hours. Mitigation would be required.

Table 13.D: Maximum Exterior Noise Level Impacts

Receptor	Direction	Project Maximum Noise Level (dBA L_{max})	Daytime Maximum Noise Level Standard (dBA L_{max})	Nighttime Maximum Noise Level Standard (dBA L_{max})	Potential Operational Noise Impact? (Daytime / Nighttime)[1]
Residential	South	66.5	70	60	No / Yes

Source: Compiled by LSA (2025).
dBA = A-weighted decibels
L_{max} = maximum noise level

The certified EIR required the implementation of Mitigation Measure NOI-2, which would reduce potential impacts related to loading dock and delivery noise by prohibiting loading dock activities at the loading dock doors and trailer parking activities south of Building 1 during nighttime hours. Loading dock and parking activities at all other locations would be shielded by the proposed buildings and would not exceed the City's nighttime noise standards. With implementation of Mitigation Measure NOI-2, as identified in the certified EIR, the proposed project would result in a less than significant impact associated with the generation of a substantial permanent increase in ambient stationary source noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, State, or federal standards. Therefore, the proposed project would not result in new or more severe impacts related to operational noise beyond those already analyzed in the certified EIR.

Vibration

Ground vibration generated by construction equipment and transportation sources spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage.

The following sections describe the potential short-term construction and long-term operational groundborne vibration impacts associated with the proposed project.

Short-Term Vibration Impacts. As discussed in the certified EIR, the construction vibration impact analysis assesses the potential for building damages using vibration levels in peak particle velocity (PPV) (in/sec). This is because vibration levels calculated in root-mean-square (RMS) are best for characterizing human response to building vibration, while vibration level in PPV is best for characterizing potential for damage.

Table 13.E shows the PPV and vibration velocity decibels (VdB) values at 25 ft from the construction vibration source. As shown in Table 13.E, bulldozers and other heavy-tracked construction equipment (expected to be used for this project) generate 0.089 PPV in/sec or 87 VdB of ground-borne vibration when measured at 25 feet, based on the FTA Manual.[24] The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Based on the information provided in Table 13.F, consistent with the findings in the certified EIR, vibration levels are expected to approach 0.068 PPV in/sec at the surrounding structures and would be below the 0.2 PPV in/sec damage threshold.

[24] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*.

Table 13.E: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks[2]	**0.076**	**86**
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
[2] Equipment shown in **bold** is expected to be used on site.
µin/sec = microinches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inch/inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

Table 13.F: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (PPV) at 25 feet[1]	Distance (feet)[2]	Vibration Level (PPV)
Residential Uses (South)	0.089	110	0.010
Industrial Uses (North)		30	0.068
Industrial Uses / Cemetery (East)		120	0.009
Industrial Uses (West)		300	0.002

Source: Compiled by LSA (2022).
[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The reference distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.
ft = foot/feet
in/sec = inch/inches per second
PPV = peak particle velocity

Based on the information provided in Table 13.G, and consistent with the findings in the certified EIR, vibration levels are expected to approach 85 VdB at the closest industrial uses north of the project site and 68 VdB at the closest residential use to the south, which are below the 90 VdB and 78 VdB annoyance threshold for workshop or industrial types uses and for daytime residential uses, respectively.

Because construction activities are regulated by the City's Code of Ordinance that states temporary construction, maintenance, or demolition activities are not allowed between the hours of 7:00 p.m. on one day and 7:00 a.m. of the following day, vibration impacts would not occur during the more sensitive nighttime hours.

Table 13.G: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (VdB) at 25 feet[1]	Distance (feet) [2]	Vibration Level (VdB)
Residential Uses (South)	87	110	68
Industrial Uses (North)		30	85
Industrial Uses / Cemetery (East)		120	67
Industrial Uses (West)		300	55

Source: Compiled by LSA (2022).

[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.

[2] The reference distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses.

VdB = vibration velocity decibels

Other building structures surrounding the project site are farther away and would experience further reduced vibration. Therefore, consistent with the certified EIR, no construction vibration impacts associated with the proposed project would occur.

Long-Term Vibration Impacts. Consistent with the approved project, once operational, the proposed project would not generate vibration levels related to on-site operations. In addition, vibration levels generated from project-related traffic on the adjacent roadways are unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. Vibration levels generated from project-related traffic on the adjacent roadways would be less than significant. Therefore, the proposed project would not result in new or more severe impacts related to vibration beyond those already analyzed in the certified EIR.

Airport Noise

As discussed in the certified EIR, the nearest airports include the Fresno Chandler Executive Airport, located approximately 0.8 mile from the project site, the Sierra Sky Airport, located approximately 6.7 miles from the project site, and the Fresno International Airport, located approximately 7.1 miles from the project site. Each of these airports is included in the Fresno County ALUCP, which guides approximate compatible land uses. The City of Fresno General Plan, other City land use plans, and all City land use decisions must be compatible with the adopted ALUCP. The ALUCP includes CNEL noise contours based on projected airport and aircraft operations. The project site is not located in the ALUCP; therefore, project implementation would not expose people residing or working in the project area to excessive noise levels. Therefore, the proposed project would not result in new or more severe impacts related to airport noise beyond those already analyzed in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measures NOI-1 and NOI-2 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the noise impacts of the proposed project. Therefore, there would be no new impacts related to land use and planning associated with the proposed project, and additional mitigation is not required.

14. POPULATION AND HOUSING

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

The proposed project would include three office/warehouse buildings. As discussed in the certified EIR, the proposed project would not result in direct population growth as the use proposed is not residential and would not contribute to permanent residency on-site. Further, the site is designated Heavy Industrial by the General Plan and would not generate growth beyond that anticipated in the General Plan. Therefore, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly. Additionally, no housing is currently present on the project site, and therefore, there are no people living on the project site that would be displaced by the proposed project. Therefore, there would be no impacts related to the displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the proposed project would not result in new or more severe impacts related to population and housing than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the population and housing impacts of the proposed project. Therefore, there would be no new impacts related to population and housing associated with the proposed project, and additional mitigation is not required.

15. PUBLIC SERVICES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Discussion

Fire Protection

As discussed in the certified EIR, the City of Fresno Fire Department (FFD) would provide fire protection services to the proposed project. There are 23 FFD fire stations in Fresno, with the closest fire station, Fire Station 3, located approximately 3 miles from the project site. Planned growth under the General Plan would increase calls for fire protection service in the City. The project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. The project could result in an incremental increase in the demand for fire protection services as a result of additional employees to the project site. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. In addition, the Project Applicant would be required to submit plans to the FFD for review and approval prior to the issuance of building permits to ensure the project would conform to applicable building codes.

The certified EIR found that the FFD would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would not be required. The certified EIR found that the approved project would not result in a significant impact on the physical environment due to the incremental increase in demand for fire protection and life safety services. The certified EIR also found that incremental increase in demand for services is not expected to adversely affect existing responses times to the site or within the City. The proposed project would have less total building square footage; therefore, as discussed in the certified EIR, although the proposed project would incrementally increase the demand for fire and police services, the potential increase in demand for service is not expected to adversely affect existing response times to the site or within the City. The proposed project would not result in new or more severe impacts related to police and fire protection services than were identified in the certified EIR.

Police Protection

As discussed in the certified EIR, the City of Fresno Police Department (FPD) provides police protection to the project site. The FPD headquarters are located at 2323 Mariposa Street, approximately 3.5 miles from the project site. Planned growth under the General Plan would increase calls for police protection service in the City. Consistent with the findings of the certified EIR, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth. As discussed in the certified EIR, the project could result in an incremental increase in the demand for police protection services. The FPD would continue to provide services to the project site and would not require additional officers to serve the project site. The construction of new or expanded police facilities would not be required. Therefore, consistent with the findings in the certified EIR, the proposed project would not result in a substantial adverse impact associated with the provision of additional police facilities or services. The proposed project would not result in new or more severe impacts related to police protection services than were identified in the certified EIR.

Schools

The proposed project would not generate student demand or otherwise impact school services given that there is no housing or a residential component. As such, there would be no impact related to schools. The proposed project would not result in new or more severe impacts related to schools than were identified in the certified EIR.

Parks

Demand for parks generated by the project is within planned services levels of the City of Fresno Parks and Community Services Department and the applicant would be required to pay any required impact fees at the time building permits are obtained or receive credits for construction as may be memorialized within a subdivision or development agreement. Maintenance would be afforded through annexation into a Community Facilities District (CFD). The proposed project would not result in new or more severe impacts related to parks than were identified in the certified EIR.

Other Public Facilities

Development of the proposed project could also increase demand for other public services, including libraries, community centers, and public health care facilities. However, due to the minimal increase in population, the proposed project would not result in a substantial increase in the use of these facilities, such that new facilities would be needed to maintain service standards, as these facilities are not currently overused and have capacity to serve new demand. The proposed project would not result in new or more severe impacts related to other public facilities than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the public services impacts of the proposed project. Therefore, there would be no new impacts related to public services associated with the proposed project, and additional mitigation is not required.

16. RECREATION

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

The proposed project would include three office/warehouse buildings and would not generate population growth that would result in an increase in the use of existing neighborhood and regional parks or other recreational facilities. Therefore, there would be no impact related to the increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Additionally, the proposed project would not include or require the construction or expansion of existing public recreational facilities; therefore, development of the proposed project and associated recreational opportunities for use by users of the project site would not result in additional environmental effects beyond those described in this document. Therefore, the proposed project would not result in new or more severe impacts related to parks and recreation than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the recreation impacts of the proposed project. Therefore, there would be no new impacts related to recreation associated with the proposed project, and additional mitigation is not required.

17. TRANSPORTATION

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Discussion

The analysis in this section is based on the Traffic Impact Study (TIS)[25] prepared for the proposed project (Appendix D). The TIS was prepared in accordance with the City of Fresno Traffic Impact Study Report Guidelines (TIS Guidelines), dated February 2, 2009, the City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds (adopted on June 25, 2020), and the California Department of Transportation (Caltrans). The scope of work for the TIS, including trip generation, trip distribution, study area, and analysis methodologies, was approved by City staff.

Conflict with a Program, Plan, Ordinance or Policy Addressing the Circulation System

Development of the proposed project would increase the amount of vehicle and truck traffic. As discussed in the certified EIR, while level of service (LOS) analysis is no longer a criterion of significance for traffic impacts under CEQA, the City of Fresno General Plan includes policies that utilize LOS to determine project conditions of approval. As such, this analysis includes LOS impacts while vehicle miles traveled (VMT) impacts are discussed in the following section.

Based on the City of Fresno General Plan Circulation Element, the City uses Traffic Impact Zone (TIZ) boundaries within the City to identify acceptable LOS for each TIZ. The majority of the study area is within TIZ III, or along the border of TIZ II and TIZ III. TIZ II has a LOS standard of E, while TIZ III has an LOS standard of D. Therefore, as a conservative estimate, LOS D was considered as the minimum LOS criterion for all intersections. As such, an operational deficiency if the addition of the project traffic results in any one of the following: causes the intersection LOS to change from acceptable to unacceptable levels; causes the intersection LOS to change from an unacceptable LOS (LOS E) to LOS F; or increases the average delay at a study intersection that is already operating at an unacceptable LOS.

[25] LSA Associates, Inc. (LSA). 2025c. *Traffic Impact Study 2740 West Nielsen Avenue Warehouse Project, City of Fresno, Fresno County, California*. January.

Caltrans does not have any operational deficiency criteria for study intersections. As such, for the purposes of this study, LOS D is considered to be the LOS standard for all study intersections under the jurisdiction of Caltrans.

The TIS examined traffic operations in the vicinity of the proposed project under the following five scenarios:

- Existing Conditions;
- Existing Plus Project Conditions;
- Near Term Plus Project Conditions;
- Cumulative Year (2046) without Project Conditions; and
- Cumulative Year (2046) Plus Project Conditions.

Consistent with the analysis in the certified EIR, traffic conditions for the proposed project were examined for the weekday daily, AM, and PM peak-hour conditions. The AM peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. The PM peak hour is the one hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. Roadway segments were analyzed using daily volume counts, and comparisons were made to the daily service volume standards provided in the City Guidelines. The study area for the TIS included the following study intersections and roadway segments.

Intersections.

1. Marks Avenue/Belmont Avenue (City of Fresno, County of Fresno);
2. Marks Avenue/Nielsen Avenue (City of Fresno);
3. Marks Avenue/Ray Johnson Drive (City of Fresno);
4. Marks Avenue/SR-180 Westbound Ramps (Caltrans);
5. Marks Avenue/SR-180 Eastbound Ramps (Caltrans);
6. Marks Avenue/Whitesbridge Avenue (City of Fresno, Fresno County);
7. Hughes Avenue/Belmont Avenue (City of Fresno, County of Fresno); and
8. Hughes Avenue/Nielsen Avenue (City of Fresno).

Roadway Segments.

1. Marks Avenue, between Belmont Avenue and Nielsen Avenue;
2. Marks Avenue, between Nielsen Avenue and Ray Johnson Drive;
3. Marks Avenue, between Ray Johnson Drive and SR-180 Westbound Ramps;
4. Marks Avenue, between SR-180 Westbound Ramps and SR-180 Eastbound Ramps;
5. Belmont Avenue, between Marks Avenue and Hughes Avenue;
6. Nielsen Avenue, between Marks Avenue and Hughes Avenue; and
7. Hughes Avenue, between Belmont Avenue and Nielsen Avenue.

Project Trip Generation. As discussed in the certified EIR, the trip generation estimated for the approved project was based on the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) High-Cube Warehouse Trip Generation Study. The study provides separate trip generation rates for passenger vehicles, 2–4 axle trucks, and 5+ axle trucks. The truck trips were converted to Passenger Car Equivalent (PCE) trips using a PCE factor of

2.0 for 2–4 axle trucks. To be conservative, a PCE factor of 3.0 was used for 5+ axle trucks. The certified EIR found that the approved project would generate 1,920 daily passenger vehicle trips, including 1,578 passenger vehicle trips and 342 truck trips, with 110 trips occurring in the AM peak hour and 148 trips occurring the PM peak hour. The certified EIR also found that the approved project would generate 2,458 daily PCE trips, including 1,578 passenger vehicle trips and 880 PCE truck trips, with of 137 PCE trips occurring during the AM peak hour and 176 PCE trips occurring during the PM peak hour.

The updated TIS developed the trip generation for the proposed project using rates from the ITE Trip Generation Manual (11th Edition) for Land Use 110 – 'General Light Industrial' and Land Use 155 – 'High-Cube Fulfillment Center Warehouse – Non-Sort' with setting/location as 'General Urban/ Suburban'. Warehouse trips were converted to passenger vehicles and trucks based on South Coast Air Quality Management District (SCAQMD) recommendations. As such, 31 percent of the warehouse trips will be trucks, which includes 6.8 percent two-axle trucks, 5.5 percent three-axle trucks, and 18.7 percent four or more axle trucks. The truck trips were converted to PCE trips using a factor of 2.0 for two-axle and three-axle trucks, consistent with Highway Capacity Manual (HCM) recommendations. However, as a conservative approach, a PCE factor of 3.0 was used for 4+ axle trucks for the purposes of this study. Table 17.A illustrates the project trip generation.

Table 17.A: Project Trip Generation

Trip Generation[1,2]	Average Daily Trips	Weekday AM Peak Hour[2]			Weekday PM Peak Hour[2]		
		In	Out	Total	In	Out	Total
Trip Generation							
Trip Generation (Cars)	1,537	159	26	185	40	134	174
Trip Generation (2–3 Axle Trucks)	274	16	16	32	14	17	31
Trip Generation (4+ Axle Trucks)	418	25	25	50	21	26	47
Trip Generation (Total Trucks)	692	41	41	82	35	43	78
Trip Generation (Total)	**2,229**	**200**	**67**	**267**	**75**	**177**	**252**
PCE Trip Generation							
Trip Generation (Cars)	1,537	159	26	185	40	134	174
PCE Trip Generation (2–3 Axle Trucks)[3]	548	32	32	64	28	34	62
PCE Trip Generation (4+ Axle Trucks)[3]	1,254	75	75	150	63	78	141
PCE Trip Generation (Total Trucks)	1,802	107	107	214	91	112	203
PCE Trip Generation (Total)	**3,339**	**266**	**133**	**399**	**131**	**246**	**377**

Source: Compiled by LSA (2025).

1 Buildings 1 and 3 used rates from Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) supplement Land Use 155 - "High-Cube Fulfilment Center Warehouse- Non-Sort" . The truck mix percentages were obtained from South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, The truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks.

2 Building 2 used rates from ITE Trip Generation Manual (11th Edition) Land Use 110 - "General Light Industrial".

3 A Passenger Car Equivalent (PCE) factor 2.0 has been taken for 2-3 axle trucks based on Highway Capacity Manual (HCM) recommendations. Further, as a conservative approach, a PCE factor of 3.0 is taken, for 4+ axle trucks, consistent with latest practices in numerous California jurisdictions.

As shown in Table 17.A, the proposed project is anticipated to generate 2,229 daily passenger vehicle trips, including 1,537 passenger vehicle trips and 692 truck trips, with 267 trips occurring in the AM peak hour and 252 trips occurring the PM peak hour. Furthermore, the proposed project is anticipated

to generate a total of 3,339 daily PCE trips, including 1,537 passenger vehicle trips and 1,802 PCE truck trips, with 399 PCE trips occurring during the AM peak hour and 377 PCE trips occurring during the PM peak hour.

Intersection Capacity and Roadway Segment Analysis. Consistent with the analysis in the certified EIR, for all study area intersections, the Highway Capacity Manual, 6th Edition (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using the Synchro 12 software, which uses the HCM 6 methodologies. LOS can be determined for both signalized and unsignalized intersections.

The certified EIR found that an operational deficiency currently exists at the intersection of Marks Avenue/Belmont Avenue. The certified EIR determined that this intersection would meet several signal warrants under the Existing, Existing with Project, Near-Term Approved and Pending with Project, Cumulative Year (2035) without Project, and Cumulative Year (2035) with Project scenarios. As discussed in the certified EIR, the City of Fresno Traffic Signal Mitigation Impact (TSMI) fees are charged to all new developments throughout the City to mitigate the traffic operational deficiencies through the funding of traffic signal improvements to serve new developments. Based on the City of Fresno *Draft City-Wide Traffic Signal Mitigation Impact Fee Nexus Analysis for Proposed Fee Update,* dated June 2022, signalization of the intersection of Marks Avenue/Belmont Avenue is included in the Traffic Signal Capital Improvements, where the entire funding is expected to be generated from the TSMI fees. Therefore, since the improvement is covered under the TSMI fee program, the certified EIR determined that the approved project would be paying into the fee program for this improvement. Additionally, the certified EIR found that the approved project would not cause any deterioration of LOS at the roadway segments analyzed.

Based on the results of the updated LOS analysis, all study intersections and roadway segments currently operate at satisfactory LOS under existing conditions. Furthermore, with implementation of the proposed project, the updated LOS analysis determined that all study intersections and roadway segments are forecast to operate at satisfactory LOS under existing plus project conditions. Additionally, all study intersections and roadway segments are forecast to operate at satisfactory LOS under near term plus project conditions. All study intersections and roadway segments are also forecast to operate at satisfactory LOS under cumulative year (2046) without project and plus project conditions. As such, the proposed project would not result in any new or more severe impacts related to intersection capacity and roadway segment analysis than were identified in the certified EIR.

Queuing Analysis. The queuing analysis for the approved project found that queues for some of the movements are projected to exceed the existing available turn-pocket storage lengths under existing, Near-term approved and pending with project, and Cumulative Year (2035) for the intersection of Marks Avenue/Belmont Avenue. Based on the project location, majority of the approved project traffic would use the intersections of Marks Avenue/Nielsen Avenue, Hughes Avenue/Belmont Avenue, and Hughes Avenue/Nielsen Avenue. It was determined that the approved project would not result in creating any inadequacy of turn pocket storage lengths at these intersections.

An updated queuing analysis was prepared for the proposed project. Queue lengths for the southbound left (SBL) movement at the Marks Avenue/Whitesbridge Avenue intersection are forecast to exceed the available turn-pocket storage length in the a.m. peak hour under cumulative year (2046)

conditions. Furthermore, queue lengths for the westbound right (WBR) movement at the same intersection are forecast to exceed the available turn-pocket storage length in the p.m. peak hour under cumulative year (2046) conditions. However, it should be noted that queue lengths for the SBL and WBR movements at the Marks Avenue/Whitesbridge Avenue intersection are forecast to exceed the corresponding available turn-pocket storage length under without project conditions. The queue lengths for both of these movements are not forecast to increase with the addition of project trips under plus project conditions. As such, implementation of the project would not contribute to the forecasted queuing deficiency at the SBL and WBR movements at this intersection under cumulative year (2046) conditions. Queue lengths for all turning movements at all other study intersections are projected to not exceed the corresponding available turn-pocket storage length under cumulative year (2046) conditions. As such, the proposed project would not result in any new or more severe impacts related to queuing than were identified in the certified EIR.

Transit. As discussed in the certified EIR, there are no existing dedicated transit facilities within the study area for the proposed project. The project site is not located in an important transit corridor in the City, and therefore it is not anticipated that the construction of additional transit facilities would be required in the study area as a result of the proposed project. Therefore, the proposed project would not substantially conflict with plans or policies supporting public transit or transit facilities, and the proposed project would not result in any new or more severe impacts related to transit services than were identified in the certified EIR.

Bicycles. Currently, there are existing Class II bike lanes along Marks Avenue and Nielsen Avenue within the study area for the project, in the vicinity of the project site. As discussed in the certified EIR, pursuant to the City's Active Transportation Plan, future Class II bike lanes will be added along Belmont Avenue and Hughes Avenue within the project study area to improve bicycle and pedestrian accessibility and connectivity in the vicinity of the project site. The proposed project would not conflict with the planning and construction of bicycle facilities pursuant to the City's Active Transportation Plan or other plans or policies supporting bicycles or bicycle facilities in Fresno. Therefore, the proposed project would not result in any new or more severe impacts related to bicycle facilities than were identified in the certified EIR.

Pedestrian Facilities. Currently, paved sidewalks are present intermittently on both sides of Belmont Avenue and Marks Avenue. Pursuant to the City's Active Transportation Plan, the City recommends pedestrian sidewalks to be constructed on Marks Avenue, Nielsen Avenue, Belmont Avenue, and Hughes Avenue within the study area. As with the approved project, the proposed project would construct sidewalks along the project frontage on Marks Avenue, Nielsen Avenue, and Hughes Avenue. Sidewalks would be constructed pursuant to City standards and would increase pedestrian access and safety in the study area. As such, the proposed project would not conflict with plans and policies for pedestrian facilities in the City, and the proposed project would not result in any new or more severe impacts related to pedestrian facilities than were identified in the certified EIR.

Conclusion. As described above, the proposed project would result in a higher trip generation than evaluated in the certified EIR for the approved project. However, as demonstrated above, the addition of project traffic is not anticipated to exceed the City's level of significance threshold of LOS (LOS D or better). In addition, the project-related traffic would not result in a deficiency to existing transit, roadway, bicycle, and pedestrian facilities. Therefore, the proposed project would not conflict with

any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program, and the proposed project would not result in any new or more severe traffic impacts than were identified in the certified EIR.

Vehicle Miles Traveled

As discussed in the certified EIR, SB 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of LOS. VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact. Heavy-duty trucks are addressed in other CEQA sections (e.g., air quality, GHGs, noise, and health risk assessment analysis) and are subject to regulation in a separate collection of rules under CARB jurisdiction.

The *State CEQA Guidelines* were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criterion for transportation impacts.

State CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

As discussed in the certified EIR, on June 25, 2020, the City of Fresno adopted its CEQA Guidelines for Vehicle Miles Traveled Thresholds, pursuant to SB 743, to be effective as of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of *State CEQA Guidelines* Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The VMT Guidelines provides multiple screening criteria for land use projects. The project was compared with the screening criteria established in the "Project Screening" section of the VMT Guidelines to check if the project can be screened out. Following is a brief description about the project in relation with the project screening criteria:

- **Transit Priority Area (TPA) Screening:** In accordance with SB 743, "Transit priority areas" are defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program." A Major Transit Stop is defined as "a site containing an

existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods." A High-Quality Transit Area or Corridor is a corridor with fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours. As with the approved project, the proposed project is not located within a TPA. Therefore, this screening criteria does not apply to the project.

- **Low Trip Generator:** The VMT Guidelines identifies that projects generating less than 500 daily trips could also be screened out. As discussed in the project trip generation section, the proposed project is estimated to generate 2,229 daily trips. Therefore, similar to the approved project, the proposed project does not satisfy this screening criterion.

- **Other Screening Criteria:** The project is not a residential or office project; therefore, it could not be screened out using low-VMT-area maps. Additionally, it is neither an affordable housing project nor could it be classified as retail, institutional/government uses, or public service uses. Therefore, consistent with the approved project, these criteria do not apply for the proposed project.

As shown above, the project could not be screened out from detailed VMT analysis. As such, similar to the approved project, the proposed project could not be screened out from detailed VMT analysis. As such, pursuant to the VMT Guidelines, a detailed VMT analysis was conducted to assess the project's VMT impact.

Thresholds of Significance. Though the project is non-residential, the project could not be classified as a retail or office project. Additionally, the project does not require a General Plan Amendment (GPA). Therefore, pursuant to the VMT Guidelines, the project VMT per employee needs to be compared with the existing VMT per employee for the region. The City's VMT Guidelines establish a numerical value of 25.6 for the regional VMT per employee.

VMT Analysis. A detailed VMT analysis discussion is included in Chapter 13 of the TIS (see Appendix D). As recommended in the City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds, projects that could not be screened out from a quantitative VMT assessment, the VMT analysis should be conducted using the Fresno Council of Governments (COG) Activity Based Model (ABM), which is a tour-based model. Therefore, the Fresno COG ABM was used for the project VMT analysis. The model database was updated with the project land uses to calculate project VMT.

As discussed in the certified EIR, the approved project's VMT was calculated to be 19.8 VMT per employee. As such, the approved project's VMT per employee rate was found to be 22.66 percent lower than the existing regional average VMT per employee, or the City's threshold, resulting in a less than significant impact.

Based on the updated Fresno COG ABM model output, the proposed project's VMT was calculated to be 13.9 VMT per employee. As such, the proposed project's VMT per employee rate is 45.6 percent lower than the existing regional VMT per employee. As such, consistent with the findings of the certified EIR, the proposed project would result in a less than significant VMT impact concerning

consistency with *State CEQA Guidelines* Section 15064.3(b). Therefore, the proposed project would not result in any new or more severe VMT impacts than were identified in the certified EIR.

Design Features

As discussed in the certified EIR, the project site is located within the City's Heavy Industrial zoning district, and nearby parcels to the project site consist mostly of low residential, light and heavy industrial, cemetery, and vacant, undeveloped uses. The proposed project would develop three office/warehouse buildings. As such, the proposed use of the project site would not be incompatible with site zoning or with uses adjacent to the project site. Therefore, the proposed project would not introduce incompatible uses that would substantially increase hazards.

The proposed project would construct sidewalks along the project frontage on Marks Avenue, Nielsen Avenue, and Hughes Avenue. The proposed sidewalks would be constructed pursuant to City standards and would increase pedestrian access and safety in the study area.

Vehicular access to the project site would be provided via eight driveways located on Marks Avenue, Nielsen Avenue, and Hughes Avenue. All project driveways would be stop controlled at the driveway approach. Therefore, vehicles exiting the project site from project driveways must stop before they continue to merge on the neighboring circulation network, which would reduce potential hazards associated with exiting the project site.

In addition, the proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. The project design features would be required to comply with standards set by the City's General Plan and City Engineer. The proposed project would also be required to submit plans to the FFD for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the project design.

Therefore, consistent with the findings identified in the certified EIR, the proposed project would not increase hazards due to design features or incompatible uses. Therefore, the proposed project would not result in any new or more severe design feature impacts than were identified in the certified EIR.

Emergency Access

Emergency vehicles would have access to the project site via eight driveways located on Marks Avenue, Nielsen Avenue, and Hughes Avenue. Additionally, the proposed project's site plan would be subject to review and approval by the FFD to ensure the project includes adequate emergency access. As such, similar to the approved project, the proposed project would not physically interfere with emergency evacuation or FFD access to and from the project site. The proposed project would not result in any new or more impacts associated with emergency access than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the certified EIR was

certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the transportation impacts of the proposed project. Therefore, there would be no new impacts related to transportation associated with the proposed project, and additional mitigation is not required.

18. TRIBAL CULTURAL RESOURCES

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Discussion

As discussed in the certified EIR, the State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the *State CEQA Guidelines*. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Register of Historical Resources or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1 2)).

Additional information may also be available from the California NAHC's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Assembly Bill 52, which became law January 1, 2015, requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American Tribes to allow for consultation between the tribe and the public agency. The purpose of AB 52 is to provide the opportunity for public agencies and tribes to consult and consider potential impacts to Tribal Cultural

Resources (TCRs), as defined by PRC Section 2107(a). Under AB 52, public agencies shall reach out to California Native American Tribes who have requested to be notified of projects in areas within or which may have been affiliated with their tribal geographic range. Pursuant to AB 52, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe were invited to consult under AB 52. A certified letter was mailed to the above-mentioned tribes on December 17, 2021. The 30-day request for consultation period ended on January 17, 2022. Neither tribe requested consultation.

The site is currently vacant. While there is no evidence to suggest the presence of TCRs, if any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws and regulations would require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resource professional. In addition, Mitigation Measure CUL-1 as identified in the certified EIR, requires that if unknown archaeological resources are discovered during construction, work in the area would halt and a qualified archaeologist would be contacted. Therefore, adherence to the requirements in Mitigation Measure CUL-1 would reduce potential impacts related to the substantial adverse change in the significance of a tribal cultural resource to less than significant. Therefore, the proposed project would not result in new or more severe impacts to tribal cultural resources than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required. The proposed project would comply with Mitigation Measure CUL-1 as established in the certified EIR that would reduce any potential impacts to a less than significant level.

Conclusion

The certified EIR adequately evaluated the tribal cultural resources impacts of the proposed project. Therefore, there would be no new impacts related to tribal cultural resources associated with the proposed project, and additional mitigation is not required.

19. UTILITIES AND SERVICE SYSTEMS

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

Water Supply and Infrastructure

Utilities required to serve the proposed project would include water, wastewater, stormwater drainage, electricity, natural gas, and telecommunications infrastructure.

Water. As discussed in the certified EIR, short term demand for water may occur during excavation, grading, and construction activities on-site. Construction activities would require water primarily for dust mitigation purposes. Water from the existing potable water lines in the vicinity of the project site would be used. Overall, short-term construction activities would require minimal water use and are not expected to have any adverse impacts on the existing water system or available water supplies. The proposed project would not require the construction of new or expanded water conveyance, treatment, or collection facilities with respect to construction activities. Therefore, consistent with the findings identified in the certified EIR, the impacts on water facilities during construction would be less than significant.

Once operational, water service to the project site would be provided by the City. As with the approved project, new water within the project site would connect to the existing 14-inch main located on North Marks Avenue and the 16-inch main on North Hughes Avenue. The project would also include an on-site 12-inch main. Extension of the water infrastructure from the adjacent streets into the project site would be a routine part of the construction process and would not have a material environmental impact. The water facility improvements would be limited to the project site and connection points to the adjacent, existing facilities. In addition, as identified in the certified EIR, the City has concluded that the City of Fresno's water system has sufficient capacity to supply the

proposed project and other projected demands within the City's service area through the year 2045. Therefore, the proposed project would not require or result in the construction of new water facilities, or the expansion of existing facilities, which could cause a significant environmental impact. As such, the proposed project would not result in any new or more severe water impacts than were identified in the certified EIR.

Wastewater. The certified EIR found that no significant increase in wastewater flows is anticipated as a result of construction activities on the project site. Sanitary services during construction would be provided by portable toilet facilities, which transport waste off site for treatment and disposal. Similar to the approved project, during construction of the proposed project, potential impacts to wastewater treatment and wastewater conveyance infrastructure would be less than significant.

Once operational, the City would provide wastewater collection and treatment for the proposed project, and maintain an existing 12- to 18-inch line located in West Nielsen Avenue. The proposed project includes the installation of a new on-site 8-inch wastewater line that would connect to the City's existing line. Any sewer improvements associated with the proposed project would be designed and constructed to City standards. In addition, as discussed in the certified EIR, the City of Fresno Department of Public Utilities has determined that adequate sanitary sewer and wastewater services would be available to serve the proposed project subject to the payment of any applicable connection charges and/or fees and extension of services in a manner that is compliant with the Department of Public Utilities standards, specifications, and policies. In addition, as discussed in the certified EIR, the City has concluded that the City of Fresno's wastewater system has sufficient capacity to supply the proposed project and other projected demands within the City's service area through the year 2045. As such, the proposed project would result in less than significant impacts related to the construction or expansion of wastewater treatment facilities. Therefore, the proposed project would not require or result in the construction of new wastewater treatment or collection facilities, or the expansion of existing facilities, which could cause a significant environmental impact. As such, the proposed project would not result in any new or more severe wastewater impacts than were identified in the certified EIR.

Stormwater and Drainage Facilities. As discussed in the certified EIR, during construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed in the certified EIR, the proposed project would be required to comply with applicable permits and preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. Compliance with applicable permit requirements and implementation of the construction BMPs would ensure that the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts, and the impact would be less than significant.

Similar to the approved project, the proposed project includes the construction of a new curb and gutter along North Marks Avenue, West Nielsen Avenue, and North Hughes Avenue that would connect to the existing FMFCD stormwater system. While the proposed project would permanently increase the impervious surface area in the project site, the project would maintain the overall on-

site drainage patterns and continue to direct surface water to catch basins that flow into the existing storm drains. As with the approved project, prior to the issuance of building permits, the applicant would be required to provide a stormwater improvement plan to the City to ensure that the stormwater system would be capable of handling a 25-year storm and that the drainage facilities conform to City requirements. Additionally, the applicant would be required to pay for all necessary improvement costs if the City determines that the City's storm drain system or storm drain pumping capacity requires expansion or modification as a result of the project. In addition, compliance with existing regulatory requirements, including compliance with the Water Pollution Control Program (WPCP) and compliance with the MS4, as specified in the Industrial General Permit, would reduce or eliminate the potential for project operations to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. As such, the proposed project would not result in any new or more severe impacts to stormwater and drainage facilities than were identified in the certified EIR.

Electricity. Electrical power would be supplied to the proposed project site by Pacific Gas & Electric (PG&E). PG&E provides electrical service to businesses and residents throughout the City via underground and above-ground service lines. PG&E owns and maintains all service and transmission lines in the City and operates several electrical substations throughout the City. According to the CEC, total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh.[26]

Short-term construction activities would be limited to providing power to the staging area and portable construction equipment and would not substantially increase demand for electricity. The heavy equipment used for construction is primarily powered by diesel fuel. Given the limited nature of potential demand for electricity during construction and the availability of existing power lines on the site, there would not be a need to construct new or alter existing electric transmission facilities. Impacts to local regional supplies of electricity would be less than significant.

The proposed project includes connections to the surrounding electrical system on-site. Existing underground utility connections provide electricity to the project site. New underground electrical lines would be installed. As discussed in Section 6, Energy, the estimated potential increased electricity demand associated with the proposed project is 9,087,989 kWh per year (compared to 8,448,500 kWh per year estimated for the approved project). Therefore, similar to the approved project, operation of the proposed project would increase the annual electricity consumption in Fresno County by approximately 0.1 percent. Consistent with the findings of the certified EIR, because the proposed project would only represent a small fraction of electricity demand in Fresno County, the project would meet Title 24 requirements and there would be sufficient electricity supplies available, energy demand for the proposed project would be less than significant. Therefore, although the proposed project would require the construction of new improvements related to the provision of electricity service, the proposed project would not result in significant environmental impacts. As such, the proposed project would not result in any new or more severe electrical impacts than were identified in the certified EIR.

[26] California Energy Commission (CEC). 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

Natural Gas. PG&E is the natural gas service provider in the City of Fresno. PG&E owns and maintains several natural gas transmission lines in the City that feed local distribution lines that connect to individual service lines. PG&E is the natural gas service provider for the City of Fresno. According to the CEC, total natural gas consumption in Fresno County in 2022 was 319,435,645 therms.[27]

Short-term construction activities would not result in demand for natural gas since construction activities/equipment would not require accessing existing adjacent natural gas facilities. Therefore, construction activities would not impact natural gas services, and the proposed project would not require new or physically altered gas transmission facilities.

Operation of the proposed project would increase on-site natural gas demand. As discussed in Section 6, Energy, the estimated potential increase in natural gas demand associated with the proposed project is 43,242 therms per year (compared to 161,487 therms per year estimated for the approved project). Therefore, natural gas consumption for the proposed project would be lower than the total natural gas usage associated with the approved project as identified in the certified EIR. Further, operation of the proposed project would negligibly increase the annual natural gas consumption in Fresno County by approximately less than 0.1 percent. Similar to the approved project, because the proposed project would only represent a small fraction of electricity demand in Fresno County, the project would meet Title 24 requirements and there would be sufficient natural gas supplies available, energy demand for the proposed project would be less than significant. Therefore, although the proposed project would require the construction of new improvements related to the provision of natural gas service, the proposed project would not result in significant environmental impacts. As such, the proposed project would not result in any new or more severe natural gas impacts than were identified in the certified EIR.

Telecommunication Facilities. Existing telephone, cable, and internet service lines in the vicinity would serve the project site. Internal to the project site, the Project Applicant would be responsible for constructing adequate telecommunication facility extensions for the proposed project. The reconfiguration of these facilities would occur on-site during the site preparation and earthwork phase and are not expected to impact any telephone, cable, or internet services off-site that serve the surrounding areas. Additionally, telecommunication facilities are generally installed concurrently with utility expansions, and impacts associated with the expansion of telecommunications facilities are already considered in the air quality, noise, and construction traffic analysis. As such, the proposed project would not result in any new or more severe telecommunication facilities impacts than were identified in the certified EIR.

Summary. As with the approved project, the proposed project would not require or result in the relocation or construction of new or expanded facilities for water, wastewater treatment, storm drainage, electric power, natural gas, or telecommunications. Therefore, the proposed project would not result in any new or more severe utilities impacts than were identified in the certified EIR.

[27] California Energy Commission (CEC) 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

Available Water Supplies

The certified EIR found that based on the WSA prepared for the approved project, the project site is included in the land use area covered by the City's 2020 UWMP and is designated as Heavy Industrial in the City's General Plan. Land use acreages and water demand in the 2020 UWMP were based on the City's General Plan land use designations for 2020 and buildout in 2056. As such, the acreage associated with the proposed project was assumed Industrial in the 2020 UWMP; therefore, it is assumed that demand for water was accounted for in the 2020 UWMP. The certified EIR found that there is no evidence, in consideration of the calculated project water demand, that such demand exceeds that estimated in the 2020 UWMP. The adequacy of the water supply for the project was thus determined to be consistent with the basis of the analysis of the City's water supply in the adopted 2020 UWMP. The proposed project would have less total building square footage than the approved project; therefore, the proposed project would not exceed the capacity identified in the certified EIR. As such, and the proposed project would not result in any new or more severe impacts than were identified in the certified EIR.

Capacity of Wastewater Services

As discussed in the certified EIR, wastewater collection and treatment services in Fresno are provided by the City of Fresno Department of Public Utilities. The City's wastewater collection system consists of about 1,630 miles of pipes ranging in size from 4 inches in diameter to 84 inches in diameter. This collection system also utilizes 15 lift stations throughout Fresno, ranging in pumping capacity from 0.25 million gallons per day (mgd) to 2.2 mgd. The City is served by two wastewater treatment plants: Fresno-Clovis Regional Wastewater Reclamation Facility and North Fresno Wastewater Reclamation Facility.

The certified EIR found that the Department of Public Utilities has determined that adequate sanitary sewer and wastewater services would be available to serve the approved project subject to the payment of any applicable connection charges and/or fees and extension of services in a manner that is compliant with the Department of Public Utilities standards, specifications, and policies. The proposed project would have less total building square footage than the approved project; therefore, the proposed project would not exceed the capacity identified in the certified EIR. As such, the City's wastewater provider would be able to provide service to the proposed project, and the proposed project would not result in any new or more severe impacts than were identified in the certified EIR.

Solid Waste

The certified EIR found that given the available capacity at local landfills, the additional solid waste generated by the approved project is not anticipated to cause the facility to exceed its daily permitted capacity. The proposed project would have less total building square footage than the approved project; therefore, the proposed project would not exceed the capacity identified in the certified EIR. As such, as with the approved project, the proposed project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs. The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The proposed project would not result in any new or more severe impacts to solid waste than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the utilities and service systems impacts of the proposed project. Therefore, there would be no new impacts related to utilities and service systems associated with the proposed project, and additional mitigation is not required.

20. WILDFIRE

	New Potentially Significant Impact	New Mitigation Required	Reduced Impact	No New Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

As discussed in Section 9 of this Environmental Checklist, Hazards and Hazardous Materials, the project site is located in a primarily developed urban area and is not located adjacent to wildland areas, and therefore the proposed project is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. According to the California Department of Forestry and Fire Protection (CAL FIRE) Very High Fire Hazard Severity Zone (VHFHSZ) Map for Fresno County, the project site is not located within a High or Very High Fire Hazard Severity Zone.[28] Therefore, the proposed project would not result in new or more severe impacts related to wildfire than were identified in the certified EIR.

Applicable Mitigation

No substantial changes in environmental circumstances have occurred for this topic, nor revisions to the project, nor new information that could not have been known at the time the EIR was certified leading to new or more severe significant impacts, and no new mitigation measures are required.

Conclusion

The certified EIR adequately evaluated the wildfire impacts of the proposed project. Therefore, there would be no new impacts related to wildfire associated with the proposed project, and additional mitigation is not required.

[28] California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Fresno County Very High Fire Hazard Severity Zones in LRA.* October 2. Website: https://osfm.fire.ca.gov/media/6673/fhszl06_1_map10.pdf (accessed September 2, 2022).

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APPENDIX A

CALEEMOD OUTPUT SHEETS

2740 West Nielsen Project Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	2740 West Nielsen Project
Construction Start Date	6/2/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	22.6
Location	36.744318771967954, -119.84246551486194
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2475
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	811	1000sqft	38.0	810,666	0.00	—	—	—

Parking Lot	821	Space	10.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.2	48.9	45.7	0.06	1.38	19.8	20.9	1.30	10.1	11.2	—	11,072	11,072	0.30	0.68	11,297
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.7	25.9	31.3	0.05	0.80	4.24	5.05	0.75	1.03	1.79	—	9,181	9,181	0.26	0.68	9,391
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.57	17.7	21.2	0.03	0.54	3.92	4.33	0.51	1.69	2.07	—	6,317	6,317	0.17	0.48	6,469
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	3.23	3.87	0.01	0.10	0.71	0.79	0.09	0.31	0.38	—	1,046	1,046	0.03	0.08	1,071

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	2.26	48.9	36.4	0.06	1.36	19.8	20.9	1.23	10.1	11.2	—	8,986	8,986	0.27	0.66	9,209
2026	21.9	25.3	35.9	0.05	0.80	4.24	5.05	0.75	1.03	1.79	—	9,582	9,582	0.24	0.68	9,813
2027	23.2	38.4	45.7	0.06	1.38	4.37	5.75	1.30	1.06	2.36	—	11,072	11,072	0.30	0.67	11,297
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.07	24.8	29.1	0.05	0.74	3.70	4.43	0.69	0.91	1.60	—	8,644	8,644	0.25	0.66	8,847
2026	21.7	25.9	31.3	0.05	0.80	4.24	5.05	0.75	1.03	1.79	—	9,181	9,181	0.26	0.68	9,391
2027	21.5	25.6	30.2	0.05	0.80	4.24	5.05	0.75	1.03	1.79	—	9,041	9,041	0.26	0.66	9,244
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.69	14.6	13.0	0.02	0.42	3.92	4.33	0.38	1.69	2.07	—	3,065	3,065	0.10	0.14	3,111
2026	6.18	17.7	21.2	0.03	0.54	2.73	3.28	0.51	0.67	1.18	—	6,317	6,317	0.17	0.48	6,469
2027	6.57	7.46	8.74	0.01	0.25	1.08	1.33	0.24	0.26	0.50	—	2,445	2,445	0.07	0.17	2,498
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.13	2.66	2.37	< 0.005	0.08	0.71	0.79	0.07	0.31	0.38	—	507	507	0.02	0.02	515
2026	1.13	3.23	3.87	0.01	0.10	0.50	0.60	0.09	0.12	0.21	—	1,046	1,046	0.03	0.08	1,071
2027	1.20	1.36	1.59	< 0.005	0.05	0.20	0.24	0.04	0.05	0.09	—	405	405	0.01	0.03	414

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.1	28.8	93.8	0.29	0.60	16.4	17.0	0.56	4.24	4.80	770	36,149	36,919	79.5	3.95	40,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.7	30.8	48.1	0.27	0.54	16.4	16.9	0.51	4.24	4.75	770	34,813	35,583	79.6	3.99	38,765

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.7	30.0	66.7	0.28	0.57	16.2	16.7	0.54	4.18	4.72	770	35,217	35,987	79.6	3.97	39,198
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.87	5.47	12.2	0.05	0.10	2.95	3.05	0.10	0.76	0.86	127	5,831	5,958	13.2	0.66	6,490

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.79	27.3	57.6	0.28	0.45	16.4	16.8	0.43	4.24	4.66	—	29,126	29,126	0.65	2.96	30,116
Area	24.2	0.30	35.3	< 0.005	0.06	—	0.06	0.05	—	0.05	—	145	145	0.01	< 0.005	146
Energy	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	6,465	6,465	0.94	0.10	6,519
Water	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Waste	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Total	30.1	28.8	93.8	0.29	0.60	16.4	17.0	0.56	4.24	4.80	770	36,149	36,919	79.5	3.95	40,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.21	29.6	47.2	0.27	0.45	16.4	16.8	0.43	4.24	4.66	—	27,935	27,935	0.71	3.01	28,852
Area	18.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	6,465	6,465	0.94	0.10	6,519
Water	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Waste	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Total	23.7	30.8	48.1	0.27	0.54	16.4	16.9	0.51	4.24	4.75	770	34,813	35,583	79.6	3.99	38,765
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	5.30	28.7	48.4	0.27	0.45	16.2	16.6	0.43	4.18	4.61	—	28,268	28,268	0.68	2.98	29,213
Area	21.3	0.15	17.4	< 0.005	0.03	—	0.03	0.02	—	0.02	—	71.5	71.5	< 0.005	< 0.005	71.8
Energy	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	6,465	6,465	0.94	0.10	6,519
Water	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Waste	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Total	26.7	30.0	66.7	0.28	0.57	16.2	16.7	0.54	4.18	4.72	770	35,217	35,987	79.6	3.97	39,198
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.97	5.24	8.82	0.05	0.08	2.95	3.03	0.08	0.76	0.84	—	4,680	4,680	0.11	0.49	4,837
Area	3.89	0.03	3.17	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	11.9
Energy	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,070	1,070	0.16	0.02	1,079
Water	—	—	—	—	—	—	—	—	—	—	59.5	68.3	128	6.11	0.15	324
Waste	—	—	—	—	—	—	—	—	—	—	68.0	0.00	68.0	6.80	0.00	238
Total	4.87	5.47	12.2	0.05	0.10	2.95	3.05	0.10	0.76	0.86	127	5,831	5,958	13.2	0.66	6,490

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	—	5,295	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—
Onsite truck	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	4.37	3.10	0.01	0.12	—	0.12	0.11	—	0.11	—	580	580	0.02	< 0.005	582
Dust From Material Movement	—	—	—	—	—	2.15	2.15	—	1.11	1.11	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.80	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.1	96.1	< 0.005	< 0.005	96.4
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.05	0.89	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	156	156	< 0.005	0.01	158
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	15.9

Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	2.63
Vendor	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
Hauling	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

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	—	6,599	6,599	0.27	0.05	6,622
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	5.35	3.87	0.01	0.15	—	0.15	0.13	—	0.13	—	723	723	0.03	0.01	726
Dust From Material Movement	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—

Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.98	0.71	< 0.005	0.03	—	0.03	0.02	—	0.02	—	120	120	< 0.005	< 0.005	120
Dust From Material Movement	—	—	—	—	—	0.18	0.18	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.02	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	178	178	< 0.005	0.01	181
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	18.2
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	3.01
Vendor	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
Hauling	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

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	3.73	2.83	< 0.005	0.14	—	0.14	0.13	—	0.13	—	474	474	0.02	< 0.005	476
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.68	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	78.5	78.5	< 0.005	< 0.005	78.7
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.51	1.03	17.4	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	3,030	3,030	0.06	0.12	3,077
Vendor	0.12	4.43	1.57	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,559	3,559	0.07	0.52	3,726

Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.24	13.1	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	2,684	2,684	0.08	0.12	2,721
Vendor	0.11	4.73	1.62	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,562	3,562	0.07	0.52	3,720
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.22	2.72	0.00	0.00	0.53	0.53	0.00	0.13	0.13	—	550	550	0.01	0.02	558
Vendor	0.02	0.91	0.31	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	704	704	0.01	0.10	736
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.50	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.0	91.0	< 0.005	< 0.005	92.4
Vendor	< 0.005	0.17	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	117	117	< 0.005	0.02	122
Hauling	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

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	13.5	10.2	0.02	0.49	—	0.49	0.46	—	0.46	—	1,712	1,712	0.07	0.01	1,718
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	2.46	1.86	< 0.005	0.09	—	0.09	0.08	—	0.08	—	283	283	0.01	< 0.005	284
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.41	0.93	16.0	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	2,967	2,967	0.06	0.12	3,013
Vendor	0.12	4.25	1.51	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,492	3,492	0.07	0.52	3,658
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.14	12.1	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	2,629	2,629	0.08	0.12	2,666
Vendor	0.11	4.55	1.56	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,495	3,495	0.07	0.52	3,653
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.73	9.05	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,946	1,946	0.05	0.08	1,975
Vendor	0.08	3.16	1.09	0.02	0.04	0.67	0.71	0.04	0.19	0.22	—	2,495	2,495	0.05	0.37	2,610
Hauling	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.13	1.65	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	322	322	0.01	0.01	327
Vendor	0.01	0.58	0.20	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	413	413	0.01	0.06	432
Hauling	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

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	4.69	3.55	0.01	0.17	—	0.17	0.16	—	0.16	—	596	596	0.02	< 0.005	598
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.86	0.65	< 0.005	0.03	—	0.03	0.03	—	0.03	—	98.6	98.6	< 0.005	< 0.005	99.0

Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	0.82	14.8	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	2,905	2,905	0.05	0.11	2,948
Vendor	0.12	4.08	1.45	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,417	3,417	0.07	0.50	3,574
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.03	11.2	0.00	0.00	2.74	2.74	0.00	0.64	0.64	—	2,575	2,575	0.08	0.12	2,612
Vendor	0.11	4.36	1.50	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,420	3,420	0.07	0.50	3,570
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.23	2.90	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	663	663	0.01	0.03	673
Vendor	0.03	1.06	0.37	0.01	0.01	0.23	0.25	0.01	0.06	0.08	—	849	849	0.02	0.12	888
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	111
Vendor	0.01	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	141	141	< 0.005	0.02	147
Hauling	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

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	—	1,511	1,511	0.06	0.01	1,516
Paving	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.09	0.87	< 0.005	0.05	—	0.05	0.04	—	0.04	—	124	124	0.01	< 0.005	125
Paving	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.20	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.6	20.6	< 0.005	< 0.005	20.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.65	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	130
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.66	9.66	< 0.005	< 0.005	9.81
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	1.62
Vendor	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
Hauling	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

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	19.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	19.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.26	0.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	32.2
Architectural Coatings	4.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.32	5.32	< 0.005	< 0.005	5.34
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.19	3.20	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	593	593	0.01	0.02	603
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	2.41	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	526	526	0.02	0.02	533
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	< 0.005	0.01	133
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	22.0
Vendor	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
Hauling	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

3.15. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	19.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	19.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.33	0.29	< 0.005	0.02	—	0.02	0.02	—	0.02	—	40.5	40.5	< 0.005	< 0.005	40.6
Architectural Coatings	5.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.70	6.70	< 0.005	< 0.005	6.73
Architectural Coatings	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.16	2.95	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	581	581	0.01	0.02	590
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	2.23	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	515	515	0.02	0.02	522
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.71	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	162	162	< 0.005	0.01	164
Vendor	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

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.8	26.8	< 0.005	< 0.005	27.2
Vendor	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
Hauling	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	5.79	27.3	57.6	0.28	0.45	16.4	16.8	0.43	4.24	4.66	—	29,126	29,126	0.65	2.96	30,116
Parking Lot	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
Total	5.79	27.3	57.6	0.28	0.45	16.4	16.8	0.43	4.24	4.66	—	29,126	29,126	0.65	2.96	30,116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	5.21	29.6	47.2	0.27	0.45	16.4	16.8	0.43	4.24	4.66	—	27,935	27,935	0.71	3.01	28,852
Parking Lot	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

Total	5.21	29.6	47.2	0.27	0.45	16.4	16.8	0.43	4.24	4.66	—	27,935	27,935	0.71	3.01	28,852
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.97	5.24	8.82	0.05	0.08	2.95	3.03	0.08	0.76	0.84	—	4,680	4,680	0.11	0.49	4,837
Parking Lot	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
Total	0.97	5.24	8.82	0.05	0.08	2.95	3.03	0.08	0.76	0.84	—	4,680	4,680	0.11	0.49	4,837

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,866	4,866	0.79	0.10	4,914
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	213	213	0.03	< 0.005	215
Total	—	—	—	—	—	—	—	—	—	—	—	5,079	5,079	0.82	0.10	5,129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,866	4,866	0.79	0.10	4,914

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	213	213	0.03	< 0.005	215
Total	—	—	—	—	—	—	—	—	—	—	—	5,079	5,079	0.82	0.10	5,129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	806	806	0.13	0.02	814
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	35.3	35.3	0.01	< 0.005	35.7
Total	—	—	—	—	—	—	—	—	—	—	—	841	841	0.14	0.02	849

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	1,386	1,386	0.12	< 0.005	1,390
Parking Lot	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
Total	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	1,386	1,386	0.12	< 0.005	1,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	1,386	1,386	0.12	< 0.005	1,390

Parking Lot	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
Total	0.06	1.16	0.98	0.01	0.09	—	0.09	0.09	—	0.09	—	1,386	1,386	0.12	< 0.005	1,390
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	229	229	0.02	< 0.005	230
Parking Lot	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
Total	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	229	229	0.02	< 0.005	230

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	17.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.79	0.30	35.3	< 0.005	0.06	—	0.06	0.05	—	0.05	—	145	145	0.01	< 0.005	146
Total	24.2	0.30	35.3	< 0.005	0.06	—	0.06	0.05	—	0.05	—	145	145	0.01	< 0.005	146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	17.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.52	0.03	3.17	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	11.9
Total	3.89	0.03	3.17	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	11.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	359	413	772	36.9	0.88	1,958
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	59.5	68.3	128	6.11	0.15	324
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	59.5	68.3	128	6.11	0.15	324

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	1,437
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	68.0	0.00	68.0	6.80	0.00	238
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	68.0	0.00	68.0	6.80	0.00	238

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	7/25/2025	5.00	40.0	—
Grading	Grading	7/28/2025	9/19/2025	5.00	40.0	—
Building Construction	Building Construction	9/22/2025	5/7/2027	5.00	425	—
Paving	Paving	4/19/2027	5/28/2027	5.00	30.0	—
Architectural Coating	Architectural Coating	8/31/2026	6/4/2027	5.00	200	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45

Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.4	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.53	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.4	LDA,LDT1,LDT2
Grading	Vendor	—	8.53	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	340	11.4	LDA,LDT1,LDT2
Building Construction	Vendor	133	8.53	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.4	LDA,LDT1,LDT2
Paving	Vendor	—	8.53	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	68.1	11.4	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.53	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,215,999	405,333	26,136

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	60.0	0.00	—
Grading	—	—	120	0.00	—
Paving	0.00	0.00	0.00	0.00	10.0

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	10.0	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	2,229	2,229	2,229	813,706	21,585	21,585	21,585	7,878,423
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,215,999	405,333	26,136

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	8,706,403	204	0.0330	0.0040	4,324,215
Parking Lot	381,586	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	187,466,513	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	762	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Total project site is 48.03 acres. Project is proposed to construct three office/warehouse buildings totaling 810,666 sq ft including a total of 821 parking spaces for all three buildings.
Construction: Construction Phases	construction would begin in the second quarter of 2025 and occur for approximately 24-months, ending in 2027. Assuming overlap between building construction, paving, and architectural coating phases.
Construction: Off-Road Equipment	default construction equipment with Tier 2 engines
Construction: Architectural Coatings	—
Operations: Vehicle Data	The proposed project would generate approximately 2,229 total average daily trips, including 1,537 passenger car trips, 274 two-axle-to-three-axle truck trips, and 418 four-axle truck trips. Trip rate = 2,229 ADT/ 810.666 = 2.75
Operations: Fleet Mix	Based on the project's fleet mix, the project would generate 1,537 passenger car trips and 274 two-axle-to-three-axle truck trips (~152 two axle and 122 three-axle trips), and 418 four-axle truck trips.

APPENDIX B

HEALTH RISK ASSESSMENT

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: January 30, 2025

TO: Paul Starn, Scannell Properties
Walker Williams, Scannell Properties

FROM: Amy Fischer, Principal
Bianca Martinez, Air Quality Specialist

SUBJECT: Health Risk Assessment for the 2740 West Nielsen Avenue Office/Warehouse Project

LSA has prepared a health risk assessment (HRA) for the proposed 2740 West Nielsen Avenue Office/Warehouse Project (project) in Fresno, Fresno County, California. An HRA is a process used to estimate the increased health risk levels for people living and/or working near a project that emits toxic air contaminants (TACs). An HRA combines the results of studies on the health effects of various animal and human exposure to TACs with the results of studies that estimate exposure levels at different distances from pollutant sources. The purpose of this HRA is to determine the increased cancer and noncancer health risks from project-related emissions of TACs in the exhaust of diesel-powered construction and operation-related trucks and equipment on existing nearby sensitive receptors.

This HRA has been prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the San Joaquin Valley Air Pollution Control District (SJVAPCD). This HRA evaluates the project against the significance criteria established by the SJVAPCD and is in compliance with all other applicable requirements.

PROJECT DESCRIPTION

The approximately 48.03-acre project site is located in Fresno, on the northeast corner of the intersection of North Marks Avenue and West Nielsen Avenue (Assessor's Parcel Number [APNs] 458-020-71 and 458-020-72). The project site itself is generally bounded to the north by vacant, undeveloped land and industrial uses, to; the east by North Hughes Avenue; to the south by West Nielsen Avenue; and to the west by North Marks Avenue.

The project would result in the construction of three office/warehouse buildings that would be configured for heavy industrial uses. The proposed buildings would result in a total gross floor area of approximately 810,666 square feet. The buildings' exterior would be up to 44 feet high, with an interior height of up to 36 feet, and designed with a total of 157 loading dock doors on the north and south sides of the buildings. The three buildings would consist of the following: Building 1 would be 468,796 square feet and would provide 122 loading dock doors; Building 2 would be 248,786 square feet and would provide 17 loading dock doors; and Building 3 would be 93,084 square feet

and would provide 18 loading dock doors. The proposed project would also subdivide the project site into three separate parcels and would consist of each proposed building on a separate parcel.

As identified above, future tenants have not been identified. Therefore, it is conservatively assumed that the proposed project would be operational 24 hours per day, 7 days per week; however, it is possible that future tenants may operate fewer hours.

The proposed project would comply with the latest California Green Building Standards Code (CALGreen) building measures and Title 24 standards. The proposed project would also include cool roof materials.

Vehicular access to the site would be provided by North Hughes Avenue, West Nielsen Avenue, and North Marks Avenue.

A total of 821 on-site parking spaces would be provided for vehicles and trucks. Truck and trailer parking would be located along the eastern and western edges of the project site and would be located behind two 8-foot-tall gates, which would be installed to separate the general parking area from the truck storage and dock loading area.

The proposed project would include demolition of the existing asphalt on the project site, which would be collected and hauled off site for disposal. Construction of the proposed project is anticipated to occur in two phases over a total 24-month period starting in the second quarter of 2025 and ending in 2027. The first phase would include the construction of Buildings 2 and 3 and would occur for 12 months. The second phase would include the construction of Building 1 and would occur for 12 months. The proposed project would not require any soil import or export.

BACKGROUND

This section provides a discussion of the regulatory guidance from the California Air Resources Board (CARB), the California Air Pollution Control Officers Association (CAPCOA), and the SJVAPCD.

California Air Resources Board Handbook and Technical Advisory

CARB has developed an *Air Quality and Land Use Handbook* (CARB Handbook)[1] and a supplement, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory,*[2] which are intended to serve as general reference guides for evaluating and reducing air pollution impacts associated with new projects that are part of the land use decision-making process. According to the CARB Handbook, recent air pollution studies have shown an association between both respiratory and other noncancer health effects and proximity to high-traffic roadways and other land uses associated with high-volume truck traffic. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that planning

[1] California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April. Website: www.arb.ca.gov/ch/handbook.pdf (accessed January 2025).

[2] CARB. 2017. *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*. April. Website: www.arb.ca.gov/ch/rd_technical_analysis_fact_sheet.pdf (accessed January 2025).

agencies recognize that the configuration of industrial operations can reduce population exposure and risk. For example, locating the main entry and exit points away from sensitive land uses helps to reduce cancer risks and other health impacts.

California Air Pollution Control Officers Association

In 2009, CAPCOA published guidance[1] on assessing the health risk impacts for land use projects. The guidance focused on the acute, chronic, and cancer impacts of sources affected by the California Environmental Quality Act (CEQA) and recommended procedures to identify when a project should undergo further risk evaluation, how to conduct the HRA, how to engage the public, what to do with the results from the HRA, and what mitigation measures may be appropriate for various land use projects.

San Joaquin Valley Air Pollution Control District

Toxic air emissions are regulated under the SJVAPCD's Integrated Air Toxics Program. This program integrates the State and federal requirements and is aimed at protecting public health. These guidelines incorporate the OEHHA guidance and the options to be selected when using CARB's Hotspots Analysis and Reporting Program Version 2 (HARP2) program for risk assessment calculations.

City of Fresno

This HRA is intended to meet the requirements of the City of Fresno (City) General Plan Program Environmental Impact Report (PEIR), which requires the implementation of the following air quality mitigation measure applicable to the project:

> **GP PEIR Mitigation Measure AIR-3.1:** Prior to future discretionary approval for projects that require environmental evaluation under CEQA, the City of Fresno shall evaluate new development proposals for new industrial or warehousing land uses that: (1) have the potential to generate 100 or more truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and (2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, or nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use. Such projects shall submit a Health Risk Assessment (HRA) to the City Planning and Development Department. The HRA shall be prepared in accordance with policies and procedures of the most current State Office of Environmental Health Hazard Assessment (OEHHA) and the SJVAPCD. If the HRA shows that the incremental health risks exceed their respective thresholds, as established by the SJVAPCD at the time a project is considered, the Applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms to reduce risks to an acceptable level. T-BACTs may include, but are not limited to:

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[1] California Air Pollution Control Officers Association (CAPCOA). 2009. *Health Risk Assessments for Proposed Land Use Projects*. July. Website: www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf (accessed January 2025).

- Restricting idling on site or electrifying warehousing docks to reduce diesel particulate matter;
- Requiring use of newer equipment and/or vehicles;
- Provide charging infrastructure for: electric forklifts, electric yard trucks, local drayage trucks, last mile delivery trucks, electric and fuel-cell heavy duty trucks; and/or
- Install solar panels, zero-emission backup electricity generators, and energy storage to minimize emissions associated with electricity generation at the project site.
- T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

The City will, in addition to noticing procedures in the Development Code, notice all residents within 1,000 feet of a proposed warehouse project before any discretionary project approval, and consider "Warehouse Projects: Best Practices and Mitigation Measure to comply with the California Environmental Quality Act," published in March 2021 by Xavier Becerra, Attorney General of the State of California, before any discretionary approval of a specific warehouse project where applicable.

SETTING

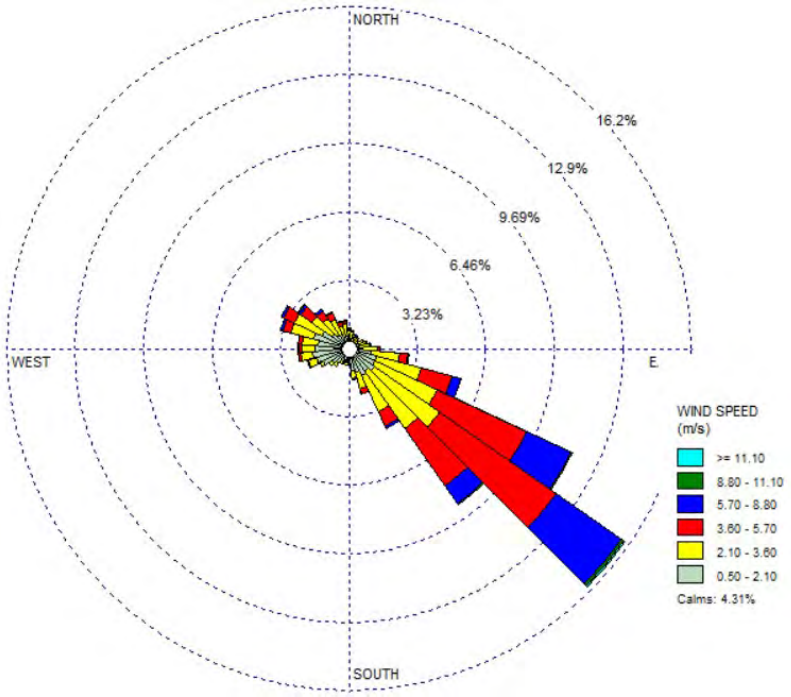
Regional Air Quality

The project site is located in the city of Fresno, California, which is part of the San Joaquin Valley Air Basin (Basin) and is under the jurisdiction of the SJVAPCD.

Climate/Meteorology

Air quality in the project area is not only affected by various emission sources (e.g., mobile and industrial) but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The nearest representative meteorological station that provides the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) ready meteorological data is the Fresno Meteorological Station, which is about 6.75 miles from the project site. Figure 1 shows the wind rose[1] from data measured at this station and the wind patterns for the project area.

[1] A wind rose provides a succinct view of how wind speed and direction are typically distributed at a particular location. Presented in a circular format, the wind rose shows the frequency of winds blowing from particular directions.



Source: SJVAPCD Meteorological Data for AERMOD.

Figure 1: Project Area Wind Patterns

In addition, the OEHHA, on behalf of the California Environmental Protection Agency (CalEPA), released Version 4.0 of the California Communities Environmental Health Screening Tool (CalEnviroScreen) in October 2021. CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Pollution Burden scores for each census tract are derived from the average percentiles of the seven Exposure Indicators (ozone and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$] concentrations, diesel particulate matter [DPM] emissions, drinking water contaminants, pesticide use, toxic releases from facilities, and traffic density) and the five Environmental Effects indicators (cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities). According to the CalEnviroScreen 4.0 Map,[1] the project site has a pollution burden percentile of 97. Surrounding areas have pollution burdens ranging from 56 to 100.0. In addition, according to the Senate Bill (SB) 535 Disadvantaged Communities Map,[2] the project area is designated as an SB 535 disadvantaged community.

1 Office of Environmental Health Hazard Assessment (OEHHA). 2021. *CalEnviroScreen 4.0.* Website: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40 (accessed January 2025).

2 OEHHA. 2022. *SB 535 Disadvantaged Communities using CalEnviroScreen 4.0 results.* Website: https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/.pdf (accessed January 2025).

Toxic Air Contaminants

The public's exposure to TACs is a significant environmental health issue in the State of California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. Health and Safety Code §39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Subsection (b) of United States Code [USC] Title 42, Section 7412, is a TAC. Under State law, CalEPA, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (the Tanner Air Toxics Act), AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987), and SB 25 (the Children's Environmental Health Protection Act). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once TACs are identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate Toxics Best Available Control Technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987 (AB 2588). Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the designated air quality management district or air pollution control district. High-priority facilities are required to perform an HRA and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM).

THRESHOLDS OF SIGNIFICANCE

Both the State and federal governments have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximally exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 70 years for adults and 9 years for children in residential locations, 350 days per year. As a conservative measure, the SJVAPCD does not recognize indoor adjustments for residents. However, the typical person spends the majority of their time indoors versus remaining outdoors 24 hours per day, 350 days per year. The MICR calculations include multi-pathway consideration, when applicable.

  The SJVAPCD's *Update to the District's Risk Management Policy to Address the OEHHA Revised Risk Assessment Guidance Document*[1] states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 20 in 1 million. Thus, the cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 20 in 1 million (2.0×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multi-pathway consideration when applicable. The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level. The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The SJVAPCD Governing Board first adopted thresholds for land use projects in 1995 in the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI).[2] The GAMAQI was revised in 2002 and 2015 but retained the original health risk thresholds. The previous project TAC threshold of 10 in 1 million was revised to 20 in 1 million, with the update to the SJVAPCD Risk Management Policy effective July 1, 2015.

IMPACT ANALYSIS

For the purposes of an HRA, short-term emissions are of concern for analyzing acute health impacts, and long-term emissions are of concern for analyzing chronic and carcinogenic health impacts. A screening-level multi-pathway assessment has been conducted. This technique was chosen as recommended in the OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines*.[3] The analysis

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1 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015a. *Update to District's Risk Management Policy to Address OEHHA's Revised Risk Assessment Guidance Document*. Website: www.valleyair.org/busind/pto/staff-report-5-28-15.pdf (accessed January 2025).

2 SJVAPCD. 2015b. *Guidance for Assessing and Mitigating Air Quality Impacts.* Website: www.valleyair.org/transportation/GAMAQI_3-19-15.pdf (accessed January 2025).

3 California Environmental Protection Agency (CalEPA) OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed January 2025).

herein has been conducted in accordance with the guidelines in the SJVAPCD GAMAQI and the SJVAPCD *Guidance for Air Dispersion Modeling.*[1]

This HRA has been conducted using three models: (1) CARB's California Emissions Factor Model, Version 2021 (EMFAC2021) for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the United States Environmental Protection Agency's (USEPA) AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM.

The conservative nature of this analysis is due primarily to the following three factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per microgram per cubic meter ($\mu g/m^3$) is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to develop the URF. Therefore, the risk factor is already representative of the conservative risk posed by DPM.

- The risk estimates assume sensitive receptors would be subject to DPM 24 hours per day, 350 days per year. As a conservative measure, SJVAPCD does not recognize indoor adjustments for residents. However, typical people spend the majority of their time indoors versus remaining outdoors 24 hours per day, 350 days per year.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancements to reduce DPM.

- The emissions derived assume that every truck accessing the project site will idle for 15 minutes.

Improvements over the last 40 years to diesel fuel and diesel engines have resulted in lower emissions of some of these contaminants. These improvements have resulted in a 75 percent reduction in particle emissions from diesel-powered trucks and other equipment by 2010 (compared

[1] SJVAPCD. 2006. *Guidance for Air Dispersion Modeling*. Website: www.valleyair.org/busind/pto/Tox_ Resources/Modeling%20Guidance.pdf (accessed January 2025).

to 2000 levels), and an 85 percent reduction by 2020 as compared to 2000 levels.[1] These improvements are anticipated to continue into the foreseeable future.

Emission Sources

Construction

To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and work site). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined, detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

Operation

The first step of an HRA is to characterize the project-related emissions of TACs. The proposed project would generate a total of 2,229 daily trips, with up to 692 truck trips per day.[2] The trucks would access the site by North Hughes Avenue, West Nielsen Avenue, and North Marks Avenue. As identified in the Project Description, Building 1 would provide 122 loading dock doors; Building 2 would provide 17 loading dock doors; and Building 3 would provide 18 loading dock doors. As such, the proposed project would have a total of 157 loading dock doors. As the project would contain multiple loading docks, off-site queuing of trucks is not anticipated. While the TAC emissions from gasoline-powered vehicles have a small health effect compared to DPM, this HRA includes both gasoline- and diesel-powered vehicle emissions. For the diesel exhaust emissions, it is sufficient to only consider the DPM (particulate matter less than 10 microns in diameter [PM_{10}] and $PM_{2.5}$) portions of the exhaust; all the TACs for the gasoline exhaust emissions are contained in the reactive organic gas (ROG) emissions. Using speciation data from CARB, the emission rates of the TAC components are derived from the total ROG emissions. This data is attached.

Project trucks would operate in two modes: stationary idling and moving on and off the site. The emissions from trucks while idling result in a much higher concentration of TACs at nearby sensitive receptors compared to the emissions from moving trucks. This is due to the dispersion of emissions that occurs with distance and with travel of the vehicle. For this HRA, the truck travel emissions were modeled as a series of volume sources along the on-site driveway and along East Avenue going north and south of the site driveway. LSA assumed that vehicles traveling on site would maneuver slowly, averaging approximately 5–15 miles per hour (mph), and that vehicles traveling on roadways would average 5–55 mph.

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1 CalEPA, OEHHA, and the American Lung Association of California. 2001. *Health Effects of Diesel Exhaust*. May 21. Website: https://oehha.ca.gov/air/health-effects-diesel-exhaust (accessed January 2025).

2 LSA. 2025. *Traffic Impact Study 2740 West Nielsen Avenue Warehouse Project, City of Fresno, Fresno County, California.* January.

The idling emissions of trucks operating on the project site were modeled as point sources within the area sources representing the planned loading docks. EMFAC2021 was used to determine the emissions factors of idling and operating diesel trucks to determine the total emissions of DPM. While it is expected that the truck emissions rate will continue to reduce over time, an HRA only allows for a single emission rate to represent the entire 70-year exposure period. Emissions factors for the year 2025 were used as a conservative estimate of emissions, although the project is not expected to be fully operational until 2027.

The tables in the attachment show the development of the exhaust emission rates for the trucks while operating both on the project site and on North Hughes Avenue, West Nielsen Avenue, and North Marks Avenue. The tables show the average daily traffic for the project on each stretch of road by vehicle category. The PM_{10} emissions factors for trucks at the average vehicle speeds of 5–15 mph on site and 5–55 mph on roadways are also shown. Because the AERMOD dispersion model cannot use emissions in grams per mile, emissions are converted to grams per second.

American Meteorological Society/Environmental Protection Agency Regulatory Model Dispersion Modeling

In order to assess the dispersion of emissions associated with the project, air dispersion modeling was performed using AERMOD. The model is approved by the USEPA when estimating the air quality impacts associated with point and fugitive sources in simple and complex terrain. The model was used to calculate the annual average pollutant concentrations associated with each emitting source. Inputs for each emitting source were based on the characterizations described above. Details of these inputs are attached.

For the volume sources used to represent on-road mobile source activity, vertical (sigma z) dispersion parameters were developed as described in the SJVAPCD's modeling guidance for trucks. For the truck unloading locations, individual point sources represent the trucks idling at each loading dock. For all the idling sources, the release parameters were set to the SJVAPCD default parameters.

The model requires additional input parameters, including local meteorology. Due to the model's sensitivity to individual parameters (e.g., wind speed, temperature, and direction), the USEPA recommends meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. As such, 5 years of meteorological data from SJVAPCD's Fresno Monitoring Station[1] (the nearest available station) was used to represent local weather conditions and prevailing winds. Figure 2 shows the graphical representation of the wind patterns, as well as the receptors placed at the nearest sensitive receptor locations.

[1] SJVAPCD. Meteorological Data for AERMOD. Website: http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm (accessed January 2025).

Figure 2: Model Receptor Locations

HOT SPOTS ANALYSIS AND REPORTING PROGRAM MODELING

CARB's HARP2 model is a tool that assists with the programmatic requirements of the Air Toxics "Hot Spots" Program (AB 2588). HARP2 was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic, and short-term acute health risk levels following the guidance in the SJVAPCD risk assessment guidelines. These guidelines specify a minimum set of TAC pathways and HARP2 modeling options for the carcinogenic assessment. To estimate chronic noncancer risks at residential receptors, the "OEHHA-Derived Method" risk calculation option was used. Following the OEHHA guidance, an 8-hour chronic noncancer risk was calculated for residential receptors because the project would operate more than 8 hours per day and 5 days per week.

The dose-response relationship for a specific pollutant describes the association between exposure and the observed response (health effect). In other words, the relationship estimates how different levels of exposure to a pollutant change the likelihood and severity of health effects. The dose-response relationship (the response occurring with increasing doses) varies with each pollutant, individual sensitivity, and type of health effect. Combining the results of the emission characterization and dispersion modeling described above with the dose-response assessment gives an estimate of the increased health risk for an individual exposed to the maximum predicted long-term concentrations of TACs.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the OEHHA guidance document entitled *Air*

Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments[1] and guidance from SJVAPCD. The risk calculation outputs are attached.

Carcinogenic and Chronic Project-Related Emission Impact Results

The following section describes the potential impacts on sensitive receptors from construction and operation of the proposed project. The HRA analysis and results are presented below; data outputs are attached.

Construction Health Risk Assessment

A construction HRA that evaluates construction-period health risk to off-site receptors was performed for the proposed project. Table A, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment, as proposed by the project, at the MEI, who is the nearest sensitive receptor. Model snapshots of the sources are attached.

Table A: Unmitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Sensitive Receptor Risk	14.22	0.011	0.000
Worker Receptor Risk	1.20	0.042	0.000
Threshold	**20.0**	**1.0**	**1.0**
Exceed?	**Yes**	**No**	**No**

Source: LSA (January 2025).
$\mu g/m^3$ = micrograms per cubic meter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

As shown in Table A, the maximum cancer risk for the sensitive MEI would be 14.22 in 1 million and the worker MEI would be lower, at 1.20 in 1 million, which would not exceed the threshold. The total chronic hazard index would be 0.011 for the sensitive MEI and 0.042 for the worker MEI, which would both be below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Operational Health Risk Assessment

The carcinogenic and chronic health risks from the proposed project are also shown in Table B. The residential risk incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 70 years (considered a conservative period of time for an individual to live in any one residence).

[1] CalEPA OEHHA. 2015. op. cit.

Table B: Health Risk Levels for Existing Residents near the Project Site

	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Maximally Exposed Resident	16.12	0.004	<0.001
Maximally Exposed Worker	1.74	0.004	<0.001
SJVAPCD Significance Threshold	**20**	**1.00**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (January 2021).
$\mu g/m^3$ = micrograms per cubic meter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SJVAPCD = San Joaquin Valley Air Pollution Control District

For the nearest residential receptor, the maximum cancer risk for the MEI would be 16.12 in 1 million, which is less than the threshold of 20 in 1 million. The chronic health risks from the project's activity would be 0.004, which would not exceed the threshold of 1.0. In addition, the total acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0.

For the nearest worker receptor, the maximum cancer risk for the MEI would be 1.74 in 1 million, less than the threshold of 20 in 1 million. The chronic health risks from the project's activity would be 0.004, which would not exceed the threshold of 1.0. In addition, the total acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0.

As demonstrated in the analysis, the health risk levels to nearby residents from project operation-related emissions of TACs would be well below the SJVAPCD's HRA thresholds. However, as discussed above, CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Pollution Burden scores for each census tract are derived from the average percentiles of the seven Exposures Indicators (ozone and $PM_{2.5}$ concentrations, DPM emissions, drinking water contaminants, pesticide use, toxic releases from facilities, and traffic density) and the five Environmental Effects indicators (cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities). According to the CalEnviroScreen 4.0 Map,[1] the project site has a pollution burden percentile of 97. Surrounding areas have pollution burdens ranging from 56 to 100.0. In addition, according to the SB 535 Disadvantaged Communities Map,[2] the project area is designated as an SB 535 disadvantaged community. Based on the CalEnviroScreen results, the project area is already at an elevated risk level. Therefore, although the maximum cancer risk for the MEI would be 16.12 in 1 million is less than the project risk criteria, any additional risk increase is potentially significant. Therefore, to reduce the cumulative health risk, the project applicant shall ensure that the proposed project would provide the infrastructure for AC and/or DC chargers for electric heavy-duty trucks, which would further reduce TAC emissions. The infrastructure provided shall accommodate a minimum of one future charger per 50,000 square feet. With implementation of Mitigation Measure AIR-1, impacts would be reduced to less than the

1 OEHHA. 2021. op. cit.
2 OEHHA. 2022. op. cit.

recommended thresholds of significance related to the exposure of sensitive receptors to substantial pollutant concentrations during project operation.

Mitigation Measure AIR-1 The project applicant shall ensure that the proposed project provides the infrastructure for AC and/or DC chargers for electric heavy-duty trucks. The infrastructure provided shall accommodate a minimum of one future charger per 50,000 square feet.

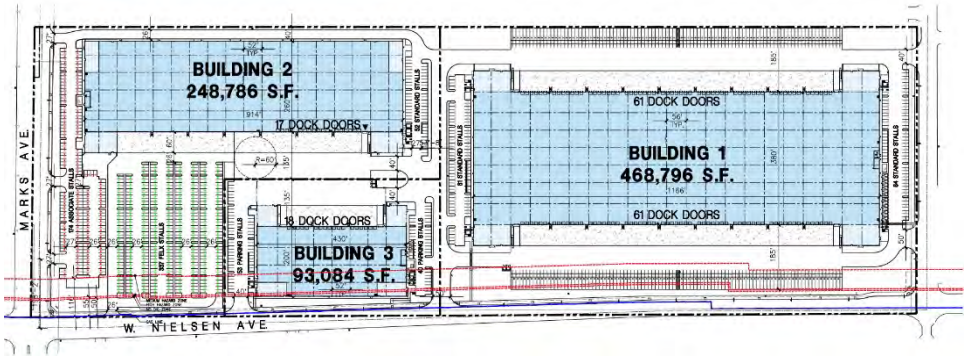
CONCLUSION

As these results show, with the implementation of Mitigation Measures AIR-1, health risk levels to nearby residents from project-related construction and operational emissions of TACs would be below the SJVAPCD's HRA thresholds. As such, no significant health risk is expected to occur from project-related construction or operational emissions. The HARP modeling reports and AERMOD information are attached.

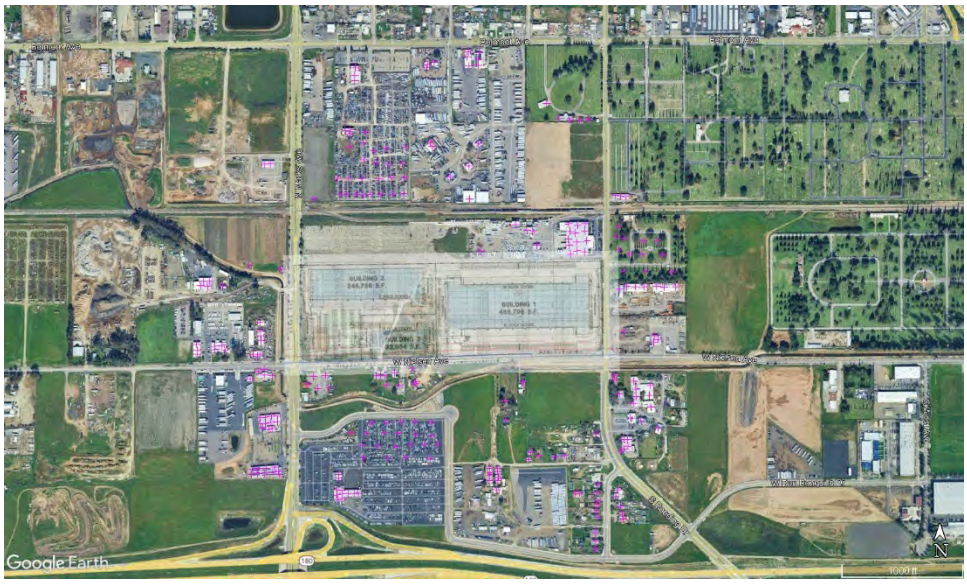
Attachment: HRA Model Output

Project Location:

Project Layout:

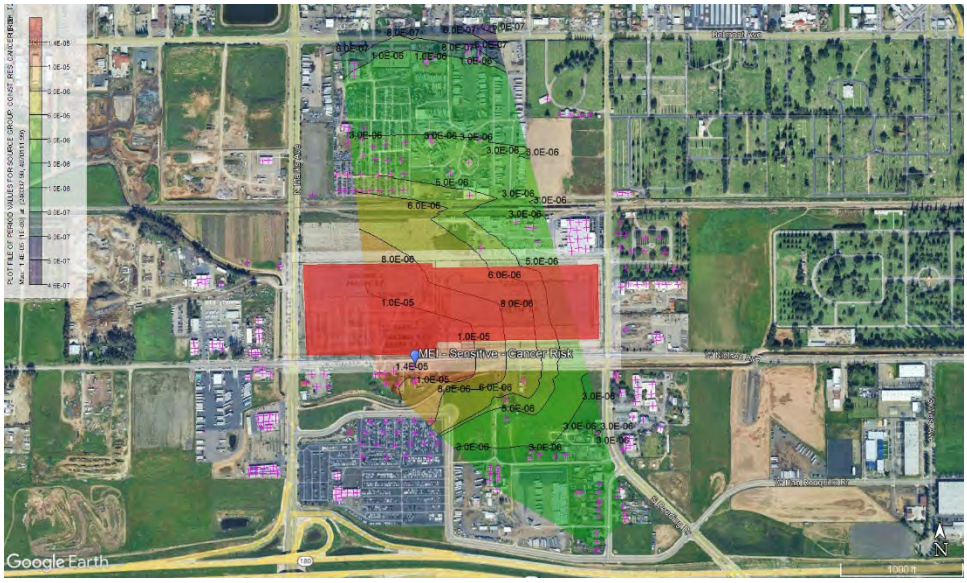


Receptor Grid:

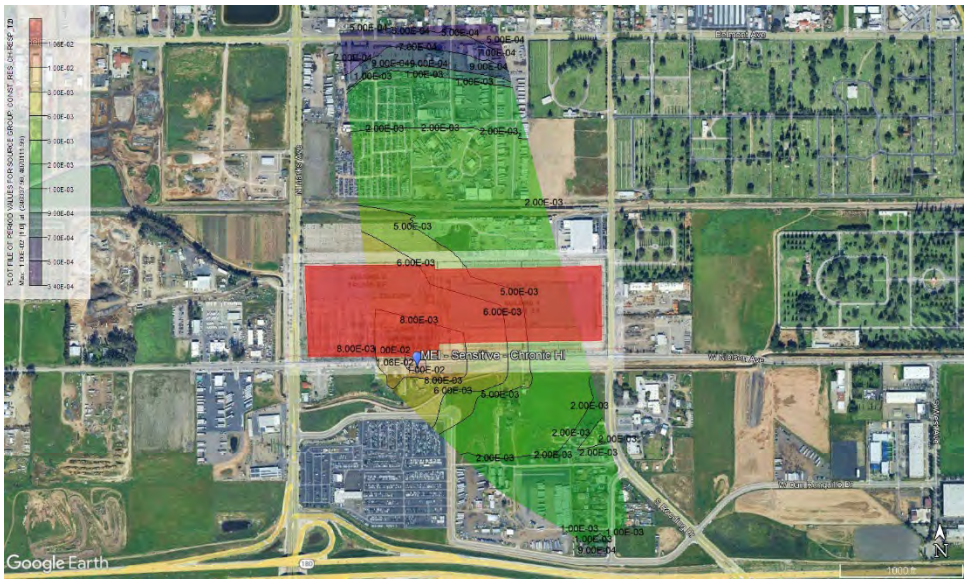


Unmitigated Health Risks under 2740 West Neilsen project to Off- Site Receptors

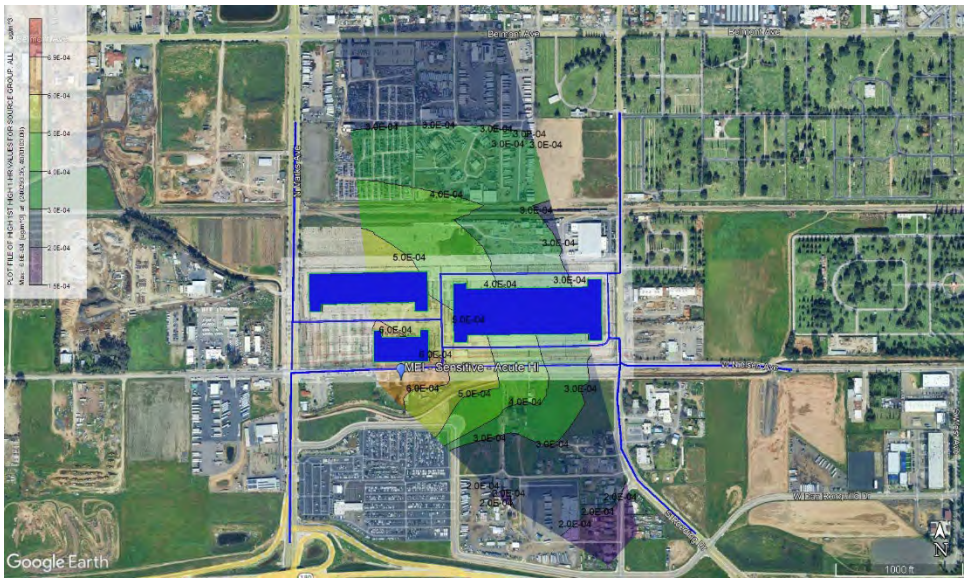
Residential Receptor: Construction Cancer Risk



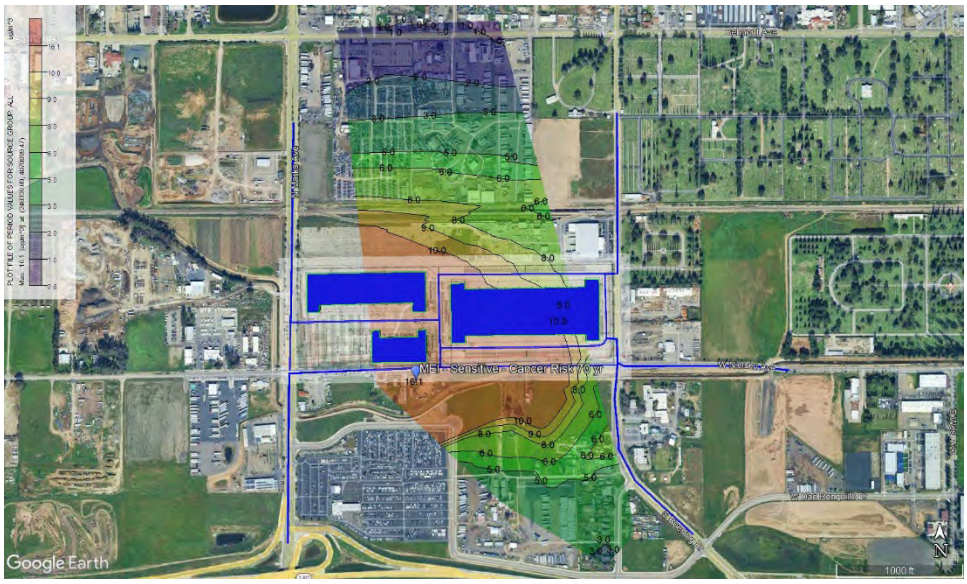
Residential Receptor: Construction Chronic Hazard Index



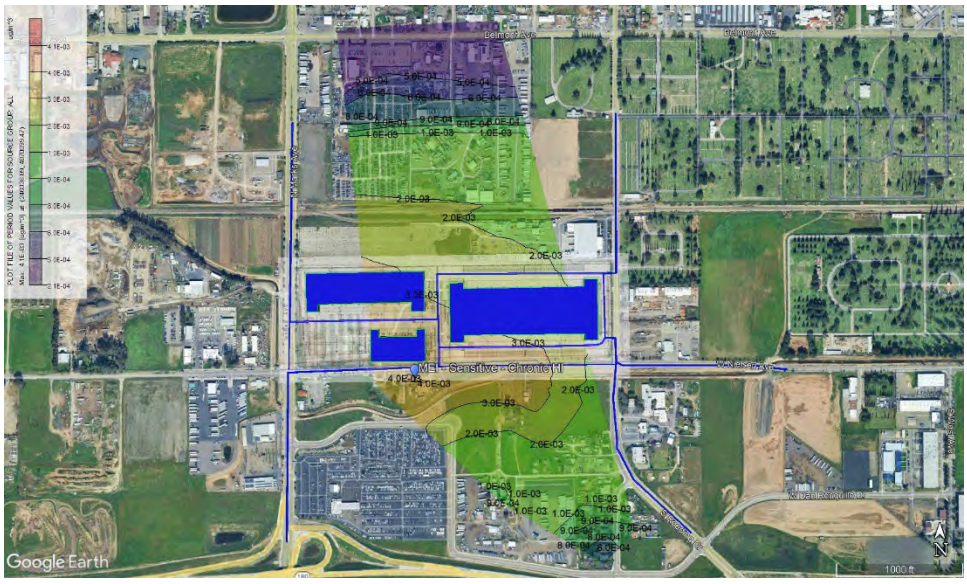
Residential Receptor: Operational Acute Hazard Index



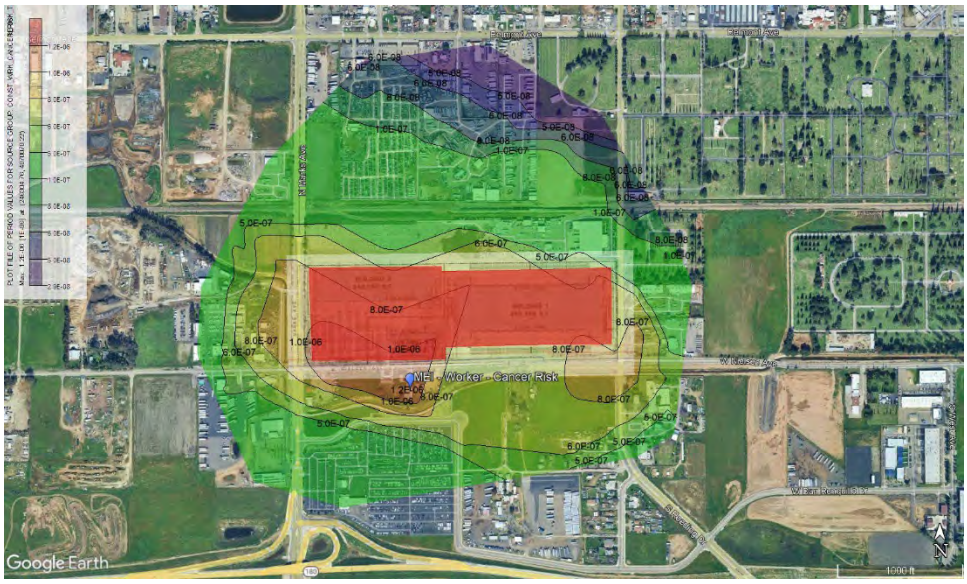
Residential Receptor: Operational Cancer Risk



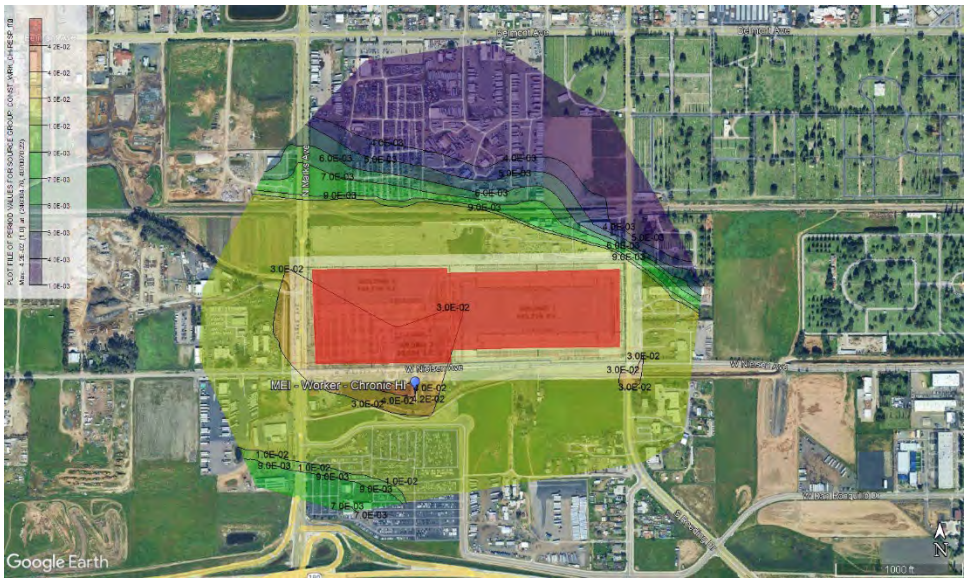
Residential Receptor: Operational Chronic Hazard Index



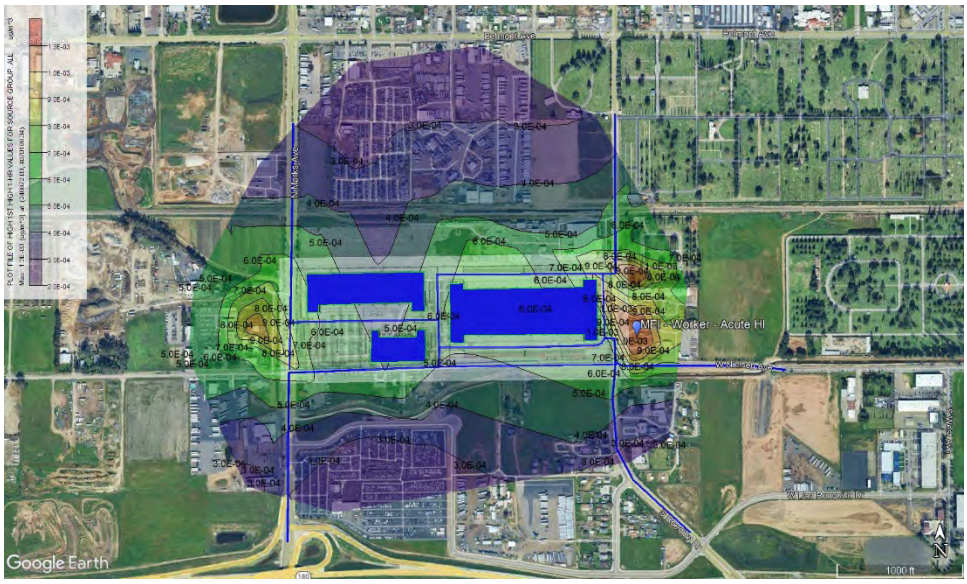
Worker Receptor: Construction Cancer Risk



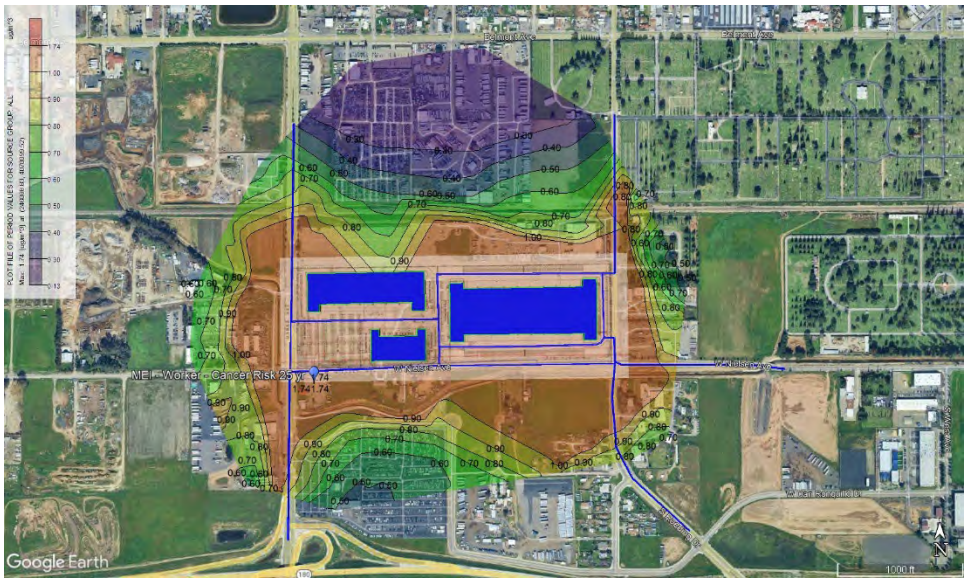
Worker Receptor: Construction Chronic Hazard Index



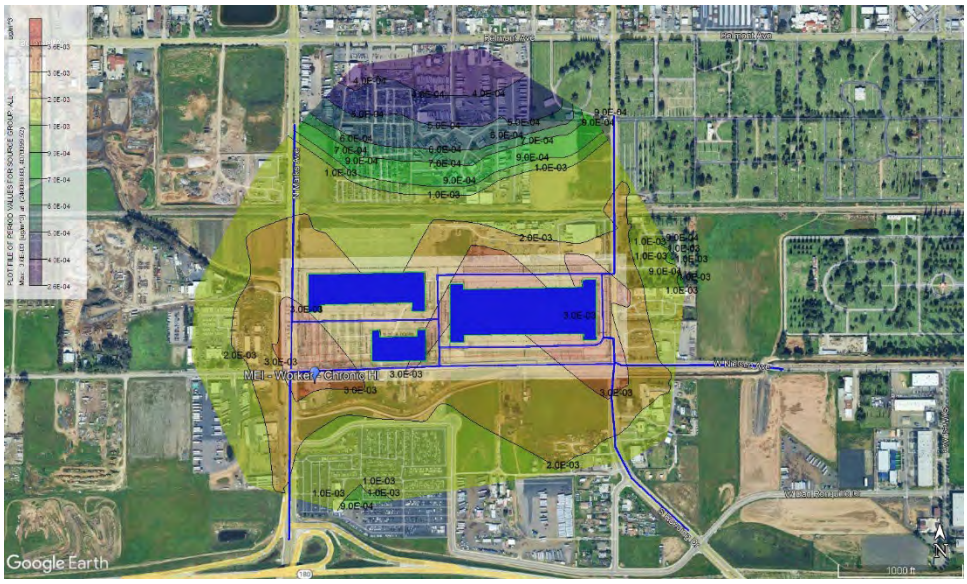
Worker Receptor: Operational Acute Hazard Index



Worker Receptor: Operational Cancer Risk



Worker Receptor: Operational Chronic Hazard Index



Construction MEI (Sensitive) - Cancer Risk (in a Million) HARP Rec #: 41 X: 246337.98 Y: 4070111.99			
T2	T2L3	T4f	0
14.22	2.70	1.62	0.00

MEI (Sensitive) - Chronic Hazard Index HARP Rec #: 41 X: 246337.98 Y: 4070111.99			
T2	T2L3	T4f	0
1.06E-02	2.18E-03	1.31E-03	0.00E+00

MEI (Sensitive) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4f	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00

MEI (Sensitive) - PM 2.5 HARP Rec #: 1 X: 0 Y: 0			
T2	T2L3	T4f	0
0.000	0.000	0.000	0.000

Construction MEI (Worker) - Cancer Risk (in a Million) HARP Rec #: 187 X: 246304.76 Y: 4070070.22			
T2	T2L3	T4f	0
1.20	0.23	0.13	0.00

MEI (Worker) - Chronic Hazard Index HARP Rec #: 187 X: 246304.76 Y: 4070070.22			
T2	T2L3	T4f	0
4.16E-02	8.56E-03	5.13E-03	0.00E+00

MEI (Worker) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4f	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00

MEI (Worker) - PM 2.5 HARP Rec #: 1 X: 0 Y: 0			
T2	T2L3	T4f	0
0.000	0.000	0.000	0.000

Operational Sensitive Receptor			
Parameter	**HARP Rec #**	**X & Y Coordinate**	**Result**
30 Yr Cancer Risk (in a Million)	0	0 0	0.00
70 Yr Cancer Risk (in a Million)	41	246334.26 4070099.5	16.12
Chronic HI	41	246334.26 4070099.5	4.06E-03
Acute HI	35	246293.35 4070103.06	6.84E-04
PM 2.5	0	0 0	0.0000

Operational Worker Receptor			
Parameter	**HARP Rec #**	**X & Y Coordinate**	**Result**
Cancer Risk (in a Million)	183	246088.83 4070099.52	1.74
Chronic HI	183	246088.83 4070099.52	3.56E-03
Acute HI	188	246872.03 4070188.34	1.26E-03
PM 2.5	0	0 0	0.00E+00

Description	Receptor Type	Model Type	UTM X	UTM Y	Latitude	Longitude
Construction	Sensitive	Cancer Risk	246337.98	4070111.99	36.74286353	-119.8410286
Construction	Sensitive	Chronic HI	246337.98	4070111.99	36.74286353	-119.8410286
Construction	Sensitive	Acute HI	0	0		
Construction	Sensitive	PM 2.5	0.00	0.00		
Construction	School	Cancer Risk	0.00	0.00		
Construction	School	Chronic HI	0.00	0.00		
Construction	School	Acute HI	0	0		
Construction	School	PM 2.5	0.00	0.00		
Construction	Worker	Cancer Risk	246304.76	4070070.22	36.74247857	-119.8413864
Construction	Worker	Chronic HI	246304.76	4070070.22	36.74247857	-119.8413864
Construction	Worker	Acute HI	0	0		
Construction	Worker	PM 2.5	0.00	0.00		
Operational	Sensitive	Cancer Risk 30 yr	0	0		
Operational	Sensitive	Cancer Risk 70 yr	246334.26	4070099.5	36.74275008	-119.8410661
Operational	Sensitive	Chronic HI	246334.26	4070099.5	36.74275008	-119.8410661
Operational	Sensitive	Acute HI	246293.35	4070103.06	36.7427712	-119.8415249
Operational	Sensitive	PM 2.5	0	0		
Operational	Worker	Cancer Risk 25 yr	246088.83	4070099.52	36.74268463	-119.8438118
Operational	Worker	Chronic HI	246088.83	4070099.52	36.74268463	-119.8438118
Operational	Worker	Acute HI	246872.03	4070188.34	36.74369357	-119.8350791

General AERMOD Input Parameters			
Project Boundary			
	Based on site plan		
Project Elevation Data			
	Source	**Lakes Environmental**	
	Link	http://www.webgis.com/terraindata.html	
	Evel Data Descr.	**SRTM1**	
Project Receptor Grid			
	Telescoping Grid	Spacing (m)	Distance (m)
	Grid 1		
	Grid 2		
	Grid 3		
	Grid 4		
	Comments	**Manually Identified**	
Meteorological Dataset			
	Location	**Fresno Arpt**	
	Provided By	**SJVAPCD**	
	Years	**2018 - 2022**	
	Elevation (m)	**100**	
	Link		
Construction Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period & Hourly**	
	Dispersion Coefficient	**Rural**	
	County	**Fresno County**	
	Urban Grouping / Pop	**N**	
	# of Worker Receptors	**201**	
	# of Sensitive Receptors	**49**	
	# of School Receptors		
Construction Area Parameters			
	Source Type	**Polygon Area**	
	Project Area (m^2)	**145555.2**	
	Ht. of Source (m)	**3.048**	
Operational Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period / Hourly**	
	Dispersion Coefficient	**Rural**	
	Urban Grouping / Pop	**N**	
	# Worker Receptors	**201**	
	# Sensitive Receptors	**49**	
	# of School Receptors	**0**	
Diesel Truck Idling Parameters			

	Source Type	**Point**
	Stack Ht. (m)	**3.658**
	Stack Dia (m)	**0.044**
	Stack Temp (k)	**388.7**
	Velocity (m/s)	**25**
Diesel Truck Travel Parameters		
	Source Type	**Line Volume**
	Initial Vertical (m)	**1.42**
	Initial Lateral (m)	**2.84**
	Release Ht (m)	**Surface**
	Volume Length (m)	**Roadway Segment Specific**
Vehicle Travel Parameters		
	Source Type	**Line Volume**
	Initial Vertical (m)	**0.85**
	Initial Lateral (m)	**1.70**
	Release Ht (m)	**Surface**
	Comments	**Combined if trucks travel the same path**

General HARP Input Parameters		
Construction		
Sensitive Receptors		
Sensitive Scenario Parameters		
	Starting Age	**3rd Trimester**
	Age Range	**3rd Trimester - 2 Year**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Sensitive Pathway Parameters		
	Pathways	**SJVAPCD Manadatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**Y**
	TAH ≥ 16 yrs	**Y**
Worker Receptors		
Worker Scenario Parameters		
	Starting Age	**16**
	Age Range	**16 - 17**
	Receptor Type	**Worker**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Worker Pathway Parameters		
	Pathways	**OEHHA minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**

			T2				45	T2L3					T4f				
							1.42E-05					2.70E-06					1.62E-06
					41	246337.98	4070111.99										
	UTM X	UTM Y	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total
1	246795.08	4069935.05	1.32E-06	1.59E-06	1.48E-07	0.00E+00	3.06E-06	2.25E-07	3.27E-07	2.83E-08	0.00E+00	5.81E-07	1.36E-07	1.96E-07	1.54E-08	0.00E+00	3.48E-07
2	246568.86	4070024.24	2.37E-06	2.84E-06	2.64E-07	0.00E+00	5.47E-06	4.02E-07	5.85E-07	5.06E-08	0.00E+00	1.04E-06	2.43E-07	3.51E-07	2.75E-08	0.00E+00	6.22E-07
3	246614.93	4070070.31	3.05E-06	3.67E-06	3.40E-07	0.00E+00	7.06E-06	5.19E-07	7.55E-07	6.53E-08	0.00E+00	1.34E-06	3.14E-07	4.53E-07	3.55E-08	0.00E+00	8.02E-07
4	246568.86	4069976.75	1.79E-06	2.15E-06	1.99E-07	0.00E+00	4.14E-06	3.04E-07	4.42E-07	3.83E-08	0.00E+00	7.84E-07	1.84E-07	2.65E-07	2.08E-08	0.00E+00	4.70E-07
5	246713.24	4069883.19	1.12E-06	1.34E-06	1.25E-07	0.00E+00	2.58E-06	1.90E-07	2.76E-07	2.39E-08	0.00E+00	4.90E-07	1.15E-07	1.66E-07	1.30E-08	0.00E+00	2.94E-07
6	246688.54	4069880.82	1.11E-06	1.34E-06	1.24E-07	0.00E+00	2.57E-06	1.89E-07	2.75E-07	2.38E-08	0.00E+00	4.88E-07	1.14E-07	1.65E-07	1.29E-08	0.00E+00	2.92E-07
7	246648.17	4069884.62	1.13E-06	1.36E-06	1.26E-07	0.00E+00	2.63E-06	1.93E-07	2.81E-07	2.43E-08	0.00E+00	4.98E-07	1.17E-07	1.68E-07	1.32E-08	0.00E+00	2.98E-07
8	246624.43	4069876.07	1.09E-06	1.31E-06	1.22E-07	0.00E+00	2.52E-06	1.86E-07	2.70E-07	2.34E-08	0.00E+00	4.79E-07	1.12E-07	1.62E-07	1.27E-08	0.00E+00	2.87E-07
9	246629.65	4069894.59	1.18E-06	1.42E-06	1.32E-07	0.00E+00	2.74E-06	2.01E-07	2.93E-07	2.53E-08	0.00E+00	5.20E-07	1.22E-07	1.76E-07	1.38E-08	0.00E+00	3.11E-07
10	246845.86	4069793.56	7.81E-07	9.40E-07	8.71E-08	0.00E+00	1.81E-06	1.33E-07	1.93E-07	1.67E-08	0.00E+00	3.43E-07	8.03E-08	1.16E-07	9.08E-09	0.00E+00	2.05E-07
11	246839.24	4069776.9	7.45E-07	8.95E-07	8.30E-08	0.00E+00	1.72E-06	1.27E-07	1.84E-07	1.59E-08	0.00E+00	3.27E-07	7.66E-08	1.11E-07	8.66E-09	0.00E+00	1.96E-07
12	246796.07	4069808.96	8.34E-07	1.00E-06	9.30E-08	0.00E+00	1.93E-06	1.42E-07	2.06E-07	1.79E-08	0.00E+00	3.66E-07	8.58E-08	1.24E-07	9.70E-09	0.00E+00	2.19E-07
13	246792.13	4069788.36	7.81E-07	9.39E-07	8.71E-08	0.00E+00	1.81E-06	1.33E-07	1.93E-07	1.67E-08	0.00E+00	3.43E-07	8.03E-08	1.16E-07	9.08E-09	0.00E+00	2.05E-07
14	246748.6	4069788.72	7.85E-07	9.44E-07	8.75E-08	0.00E+00	1.82E-06	1.34E-07	1.94E-07	1.68E-08	0.00E+00	3.45E-07	8.07E-08	1.17E-07	9.13E-09	0.00E+00	2.06E-07
15	246738.57	4069788	7.83E-07	9.42E-07	8.73E-08	0.00E+00	1.81E-06	1.33E-07	1.94E-07	1.68E-08	0.00E+00	3.44E-07	8.05E-08	1.16E-07	9.10E-09	0.00E+00	2.06E-07
16	246793.56	4069767.94	7.32E-07	8.80E-07	8.16E-08	0.00E+00	1.69E-06	1.24E-07	1.81E-07	1.57E-08	0.00E+00	3.21E-07	7.52E-08	1.09E-07	8.51E-09	0.00E+00	1.92E-07
17	246792.84	4069727.28	6.45E-07	7.75E-07	7.19E-08	0.00E+00	1.49E-06	1.10E-07	1.60E-07	1.38E-08	0.00E+00	2.83E-07	6.63E-08	9.57E-08	7.50E-09	0.00E+00	1.69E-07
18	246790.16	4069744.3	6.80E-07	8.17E-07	7.58E-08	0.00E+00	1.57E-06	1.16E-07	1.68E-07	1.46E-08	0.00E+00	2.98E-07	6.99E-08	1.01E-07	7.90E-09	0.00E+00	1.79E-07
19	246793.02	4069759.52	7.13E-07	8.57E-07	7.94E-08	0.00E+00	1.65E-06	1.21E-07	1.76E-07	1.53E-08	0.00E+00	3.13E-07	7.33E-08	1.06E-07	8.28E-09	0.00E+00	1.87E-07
20	246856.07	4069721.01	6.31E-07	7.59E-07	7.03E-08	0.00E+00	1.46E-06	1.07E-07	1.56E-07	1.35E-08	0.00E+00	2.77E-07	6.49E-08	9.37E-08	7.33E-09	0.00E+00	1.66E-07
21	246851.42	4069752	6.90E-07	8.29E-07	7.69E-08	0.00E+00	1.60E-06	1.17E-07	1.71E-07	1.48E-08	0.00E+00	3.03E-07	7.09E-08	1.02E-07	8.02E-09	0.00E+00	1.81E-07
22	246855.54	4069732.66	6.52E-07	7.84E-07	7.27E-08	0.00E+00	1.51E-06	1.11E-07	1.61E-07	1.40E-08	0.00E+00	2.86E-07	6.71E-08	9.68E-08	7.58E-09	0.00E+00	1.71E-07
23	246784.25	4069647.57	5.06E-07	6.08E-07	5.64E-08	0.00E+00	1.17E-06	8.61E-08	1.25E-07	1.08E-08	0.00E+00	2.22E-07	5.20E-08	7.51E-08	5.88E-09	0.00E+00	1.33E-07
24	246784.96	4069667.28	5.37E-07	6.46E-07	5.99E-08	0.00E+00	1.24E-06	9.13E-08	1.33E-07	1.15E-08	0.00E+00	2.36E-07	5.52E-08	7.97E-08	6.24E-09	0.00E+00	1.41E-07
25	246785.14	4069689.13	5.74E-07	6.90E-07	6.40E-08	0.00E+00	1.33E-06	9.76E-08	1.42E-07	1.23E-08	0.00E+00	2.52E-07	5.90E-08	8.52E-08	6.67E-09	0.00E+00	1.51E-07
26	246545	4069856.58	9.82E-07	1.18E-06	1.09E-07	0.00E+00	2.27E-06	1.67E-07	2.43E-07	2.10E-08	0.00E+00	4.31E-07	1.01E-07	1.46E-07	1.14E-08	0.00E+00	2.58E-07
27	246544.52	4069847.55	9.41E-07	1.13E-06	1.05E-07	0.00E+00	2.18E-06	1.60E-07	2.33E-07	2.01E-08	0.00E+00	4.13E-07	9.67E-08	1.40E-07	1.09E-08	0.00E+00	2.47E-07
28	246546.42	4069834.25	8.86E-07	1.07E-06	9.88E-08	0.00E+00	2.05E-06	1.51E-07	2.19E-07	1.90E-08	0.00E+00	3.89E-07	9.11E-08	1.32E-07	1.03E-08	0.00E+00	2.33E-07
29	246543.57	4069826.18	8.52E-07	1.03E-06	9.50E-08	0.00E+00	1.97E-06	1.45E-07	2.11E-07	1.83E-08	0.00E+00	3.74E-07	8.77E-08	1.27E-07	9.91E-09	0.00E+00	2.24E-07
30	246540.72	4069803.38	7.68E-07	9.23E-07	8.56E-08	0.00E+00	1.78E-06	1.31E-07	1.90E-07	1.64E-08	0.00E+00	3.37E-07	7.89E-08	1.14E-07	8.93E-09	0.00E+00	2.02E-07
31	246526	4069857.53	9.72E-07	1.17E-06	1.08E-07	0.00E+00	2.25E-06	1.65E-07	2.40E-07	2.08E-08	0.00E+00	4.27E-07	9.99E-08	1.44E-07	1.13E-08	0.00E+00	2.55E-07
32	246525.53	4069847.08	9.25E-07	1.11E-06	1.03E-07	0.00E+00	2.14E-06	1.57E-07	2.29E-07	1.98E-08	0.00E+00	4.06E-07	9.51E-08	1.37E-07	1.07E-08	0.00E+00	2.43E-07
33	246524.1	4069838.53	8.87E-07	1.07E-06	9.89E-08	0.00E+00	2.05E-06	1.51E-07	2.20E-07	1.90E-08	0.00E+00	3.89E-07	9.12E-08	1.32E-07	1.03E-08	0.00E+00	2.33E-07
34	246523.63	4069826.65	8.39E-07	1.01E-06	9.36E-08	0.00E+00	1.94E-06	1.43E-07	2.08E-07	1.80E-08	0.00E+00	3.68E-07	8.63E-08	1.25E-07	9.76E-09	0.00E+00	2.21E-07
35	246293.35	4070103.06	5.21E-06	6.27E-06	5.81E-07	0.00E+00	1.21E-05	8.86E-07	1.29E-06	1.12E-07	0.00E+00	2.29E-06	5.36E-07	7.73E-07	6.06E-08	0.00E+00	1.37E-06
36	246270.04	4070096.62	4.65E-06	5.59E-06	5.18E-07	0.00E+00	1.08E-05	7.90E-07	1.15E-06	9.95E-08	0.00E+00	2.04E-06	4.78E-07	6.90E-07	5.40E-08	0.00E+00	1.22E-06
37	246257.65	4070096.12	4.55E-06	5.47E-06	5.07E-07	0.00E+00	1.05E-05	7.74E-07	1.13E-06	9.74E-08	0.00E+00	2.00E-06	4.68E-07	6.75E-07	5.29E-08	0.00E+00	1.20E-06
38	246246.49	4070096.12	4.47E-06	5.38E-06	4.99E-07	0.00E+00	1.03E-05	7.61E-07	1.11E-06	9.58E-08	0.00E+00	1.96E-06	4.60E-07	6.64E-07	5.20E-08	0.00E+00	1.18E-06
39	246346.91	4070078.52	3.95E-06	4.75E-06	4.40E-07	0.00E+00	9.13E-06	6.71E-07	9.77E-07	8.45E-08	0.00E+00	1.73E-06	4.06E-07	5.86E-07	4.59E-08	0.00E+00	1.04E-06
40	246344.67	4070073.06	3.70E-06	4.45E-06	4.13E-07	0.00E+00	8.57E-06	6.30E-07	9.17E-07	7.93E-08	0.00E+00	1.63E-06	3.81E-07	5.50E-07	4.31E-08	0.00E+00	9.74E-07
41	246337.98	4070111.99	6.15E-06	7.39E-06	6.85E-07	0.00E+00	1.42E-05	1.05E-06	1.52E-06	1.32E-07	0.00E+00	2.70E-06	6.32E-07	9.12E-07	7.14E-08	0.00E+00	1.62E-06
42	246302.9	4070951.41	2.88E-07	3.46E-07	3.21E-08	0.00E+00	6.67E-07	4.90E-08	7.13E-08	6.17E-09	0.00E+00	1.26E-07	2.96E-08	4.28E-08	3.35E-09	0.00E+00	7.57E-08
43	246397.11	4070950.37	2.62E-07	3.15E-07	2.92E-08	0.00E+00	6.07E-07	4.46E-08	6.49E-08	5.61E-09	0.00E+00	1.15E-07	2.70E-08	3.89E-08	3.05E-09	0.00E+00	6.89E-08
44	246565.53	4070954.82	1.98E-07	2.38E-07	2.21E-08	0.00E+00	4.58E-07	3.37E-08	4.90E-08	4.24E-09	0.00E+00	8.69E-08	2.04E-08	2.94E-08	2.30E-09	0.00E+00	5.21E-08
45	246549.86	4070941.04	2.11E-07	2.53E-07	2.35E-08	0.00E+00	4.88E-07	3.59E-08	5.22E-08	4.51E-09	0.00E+00	9.25E-08	2.17E-08	3.13E-08	2.45E-09	0.00E+00	5.54E-08
46	246519.33	4070942.66	2.21E-07	2.65E-07	2.46E-08	0.00E+00	5.11E-07	3.76E-08	5.46E-08	4.73E-09	0.00E+00	9.69E-08	2.27E-08	3.28E-08	2.57E-09	0.00E+00	5.80E-08
47	246200.46	4070942.04	3.17E-07	3.81E-07	3.54E-08	0.00E+00	7.34E-07	5.39E-08	7.85E-08	6.79E-09	0.00E+00	1.39E-07	3.26E-08	4.71E-08	3.69E-09	0.00E+00	8.34E-08
48	246179.09	4070942.73	3.23E-07	3.89E-07	3.60E-08	0.00E+00	7.48E-07	5.50E-08	8.00E-08	6.92E-09	0.00E+00	1.42E-07	3.32E-08	4.80E-08	3.76E-09	0.00E+00	8.50E-08
49	246220.67	4070942.5	3.12E-07	3.75E-07	3.48E-08	0.00E+00	7.22E-07	5.31E-08	7.72E-08	6.68E-09	0.00E+00	1.37E-07	3.21E-08	4.63E-08	3.63E-09	0.00E+00	8.20E-08

			T2		45		T2L3				T4f			
			41	246337.98	4070111.99									
			8.13E-03	1.06E-02	4.89E-03	0.00E+00	1.38E-03	2.18E-03	9.39E-04	0.00E+00	8.36E-04	1.31E-03	5.10E-04	0.00E+00
	UTM X	UTM Y	Yr 1	Yr 2	Yr 3	Yr 4	Yr 1	Yr 2	Yr 3	Yr 4	Yr 1	Yr 2	Yr 3	Yr 4
1	246795.08	4069935.05	1.75E-03	2.28E-03	1.05E-03	0.00E+00	2.98E-04	4.69E-04	2.02E-04	0.00E+00	1.80E-04	2.81E-04	1.10E-04	0.00E+00
2	246568.86	4070024.24	3.13E-03	4.07E-03	1.88E-03	0.00E+00	5.32E-04	8.38E-04	3.61E-04	0.00E+00	3.22E-04	5.03E-04	1.96E-04	0.00E+00
3	246614.93	4070070.31	4.04E-03	5.26E-03	2.43E-03	0.00E+00	6.87E-04	1.08E-03	4.66E-04	0.00E+00	4.15E-04	6.49E-04	2.53E-04	0.00E+00
4	246568.86	4069976.75	2.36E-03	3.08E-03	1.42E-03	0.00E+00	4.02E-04	6.34E-04	2.73E-04	0.00E+00	2.43E-04	3.80E-04	1.48E-04	0.00E+00
5	246713.24	4069883.19	1.48E-03	1.92E-03	8.89E-04	0.00E+00	2.51E-04	3.96E-04	1.71E-04	0.00E+00	1.52E-04	2.38E-04	9.27E-05	0.00E+00
6	246688.54	4069880.82	1.47E-03	1.92E-03	8.85E-04	0.00E+00	2.50E-04	3.94E-04	1.70E-04	0.00E+00	1.51E-04	2.36E-04	9.23E-05	0.00E+00
7	246648.17	4069884.62	1.50E-03	1.95E-03	9.03E-04	0.00E+00	2.55E-04	4.02E-04	1.73E-04	0.00E+00	1.54E-04	2.41E-04	9.41E-05	0.00E+00
8	246624.43	4069876.07	1.44E-03	1.88E-03	8.68E-04	0.00E+00	2.46E-04	3.87E-04	1.67E-04	0.00E+00	1.48E-04	2.32E-04	9.05E-05	0.00E+00
9	246629.65	4069894.59	1.57E-03	2.04E-03	9.42E-04	0.00E+00	2.66E-04	4.20E-04	1.81E-04	0.00E+00	1.61E-04	2.52E-04	9.82E-05	0.00E+00
10	246845.86	4069793.56	1.03E-03	1.35E-03	6.22E-04	0.00E+00	1.76E-04	2.77E-04	1.19E-04	0.00E+00	1.06E-04	1.66E-04	6.48E-05	0.00E+00
11	246839.24	4069776.9	9.85E-04	1.28E-03	5.92E-04	0.00E+00	1.68E-04	2.64E-04	1.14E-04	0.00E+00	1.01E-04	1.58E-04	6.18E-05	0.00E+00
12	246796.07	4069808.96	1.10E-03	1.44E-03	6.64E-04	0.00E+00	1.88E-04	2.96E-04	1.27E-04	0.00E+00	1.13E-04	1.77E-04	6.92E-05	0.00E+00
13	246792.13	4069788.36	1.03E-03	1.35E-03	6.21E-04	0.00E+00	1.76E-04	2.77E-04	1.19E-04	0.00E+00	1.06E-04	1.66E-04	6.48E-05	0.00E+00
14	246748.6	4069788.72	1.04E-03	1.35E-03	6.25E-04	0.00E+00	1.77E-04	2.78E-04	1.20E-04	0.00E+00	1.07E-04	1.67E-04	6.51E-05	0.00E+00
15	246738.57	4069788	1.04E-03	1.35E-03	6.23E-04	0.00E+00	1.76E-04	2.78E-04	1.20E-04	0.00E+00	1.07E-04	1.67E-04	6.50E-05	0.00E+00
16	246793.56	4069767.94	9.68E-04	1.26E-03	5.82E-04	0.00E+00	1.65E-04	2.59E-04	1.12E-04	0.00E+00	9.95E-05	1.56E-04	6.07E-05	0.00E+00
17	246792.84	4069727.28	8.53E-04	1.11E-03	5.13E-04	0.00E+00	1.45E-04	2.29E-04	9.85E-05	0.00E+00	8.77E-05	1.37E-04	5.35E-05	0.00E+00
18	246790.16	4069744.3	8.99E-04	1.17E-03	5.41E-04	0.00E+00	1.53E-04	2.41E-04	1.04E-04	0.00E+00	9.24E-05	1.45E-04	5.64E-05	0.00E+00
19	246793.02	4069759.52	9.43E-04	1.23E-03	5.67E-04	0.00E+00	1.60E-04	2.53E-04	1.09E-04	0.00E+00	9.69E-05	1.52E-04	5.91E-05	0.00E+00
20	246856.07	4069721.01	8.35E-04	1.09E-03	5.02E-04	0.00E+00	1.42E-04	2.24E-04	9.64E-05	0.00E+00	8.58E-05	1.34E-04	5.23E-05	0.00E+00
21	246851.42	4069752	9.12E-04	1.19E-03	5.49E-04	0.00E+00	1.55E-04	2.44E-04	1.05E-04	0.00E+00	9.38E-05	1.47E-04	5.72E-05	0.00E+00
22	246855.54	4069732.66	8.63E-04	1.12E-03	5.19E-04	0.00E+00	1.47E-04	2.31E-04	9.97E-05	0.00E+00	8.87E-05	1.39E-04	5.41E-05	0.00E+00
23	246784.25	4069647.57	6.69E-04	8.71E-04	4.02E-04	0.00E+00	1.14E-04	1.79E-04	7.73E-05	0.00E+00	6.88E-05	1.08E-04	4.20E-05	0.00E+00
24	246784.96	4069667.28	7.10E-04	9.25E-04	4.27E-04	0.00E+00	1.21E-04	1.90E-04	8.20E-05	0.00E+00	7.30E-05	1.14E-04	4.45E-05	0.00E+00
25	246785.14	4069689.13	7.59E-04	9.88E-04	4.56E-04	0.00E+00	1.29E-04	2.03E-04	8.77E-05	0.00E+00	7.80E-05	1.22E-04	4.76E-05	0.00E+00
26	246545	4069856.58	1.30E-03	1.69E-03	7.81E-04	0.00E+00	2.21E-04	3.48E-04	1.50E-04	0.00E+00	1.34E-04	2.09E-04	8.14E-05	0.00E+00
27	246544.52	4069847.55	1.24E-03	1.62E-03	7.49E-04	0.00E+00	2.12E-04	3.34E-04	1.44E-04	0.00E+00	1.28E-04	2.00E-04	7.81E-05	0.00E+00
28	246546.42	4069834.25	1.17E-03	1.53E-03	7.05E-04	0.00E+00	1.99E-04	3.14E-04	1.35E-04	0.00E+00	1.21E-04	1.88E-04	7.35E-05	0.00E+00
29	246543.57	4069826.18	1.13E-03	1.47E-03	6.78E-04	0.00E+00	1.92E-04	3.02E-04	1.30E-04	0.00E+00	1.16E-04	1.81E-04	7.07E-05	0.00E+00
30	246540.72	4069803.38	1.02E-03	1.32E-03	6.11E-04	0.00E+00	1.73E-04	2.72E-04	1.17E-04	0.00E+00	1.04E-04	1.63E-04	6.37E-05	0.00E+00
31	246526	4069857.53	1.29E-03	1.67E-03	7.73E-04	0.00E+00	2.19E-04	3.44E-04	1.48E-04	0.00E+00	1.32E-04	2.07E-04	8.06E-05	0.00E+00
32	246525.53	4069847.08	1.22E-03	1.59E-03	7.36E-04	0.00E+00	2.08E-04	3.28E-04	1.41E-04	0.00E+00	1.26E-04	1.97E-04	7.67E-05	0.00E+00
33	246524.1	4069838.53	1.17E-03	1.53E-03	7.06E-04	0.00E+00	2.00E-04	3.15E-04	1.36E-04	0.00E+00	1.21E-04	1.89E-04	7.36E-05	0.00E+00
34	246523.63	4069826.65	1.11E-03	1.45E-03	6.68E-04	0.00E+00	1.89E-04	2.98E-04	1.28E-04	0.00E+00	1.14E-04	1.78E-04	6.96E-05	0.00E+00
35	246293.35	4070103.06	6.89E-03	8.98E-03	4.15E-03	0.00E+00	1.17E-03	1.85E-03	7.96E-04	0.00E+00	7.09E-04	1.11E-03	4.32E-04	0.00E+00
36	246270.04	4070096.62	6.15E-03	8.00E-03	3.70E-03	0.00E+00	1.05E-03	1.65E-03	7.10E-04	0.00E+00	6.32E-04	9.88E-04	3.85E-04	0.00E+00
37	246257.65	4070096.12	6.02E-03	7.83E-03	3.62E-03	0.00E+00	1.02E-03	1.61E-03	6.95E-04	0.00E+00	6.19E-04	9.67E-04	3.77E-04	0.00E+00
38	246246.49	4070096.12	5.92E-03	7.70E-03	3.56E-03	0.00E+00	1.01E-03	1.59E-03	6.83E-04	0.00E+00	6.08E-04	9.51E-04	3.71E-04	0.00E+00
39	246346.91	4070078.52	5.22E-03	6.80E-03	3.14E-03	0.00E+00	8.88E-04	1.40E-03	6.03E-04	0.00E+00	5.37E-04	8.39E-04	3.27E-04	0.00E+00

40	246344.67	4070073.06	4.90E-03	6.38E-03	2.95E-03	0.00E+00	8.34E-04	1.31E-03	5.66E-04	0.00E+00	5.04E-04	7.88E-04	3.07E-04	0.00E+00
41	246337.98	4070111.99	8.13E-03	1.06E-02	4.89E-03	0.00E+00	1.38E-03	2.18E-03	9.39E-04	0.00E+00	8.36E-04	1.31E-03	5.10E-04	0.00E+00
42	246302.9	4070951.41	3.81E-04	4.96E-04	2.29E-04	0.00E+00	6.48E-05	1.02E-04	4.40E-05	0.00E+00	3.92E-05	6.13E-05	2.39E-05	0.00E+00
43	246397.11	4070950.37	3.47E-04	4.52E-04	2.09E-04	0.00E+00	5.90E-05	9.29E-05	4.01E-05	0.00E+00	3.57E-05	5.57E-05	2.18E-05	0.00E+00
44	246565.53	4070954.82	2.62E-04	3.41E-04	1.58E-04	0.00E+00	4.46E-05	7.02E-05	3.03E-05	0.00E+00	2.69E-05	4.21E-05	1.64E-05	0.00E+00
45	246549.86	4070941.04	2.79E-04	3.63E-04	1.68E-04	0.00E+00	4.74E-05	7.47E-05	3.22E-05	0.00E+00	2.87E-05	4.48E-05	1.75E-05	0.00E+00
46	246519.33	4070942.66	2.92E-04	3.80E-04	1.76E-04	0.00E+00	4.97E-05	7.83E-05	3.37E-05	0.00E+00	3.00E-05	4.69E-05	1.83E-05	0.00E+00
47	246200.46	4070942.04	4.20E-04	5.46E-04	2.52E-04	0.00E+00	7.14E-05	1.12E-04	4.85E-05	0.00E+00	4.31E-05	6.74E-05	2.63E-05	0.00E+00
48	246179.09	4070942.73	4.28E-04	5.57E-04	2.57E-04	0.00E+00	7.28E-05	1.15E-04	4.94E-05	0.00E+00	4.40E-05	6.88E-05	2.68E-05	0.00E+00
49	246220.67	4070942.5	4.13E-04	5.38E-04	2.48E-04	0.00E+00	7.02E-05	1.11E-04	4.77E-05	0.00E+00	4.25E-05	6.64E-05	2.59E-05	0.00E+00

			T2		191			T2L3					T4f				
			187	246304.76	4070070.22												
							1.20E-06					2.28E-07					1.35E-07
	UTM X	UTM Y	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total
1	246074.6	4070081	2.55E-07	3.32E-07	1.53E-07	0.00E+00	7.41E-07	4.34E-08	6.84E-08	2.95E-08	0.00E+00	1.41E-07	2.62E-08	4.10E-08	1.60E-08	0.00E+00	8.33E-08
2	246863.3	4069919	1.56E-07	2.03E-07	9.36E-08	0.00E+00	4.52E-07	2.65E-08	4.17E-08	1.80E-08	0.00E+00	8.62E-08	1.60E-08	2.50E-08	9.76E-09	0.00E+00	5.08E-08
3	246874.2	4069902	1.46E-07	1.90E-07	8.78E-08	0.00E+00	4.24E-07	2.48E-08	3.91E-08	1.69E-08	0.00E+00	8.08E-08	1.50E-08	2.35E-08	9.16E-09	0.00E+00	4.76E-08
4	246855.2	4069890	1.43E-07	1.86E-07	8.61E-08	0.00E+00	4.16E-07	2.44E-08	3.84E-08	1.65E-08	0.00E+00	7.93E-08	1.47E-08	2.30E-08	8.98E-09	0.00E+00	4.67E-08
5	246883.3	4069972	1.79E-07	2.33E-07	1.07E-07	0.00E+00	5.19E-07	3.04E-08	4.79E-08	2.06E-08	0.00E+00	9.89E-08	1.84E-08	2.87E-08	1.12E-08	0.00E+00	5.83E-08
6	246891.4	4070009	1.98E-07	2.58E-07	1.19E-07	0.00E+00	5.74E-07	3.36E-08	5.30E-08	2.28E-08	0.00E+00	1.09E-07	2.03E-08	3.18E-08	1.24E-08	0.00E+00	6.45E-08
7	246898.6	4070025	2.03E-07	2.65E-07	1.22E-07	0.00E+00	5.91E-07	3.46E-08	5.45E-08	2.35E-08	0.00E+00	1.13E-07	2.09E-08	3.27E-08	1.28E-08	0.00E+00	6.64E-08
8	246897.7	4070044	2.16E-07	2.81E-07	1.30E-07	0.00E+00	6.27E-07	3.67E-08	5.79E-08	2.49E-08	0.00E+00	1.20E-07	2.22E-08	3.47E-08	1.35E-08	0.00E+00	7.04E-08
9	246893.2	4070063	2.33E-07	3.03E-07	1.40E-07	0.00E+00	6.75E-07	3.96E-08	6.23E-08	2.69E-08	0.00E+00	1.29E-07	2.39E-08	3.74E-08	1.46E-08	0.00E+00	7.59E-08
10	246856.1	4070032	2.37E-07	3.08E-07	1.42E-07	0.00E+00	6.87E-07	4.03E-08	6.34E-08	2.73E-08	0.00E+00	1.31E-07	2.43E-08	3.80E-08	1.48E-08	0.00E+00	7.72E-08
11	246844.3	4070069	2.90E-07	3.78E-07	1.75E-07	0.00E+00	8.43E-07	4.94E-08	7.78E-08	3.35E-08	0.00E+00	1.61E-07	2.99E-08	4.67E-08	1.82E-08	0.00E+00	9.48E-08
12	246845.2	4070080	3.07E-07	3.99E-07	1.84E-07	0.00E+00	8.91E-07	5.22E-08	8.22E-08	3.54E-08	0.00E+00	1.70E-07	3.15E-08	4.93E-08	1.92E-08	0.00E+00	1.00E-07
13	246934.8	4070051	1.88E-07	2.44E-07	1.13E-07	0.00E+00	5.45E-07	3.19E-08	5.03E-08	2.17E-08	0.00E+00	1.04E-07	1.93E-08	3.01E-08	1.18E-08	0.00E+00	6.12E-08
14	246931.2	4070027	1.83E-07	2.38E-07	1.10E-07	0.00E+00	5.30E-07	3.11E-08	4.89E-08	2.11E-08	0.00E+00	1.01E-07	1.88E-08	2.94E-08	1.15E-08	0.00E+00	5.96E-08
15	246934.8	4069998	1.70E-07	2.21E-07	1.02E-07	0.00E+00	4.92E-07	2.88E-08	4.54E-08	1.96E-08	0.00E+00	9.38E-08	1.74E-08	2.72E-08	1.06E-08	0.00E+00	5.53E-08
16	246957.5	4070166	1.48E-07	1.93E-07	8.90E-08	0.00E+00	4.30E-07	2.52E-08	3.96E-08	1.71E-08	0.00E+00	8.19E-08	1.52E-08	2.38E-08	9.28E-09	0.00E+00	4.83E-08
17	246866.1	4070294	1.97E-07	2.57E-07	1.18E-07	0.00E+00	5.72E-07	3.35E-08	5.28E-08	2.28E-08	0.00E+00	1.09E-07	2.03E-08	3.17E-08	1.24E-08	0.00E+00	6.43E-08
18	246883.3	4070300	1.43E-07	1.86E-07	8.59E-08	0.00E+00	4.15E-07	2.43E-08	3.83E-08	1.65E-08	0.00E+00	7.91E-08	1.47E-08	2.30E-08	8.96E-09	0.00E+00	4.66E-08
19	246905	4070298	1.10E-07	1.44E-07	6.64E-08	0.00E+00	3.21E-07	1.88E-08	2.96E-08	1.28E-08	0.00E+00	6.11E-08	1.14E-08	1.77E-08	6.92E-09	0.00E+00	3.60E-08
20	246927.6	4070298	8.79E-08	1.14E-07	5.29E-08	0.00E+00	2.55E-07	1.50E-08	2.36E-08	1.02E-08	0.00E+00	4.87E-08	9.04E-09	1.41E-08	5.51E-09	0.00E+00	2.87E-08
21	246958.4	4070298	6.79E-08	8.85E-08	4.09E-08	0.00E+00	1.97E-07	1.16E-08	1.82E-08	7.85E-09	0.00E+00	3.76E-08	6.99E-09	1.09E-08	4.26E-09	0.00E+00	2.22E-08
22	246976.5	4070296	6.13E-08	7.98E-08	3.69E-08	0.00E+00	1.78E-07	1.04E-08	1.64E-08	7.08E-09	0.00E+00	3.39E-08	6.30E-09	9.85E-09	3.84E-09	0.00E+00	2.00E-08
23	247005.4	4070296	5.14E-08	6.69E-08	3.09E-08	0.00E+00	1.49E-07	8.74E-09	1.38E-08	5.93E-09	0.00E+00	2.84E-08	5.28E-09	8.26E-09	3.22E-09	0.00E+00	1.68E-08
24	246946.7	4070158	1.64E-07	2.14E-07	9.87E-08	0.00E+00	4.77E-07	2.79E-08	4.40E-08	1.90E-08	0.00E+00	9.09E-08	1.69E-08	2.64E-08	1.03E-08	0.00E+00	5.36E-08
25	246947.7	4070175	1.54E-07	2.00E-07	9.26E-08	0.00E+00	4.47E-07	2.62E-08	4.13E-08	1.78E-08	0.00E+00	8.52E-08	1.58E-08	2.47E-08	9.65E-09	0.00E+00	5.02E-08
26	246863.4	4069895	1.44E-07	1.88E-07	8.68E-08	0.00E+00	4.19E-07	2.46E-08	3.87E-08	1.67E-08	0.00E+00	7.99E-08	1.48E-08	2.32E-08	9.06E-09	0.00E+00	4.71E-08
27	246873.4	4069919	1.54E-07	2.00E-07	9.26E-08	0.00E+00	4.47E-07	2.62E-08	4.13E-08	1.78E-08	0.00E+00	8.52E-08	1.58E-08	2.48E-08	9.66E-09	0.00E+00	5.02E-08
28	246909	4069964	1.66E-07	2.16E-07	9.97E-08	0.00E+00	4.81E-07	2.82E-08	4.44E-08	1.91E-08	0.00E+00	9.18E-08	1.70E-08	2.66E-08	1.04E-08	0.00E+00	5.41E-08
29	246951.3	4069944	1.44E-07	1.88E-07	8.68E-08	0.00E+00	4.19E-07	2.45E-08	3.87E-08	1.67E-08	0.00E+00	7.99E-08	1.48E-08	2.32E-08	9.05E-09	0.00E+00	4.71E-08
30	246779.5	4070389	1.21E-07	1.58E-07	7.30E-08	0.00E+00	3.53E-07	2.07E-08	3.25E-08	1.40E-08	0.00E+00	6.72E-08	1.25E-08	1.95E-08	7.62E-09	0.00E+00	3.96E-08
31	246784.5	4070417	6.72E-08	8.75E-08	4.04E-08	0.00E+00	1.95E-07	1.14E-08	1.80E-08	7.76E-09	0.00E+00	3.72E-08	6.91E-09	1.08E-08	4.21E-09	0.00E+00	2.19E-08
32	246781.7	4070442	4.96E-08	6.45E-08	2.98E-08	0.00E+00	1.44E-07	8.43E-09	1.33E-08	5.72E-09	0.00E+00	2.74E-08	5.10E-09	7.97E-09	3.11E-09	0.00E+00	1.62E-08
33	246782.8	4070460	4.14E-08	5.38E-08	2.49E-08	0.00E+00	1.20E-07	7.04E-09	1.11E-08	4.78E-09	0.00E+00	2.29E-08	4.25E-09	6.65E-09	2.59E-09	0.00E+00	1.35E-08
34	246741.7	4070461	5.12E-08	6.67E-08	3.08E-08	0.00E+00	1.49E-07	8.71E-09	1.37E-08	5.92E-09	0.00E+00	2.84E-08	5.27E-09	8.23E-09	3.21E-09	0.00E+00	1.67E-08
35	246743.9	4070442	6.16E-08	8.02E-08	3.70E-08	0.00E+00	1.79E-07	1.05E-08	1.65E-08	7.11E-09	0.00E+00	3.41E-08	6.33E-09	9.90E-09	3.86E-09	0.00E+00	2.01E-08
36	246738.9	4070423	8.03E-08	1.05E-07	4.83E-08	0.00E+00	2.33E-07	1.37E-08	2.15E-08	9.28E-09	0.00E+00	4.45E-08	8.26E-09	1.29E-08	5.04E-09	0.00E+00	2.62E-08
37	246741.2	4070407	1.06E-07	1.39E-07	6.40E-08	0.00E+00	3.09E-07	1.81E-08	2.85E-08	1.23E-08	0.00E+00	5.89E-08	1.09E-08	1.71E-08	6.67E-09	0.00E+00	3.47E-08
38	246744.5	4070386	1.77E-07	2.31E-07	1.07E-07	0.00E+00	5.15E-07	3.01E-08	4.75E-08	2.05E-08	0.00E+00	9.81E-08	1.82E-08	2.85E-08	1.11E-08	0.00E+00	5.78E-08
39	246760.6	4070393	1.32E-07	1.72E-07	7.95E-08	0.00E+00	3.84E-07	2.25E-08	3.54E-08	1.53E-08	0.00E+00	7.31E-08	1.36E-08	2.12E-08	8.29E-09	0.00E+00	4.31E-08
40	246760.6	4070414	8.27E-08	1.08E-07	4.97E-08	0.00E+00	2.40E-07	1.41E-08	2.22E-08	9.55E-09	0.00E+00	4.58E-08	8.50E-09	1.33E-08	5.19E-09	0.00E+00	2.70E-08
41	246757.8	4070437	6.01E-08	7.83E-08	3.62E-08	0.00E+00	1.75E-07	1.02E-08	1.61E-08	6.94E-09	0.00E+00	3.33E-08	6.18E-09	9.66E-09	3.77E-09	0.00E+00	1.96E-08
42	246763.9	4070457	4.73E-08	6.15E-08	2.84E-08	0.00E+00	1.37E-07	8.04E-09	1.27E-08	5.46E-09	0.00E+00	2.62E-08	4.86E-09	7.60E-09	2.96E-09	0.00E+00	1.54E-08
43	246660.6	4070410	1.53E-07	1.99E-07	9.18E-08	0.00E+00	4.43E-07	2.60E-08	4.09E-08	1.76E-08	0.00E+00	8.45E-08	1.57E-08	2.45E-08	9.57E-09	0.00E+00	4.98E-08
44	246650.5	4070444	9.10E-08	1.19E-07	5.47E-08	0.00E+00	2.64E-07	1.55E-08	2.44E-08	1.05E-08	0.00E+00	5.04E-08	9.36E-09	1.46E-08	5.71E-09	0.00E+00	2.97E-08
45	246636.1	4070447	9.25E-08	1.20E-07	5.56E-08	0.00E+00	2.69E-07	1.57E-08	2.48E-08	1.07E-08	0.00E+00	5.12E-08	9.51E-09	1.49E-08	5.80E-09	0.00E+00	3.02E-08
46	246607.7	4070462	8.62E-08	1.12E-07	5.18E-08	0.00E+00	2.50E-07	1.47E-08	2.31E-08	9.96E-09	0.00E+00	4.77E-08	8.86E-09	1.39E-08	5.41E-09	0.00E+00	2.81E-08
47	246860.1	4070528	1.95E-08	2.54E-08	1.17E-08	0.00E+00	5.66E-08	3.32E-09	5.23E-09	2.25E-09	0.00E+00	1.08E-08	2.01E-09	3.13E-09	1.22E-09	0.00E+00	6.36E-09
48	246874.6	4070527	1.89E-08	2.46E-08	1.13E-08	0.00E+00	5.48E-08	3.21E-09	5.05E-09	2.18E-09	0.00E+00	1.04E-08	1.94E-09	3.03E-09	1.18E-09	0.00E+00	6.15E-09

49	246887.9	4070525	1.83E-08	2.38E-08	1.10E-08	0.00E+00	5.32E-08	3.11E-09	4.91E-09	2.11E-09	0.00E+00	1.01E-08	1.88E-09	2.94E-09	1.15E-09	0.00E+00	5.97E-09
50	246798.4	4070720	1.01E-08	1.32E-08	6.08E-09	0.00E+00	2.94E-08	1.72E-09	2.71E-09	1.17E-09	0.00E+00	5.60E-09	1.04E-09	1.63E-09	6.35E-10	0.00E+00	3.30E-09
51	246776.2	4070718	1.07E-08	1.39E-08	6.44E-09	0.00E+00	3.11E-08	1.82E-09	2.87E-09	1.24E-09	0.00E+00	5.93E-09	1.10E-09	1.72E-09	6.72E-10	0.00E+00	3.49E-09
52	246751.7	4070720	1.15E-08	1.50E-08	6.91E-09	0.00E+00	3.34E-08	1.95E-09	3.08E-09	1.33E-09	0.00E+00	6.36E-09	1.18E-09	1.85E-09	7.21E-10	0.00E+00	3.75E-09
53	246725	4070723	1.22E-08	1.59E-08	7.33E-09	0.00E+00	3.54E-08	2.07E-09	3.26E-09	1.41E-09	0.00E+00	6.74E-09	1.25E-09	1.96E-09	7.64E-10	0.00E+00	3.97E-09
54	246695	4070762	1.14E-08	1.49E-08	6.88E-09	0.00E+00	3.32E-08	1.95E-09	3.07E-09	1.32E-09	0.00E+00	6.33E-09	1.18E-09	1.84E-09	7.18E-10	0.00E+00	3.73E-09
55	246494.9	4070530	6.26E-08	8.16E-08	3.77E-08	0.00E+00	1.82E-07	1.07E-08	1.68E-08	7.23E-09	0.00E+00	3.47E-08	6.44E-09	1.01E-08	3.93E-09	0.00E+00	2.04E-08
56	246495.5	4070612	3.62E-08	4.71E-08	2.18E-08	0.00E+00	1.05E-07	6.16E-09	9.70E-09	4.18E-09	0.00E+00	2.00E-08	3.72E-09	5.82E-09	2.27E-09	0.00E+00	1.18E-08
57	246521	4070668	2.54E-08	3.31E-08	1.53E-08	0.00E+00	7.38E-08	4.32E-09	6.81E-09	2.93E-09	0.00E+00	1.41E-08	2.61E-09	4.08E-09	1.59E-09	0.00E+00	8.29E-09
58	246400.4	4070675	3.12E-08	4.06E-08	1.87E-08	0.00E+00	9.05E-08	5.30E-09	8.35E-09	3.60E-09	0.00E+00	1.73E-08	3.21E-09	5.01E-09	1.95E-09	0.00E+00	1.02E-08
59	246404.3	4070664	3.26E-08	4.24E-08	1.96E-08	0.00E+00	9.46E-08	5.55E-09	8.73E-09	3.76E-09	0.00E+00	1.80E-08	3.35E-09	5.24E-09	2.04E-09	0.00E+00	1.06E-08
60	246447.1	4070587	4.61E-08	6.00E-08	2.77E-08	0.00E+00	1.34E-07	7.84E-09	1.24E-08	5.32E-09	0.00E+00	2.55E-08	4.74E-09	7.41E-09	2.89E-09	0.00E+00	1.50E-08
61	246526	4070863	1.21E-08	1.58E-08	7.30E-09	0.00E+00	3.52E-08	2.06E-09	3.25E-09	1.40E-09	0.00E+00	6.72E-09	1.25E-09	1.95E-09	7.61E-10	0.00E+00	3.96E-09
62	246527.1	4070877	1.16E-08	1.51E-08	6.99E-09	0.00E+00	3.37E-08	1.98E-09	3.11E-09	1.34E-09	0.00E+00	6.43E-09	1.19E-09	1.87E-09	7.29E-10	0.00E+00	3.79E-09
63	246529.9	4070895	1.10E-08	1.43E-08	6.61E-09	0.00E+00	3.19E-08	1.87E-09	2.94E-09	1.27E-09	0.00E+00	6.08E-09	1.13E-09	1.77E-09	6.89E-10	0.00E+00	3.59E-09
64	246503.2	4070897	1.15E-08	1.49E-08	6.89E-09	0.00E+00	3.33E-08	1.95E-09	3.07E-09	1.32E-09	0.00E+00	6.34E-09	1.18E-09	1.84E-09	7.18E-10	0.00E+00	3.74E-09
65	246499.4	4070884	1.20E-08	1.56E-08	7.21E-09	0.00E+00	3.48E-08	2.04E-09	3.21E-09	1.38E-09	0.00E+00	6.64E-09	1.23E-09	1.93E-09	7.52E-10	0.00E+00	3.91E-09
66	246503.2	4070861	1.27E-08	1.66E-08	7.65E-09	0.00E+00	3.69E-08	2.16E-09	3.41E-09	1.47E-09	0.00E+00	7.04E-09	1.31E-09	2.04E-09	7.97E-10	0.00E+00	4.15E-09
67	246415.4	4070874	1.41E-08	1.84E-08	8.49E-09	0.00E+00	4.10E-08	2.40E-09	3.78E-09	1.63E-09	0.00E+00	7.82E-09	1.45E-09	2.27E-09	8.85E-10	0.00E+00	4.61E-09
68	246396.5	4070861	1.51E-08	1.97E-08	9.08E-09	0.00E+00	4.38E-08	2.57E-09	4.05E-09	1.74E-09	0.00E+00	8.36E-09	1.55E-09	2.43E-09	9.47E-10	0.00E+00	4.93E-09
69	246398.7	4070869	1.47E-08	1.91E-08	8.83E-09	0.00E+00	4.26E-08	2.50E-09	3.93E-09	1.70E-09	0.00E+00	8.13E-09	1.51E-09	2.36E-09	9.21E-10	0.00E+00	4.79E-09
70	246217	4070865	1.90E-08	2.47E-08	1.14E-08	0.00E+00	5.50E-08	3.22E-09	5.08E-09	2.19E-09	0.00E+00	1.05E-08	1.95E-09	3.05E-09	1.19E-09	0.00E+00	6.18E-09
71	246215.9	4070847	2.03E-08	2.65E-08	1.22E-08	0.00E+00	5.91E-08	3.46E-09	5.45E-09	2.35E-09	0.00E+00	1.13E-08	2.09E-09	3.27E-09	1.28E-09	0.00E+00	6.64E-09
72	246215.3	4070833	2.15E-08	2.80E-08	1.29E-08	0.00E+00	6.23E-08	3.65E-09	5.75E-09	2.48E-09	0.00E+00	1.19E-08	2.21E-09	3.45E-09	1.35E-09	0.00E+00	7.00E-09
73	246187.5	4070711	3.59E-08	4.67E-08	2.16E-08	0.00E+00	1.04E-07	6.11E-09	9.62E-09	4.15E-09	0.00E+00	1.99E-08	3.69E-09	5.77E-09	2.25E-09	0.00E+00	1.17E-08
74	246200.9	4070711	3.55E-08	4.62E-08	2.13E-08	0.00E+00	1.03E-07	6.04E-09	9.51E-09	4.10E-09	0.00E+00	1.96E-08	3.65E-09	5.70E-09	2.23E-09	0.00E+00	1.16E-08
75	246198.1	4070701	3.72E-08	4.84E-08	2.24E-08	0.00E+00	1.08E-07	6.33E-09	9.97E-09	4.30E-09	0.00E+00	2.06E-08	3.83E-09	5.98E-09	2.33E-09	0.00E+00	1.21E-08
76	246329.8	4070549	7.13E-08	9.29E-08	4.29E-08	0.00E+00	2.07E-07	1.21E-08	1.91E-08	8.24E-09	0.00E+00	3.95E-08	7.33E-09	1.15E-08	4.47E-09	0.00E+00	2.33E-08
77	246301.5	4070548	7.43E-08	9.67E-08	4.47E-08	0.00E+00	2.16E-07	1.26E-08	1.99E-08	8.58E-09	0.00E+00	4.11E-08	7.63E-09	1.19E-08	4.66E-09	0.00E+00	2.42E-08
78	246270.3	4070549	7.67E-08	9.99E-08	4.61E-08	0.00E+00	2.23E-07	1.30E-08	2.05E-08	8.86E-09	0.00E+00	4.25E-08	7.89E-09	1.23E-08	4.81E-09	0.00E+00	2.50E-08
79	246246.4	4070549	7.84E-08	1.02E-07	4.71E-08	0.00E+00	2.28E-07	1.33E-08	2.10E-08	9.05E-09	0.00E+00	4.34E-08	8.06E-09	1.26E-08	4.91E-09	0.00E+00	2.56E-08
80	246227	4070549	8.01E-08	1.04E-07	4.81E-08	0.00E+00	2.32E-07	1.36E-08	2.15E-08	9.25E-09	0.00E+00	4.43E-08	8.23E-09	1.29E-08	5.02E-09	0.00E+00	2.61E-08
81	246209.2	4070550	8.08E-08	1.05E-07	4.86E-08	0.00E+00	2.35E-07	1.38E-08	2.17E-08	9.33E-09	0.00E+00	4.47E-08	8.31E-09	1.30E-08	5.07E-09	0.00E+00	2.64E-08
82	246185.9	4070552	8.21E-08	1.07E-07	4.94E-08	0.00E+00	2.38E-07	1.40E-08	2.20E-08	9.48E-09	0.00E+00	4.54E-08	8.44E-09	1.32E-08	5.15E-09	0.00E+00	2.68E-08
83	246172	4070552	8.30E-08	1.08E-07	4.99E-08	0.00E+00	2.41E-07	1.41E-08	2.22E-08	9.59E-09	0.00E+00	4.60E-08	8.54E-09	1.33E-08	5.21E-09	0.00E+00	2.71E-08
84	246164.7	4070591	6.55E-08	8.53E-08	3.94E-08	0.00E+00	1.90E-07	1.11E-08	1.76E-08	7.56E-09	0.00E+00	3.63E-08	6.73E-09	1.05E-08	4.11E-09	0.00E+00	2.14E-08
85	246192	4070591	6.42E-08	8.36E-08	3.86E-08	0.00E+00	1.86E-07	1.09E-08	1.72E-08	7.41E-09	0.00E+00	3.55E-08	6.60E-09	1.03E-08	4.03E-09	0.00E+00	2.09E-08
86	246225.9	4070589	6.32E-08	8.23E-08	3.80E-08	0.00E+00	1.84E-07	1.08E-08	1.69E-08	7.30E-09	0.00E+00	3.50E-08	6.50E-09	1.02E-08	3.97E-09	0.00E+00	2.06E-08
87	246268.7	4070587	6.16E-08	8.03E-08	3.71E-08	0.00E+00	1.79E-07	1.05E-08	1.65E-08	7.12E-09	0.00E+00	3.41E-08	6.34E-09	9.91E-09	3.87E-09	0.00E+00	2.01E-08
88	246300.4	4070590	5.86E-08	7.64E-08	3.53E-08	0.00E+00	1.70E-07	9.98E-09	1.57E-08	6.77E-09	0.00E+00	3.25E-08	6.03E-09	9.43E-09	3.68E-09	0.00E+00	1.91E-08
89	246332.6	4070588	5.61E-08	7.31E-08	3.38E-08	0.00E+00	1.63E-07	9.55E-09	1.50E-08	6.48E-09	0.00E+00	3.11E-08	5.77E-09	9.02E-09	3.52E-09	0.00E+00	1.83E-08
90	246328.7	4070623	4.62E-08	6.01E-08	2.78E-08	0.00E+00	1.34E-07	7.86E-09	1.24E-08	5.33E-09	0.00E+00	2.56E-08	4.75E-09	7.42E-09	2.90E-09	0.00E+00	1.51E-08
91	246292.6	4070623	4.88E-08	6.35E-08	2.93E-08	0.00E+00	1.42E-07	8.30E-09	1.31E-08	5.64E-09	0.00E+00	2.70E-08	5.02E-09	7.84E-09	3.06E-09	0.00E+00	1.59E-08
92	246262.6	4070626	4.94E-08	6.44E-08	2.97E-08	0.00E+00	1.44E-07	8.41E-09	1.32E-08	5.71E-09	0.00E+00	2.74E-08	5.08E-09	7.95E-09	3.10E-09	0.00E+00	1.61E-08
93	246258.1	4070658	4.14E-08	5.39E-08	2.49E-08	0.00E+00	1.20E-07	7.04E-09	1.11E-08	4.78E-09	0.00E+00	2.29E-08	4.26E-09	6.65E-09	2.60E-09	0.00E+00	1.35E-08
94	246288.7	4070663	3.92E-08	5.10E-08	2.36E-08	0.00E+00	1.14E-07	6.66E-09	1.05E-08	4.52E-09	0.00E+00	2.17E-08	4.03E-09	6.30E-09	2.46E-09	0.00E+00	1.28E-08
95	246337	4070665	3.66E-08	4.77E-08	2.20E-08	0.00E+00	1.06E-07	6.23E-09	9.81E-09	4.23E-09	0.00E+00	2.03E-08	3.76E-09	5.88E-09	2.30E-09	0.00E+00	1.19E-08
96	246236.4	4070705	3.49E-08	4.54E-08	2.10E-08	0.00E+00	1.01E-07	5.93E-09	9.35E-09	4.03E-09	0.00E+00	1.93E-08	3.59E-09	5.61E-09	2.19E-09	0.00E+00	1.14E-08
97	246231.4	4070678	3.92E-08	5.11E-08	2.36E-08	0.00E+00	1.14E-07	6.67E-09	1.05E-08	4.53E-09	0.00E+00	2.17E-08	4.03E-09	6.30E-09	2.46E-09	0.00E+00	1.28E-08
98	246232	4070636	4.78E-08	6.22E-08	2.87E-08	0.00E+00	1.39E-07	8.13E-09	1.28E-08	5.52E-09	0.00E+00	2.64E-08	4.91E-09	7.68E-09	3.00E-09	0.00E+00	1.56E-08
99	246196.4	4070668	4.27E-08	5.56E-08	2.57E-08	0.00E+00	1.24E-07	7.26E-09	1.14E-08	4.93E-09	0.00E+00	2.36E-08	4.39E-09	6.86E-09	2.68E-09	0.00E+00	1.39E-08
100	246103.6	4070542	9.05E-08	1.18E-07	5.44E-08	0.00E+00	2.63E-07	1.54E-08	2.42E-08	1.05E-08	0.00E+00	5.01E-08	9.30E-09	1.45E-08	5.67E-09	0.00E+00	2.95E-08

101	245996.9	4070633	5.70E-08	7.42E-08	3.43E-08	0.00E+00	1.66E-07	9.70E-09	1.53E-08	6.58E-09	0.00E+00	3.16E-08	5.86E-09	9.16E-09	3.58E-09	0.00E+00	1.86E-08
102	245982.4	4070632	5.74E-08	7.47E-08	3.45E-08	0.00E+00	1.67E-07	9.76E-09	1.54E-08	6.63E-09	0.00E+00	3.18E-08	5.90E-09	9.23E-09	3.60E-09	0.00E+00	1.87E-08
103	246015.8	4070369	3.04E-07	3.95E-07	1.83E-07	0.00E+00	8.81E-07	5.16E-08	8.13E-08	3.51E-08	0.00E+00	1.68E-07	3.12E-08	4.88E-08	1.90E-08	0.00E+00	9.90E-08
104	245936.3	4070380	1.86E-07	2.43E-07	1.12E-07	0.00E+00	5.41E-07	3.17E-08	4.99E-08	2.15E-08	0.00E+00	1.03E-07	1.92E-08	3.00E-08	1.17E-08	0.00E+00	6.08E-08
105	245959.1	4070239	2.88E-07	3.75E-07	1.73E-07	0.00E+00	8.37E-07	4.90E-08	7.72E-08	3.33E-08	0.00E+00	1.60E-07	2.96E-08	4.63E-08	1.81E-08	0.00E+00	9.41E-08
106	245960.2	4070216	2.88E-07	3.76E-07	1.73E-07	0.00E+00	8.37E-07	4.91E-08	7.73E-08	3.33E-08	0.00E+00	1.60E-07	2.97E-08	4.64E-08	1.81E-08	0.00E+00	9.41E-08
107	245960.2	4070205	2.85E-07	3.71E-07	1.71E-07	0.00E+00	8.27E-07	4.85E-08	7.63E-08	3.29E-08	0.00E+00	1.58E-07	2.93E-08	4.58E-08	1.79E-08	0.00E+00	9.29E-08
108	245960.7	4070192	2.80E-07	3.64E-07	1.68E-07	0.00E+00	8.13E-07	4.76E-08	7.50E-08	3.23E-08	0.00E+00	1.55E-07	2.88E-08	4.50E-08	1.76E-08	0.00E+00	9.13E-08
109	245950.2	4070154	2.41E-07	3.14E-07	1.45E-07	0.00E+00	7.00E-07	4.10E-08	6.46E-08	2.78E-08	0.00E+00	1.33E-07	2.48E-08	3.87E-08	1.51E-08	0.00E+00	7.86E-08
110	245940.2	4070159	2.32E-07	3.02E-07	1.39E-07	0.00E+00	6.73E-07	3.94E-08	6.21E-08	2.68E-08	0.00E+00	1.28E-07	2.38E-08	3.73E-08	1.45E-08	0.00E+00	7.56E-08
111	245956.3	4070159	2.52E-07	3.28E-07	1.52E-07	0.00E+00	7.32E-07	4.29E-08	6.76E-08	2.91E-08	0.00E+00	1.40E-07	2.59E-08	4.05E-08	1.58E-08	0.00E+00	8.23E-08
112	245869	4070172	1.76E-07	2.29E-07	1.06E-07	0.00E+00	5.11E-07	2.99E-08	4.72E-08	2.03E-08	0.00E+00	9.74E-08	1.81E-08	2.83E-08	1.10E-08	0.00E+00	5.74E-08
113	245844	4070174	1.61E-07	2.10E-07	9.68E-08	0.00E+00	4.68E-07	2.74E-08	4.31E-08	1.86E-08	0.00E+00	8.91E-08	1.66E-08	2.59E-08	1.01E-08	0.00E+00	5.25E-08
114	245844	4070183	1.62E-07	2.11E-07	9.76E-08	0.00E+00	4.71E-07	2.76E-08	4.35E-08	1.88E-08	0.00E+00	8.99E-08	1.67E-08	2.61E-08	1.02E-08	0.00E+00	5.30E-08
115	245862.3	4070184	1.74E-07	2.27E-07	1.05E-07	0.00E+00	5.05E-07	2.96E-08	4.66E-08	2.01E-08	0.00E+00	9.64E-08	1.79E-08	2.80E-08	1.09E-08	0.00E+00	5.68E-08
116	245800.1	4070164	1.38E-07	1.79E-07	8.27E-08	0.00E+00	3.99E-07	2.34E-08	3.68E-08	1.59E-08	0.00E+00	7.61E-08	1.41E-08	2.21E-08	8.62E-09	0.00E+00	4.49E-08
117	245800.1	4070173	1.39E-07	1.80E-07	8.34E-08	0.00E+00	4.02E-07	2.36E-08	3.71E-08	1.60E-08	0.00E+00	7.67E-08	1.43E-08	2.23E-08	8.69E-09	0.00E+00	4.52E-08
118	245798.4	4070188	1.39E-07	1.81E-07	8.37E-08	0.00E+00	4.04E-07	2.37E-08	3.73E-08	1.61E-08	0.00E+00	7.70E-08	1.43E-08	2.24E-08	8.73E-09	0.00E+00	4.54E-08
119	245868.5	4070330	1.64E-07	2.14E-07	9.87E-08	0.00E+00	4.76E-07	2.79E-08	4.40E-08	1.90E-08	0.00E+00	9.08E-08	1.69E-08	2.64E-08	1.03E-08	0.00E+00	5.35E-08
120	245830.7	4070332	1.42E-07	1.84E-07	8.51E-08	0.00E+00	4.11E-07	2.41E-08	3.79E-08	1.63E-08	0.00E+00	7.83E-08	1.46E-08	2.27E-08	8.88E-09	0.00E+00	4.62E-08
121	245812.3	4070334	1.32E-07	1.71E-07	7.92E-08	0.00E+00	3.82E-07	2.24E-08	3.53E-08	1.52E-08	0.00E+00	7.29E-08	1.35E-08	2.12E-08	8.26E-09	0.00E+00	4.30E-08
122	245820.7	4070344	1.33E-07	1.73E-07	8.00E-08	0.00E+00	3.86E-07	2.26E-08	3.57E-08	1.54E-08	0.00E+00	7.37E-08	1.37E-08	2.14E-08	8.34E-09	0.00E+00	4.34E-08
123	245835.7	4070344	1.41E-07	1.83E-07	8.46E-08	0.00E+00	4.08E-07	2.39E-08	3.77E-08	1.62E-08	0.00E+00	7.79E-08	1.45E-08	2.26E-08	8.82E-09	0.00E+00	4.59E-08
124	245985.3	4070104	2.26E-07	2.95E-07	1.36E-07	0.00E+00	6.57E-07	3.85E-08	6.06E-08	2.61E-08	0.00E+00	1.25E-07	2.33E-08	3.64E-08	1.42E-08	0.00E+00	7.38E-08
125	245966.4	4070107	2.15E-07	2.80E-07	1.29E-07	0.00E+00	6.25E-07	3.66E-08	5.76E-08	2.48E-08	0.00E+00	1.19E-07	2.21E-08	3.46E-08	1.35E-08	0.00E+00	7.02E-08
126	245950.7	4070116	2.11E-07	2.75E-07	1.27E-07	0.00E+00	6.13E-07	3.59E-08	5.66E-08	2.44E-08	0.00E+00	1.17E-07	2.17E-08	3.39E-08	1.32E-08	0.00E+00	6.89E-08
127	245966.7	4070120	2.29E-07	2.98E-07	1.38E-07	0.00E+00	6.65E-07	3.90E-08	6.14E-08	2.64E-08	0.00E+00	1.27E-07	2.35E-08	3.68E-08	1.44E-08	0.00E+00	7.47E-08
128	245930.7	4070098	1.83E-07	2.38E-07	1.10E-07	0.00E+00	5.32E-07	3.11E-08	4.91E-08	2.11E-08	0.00E+00	1.01E-07	1.88E-08	2.94E-08	1.15E-08	0.00E+00	5.97E-08
129	245996	4070003	1.35E-07	1.76E-07	8.12E-08	0.00E+00	3.92E-07	2.30E-08	3.62E-08	1.56E-08	0.00E+00	7.47E-08	1.39E-08	2.17E-08	8.46E-09	0.00E+00	4.40E-08
130	245995.7	4069989	1.27E-07	1.65E-07	7.62E-08	0.00E+00	3.68E-07	2.15E-08	3.39E-08	1.46E-08	0.00E+00	7.01E-08	1.30E-08	2.04E-08	7.94E-09	0.00E+00	4.13E-08
131	245980.9	4070004	1.33E-07	1.73E-07	7.98E-08	0.00E+00	3.85E-07	2.26E-08	3.56E-08	1.53E-08	0.00E+00	7.35E-08	1.37E-08	2.13E-08	8.33E-09	0.00E+00	4.33E-08
132	245979.8	4069988	1.23E-07	1.60E-07	7.39E-08	0.00E+00	3.57E-07	2.09E-08	3.29E-08	1.42E-08	0.00E+00	6.81E-08	1.26E-08	1.98E-08	7.71E-09	0.00E+00	4.01E-08
133	245965.5	4070001	1.28E-07	1.67E-07	7.69E-08	0.00E+00	3.71E-07	2.18E-08	3.43E-08	1.48E-08	0.00E+00	7.08E-08	1.32E-08	2.06E-08	8.02E-09	0.00E+00	4.17E-08
134	245965.8	4069986	1.20E-07	1.56E-07	7.19E-08	0.00E+00	3.47E-07	2.03E-08	3.20E-08	1.38E-08	0.00E+00	6.62E-08	1.23E-08	1.92E-08	7.50E-09	0.00E+00	3.90E-08
135	245952.5	4070001	1.25E-07	1.63E-07	7.54E-08	0.00E+00	3.64E-07	2.13E-08	3.36E-08	1.45E-08	0.00E+00	6.94E-08	1.29E-08	2.02E-08	7.86E-09	0.00E+00	4.09E-08
136	245953.9	4069986	1.17E-07	1.53E-07	7.07E-08	0.00E+00	3.41E-07	2.00E-08	3.15E-08	1.36E-08	0.00E+00	6.50E-08	1.21E-08	1.89E-08	7.37E-09	0.00E+00	3.83E-08
137	245959.2	4069975	1.13E-07	1.47E-07	6.77E-08	0.00E+00	3.27E-07	1.92E-08	3.02E-08	1.30E-08	0.00E+00	6.24E-08	1.16E-08	1.81E-08	7.06E-09	0.00E+00	3.68E-08
138	245974.5	4069971	1.13E-07	1.47E-07	6.80E-08	0.00E+00	3.28E-07	1.92E-08	3.03E-08	1.31E-08	0.00E+00	6.26E-08	1.16E-08	1.82E-08	7.09E-09	0.00E+00	3.69E-08
139	245982.1	4069972	1.15E-07	1.50E-07	6.93E-08	0.00E+00	3.35E-07	1.96E-08	3.09E-08	1.33E-08	0.00E+00	6.38E-08	1.19E-08	1.85E-08	7.23E-09	0.00E+00	3.76E-08
140	245996.3	4069858	7.25E-08	9.44E-08	4.36E-08	0.00E+00	2.11E-07	1.23E-08	1.94E-08	8.37E-09	0.00E+00	4.01E-08	7.46E-09	1.17E-08	4.55E-09	0.00E+00	2.37E-08
141	245994.6	4069865	7.46E-08	9.71E-08	4.49E-08	0.00E+00	2.17E-07	1.27E-08	2.00E-08	8.61E-09	0.00E+00	4.13E-08	7.67E-09	1.20E-08	4.68E-09	0.00E+00	2.43E-08
142	245986.1	4069876	7.74E-08	1.01E-07	4.66E-08	0.00E+00	2.25E-07	1.32E-08	2.07E-08	8.94E-09	0.00E+00	4.29E-08	7.96E-09	1.24E-08	4.86E-09	0.00E+00	2.53E-08
143	245980.3	4069863	7.38E-08	9.61E-08	4.44E-08	0.00E+00	2.14E-07	1.26E-08	1.98E-08	8.53E-09	0.00E+00	4.09E-08	7.59E-09	1.19E-08	4.63E-09	0.00E+00	2.41E-08
144	245963.5	4069874	7.60E-08	9.89E-08	4.57E-08	0.00E+00	2.21E-07	1.29E-08	2.04E-08	8.77E-09	0.00E+00	4.21E-08	7.81E-09	1.22E-08	4.76E-09	0.00E+00	2.48E-08
145	245959.7	4069860	7.22E-08	9.39E-08	4.34E-08	0.00E+00	2.09E-07	1.23E-08	1.93E-08	8.33E-09	0.00E+00	3.99E-08	7.42E-09	1.16E-08	4.52E-09	0.00E+00	2.35E-08
146	245944.7	4069875	7.51E-08	9.77E-08	4.51E-08	0.00E+00	2.18E-07	1.28E-08	2.01E-08	8.67E-09	0.00E+00	4.15E-08	7.72E-09	1.21E-08	4.71E-09	0.00E+00	2.45E-08
147	245942.3	4069862	7.18E-08	9.34E-08	4.32E-08	0.00E+00	2.08E-07	1.22E-08	1.92E-08	8.29E-09	0.00E+00	3.97E-08	7.38E-09	1.15E-08	4.50E-09	0.00E+00	2.34E-08
148	245929.6	4069872	7.34E-08	9.56E-08	4.41E-08	0.00E+00	2.13E-07	1.25E-08	1.97E-08	8.48E-09	0.00E+00	4.06E-08	7.55E-09	1.18E-08	4.60E-09	0.00E+00	2.39E-08
149	245926.1	4069860	7.03E-08	9.16E-08	4.23E-08	0.00E+00	2.04E-07	1.20E-08	1.88E-08	8.12E-09	0.00E+00	3.89E-08	7.23E-09	1.13E-08	4.41E-09	0.00E+00	2.29E-08
150	246145.7	4069854	8.16E-08	1.06E-07	4.91E-08	0.00E+00	2.37E-07	1.39E-08	2.19E-08	9.42E-09	0.00E+00	4.52E-08	8.39E-09	1.31E-08	5.12E-09	0.00E+00	2.66E-08
151	246145.5	4069844	7.91E-08	1.03E-07	4.75E-08	0.00E+00	2.30E-07	1.34E-08	2.12E-08	9.13E-09	0.00E+00	4.38E-08	8.13E-09	1.27E-08	4.96E-09	0.00E+00	2.58E-08
152	246139.6	4069815	7.11E-08	9.25E-08	4.27E-08	0.00E+00	2.06E-07	1.21E-08	1.90E-08	8.21E-09	0.00E+00	3.93E-08	7.31E-09	1.14E-08	4.46E-09	0.00E+00	2.32E-08

153	246139.9	4069802	6.79E-08	8.85E-08	4.09E-08	0.00E+00	1.97E-07	1.16E-08	1.82E-08	7.85E-09	0.00E+00	3.76E-08	6.99E-09	1.09E-08	4.26E-09	0.00E+00	2.22E-08
154	246140.5	4069791	6.54E-08	8.51E-08	3.93E-08	0.00E+00	1.90E-07	1.11E-08	1.75E-08	7.55E-09	0.00E+00	3.62E-08	6.72E-09	1.05E-08	4.10E-09	0.00E+00	2.13E-08
155	246153.9	4069793	6.68E-08	8.70E-08	4.02E-08	0.00E+00	1.94E-07	1.14E-08	1.79E-08	7.71E-09	0.00E+00	3.70E-08	6.87E-09	1.07E-08	4.19E-09	0.00E+00	2.18E-08
156	246153.6	4069805	6.98E-08	9.08E-08	4.20E-08	0.00E+00	2.03E-07	1.19E-08	1.87E-08	8.06E-09	0.00E+00	3.86E-08	7.17E-09	1.12E-08	4.37E-09	0.00E+00	2.28E-08
157	246153.9	4069813	7.18E-08	9.35E-08	4.32E-08	0.00E+00	2.09E-07	1.22E-08	1.92E-08	8.29E-09	0.00E+00	3.98E-08	7.38E-09	1.15E-08	4.50E-09	0.00E+00	2.34E-08
158	246168.7	4069805	7.07E-08	9.21E-08	4.25E-08	0.00E+00	2.05E-07	1.20E-08	1.90E-08	8.17E-09	0.00E+00	3.92E-08	7.27E-09	1.14E-08	4.44E-09	0.00E+00	2.31E-08
159	246184.3	4069805	7.20E-08	9.38E-08	4.33E-08	0.00E+00	2.09E-07	1.23E-08	1.93E-08	8.32E-09	0.00E+00	3.99E-08	7.41E-09	1.16E-08	4.52E-09	0.00E+00	2.35E-08
160	246193	4069804	7.23E-08	9.42E-08	4.35E-08	0.00E+00	2.10E-07	1.23E-08	1.94E-08	8.36E-09	0.00E+00	4.00E-08	7.44E-09	1.16E-08	4.54E-09	0.00E+00	2.36E-08
161	246382.7	4069976	2.22E-07	2.88E-07	1.33E-07	0.00E+00	6.43E-07	3.77E-08	5.94E-08	2.56E-08	0.00E+00	1.23E-07	2.28E-08	3.56E-08	1.39E-08	0.00E+00	7.23E-08
162	246340.7	4069978	2.14E-07	2.79E-07	1.29E-07	0.00E+00	6.22E-07	3.64E-08	5.74E-08	2.47E-08	0.00E+00	1.19E-07	2.20E-08	3.44E-08	1.34E-08	0.00E+00	6.99E-08
163	246304.8	4069980	2.08E-07	2.71E-07	1.25E-07	0.00E+00	6.04E-07	3.54E-08	5.57E-08	2.40E-08	0.00E+00	1.15E-07	2.14E-08	3.34E-08	1.30E-08	0.00E+00	6.79E-08
164	246268.9	4069979	1.96E-07	2.55E-07	1.18E-07	0.00E+00	5.69E-07	3.34E-08	5.25E-08	2.26E-08	0.00E+00	1.09E-07	2.02E-08	3.15E-08	1.23E-08	0.00E+00	6.40E-08
165	246230.6	4069979	1.82E-07	2.38E-07	1.10E-07	0.00E+00	5.30E-07	3.10E-08	4.89E-08	2.11E-08	0.00E+00	1.01E-07	1.88E-08	2.93E-08	1.14E-08	0.00E+00	5.95E-08
166	246180	4069956	1.43E-07	1.86E-07	8.59E-08	0.00E+00	4.15E-07	2.43E-08	3.83E-08	1.65E-08	0.00E+00	7.91E-08	1.47E-08	2.30E-08	8.96E-09	0.00E+00	4.66E-08
167	246217.8	4069953	1.51E-07	1.97E-07	9.10E-08	0.00E+00	4.39E-07	2.57E-08	4.05E-08	1.75E-08	0.00E+00	8.37E-08	1.56E-08	2.43E-08	9.49E-09	0.00E+00	4.94E-08
168	246261.8	4069954	1.65E-07	2.15E-07	9.94E-08	0.00E+00	4.80E-07	2.81E-08	4.43E-08	1.91E-08	0.00E+00	9.15E-08	1.70E-08	2.66E-08	1.04E-08	0.00E+00	5.39E-08
169	246296.7	4069951	1.71E-07	2.23E-07	1.03E-07	0.00E+00	4.97E-07	2.91E-08	4.58E-08	1.98E-08	0.00E+00	9.47E-08	1.76E-08	2.75E-08	1.07E-08	0.00E+00	5.58E-08
170	246341.1	4069947	1.78E-07	2.32E-07	1.07E-07	0.00E+00	5.16E-07	3.02E-08	4.76E-08	2.05E-08	0.00E+00	9.84E-08	1.83E-08	2.86E-08	1.12E-08	0.00E+00	5.80E-08
171	246382.3	4069942	1.81E-07	2.36E-07	1.09E-07	0.00E+00	5.27E-07	3.09E-08	4.86E-08	2.09E-08	0.00E+00	1.00E-07	1.86E-08	2.92E-08	1.14E-08	0.00E+00	5.92E-08
172	246395.5	4069920	1.63E-07	2.12E-07	9.80E-08	0.00E+00	4.73E-07	2.77E-08	4.37E-08	1.88E-08	0.00E+00	9.02E-08	1.68E-08	2.62E-08	1.02E-08	0.00E+00	5.32E-08
173	246362.9	4069922	1.59E-07	2.07E-07	9.55E-08	0.00E+00	4.61E-07	2.70E-08	4.25E-08	1.83E-08	0.00E+00	8.79E-08	1.63E-08	2.55E-08	9.95E-09	0.00E+00	5.18E-08
174	246329.8	4069922	1.53E-07	1.99E-07	9.18E-08	0.00E+00	4.43E-07	2.60E-08	4.09E-08	1.76E-08	0.00E+00	8.45E-08	1.57E-08	2.45E-08	9.57E-09	0.00E+00	4.98E-08
175	246290.1	4069918	1.41E-07	1.83E-07	8.45E-08	0.00E+00	4.08E-07	2.39E-08	3.77E-08	1.62E-08	0.00E+00	7.78E-08	1.44E-08	2.26E-08	8.81E-09	0.00E+00	4.58E-08
176	246245.2	4069922	1.33E-07	1.73E-07	7.98E-08	0.00E+00	3.85E-07	2.26E-08	3.56E-08	1.53E-08	0.00E+00	7.35E-08	1.37E-08	2.13E-08	8.33E-09	0.00E+00	4.33E-08
177	246206	4069925	1.26E-07	1.64E-07	7.55E-08	0.00E+00	3.65E-07	2.14E-08	3.37E-08	1.45E-08	0.00E+00	6.95E-08	1.29E-08	2.02E-08	7.88E-09	0.00E+00	4.10E-08
178	246208.4	4069893	1.07E-07	1.39E-07	6.43E-08	0.00E+00	3.10E-07	1.82E-08	2.86E-08	1.23E-08	0.00E+00	5.92E-08	1.10E-08	1.72E-08	6.70E-09	0.00E+00	3.49E-08
179	246268.9	4069891	1.17E-07	1.53E-07	7.06E-08	0.00E+00	3.41E-07	2.00E-08	3.14E-08	1.36E-08	0.00E+00	6.50E-08	1.21E-08	1.89E-08	7.36E-09	0.00E+00	3.83E-08
180	246316.1	4069890	1.26E-07	1.64E-07	7.57E-08	0.00E+00	3.66E-07	2.14E-08	3.38E-08	1.45E-08	0.00E+00	6.97E-08	1.30E-08	2.02E-08	7.90E-09	0.00E+00	4.11E-08
181	246375.2	4069886	1.33E-07	1.74E-07	8.03E-08	0.00E+00	3.87E-07	2.27E-08	3.58E-08	1.54E-08	0.00E+00	7.39E-08	1.37E-08	2.14E-08	8.37E-09	0.00E+00	4.35E-08
182	246120	4070100	3.83E-07	4.99E-07	2.31E-07	0.00E+00	1.11E-06	6.52E-08	1.03E-07	4.43E-08	0.00E+00	2.12E-07	3.94E-08	6.16E-08	2.40E-08	0.00E+00	1.25E-07
183	246088.8	4070100	3.24E-07	4.21E-07	1.95E-07	0.00E+00	9.39E-07	5.50E-08	8.67E-08	3.74E-08	0.00E+00	1.79E-07	3.33E-08	5.20E-08	2.03E-08	0.00E+00	1.06E-07
184	246100.2	4070069	2.54E-07	3.30E-07	1.53E-07	0.00E+00	7.36E-07	4.31E-08	6.80E-08	2.93E-08	0.00E+00	1.40E-07	2.61E-08	4.08E-08	1.59E-08	0.00E+00	8.27E-08
185	246127.1	4070070	2.81E-07	3.66E-07	1.69E-07	0.00E+00	8.16E-07	4.78E-08	7.53E-08	3.25E-08	0.00E+00	1.56E-07	2.89E-08	4.52E-08	1.76E-08	0.00E+00	9.17E-08
186	246272.2	4070072	4.08E-07	5.31E-07	2.45E-07	0.00E+00	1.18E-06	6.94E-08	1.09E-07	4.71E-08	0.00E+00	2.26E-07	4.19E-08	6.55E-08	2.56E-08	0.00E+00	1.33E-07
187	246304.8	4070070	4.13E-07	5.37E-07	2.48E-07	0.00E+00	1.20E-06	7.02E-08	1.11E-07	4.76E-08	0.00E+00	2.28E-07	4.24E-08	6.63E-08	2.59E-08	0.00E+00	1.35E-07
188	246872	4070188	2.95E-07	3.84E-07	1.77E-07	0.00E+00	8.57E-07	5.02E-08	7.91E-08	3.41E-08	0.00E+00	1.63E-07	3.03E-08	4.74E-08	1.85E-08	0.00E+00	9.63E-08
189	246519.3	4070400	2.32E-07	3.02E-07	1.39E-07	0.00E+00	6.73E-07	3.94E-08	6.21E-08	2.68E-08	0.00E+00	1.28E-07	2.38E-08	3.72E-08	1.45E-08	0.00E+00	7.56E-08
190	246876.9	4070339	9.60E-08	1.25E-07	5.78E-08	0.00E+00	2.79E-07	1.63E-08	2.57E-08	1.11E-08	0.00E+00	5.32E-08	9.88E-09	1.54E-08	6.02E-09	0.00E+00	3.13E-08
191	246865.6	4070391	4.84E-08	6.31E-08	2.91E-08	0.00E+00	1.41E-07	8.24E-09	1.30E-08	5.59E-09	0.00E+00	2.68E-08	4.98E-09	7.79E-09	3.04E-09	0.00E+00	1.58E-08
192	246860.6	4070426	3.56E-08	4.64E-08	2.14E-08	0.00E+00	1.03E-07	6.06E-09	9.55E-09	4.12E-09	0.00E+00	1.97E-08	3.67E-09	5.73E-09	2.24E-09	0.00E+00	1.16E-08
193	246865.6	4070450	2.94E-08	3.83E-08	1.77E-08	0.00E+00	8.55E-08	5.01E-09	7.89E-09	3.40E-09	0.00E+00	1.63E-08	3.03E-09	4.73E-09	1.85E-09	0.00E+00	9.60E-09
194	246930.7	4070337	5.82E-08	7.57E-08	3.50E-08	0.00E+00	1.69E-07	9.89E-09	1.56E-08	6.72E-09	0.00E+00	3.22E-08	5.98E-09	9.35E-09	3.65E-09	0.00E+00	1.90E-08
195	246997.1	4070332	4.12E-08	5.36E-08	2.48E-08	0.00E+00	1.20E-07	7.00E-09	1.10E-08	4.75E-09	0.00E+00	2.28E-08	4.23E-09	6.62E-09	2.58E-09	0.00E+00	1.34E-08
196	246891.9	4070381	4.67E-08	6.08E-08	2.81E-08	0.00E+00	1.35E-07	7.94E-09	1.25E-08	5.39E-09	0.00E+00	2.58E-08	4.80E-09	7.50E-09	2.93E-09	0.00E+00	1.52E-08
197	246924.5	4070379	4.02E-08	5.24E-08	2.42E-08	0.00E+00	1.17E-07	6.85E-09	1.08E-08	4.65E-09	0.00E+00	2.23E-08	4.14E-09	6.47E-09	2.52E-09	0.00E+00	1.31E-08
198	246974.6	4070376	3.30E-08	4.30E-08	1.99E-08	0.00E+00	9.59E-08	5.62E-09	8.85E-09	3.81E-09	0.00E+00	1.83E-08	3.40E-09	5.31E-09	2.07E-09	0.00E+00	1.08E-08
199	246879.4	4070420	3.44E-08	4.48E-08	2.07E-08	0.00E+00	9.99E-08	5.85E-09	9.22E-09	3.97E-09	0.00E+00	1.90E-08	3.54E-09	5.53E-09	2.16E-09	0.00E+00	1.12E-08
200	246927	4070413	3.04E-08	3.95E-08	1.83E-08	0.00E+00	8.81E-08	5.16E-09	8.14E-09	3.51E-09	0.00E+00	1.68E-08	3.12E-09	4.88E-09	1.90E-09	0.00E+00	9.91E-09
201	246962.1	4070413	2.70E-08	3.51E-08	1.62E-08	0.00E+00	7.83E-08	4.59E-09	7.23E-09	3.11E-09	0.00E+00	1.49E-08	2.77E-09	4.34E-09	1.69E-09	0.00E+00	8.80E-09

			T2		191		T2L3				T4f			
			187	246304.76	4070070.22									
			3.19E-02	4.16E-02	1.92E-02	0.00E+00	5.43E-03	8.56E-03	3.69E-03	0.00E+00	3.28E-03	5.13E-03	2.00E-03	0.00E+00
	UTM X	UTM Y	Yr 1	Yr 2	Yr 3	Yr 4	Yr 1	Yr 2	Yr 3	Yr 4	Yr 1	Yr 2	Yr 3	Yr 4
1	246074.6	4070081	1.98E-02	2.57E-02	1.19E-02	0.00E+00	3.36E-03	5.30E-03	2.28E-03	0.00E+00	2.03E-03	3.18E-03	1.24E-03	0.00E+00
2	246863.3	4069919	1.21E-02	1.57E-02	7.25E-03	0.00E+00	2.05E-03	3.23E-03	1.39E-03	0.00E+00	1.24E-03	1.94E-03	7.56E-04	0.00E+00
3	246874.2	4069902	1.13E-02	1.47E-02	6.80E-03	0.00E+00	1.92E-03	3.03E-03	1.31E-03	0.00E+00	1.16E-03	1.82E-03	7.09E-04	0.00E+00
4	246855.2	4069890	1.11E-02	1.44E-02	6.67E-03	0.00E+00	1.89E-03	2.97E-03	1.28E-03	0.00E+00	1.14E-03	1.78E-03	6.95E-04	0.00E+00
5	246883.3	4069972	1.38E-02	1.80E-02	8.32E-03	0.00E+00	2.35E-03	3.71E-03	1.60E-03	0.00E+00	1.42E-03	2.22E-03	8.67E-04	0.00E+00
6	246891.4	4070009	1.53E-02	1.99E-02	9.21E-03	0.00E+00	2.60E-03	4.10E-03	1.77E-03	0.00E+00	1.57E-03	2.46E-03	9.60E-04	0.00E+00
7	246898.6	4070025	1.58E-02	2.05E-02	9.47E-03	0.00E+00	2.68E-03	4.22E-03	1.82E-03	0.00E+00	1.62E-03	2.53E-03	9.88E-04	0.00E+00
8	246897.7	4070044	1.67E-02	2.18E-02	1.01E-02	0.00E+00	2.84E-03	4.48E-03	1.93E-03	0.00E+00	1.72E-03	2.69E-03	1.05E-03	0.00E+00
9	246893.2	4070063	1.80E-02	2.34E-02	1.08E-02	0.00E+00	3.06E-03	4.82E-03	2.08E-03	0.00E+00	1.85E-03	2.89E-03	1.13E-03	0.00E+00
10	246856.1	4070032	1.83E-02	2.39E-02	1.10E-02	0.00E+00	3.12E-03	4.91E-03	2.12E-03	0.00E+00	1.88E-03	2.94E-03	1.15E-03	0.00E+00
11	246844.3	4070069	2.25E-02	2.93E-02	1.35E-02	0.00E+00	3.83E-03	6.02E-03	2.60E-03	0.00E+00	2.31E-03	3.61E-03	1.41E-03	0.00E+00
12	246845.2	4070080	2.37E-02	3.09E-02	1.43E-02	0.00E+00	4.04E-03	6.36E-03	2.74E-03	0.00E+00	2.44E-03	3.82E-03	1.49E-03	0.00E+00
13	246934.8	4070051	1.45E-02	1.89E-02	8.73E-03	0.00E+00	2.47E-03	3.89E-03	1.68E-03	0.00E+00	1.49E-03	2.33E-03	9.11E-04	0.00E+00
14	246931.2	4070027	1.41E-02	1.84E-02	8.50E-03	0.00E+00	2.41E-03	3.79E-03	1.63E-03	0.00E+00	1.45E-03	2.27E-03	8.87E-04	0.00E+00
15	246934.8	4069998	1.31E-02	1.71E-02	7.89E-03	0.00E+00	2.23E-03	3.52E-03	1.52E-03	0.00E+00	1.35E-03	2.11E-03	8.23E-04	0.00E+00
16	246957.5	4070166	1.15E-02	1.49E-02	6.89E-03	0.00E+00	1.95E-03	3.07E-03	1.32E-03	0.00E+00	1.18E-03	1.84E-03	7.18E-04	0.00E+00
17	246866.1	4070294	1.53E-02	1.99E-02	9.17E-03	0.00E+00	2.59E-03	4.09E-03	1.76E-03	0.00E+00	1.57E-03	2.45E-03	9.57E-04	0.00E+00
18	246883.3	4070300	1.11E-02	1.44E-02	6.65E-03	0.00E+00	1.88E-03	2.96E-03	1.28E-03	0.00E+00	1.14E-03	1.78E-03	6.94E-04	0.00E+00
19	246905	4070298	8.55E-03	1.11E-02	5.14E-03	0.00E+00	1.45E-03	2.29E-03	9.87E-04	0.00E+00	8.79E-04	1.37E-03	5.36E-04	0.00E+00
20	246927.6	4070298	6.81E-03	8.86E-03	4.09E-03	0.00E+00	1.16E-03	1.82E-03	7.86E-04	0.00E+00	7.00E-04	1.09E-03	4.27E-04	0.00E+00
21	246958.4	4070298	5.26E-03	6.85E-03	3.16E-03	0.00E+00	8.95E-04	1.41E-03	6.08E-04	0.00E+00	5.41E-04	8.45E-04	3.30E-04	0.00E+00
22	246976.5	4070296	4.75E-03	6.18E-03	2.85E-03	0.00E+00	8.07E-04	1.27E-03	5.48E-04	0.00E+00	4.88E-04	7.63E-04	2.98E-04	0.00E+00
23	247005.4	4070296	3.98E-03	5.18E-03	2.39E-03	0.00E+00	6.77E-04	1.07E-03	4.59E-04	0.00E+00	4.09E-04	6.39E-04	2.49E-04	0.00E+00
24	246946.7	4070158	1.27E-02	1.66E-02	7.64E-03	0.00E+00	2.16E-03	3.41E-03	1.47E-03	0.00E+00	1.31E-03	2.04E-03	7.97E-04	0.00E+00
25	246947.7	4070175	1.19E-02	1.55E-02	7.17E-03	0.00E+00	2.03E-03	3.19E-03	1.38E-03	0.00E+00	1.23E-03	1.92E-03	7.47E-04	0.00E+00
26	246863.4	4069895	1.12E-02	1.46E-02	6.72E-03	0.00E+00	1.90E-03	3.00E-03	1.29E-03	0.00E+00	1.15E-03	1.80E-03	7.01E-04	0.00E+00
27	246873.4	4069919	1.19E-02	1.55E-02	7.17E-03	0.00E+00	2.03E-03	3.19E-03	1.38E-03	0.00E+00	1.23E-03	1.92E-03	7.48E-04	0.00E+00
28	246909	4069964	1.28E-02	1.67E-02	7.72E-03	0.00E+00	2.18E-03	3.44E-03	1.48E-03	0.00E+00	1.32E-03	2.06E-03	8.05E-04	0.00E+00
29	246951.3	4069944	1.12E-02	1.45E-02	6.72E-03	0.00E+00	1.90E-03	2.99E-03	1.29E-03	0.00E+00	1.15E-03	1.80E-03	7.00E-04	0.00E+00
30	246779.5	4070389	9.40E-03	1.22E-02	5.65E-03	0.00E+00	1.60E-03	2.52E-03	1.09E-03	0.00E+00	9.67E-04	1.51E-03	5.90E-04	0.00E+00
31	246784.5	4070417	5.20E-03	6.78E-03	3.13E-03	0.00E+00	8.85E-04	1.39E-03	6.01E-04	0.00E+00	5.35E-04	8.36E-04	3.26E-04	0.00E+00
32	246781.7	4070442	3.84E-03	5.00E-03	2.31E-03	0.00E+00	6.53E-04	1.03E-03	4.43E-04	0.00E+00	3.95E-04	6.17E-04	2.41E-04	0.00E+00
33	246782.8	4070460	3.20E-03	4.17E-03	1.93E-03	0.00E+00	5.45E-04	8.58E-04	3.70E-04	0.00E+00	3.29E-04	5.15E-04	2.01E-04	0.00E+00
34	246741.7	4070461	3.97E-03	5.16E-03	2.38E-03	0.00E+00	6.75E-04	1.06E-03	4.58E-04	0.00E+00	4.08E-04	6.37E-04	2.49E-04	0.00E+00
35	246743.9	4070442	4.77E-03	6.21E-03	2.87E-03	0.00E+00	8.11E-04	1.28E-03	5.51E-04	0.00E+00	4.90E-04	7.66E-04	2.99E-04	0.00E+00
36	246738.9	4070423	6.22E-03	8.10E-03	3.74E-03	0.00E+00	1.06E-03	1.67E-03	7.18E-04	0.00E+00	6.40E-04	1.00E-03	3.90E-04	0.00E+00
37	246741.2	4070407	8.24E-03	1.07E-02	4.95E-03	0.00E+00	1.40E-03	2.21E-03	9.51E-04	0.00E+00	8.47E-04	1.32E-03	5.16E-04	0.00E+00
38	246744.5	4070386	1.37E-02	1.79E-02	8.25E-03	0.00E+00	2.33E-03	3.68E-03	1.58E-03	0.00E+00	1.41E-03	2.21E-03	8.60E-04	0.00E+00
39	246760.6	4070393	1.02E-02	1.33E-02	6.15E-03	0.00E+00	1.74E-03	2.74E-03	1.18E-03	0.00E+00	1.05E-03	1.64E-03	6.41E-04	0.00E+00

40	246760.6	4070414	6.40E-03	8.33E-03	3.85E-03	0.00E+00	1.09E-03	1.72E-03	7.39E-04	0.00E+00	6.58E-04	1.03E-03	4.01E-04	0.00E+00
41	246757.8	4070437	4.65E-03	6.06E-03	2.80E-03	0.00E+00	7.92E-04	1.25E-03	5.38E-04	0.00E+00	4.79E-04	7.48E-04	2.92E-04	0.00E+00
42	246763.9	4070457	3.66E-03	4.76E-03	2.20E-03	0.00E+00	6.23E-04	9.81E-04	4.23E-04	0.00E+00	3.76E-04	5.88E-04	2.29E-04	0.00E+00
43	246660.6	4070410	1.18E-02	1.54E-02	7.11E-03	0.00E+00	2.01E-03	3.17E-03	1.37E-03	0.00E+00	1.22E-03	1.90E-03	7.41E-04	0.00E+00
44	246650.5	4070444	7.05E-03	9.17E-03	4.24E-03	0.00E+00	1.20E-03	1.89E-03	8.14E-04	0.00E+00	7.25E-04	1.13E-03	4.42E-04	0.00E+00
45	246636.1	4070447	7.16E-03	9.33E-03	4.31E-03	0.00E+00	1.22E-03	1.92E-03	8.27E-04	0.00E+00	7.36E-04	1.15E-03	4.49E-04	0.00E+00
46	246607.7	4070462	6.67E-03	8.69E-03	4.01E-03	0.00E+00	1.14E-03	1.79E-03	7.71E-04	0.00E+00	6.86E-04	1.07E-03	4.19E-04	0.00E+00
47	246860.1	4070528	1.51E-03	1.97E-03	9.08E-04	0.00E+00	2.57E-04	4.05E-04	1.74E-04	0.00E+00	1.55E-04	2.43E-04	9.47E-05	0.00E+00
48	246874.6	4070527	1.46E-03	1.90E-03	8.78E-04	0.00E+00	2.48E-04	3.91E-04	1.69E-04	0.00E+00	1.50E-04	2.35E-04	9.16E-05	0.00E+00
49	246887.9	4070525	1.42E-03	1.85E-03	8.53E-04	0.00E+00	2.41E-04	3.80E-04	1.64E-04	0.00E+00	1.46E-04	2.28E-04	8.89E-05	0.00E+00
50	246798.4	4070720	7.83E-04	1.02E-03	4.71E-04	0.00E+00	1.33E-04	2.10E-04	9.05E-05	0.00E+00	8.05E-05	1.26E-04	4.91E-05	0.00E+00
51	246776.2	4070718	8.29E-04	1.08E-03	4.99E-04	0.00E+00	1.41E-04	2.22E-04	9.58E-05	0.00E+00	8.53E-05	1.33E-04	5.20E-05	0.00E+00
52	246751.7	4070720	8.90E-04	1.16E-03	5.35E-04	0.00E+00	1.51E-04	2.38E-04	1.03E-04	0.00E+00	9.15E-05	1.43E-04	5.58E-05	0.00E+00
53	246725	4070723	9.43E-04	1.23E-03	5.67E-04	0.00E+00	1.60E-04	2.53E-04	1.09E-04	0.00E+00	9.70E-05	1.52E-04	5.91E-05	0.00E+00
54	246695	4070762	8.86E-04	1.15E-03	5.33E-04	0.00E+00	1.51E-04	2.37E-04	1.02E-04	0.00E+00	9.11E-05	1.42E-04	5.56E-05	0.00E+00
55	246494.9	4070530	4.85E-03	6.31E-03	2.92E-03	0.00E+00	8.25E-04	1.30E-03	5.60E-04	0.00E+00	4.99E-04	7.80E-04	3.04E-04	0.00E+00
56	246495.5	4070612	2.80E-03	3.65E-03	1.69E-03	0.00E+00	4.77E-04	7.51E-04	3.24E-04	0.00E+00	2.88E-04	4.50E-04	1.76E-04	0.00E+00
57	246521	4070668	1.97E-03	2.56E-03	1.18E-03	0.00E+00	3.35E-04	5.27E-04	2.27E-04	0.00E+00	2.02E-04	3.16E-04	1.23E-04	0.00E+00
58	246400.4	4070675	2.41E-03	3.14E-03	1.45E-03	0.00E+00	4.11E-04	6.47E-04	2.79E-04	0.00E+00	2.48E-04	3.88E-04	1.51E-04	0.00E+00
59	246404.3	4070664	2.52E-03	3.29E-03	1.52E-03	0.00E+00	4.29E-04	6.76E-04	2.91E-04	0.00E+00	2.60E-04	4.06E-04	1.58E-04	0.00E+00
60	246447.1	4070587	3.57E-03	4.65E-03	2.15E-03	0.00E+00	6.07E-04	9.56E-04	4.12E-04	0.00E+00	3.67E-04	5.74E-04	2.24E-04	0.00E+00
61	246526	4070863	9.40E-04	1.22E-03	5.65E-04	0.00E+00	1.60E-04	2.52E-04	1.09E-04	0.00E+00	9.66E-05	1.51E-04	5.89E-05	0.00E+00
62	246527.1	4070877	9.00E-04	1.17E-03	5.41E-04	0.00E+00	1.53E-04	2.41E-04	1.04E-04	0.00E+00	9.25E-05	1.45E-04	5.64E-05	0.00E+00
63	246529.9	4070895	8.51E-04	1.11E-03	5.12E-04	0.00E+00	1.45E-04	2.28E-04	9.83E-05	0.00E+00	8.75E-05	1.37E-04	5.34E-05	0.00E+00
64	246503.2	4070897	8.87E-04	1.15E-03	5.33E-04	0.00E+00	1.51E-04	2.38E-04	1.02E-04	0.00E+00	9.12E-05	1.43E-04	5.56E-05	0.00E+00
65	246499.4	4070884	9.28E-04	1.21E-03	5.58E-04	0.00E+00	1.58E-04	2.49E-04	1.07E-04	0.00E+00	9.54E-05	1.49E-04	5.82E-05	0.00E+00
66	246503.2	4070861	9.84E-04	1.28E-03	5.92E-04	0.00E+00	1.67E-04	2.64E-04	1.14E-04	0.00E+00	1.01E-04	1.58E-04	6.17E-05	0.00E+00
67	246415.4	4070874	1.09E-03	1.42E-03	6.57E-04	0.00E+00	1.86E-04	2.93E-04	1.26E-04	0.00E+00	1.12E-04	1.76E-04	6.86E-05	0.00E+00
68	246396.5	4070861	1.17E-03	1.52E-03	7.03E-04	0.00E+00	1.99E-04	3.13E-04	1.35E-04	0.00E+00	1.20E-04	1.88E-04	7.33E-05	0.00E+00
69	246398.7	4070869	1.14E-03	1.48E-03	6.84E-04	0.00E+00	1.93E-04	3.05E-04	1.31E-04	0.00E+00	1.17E-04	1.83E-04	7.13E-05	0.00E+00
70	246217	4070865	1.47E-03	1.91E-03	8.82E-04	0.00E+00	2.50E-04	3.93E-04	1.69E-04	0.00E+00	1.51E-04	2.36E-04	9.20E-05	0.00E+00
71	246215.9	4070847	1.58E-03	2.05E-03	9.47E-04	0.00E+00	2.68E-04	4.22E-04	1.82E-04	0.00E+00	1.62E-04	2.53E-04	9.88E-05	0.00E+00
72	246215.3	4070833	1.66E-03	2.16E-03	1.00E-03	0.00E+00	2.83E-04	4.45E-04	1.92E-04	0.00E+00	1.71E-04	2.67E-04	1.04E-04	0.00E+00
73	246187.5	4070711	2.78E-03	3.62E-03	1.67E-03	0.00E+00	4.73E-04	7.45E-04	3.21E-04	0.00E+00	2.86E-04	4.47E-04	1.74E-04	0.00E+00
74	246200.9	4070711	2.75E-03	3.58E-03	1.65E-03	0.00E+00	4.67E-04	7.36E-04	3.17E-04	0.00E+00	2.82E-04	4.42E-04	1.72E-04	0.00E+00
75	246198.1	4070701	2.88E-03	3.75E-03	1.73E-03	0.00E+00	4.90E-04	7.72E-04	3.33E-04	0.00E+00	2.96E-04	4.63E-04	1.81E-04	0.00E+00
76	246329.8	4070549	5.52E-03	7.19E-03	3.32E-03	0.00E+00	9.40E-04	1.48E-03	6.38E-04	0.00E+00	5.68E-04	8.88E-04	3.46E-04	0.00E+00
77	246301.5	4070548	5.75E-03	7.49E-03	3.46E-03	0.00E+00	9.78E-04	1.54E-03	6.64E-04	0.00E+00	5.91E-04	9.24E-04	3.61E-04	0.00E+00
78	246270.3	4070549	5.94E-03	7.73E-03	3.57E-03	0.00E+00	1.01E-03	1.59E-03	6.86E-04	0.00E+00	6.11E-04	9.54E-04	3.72E-04	0.00E+00
79	246246.4	4070549	6.07E-03	7.90E-03	3.65E-03	0.00E+00	1.03E-03	1.63E-03	7.01E-04	0.00E+00	6.24E-04	9.75E-04	3.80E-04	0.00E+00
80	246227	4070549	6.20E-03	8.07E-03	3.73E-03	0.00E+00	1.05E-03	1.66E-03	7.16E-04	0.00E+00	6.37E-04	9.96E-04	3.89E-04	0.00E+00
81	246209.2	4070550	6.26E-03	8.15E-03	3.76E-03	0.00E+00	1.06E-03	1.68E-03	7.23E-04	0.00E+00	6.43E-04	1.01E-03	3.92E-04	0.00E+00
82	246185.9	4070552	6.36E-03	8.28E-03	3.82E-03	0.00E+00	1.08E-03	1.70E-03	7.34E-04	0.00E+00	6.54E-04	1.02E-03	3.99E-04	0.00E+00

83	246172	4070552	6.43E-03	8.37E-03	3.87E-03	0.00E+00	1.09E-03	1.72E-03	7.42E-04	0.00E+00	6.61E-04	1.03E-03	4.03E-04	0.00E+00
84	246164.7	4070591	5.07E-03	6.60E-03	3.05E-03	0.00E+00	8.63E-04	1.36E-03	5.86E-04	0.00E+00	5.21E-04	8.15E-04	3.18E-04	0.00E+00
85	246192	4070591	4.97E-03	6.47E-03	2.99E-03	0.00E+00	8.46E-04	1.33E-03	5.74E-04	0.00E+00	5.11E-04	7.99E-04	3.12E-04	0.00E+00
86	246225.9	4070589	4.90E-03	6.37E-03	2.94E-03	0.00E+00	8.33E-04	1.31E-03	5.65E-04	0.00E+00	5.03E-04	7.87E-04	3.07E-04	0.00E+00
87	246268.7	4070587	4.77E-03	6.21E-03	2.87E-03	0.00E+00	8.12E-04	1.28E-03	5.51E-04	0.00E+00	4.91E-04	7.67E-04	2.99E-04	0.00E+00
88	246300.4	4070590	4.54E-03	5.91E-03	2.73E-03	0.00E+00	7.72E-04	1.22E-03	5.24E-04	0.00E+00	4.67E-04	7.30E-04	2.85E-04	0.00E+00
89	246332.6	4070588	4.35E-03	5.66E-03	2.61E-03	0.00E+00	7.39E-04	1.16E-03	5.02E-04	0.00E+00	4.47E-04	6.99E-04	2.73E-04	0.00E+00
90	246328.7	4070623	3.58E-03	4.66E-03	2.15E-03	0.00E+00	6.08E-04	9.58E-04	4.13E-04	0.00E+00	3.68E-04	5.75E-04	2.24E-04	0.00E+00
91	246292.6	4070623	3.78E-03	4.92E-03	2.27E-03	0.00E+00	6.43E-04	1.01E-03	4.36E-04	0.00E+00	3.88E-04	6.07E-04	2.37E-04	0.00E+00
92	246262.6	4070626	3.83E-03	4.98E-03	2.30E-03	0.00E+00	6.51E-04	1.03E-03	4.42E-04	0.00E+00	3.94E-04	6.15E-04	2.40E-04	0.00E+00
93	246258.1	4070658	3.21E-03	4.17E-03	1.93E-03	0.00E+00	5.45E-04	8.59E-04	3.70E-04	0.00E+00	3.30E-04	5.15E-04	2.01E-04	0.00E+00
94	246288.7	4070663	3.03E-03	3.95E-03	1.82E-03	0.00E+00	5.16E-04	8.13E-04	3.50E-04	0.00E+00	3.12E-04	4.88E-04	1.90E-04	0.00E+00
95	246337	4070665	2.83E-03	3.69E-03	1.70E-03	0.00E+00	4.82E-04	7.59E-04	3.27E-04	0.00E+00	2.91E-04	4.56E-04	1.78E-04	0.00E+00
96	246236.4	4070705	2.70E-03	3.52E-03	1.62E-03	0.00E+00	4.59E-04	7.24E-04	3.12E-04	0.00E+00	2.78E-04	4.34E-04	1.69E-04	0.00E+00
97	246231.4	4070678	3.04E-03	3.95E-03	1.83E-03	0.00E+00	5.17E-04	8.14E-04	3.51E-04	0.00E+00	3.12E-04	4.88E-04	1.90E-04	0.00E+00
98	246232	4070636	3.70E-03	4.82E-03	2.22E-03	0.00E+00	6.29E-04	9.91E-04	4.27E-04	0.00E+00	3.80E-04	5.95E-04	2.32E-04	0.00E+00
99	246196.4	4070668	3.30E-03	4.30E-03	1.99E-03	0.00E+00	5.62E-04	8.86E-04	3.82E-04	0.00E+00	3.40E-04	5.31E-04	2.07E-04	0.00E+00
100	246103.6	4070542	7.01E-03	9.12E-03	4.21E-03	0.00E+00	1.19E-03	1.88E-03	8.09E-04	0.00E+00	7.20E-04	1.13E-03	4.39E-04	0.00E+00
101	245996.9	4070633	4.41E-03	5.75E-03	2.65E-03	0.00E+00	7.51E-04	1.18E-03	5.10E-04	0.00E+00	4.54E-04	7.09E-04	2.77E-04	0.00E+00
102	245982.4	4070632	4.44E-03	5.79E-03	2.67E-03	0.00E+00	7.56E-04	1.19E-03	5.13E-04	0.00E+00	4.57E-04	7.14E-04	2.79E-04	0.00E+00
103	246015.8	4070369	2.35E-02	3.06E-02	1.41E-02	0.00E+00	4.00E-03	6.30E-03	2.71E-03	0.00E+00	2.42E-03	3.78E-03	1.47E-03	0.00E+00
104	245936.3	4070380	1.44E-02	1.88E-02	8.68E-03	0.00E+00	2.46E-03	3.87E-03	1.67E-03	0.00E+00	1.48E-03	2.32E-03	9.05E-04	0.00E+00
105	245959.1	4070239	2.23E-02	2.91E-02	1.34E-02	0.00E+00	3.80E-03	5.98E-03	2.58E-03	0.00E+00	2.30E-03	3.59E-03	1.40E-03	0.00E+00
106	245960.2	4070216	2.23E-02	2.91E-02	1.34E-02	0.00E+00	3.80E-03	5.98E-03	2.58E-03	0.00E+00	2.30E-03	3.59E-03	1.40E-03	0.00E+00
107	245960.2	4070205	2.21E-02	2.87E-02	1.33E-02	0.00E+00	3.75E-03	5.91E-03	2.55E-03	0.00E+00	2.27E-03	3.54E-03	1.38E-03	0.00E+00
108	245960.7	4070192	2.17E-02	2.82E-02	1.30E-02	0.00E+00	3.69E-03	5.81E-03	2.50E-03	0.00E+00	2.23E-03	3.48E-03	1.36E-03	0.00E+00
109	245950.2	4070154	1.87E-02	2.43E-02	1.12E-02	0.00E+00	3.17E-03	5.00E-03	2.16E-03	0.00E+00	1.92E-03	3.00E-03	1.17E-03	0.00E+00
110	245940.2	4070159	1.80E-02	2.34E-02	1.08E-02	0.00E+00	3.05E-03	4.81E-03	2.07E-03	0.00E+00	1.85E-03	2.89E-03	1.13E-03	0.00E+00
111	245956.3	4070159	1.95E-02	2.54E-02	1.17E-02	0.00E+00	3.32E-03	5.23E-03	2.25E-03	0.00E+00	2.01E-03	3.14E-03	1.22E-03	0.00E+00
112	245869	4070172	1.36E-02	1.77E-02	8.20E-03	0.00E+00	2.32E-03	3.65E-03	1.57E-03	0.00E+00	1.40E-03	2.19E-03	8.55E-04	0.00E+00
113	245844	4070174	1.25E-02	1.62E-02	7.50E-03	0.00E+00	2.12E-03	3.34E-03	1.44E-03	0.00E+00	1.28E-03	2.00E-03	7.82E-04	0.00E+00
114	245844	4070183	1.26E-02	1.64E-02	7.56E-03	0.00E+00	2.14E-03	3.37E-03	1.45E-03	0.00E+00	1.29E-03	2.02E-03	7.88E-04	0.00E+00
115	245862.3	4070184	1.35E-02	1.75E-02	8.10E-03	0.00E+00	2.29E-03	3.61E-03	1.56E-03	0.00E+00	1.39E-03	2.17E-03	8.45E-04	0.00E+00
116	245800.1	4070164	1.06E-02	1.39E-02	6.40E-03	0.00E+00	1.81E-03	2.85E-03	1.23E-03	0.00E+00	1.09E-03	1.71E-03	6.68E-04	0.00E+00
117	245800.1	4070173	1.07E-02	1.40E-02	6.45E-03	0.00E+00	1.83E-03	2.88E-03	1.24E-03	0.00E+00	1.10E-03	1.73E-03	6.73E-04	0.00E+00
118	245798.4	4070188	1.08E-02	1.40E-02	6.48E-03	0.00E+00	1.83E-03	2.89E-03	1.24E-03	0.00E+00	1.11E-03	1.73E-03	6.76E-04	0.00E+00
119	245868.5	4070330	1.27E-02	1.65E-02	7.64E-03	0.00E+00	2.16E-03	3.40E-03	1.47E-03	0.00E+00	1.31E-03	2.04E-03	7.97E-04	0.00E+00
120	245830.7	4070332	1.10E-02	1.43E-02	6.59E-03	0.00E+00	1.86E-03	2.94E-03	1.27E-03	0.00E+00	1.13E-03	1.76E-03	6.87E-04	0.00E+00
121	245812.3	4070334	1.02E-02	1.33E-02	6.13E-03	0.00E+00	1.73E-03	2.73E-03	1.18E-03	0.00E+00	1.05E-03	1.64E-03	6.39E-04	0.00E+00
122	245820.7	4070344	1.03E-02	1.34E-02	6.20E-03	0.00E+00	1.75E-03	2.76E-03	1.19E-03	0.00E+00	1.06E-03	1.66E-03	6.46E-04	0.00E+00
123	245835.7	4070344	1.09E-02	1.42E-02	6.55E-03	0.00E+00	1.85E-03	2.92E-03	1.26E-03	0.00E+00	1.12E-03	1.75E-03	6.83E-04	0.00E+00
124	245985.3	4070104	1.75E-02	2.28E-02	1.05E-02	0.00E+00	2.98E-03	4.69E-03	2.02E-03	0.00E+00	1.80E-03	2.82E-03	1.10E-03	0.00E+00
125	245966.4	4070107	1.67E-02	2.17E-02	1.00E-02	0.00E+00	2.83E-03	4.46E-03	1.92E-03	0.00E+00	1.71E-03	2.68E-03	1.04E-03	0.00E+00

126	245950.7	4070116	1.63E-02	2.13E-02	9.83E-03	0.00E+00	2.78E-03	4.38E-03	1.89E-03	0.00E+00	1.68E-03	2.63E-03	1.03E-03	0.00E+00
127	245966.7	4070120	1.77E-02	2.31E-02	1.07E-02	0.00E+00	3.02E-03	4.75E-03	2.05E-03	0.00E+00	1.82E-03	2.85E-03	1.11E-03	0.00E+00
128	245930.7	4070098	1.42E-02	1.85E-02	8.52E-03	0.00E+00	2.41E-03	3.80E-03	1.64E-03	0.00E+00	1.46E-03	2.28E-03	8.89E-04	0.00E+00
129	245996	4070003	1.04E-02	1.36E-02	6.28E-03	0.00E+00	1.78E-03	2.80E-03	1.21E-03	0.00E+00	1.07E-03	1.68E-03	6.55E-04	0.00E+00
130	245995.7	4069989	9.81E-03	1.28E-02	5.90E-03	0.00E+00	1.67E-03	2.63E-03	1.13E-03	0.00E+00	1.01E-03	1.58E-03	6.15E-04	0.00E+00
131	245980.9	4070004	1.03E-02	1.34E-02	6.18E-03	0.00E+00	1.75E-03	2.75E-03	1.19E-03	0.00E+00	1.06E-03	1.65E-03	6.45E-04	0.00E+00
132	245979.8	4069988	9.52E-03	1.24E-02	5.72E-03	0.00E+00	1.62E-03	2.55E-03	1.10E-03	0.00E+00	9.79E-04	1.53E-03	5.97E-04	0.00E+00
133	245965.5	4070001	9.90E-03	1.29E-02	5.95E-03	0.00E+00	1.68E-03	2.65E-03	1.14E-03	0.00E+00	1.02E-03	1.59E-03	6.21E-04	0.00E+00
134	245965.8	4069986	9.26E-03	1.21E-02	5.57E-03	0.00E+00	1.58E-03	2.48E-03	1.07E-03	0.00E+00	9.52E-04	1.49E-03	5.81E-04	0.00E+00
135	245952.5	4070001	9.71E-03	1.26E-02	5.84E-03	0.00E+00	1.65E-03	2.60E-03	1.12E-03	0.00E+00	9.98E-04	1.56E-03	6.09E-04	0.00E+00
136	245953.9	4069986	9.10E-03	1.18E-02	5.47E-03	0.00E+00	1.55E-03	2.44E-03	1.05E-03	0.00E+00	9.35E-04	1.46E-03	5.70E-04	0.00E+00
137	245959.2	4069975	8.72E-03	1.14E-02	5.24E-03	0.00E+00	1.48E-03	2.34E-03	1.01E-03	0.00E+00	8.97E-04	1.40E-03	5.47E-04	0.00E+00
138	245974.5	4069971	8.76E-03	1.14E-02	5.27E-03	0.00E+00	1.49E-03	2.35E-03	1.01E-03	0.00E+00	9.01E-04	1.41E-03	5.49E-04	0.00E+00
139	245982.1	4069972	8.92E-03	1.16E-02	5.37E-03	0.00E+00	1.52E-03	2.39E-03	1.03E-03	0.00E+00	9.18E-04	1.43E-03	5.60E-04	0.00E+00
140	245996.3	4069858	5.61E-03	7.31E-03	3.38E-03	0.00E+00	9.55E-04	1.50E-03	6.48E-04	0.00E+00	5.77E-04	9.02E-04	3.52E-04	0.00E+00
141	245994.6	4069865	5.77E-03	7.52E-03	3.47E-03	0.00E+00	9.82E-04	1.55E-03	6.67E-04	0.00E+00	5.94E-04	9.28E-04	3.62E-04	0.00E+00
142	245986.1	4069876	5.99E-03	7.80E-03	3.60E-03	0.00E+00	1.02E-03	1.61E-03	6.92E-04	0.00E+00	6.16E-04	9.63E-04	3.76E-04	0.00E+00
143	245980.3	4069863	5.72E-03	7.44E-03	3.44E-03	0.00E+00	9.72E-04	1.53E-03	6.60E-04	0.00E+00	5.88E-04	9.19E-04	3.58E-04	0.00E+00
144	245963.5	4069874	5.88E-03	7.66E-03	3.54E-03	0.00E+00	1.00E-03	1.58E-03	6.79E-04	0.00E+00	6.05E-04	9.45E-04	3.69E-04	0.00E+00
145	245959.7	4069860	5.59E-03	7.27E-03	3.36E-03	0.00E+00	9.50E-04	1.50E-03	6.45E-04	0.00E+00	5.74E-04	8.98E-04	3.50E-04	0.00E+00
146	245944.7	4069875	5.81E-03	7.57E-03	3.49E-03	0.00E+00	9.89E-04	1.56E-03	6.71E-04	0.00E+00	5.97E-04	9.34E-04	3.64E-04	0.00E+00
147	245942.3	4069862	5.56E-03	7.23E-03	3.34E-03	0.00E+00	9.45E-04	1.49E-03	6.42E-04	0.00E+00	5.71E-04	8.93E-04	3.48E-04	0.00E+00
148	245929.6	4069872	5.68E-03	7.40E-03	3.42E-03	0.00E+00	9.67E-04	1.52E-03	6.56E-04	0.00E+00	5.84E-04	9.14E-04	3.56E-04	0.00E+00
149	245926.1	4069860	5.44E-03	7.09E-03	3.27E-03	0.00E+00	9.26E-04	1.46E-03	6.29E-04	0.00E+00	5.60E-04	8.75E-04	3.41E-04	0.00E+00
150	246145.7	4069854	6.32E-03	8.23E-03	3.80E-03	0.00E+00	1.07E-03	1.69E-03	7.30E-04	0.00E+00	6.50E-04	1.02E-03	3.96E-04	0.00E+00
151	246145.5	4069844	6.12E-03	7.97E-03	3.68E-03	0.00E+00	1.04E-03	1.64E-03	7.07E-04	0.00E+00	6.29E-04	9.84E-04	3.84E-04	0.00E+00
152	246139.6	4069815	5.50E-03	7.17E-03	3.31E-03	0.00E+00	9.36E-04	1.47E-03	6.36E-04	0.00E+00	5.66E-04	8.85E-04	3.45E-04	0.00E+00
153	246139.9	4069802	5.26E-03	6.85E-03	3.16E-03	0.00E+00	8.95E-04	1.41E-03	6.08E-04	0.00E+00	5.41E-04	8.46E-04	3.30E-04	0.00E+00
154	246140.5	4069791	5.06E-03	6.59E-03	3.04E-03	0.00E+00	8.61E-04	1.36E-03	5.85E-04	0.00E+00	5.21E-04	8.14E-04	3.18E-04	0.00E+00
155	246153.9	4069793	5.17E-03	6.73E-03	3.11E-03	0.00E+00	8.80E-04	1.39E-03	5.97E-04	0.00E+00	5.32E-04	8.31E-04	3.24E-04	0.00E+00
156	246153.6	4069805	5.40E-03	7.03E-03	3.25E-03	0.00E+00	9.19E-04	1.45E-03	6.24E-04	0.00E+00	5.55E-04	8.68E-04	3.39E-04	0.00E+00
157	246153.9	4069813	5.56E-03	7.24E-03	3.34E-03	0.00E+00	9.46E-04	1.49E-03	6.42E-04	0.00E+00	5.72E-04	8.94E-04	3.49E-04	0.00E+00
158	246168.7	4069805	5.48E-03	7.13E-03	3.29E-03	0.00E+00	9.32E-04	1.47E-03	6.33E-04	0.00E+00	5.63E-04	8.80E-04	3.43E-04	0.00E+00
159	246184.3	4069805	5.58E-03	7.26E-03	3.35E-03	0.00E+00	9.49E-04	1.49E-03	6.44E-04	0.00E+00	5.73E-04	8.96E-04	3.50E-04	0.00E+00
160	246193	4069804	5.60E-03	7.29E-03	3.37E-03	0.00E+00	9.53E-04	1.50E-03	6.47E-04	0.00E+00	5.76E-04	9.00E-04	3.51E-04	0.00E+00
161	246382.7	4069976	1.72E-02	2.23E-02	1.03E-02	0.00E+00	2.92E-03	4.60E-03	1.98E-03	0.00E+00	1.76E-03	2.76E-03	1.08E-03	0.00E+00
162	246340.7	4069978	1.66E-02	2.16E-02	9.97E-03	0.00E+00	2.82E-03	4.44E-03	1.92E-03	0.00E+00	1.71E-03	2.67E-03	1.04E-03	0.00E+00
163	246304.8	4069980	1.61E-02	2.10E-02	9.69E-03	0.00E+00	2.74E-03	4.32E-03	1.86E-03	0.00E+00	1.66E-03	2.59E-03	1.01E-03	0.00E+00
164	246268.9	4069979	1.52E-02	1.98E-02	9.13E-03	0.00E+00	2.58E-03	4.07E-03	1.75E-03	0.00E+00	1.56E-03	2.44E-03	9.52E-04	0.00E+00
165	246230.6	4069979	1.41E-02	1.84E-02	8.49E-03	0.00E+00	2.40E-03	3.78E-03	1.63E-03	0.00E+00	1.45E-03	2.27E-03	8.86E-04	0.00E+00
166	246180	4069956	1.11E-02	1.44E-02	6.65E-03	0.00E+00	1.88E-03	2.96E-03	1.28E-03	0.00E+00	1.14E-03	1.78E-03	6.94E-04	0.00E+00
167	246217.8	4069953	1.17E-02	1.52E-02	7.04E-03	0.00E+00	1.99E-03	3.14E-03	1.35E-03	0.00E+00	1.20E-03	1.88E-03	7.34E-04	0.00E+00
168	246261.8	4069954	1.28E-02	1.67E-02	7.70E-03	0.00E+00	2.18E-03	3.43E-03	1.48E-03	0.00E+00	1.32E-03	2.06E-03	8.03E-04	0.00E+00

169	246296.7	4069951	1.32E-02	1.72E-02	7.96E-03	0.00E+00	2.25E-03	3.55E-03	1.53E-03	0.00E+00	1.36E-03	2.13E-03	8.30E-04	0.00E+00
170	246341.1	4069947	1.38E-02	1.79E-02	8.28E-03	0.00E+00	2.34E-03	3.69E-03	1.59E-03	0.00E+00	1.42E-03	2.21E-03	8.63E-04	0.00E+00
171	246382.3	4069942	1.40E-02	1.83E-02	8.44E-03	0.00E+00	2.39E-03	3.76E-03	1.62E-03	0.00E+00	1.44E-03	2.26E-03	8.81E-04	0.00E+00
172	246395.5	4069920	1.26E-02	1.64E-02	7.59E-03	0.00E+00	2.15E-03	3.38E-03	1.46E-03	0.00E+00	1.30E-03	2.03E-03	7.91E-04	0.00E+00
173	246362.9	4069922	1.23E-02	1.60E-02	7.39E-03	0.00E+00	2.09E-03	3.29E-03	1.42E-03	0.00E+00	1.26E-03	1.98E-03	7.71E-04	0.00E+00
174	246329.8	4069922	1.18E-02	1.54E-02	7.10E-03	0.00E+00	2.01E-03	3.17E-03	1.36E-03	0.00E+00	1.21E-03	1.90E-03	7.41E-04	0.00E+00
175	246290.1	4069918	1.09E-02	1.42E-02	6.54E-03	0.00E+00	1.85E-03	2.91E-03	1.26E-03	0.00E+00	1.12E-03	1.75E-03	6.82E-04	0.00E+00
176	246245.2	4069922	1.03E-02	1.34E-02	6.18E-03	0.00E+00	1.75E-03	2.75E-03	1.19E-03	0.00E+00	1.06E-03	1.65E-03	6.45E-04	0.00E+00
177	246206	4069925	9.72E-03	1.27E-02	5.85E-03	0.00E+00	1.65E-03	2.61E-03	1.12E-03	0.00E+00	1.00E-03	1.56E-03	6.10E-04	0.00E+00
178	246208.4	4069893	8.27E-03	1.08E-02	4.98E-03	0.00E+00	1.41E-03	2.22E-03	9.56E-04	0.00E+00	8.51E-04	1.33E-03	5.19E-04	0.00E+00
179	246268.9	4069891	9.09E-03	1.18E-02	5.46E-03	0.00E+00	1.55E-03	2.43E-03	1.05E-03	0.00E+00	9.34E-04	1.46E-03	5.70E-04	0.00E+00
180	246316.1	4069890	9.75E-03	1.27E-02	5.86E-03	0.00E+00	1.66E-03	2.61E-03	1.13E-03	0.00E+00	1.00E-03	1.57E-03	6.12E-04	0.00E+00
181	246375.2	4069886	1.03E-02	1.35E-02	6.21E-03	0.00E+00	1.76E-03	2.77E-03	1.19E-03	0.00E+00	1.06E-03	1.66E-03	6.48E-04	0.00E+00
182	246120	4070100	2.97E-02	3.87E-02	1.79E-02	0.00E+00	5.05E-03	7.95E-03	3.43E-03	0.00E+00	3.05E-03	4.77E-03	1.86E-03	0.00E+00
183	246088.8	4070100	2.51E-02	3.26E-02	1.51E-02	0.00E+00	4.26E-03	6.71E-03	2.89E-03	0.00E+00	2.58E-03	4.03E-03	1.57E-03	0.00E+00
184	246100.2	4070069	1.96E-02	2.56E-02	1.18E-02	0.00E+00	3.34E-03	5.26E-03	2.27E-03	0.00E+00	2.02E-03	3.16E-03	1.23E-03	0.00E+00
185	246127.1	4070070	2.18E-02	2.83E-02	1.31E-02	0.00E+00	3.70E-03	5.83E-03	2.51E-03	0.00E+00	2.24E-03	3.50E-03	1.36E-03	0.00E+00
186	246272.2	4070072	3.16E-02	4.11E-02	1.90E-02	0.00E+00	5.37E-03	8.46E-03	3.65E-03	0.00E+00	3.25E-03	5.07E-03	1.98E-03	0.00E+00
187	246304.8	4070070	3.19E-02	4.16E-02	1.92E-02	0.00E+00	5.43E-03	8.56E-03	3.69E-03	0.00E+00	3.28E-03	5.13E-03	2.00E-03	0.00E+00
188	246872	4070188	2.28E-02	2.97E-02	1.37E-02	0.00E+00	3.89E-03	6.12E-03	2.64E-03	0.00E+00	2.35E-03	3.67E-03	1.43E-03	0.00E+00
189	246519.3	4070400	1.79E-02	2.34E-02	1.08E-02	0.00E+00	3.05E-03	4.81E-03	2.07E-03	0.00E+00	1.84E-03	2.88E-03	1.12E-03	0.00E+00
190	246876.9	4070339	7.44E-03	9.68E-03	4.47E-03	0.00E+00	1.27E-03	1.99E-03	8.59E-04	0.00E+00	7.65E-04	1.20E-03	4.66E-04	0.00E+00
191	246865.6	4070391	3.75E-03	4.88E-03	2.26E-03	0.00E+00	6.38E-04	1.00E-03	4.33E-04	0.00E+00	3.86E-04	6.03E-04	2.35E-04	0.00E+00
192	246860.6	4070426	2.76E-03	3.59E-03	1.66E-03	0.00E+00	4.70E-04	7.40E-04	3.19E-04	0.00E+00	2.84E-04	4.44E-04	1.73E-04	0.00E+00
193	246865.6	4070450	2.28E-03	2.97E-03	1.37E-03	0.00E+00	3.88E-04	6.11E-04	2.63E-04	0.00E+00	2.34E-04	3.66E-04	1.43E-04	0.00E+00
194	246930.7	4070337	4.50E-03	5.86E-03	2.71E-03	0.00E+00	7.66E-04	1.21E-03	5.20E-04	0.00E+00	4.63E-04	7.24E-04	2.82E-04	0.00E+00
195	246997.1	4070332	3.19E-03	4.15E-03	1.92E-03	0.00E+00	5.42E-04	8.54E-04	3.68E-04	0.00E+00	3.28E-04	5.12E-04	2.00E-04	0.00E+00
196	246891.9	4070381	3.61E-03	4.70E-03	2.17E-03	0.00E+00	6.15E-04	9.68E-04	4.17E-04	0.00E+00	3.72E-04	5.81E-04	2.27E-04	0.00E+00
197	246924.5	4070379	3.12E-03	4.06E-03	1.87E-03	0.00E+00	5.30E-04	8.35E-04	3.60E-04	0.00E+00	3.20E-04	5.01E-04	1.95E-04	0.00E+00
198	246974.6	4070376	2.56E-03	3.33E-03	1.54E-03	0.00E+00	4.35E-04	6.85E-04	2.95E-04	0.00E+00	2.63E-04	4.11E-04	1.60E-04	0.00E+00
199	246879.4	4070420	2.66E-03	3.47E-03	1.60E-03	0.00E+00	4.53E-04	7.14E-04	3.08E-04	0.00E+00	2.74E-04	4.28E-04	1.67E-04	0.00E+00
200	246927	4070413	2.35E-03	3.06E-03	1.41E-03	0.00E+00	4.00E-04	6.30E-04	2.71E-04	0.00E+00	2.42E-04	3.78E-04	1.47E-04	0.00E+00
201	246962.1	4070413	2.09E-03	2.72E-03	1.26E-03	0.00E+00	3.55E-04	5.60E-04	2.41E-04	0.00E+00	2.15E-04	3.36E-04	1.31E-04	0.00E+00

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* AERMOD (23132 ):  HARP GENERATED FILE                                  01/18/25
* AERMET ( 21112):                                                      09:45:42
* MODELING OPTIONS USED:   RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
*        PLOT FILE OF  HIGH   1ST HIGH  1-HR VALUES FOR SOURCE GROUP: ALL
*        FOR A TOTAL OF    49 RECEPTORS.
*        FORMAT: (3(1X,F13.5),3(1X,F8.2),3X,A5,2X,A8,2X,A5,5X,A8,2X,I8)
*       X           Y     AVERAGE CONC   ZELEV   ZHILL   ZFLAG   AVE    GRP      RANK     NET
ID   DATE(CONC)
* ____________ ____________ _____________  ______  ______  ______  ______  ________  ________
_______  ________
 246795.08000 4069935.05000 2.9990000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246568.86000 4070024.24000 3.7769000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246614.93000 4070070.31000 4.3798000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246568.86000 4069976.75000 3.0580000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246713.24000 4069883.19000 2.4264000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246688.54000 4069880.82000 2.4539000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246648.17000 4069884.62000 2.4453000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246624.43000 4069876.07000 2.3436000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246629.65000 4069894.59000 2.4812000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246845.86000 4069793.56000 1.9089000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246839.24000 4069776.90000 1.8794000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246796.07000 4069808.96000 2.0705000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246792.13000 4069788.36000 2.0214000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246748.60000 4069788.72000 2.0460000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246738.57000 4069788.00000 2.0364000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246793.56000 4069767.94000 1.9565000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246792.84000 4069727.28000 1.8300000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246790.16000 4069744.30000 1.8872000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246793.02000 4069759.52000 1.9329000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246856.07000 4069721.01000 1.7169000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246851.42000 4069752.00000 1.8020000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246855.54000 4069732.66000 1.7484000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246784.25000 4069647.57000 1.5816000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
 246784.96000 4069667.28000 1.6367000e-04    -99     -99     -99   1-HR  ALL      1ST
00000000
```

246785.14000 4069689.13000 1.7026000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246545.00000 4069856.58000 2.1147000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246544.52000 4069847.55000 2.0620000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246546.42000 4069834.25000 1.9940000e-04 -99 -99 -99 1-HR ALL 1ST
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246543.57000 4069826.18000 1.9587000e-04 -99 -99 -99 1-HR ALL 1ST
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246540.72000 4069803.38000 1.8872000e-04 -99 -99 -99 1-HR ALL 1ST
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246526.00000 4069857.53000 2.1312000e-04 -99 -99 -99 1-HR ALL 1ST
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246525.53000 4069847.08000 2.0755000e-04 -99 -99 -99 1-HR ALL 1ST
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246524.10000 4069838.53000 2.0340000e-04 -99 -99 -99 1-HR ALL 1ST
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246523.63000 4069826.65000 1.9921000e-04 -99 -99 -99 1-HR ALL 1ST
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246293.35000 4070103.06000 6.8418000e-04 -99 -99 -99 1-HR ALL 1ST
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246270.04000 4070096.62000 6.2669000e-04 -99 -99 -99 1-HR ALL 1ST
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246257.65000 4070096.12000 6.1176000e-04 -99 -99 -99 1-HR ALL 1ST
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246246.49000 4070096.12000 6.0730000e-04 -99 -99 -99 1-HR ALL 1ST
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246346.91000 4070078.52000 5.8875000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246344.67000 4070073.06000 5.6398000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246336.89000 4070099.47000 6.7112000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246302.90000 4070951.41000 2.1880000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246397.11000 4070950.37000 2.1876000e-04 -99 -99 -99 1-HR ALL 1ST
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246565.53000 4070954.82000 2.2322000e-04 -99 -99 -99 1-HR ALL 1ST
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246549.86000 4070941.04000 2.2438000e-04 -99 -99 -99 1-HR ALL 1ST
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246519.33000 4070942.66000 2.1992000e-04 -99 -99 -99 1-HR ALL 1ST
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246200.46000 4070942.04000 2.2973000e-04 -99 -99 -99 1-HR ALL 1ST
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246179.09000 4070942.73000 2.3405000e-04 -99 -99 -99 1-HR ALL 1ST
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246220.67000 4070942.50000 2.2741000e-04 -99 -99 -99 1-HR ALL 1ST
00000000

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* AERMOD (23132 ):  HARP GENERATED FILE                                01/18/25
* AERMET ( 21112):                                                    09:45:05
* MODELING OPTIONS USED:  RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
*       PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL
*       FOR A TOTAL OF    49 RECEPTORS.
*       FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)
*      X           Y     AVERAGE CONC   ZELEV   ZHILL   ZFLAG   AVE    GRP     NUM HRS   NET
ID
*  _____  _____  _____  _____  _____  _____  _____  _____  _____
_____
 246336.89000 4070099.47000 1.6118000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246293.35000 4070103.06000 1.5704000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246270.04000 4070096.62000 1.4518000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246614.93000 4070070.31000 1.4508000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246246.49000 4070096.12000 1.4472000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246257.65000 4070096.12000 1.4459000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246346.91000 4070078.52000 1.3005000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246344.67000 4070073.06000 1.2303000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246568.86000 4070024.24000 1.0992000e+01   -99    -99    -99  PERIOD  ALL      00000000
 246568.86000 4069976.75000 8.0189000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246795.08000 4069935.05000 7.2262000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246713.24000 4069883.19000 5.4692000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246629.65000 4069894.59000 5.4660000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246688.54000 4069880.82000 5.3654000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246648.17000 4069884.62000 5.3137000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246624.43000 4069876.07000 4.9964000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246845.86000 4069793.56000 4.3651000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246796.07000 4069808.96000 4.3619000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246545.00000 4069856.58000 4.2477000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246526.00000 4069857.53000 4.2093000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246544.52000 4069847.55000 4.0974000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246525.53000 4069847.08000 4.0390000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246792.13000 4069788.36000 4.0354000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246839.24000 4069776.90000 4.0242000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246748.60000 4069788.72000 3.9336000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246524.10000 4069838.53000 3.9050000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246546.42000 4069834.25000 3.8982000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246738.57000 4069788.00000 3.8966000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246543.57000 4069826.18000 3.7762000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246793.56000 4069767.94000 3.7597000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246523.63000 4069826.65000 3.7337000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246851.42000 4069752.00000 3.6998000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246793.02000 4069759.52000 3.6505000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246540.72000 4069803.38000 3.4722000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246790.16000 4069744.30000 3.4607000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246855.54000 4069732.66000 3.4560000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246856.07000 4069721.01000 3.3151000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246792.84000 4069727.28000 3.2748000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246785.14000 4069689.13000 2.8828000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246784.96000 4069667.28000 2.6896000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246784.25000 4069647.57000 2.5275000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246179.09000 4070942.73000 1.0292000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246200.46000 4070942.04000 1.0185000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246220.67000 4070942.50000 1.0118000e+00   -99    -99    -99  PERIOD  ALL      00000000
 246302.90000 4070951.41000 9.7583000e-01   -99    -99    -99  PERIOD  ALL      00000000
 246397.11000 4070950.37000 9.5711000e-01   -99    -99    -99  PERIOD  ALL      00000000
 246519.33000 4070942.66000 9.0914000e-01   -99    -99    -99  PERIOD  ALL      00000000
 246549.86000 4070941.04000 8.9304000e-01   -99    -99    -99  PERIOD  ALL      00000000
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246565.53000 4070954.82000 8.4691000e-01 -99 -99 -99 PERIOD ALL 00000000

* AERMOD (23132): HARP GENERATED FILE 01/18/25
* AERMET (21112): 09:45:27
* MODELING OPTIONS USED: RegDFAULT CONC ELEV RURAL ADJ_U*
* PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 49 RECEPTORS.
* FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)
* X Y AVERAGE CONC ZELEV ZHILL ZFLAG AVE GRP NUM HRS NET ID
* _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

246795.08000 4069935.05000 1.8192000e-03 -99 -99 -99 PERIOD ALL 00000000
246568.86000 4070024.24000 2.7711000e-03 -99 -99 -99 PERIOD ALL 00000000
246614.93000 4070070.31000 3.6576000e-03 -99 -99 -99 PERIOD ALL 00000000
246568.86000 4069976.75000 2.0216000e-03 -99 -99 -99 PERIOD ALL 00000000
246713.24000 4069883.19000 1.3782000e-03 -99 -99 -99 PERIOD ALL 00000000
246688.54000 4069880.82000 1.3522000e-03 -99 -99 -99 PERIOD ALL 00000000
246648.17000 4069884.62000 1.3393000e-03 -99 -99 -99 PERIOD ALL 00000000
246624.43000 4069876.07000 1.2594000e-03 -99 -99 -99 PERIOD ALL 00000000
246629.65000 4069894.59000 1.3777000e-03 -99 -99 -99 PERIOD ALL 00000000
246845.86000 4069793.56000 1.0990000e-03 -99 -99 -99 PERIOD ALL 00000000
246839.24000 4069776.90000 1.0134000e-03 -99 -99 -99 PERIOD ALL 00000000
246796.07000 4069808.96000 1.0987000e-03 -99 -99 -99 PERIOD ALL 00000000
246792.13000 4069788.36000 1.0166000e-03 -99 -99 -99 PERIOD ALL 00000000
246748.60000 4069788.72000 9.9117000e-04 -99 -99 -99 PERIOD ALL 00000000
246738.57000 4069788.00000 9.8189000e-04 -99 -99 -99 PERIOD ALL 00000000
246793.56000 4069767.94000 9.4719000e-04 -99 -99 -99 PERIOD ALL 00000000
246792.84000 4069727.28000 8.2515000e-04 -99 -99 -99 PERIOD ALL 00000000
246790.16000 4069744.30000 8.7196000e-04 -99 -99 -99 PERIOD ALL 00000000
246793.02000 4069759.52000 9.1971000e-04 -99 -99 -99 PERIOD ALL 00000000
246856.07000 4069721.01000 8.3509000e-04 -99 -99 -99 PERIOD ALL 00000000
246851.42000 4069752.00000 9.3180000e-04 -99 -99 -99 PERIOD ALL 00000000
246855.54000 4069732.66000 8.7052000e-04 -99 -99 -99 PERIOD ALL 00000000
246784.25000 4069647.57000 6.3699000e-04 -99 -99 -99 PERIOD ALL 00000000
246784.96000 4069667.28000 6.7781000e-04 -99 -99 -99 PERIOD ALL 00000000
246785.14000 4069689.13000 7.2647000e-04 -99 -99 -99 PERIOD ALL 00000000
246545.00000 4069856.58000 1.0709000e-03 -99 -99 -99 PERIOD ALL 00000000
246544.52000 4069847.55000 1.0330000e-03 -99 -99 -99 PERIOD ALL 00000000
246546.42000 4069834.25000 9.8277000e-04 -99 -99 -99 PERIOD ALL 00000000
246543.57000 4069826.18000 9.5202000e-04 -99 -99 -99 PERIOD ALL 00000000
246540.72000 4069803.38000 8.7538000e-04 -99 -99 -99 PERIOD ALL 00000000
246526.00000 4069857.53000 1.0613000e-03 -99 -99 -99 PERIOD ALL 00000000
246525.53000 4069847.08000 1.0183000e-03 -99 -99 -99 PERIOD ALL 00000000
246524.10000 4069838.53000 9.8453000e-04 -99 -99 -99 PERIOD ALL 00000000
246523.63000 4069826.65000 9.4135000e-04 -99 -99 -99 PERIOD ALL 00000000
246293.35000 4070103.06000 3.9579000e-03 -99 -99 -99 PERIOD ALL 00000000
246270.04000 4070096.62000 3.6611000e-03 -99 -99 -99 PERIOD ALL 00000000
246257.65000 4070096.12000 3.6476000e-03 -99 -99 -99 PERIOD ALL 00000000
246246.49000 4070096.12000 3.6519000e-03 -99 -99 -99 PERIOD ALL 00000000
246346.91000 4070078.52000 3.2788000e-03 -99 -99 -99 PERIOD ALL 00000000
246344.67000 4070073.06000 3.1021000e-03 -99 -99 -99 PERIOD ALL 00000000
246336.89000 4070099.47000 4.0621000e-03 -99 -99 -99 PERIOD ALL 00000000
246302.90000 4070951.41000 2.4601000e-04 -99 -99 -99 PERIOD ALL 00000000
246397.11000 4070950.37000 2.4129000e-04 -99 -99 -99 PERIOD ALL 00000000
246565.53000 4070954.82000 2.1352000e-04 -99 -99 -99 PERIOD ALL 00000000
246549.86000 4070941.04000 2.2515000e-04 -99 -99 -99 PERIOD ALL 00000000
246519.33000 4070942.66000 2.2921000e-04 -99 -99 -99 PERIOD ALL 00000000
246200.46000 4070942.04000 2.5678000e-04 -99 -99 -99 PERIOD ALL 00000000
246179.09000 4070942.73000 2.5948000e-04 -99 -99 -99 PERIOD ALL 00000000

246220.67000 4070942.50000 2.5508000e-04 -99 -99 -99 PERIOD ALL 00000000

* AERMOD (23132): HARP GENERATED FILE 01/17/25
* AERMET (21112): 22:07:32
* MODELING OPTIONS USED: RegDFAULT CONC ELEV RURAL ADJ_U*
* PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 201 RECEPTORS.
* FORMAT: (3(1X,F13.5),3(1X,F8.2),3X,A5,2X,A8,2X,A5,5X,A8,2X,I8)
* X Y AVERAGE CONC ZELEV ZHILL ZFLAG AVE GRP RANK NET ID DATE(CONC)
*

246074.58000 4070080.77000 5.4877000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246863.34000 4069919.21000 2.6727000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246874.20000 4069902.01000 2.5514000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246855.20000 4069890.24000 2.5713000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246883.25000 4069971.70000 3.2268000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246891.40000 4070008.81000 3.6037000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246898.64000 4070025.10000 3.9477000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246897.74000 4070044.11000 4.3390000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246893.21000 4070063.12000 4.7449000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246856.10000 4070032.34000 4.1195000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246844.33000 4070069.45000 5.1155000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246845.24000 4070080.31000 5.3895000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246934.84000 4070051.35000 4.3515000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246931.22000 4070026.91000 3.9231000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246934.84000 4069997.95000 3.4434000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
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246866.06000 4070293.91000 7.4915000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246883.25000 4070300.25000 7.6030000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246904.98000 4070298.44000 7.3831000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246927.60000 4070298.44000 7.3087000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
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247005.44000 4070295.72000 6.2438000e-04 -99 -99 -99 1-HR ALL 1ST 00000000
246946.72000 4070158.37000 8.1411000e-04 -99 -99 -99 1-HR ALL 1ST 00000000

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246863.44000 4069895.23000 2.5382000e-04 -99 -99 -99 1-HR ALL 1ST
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246873.44000 4069919.13000 2.6590000e-04 -99 -99 -99 1-HR ALL 1ST
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00000000
246887.90000 4070525.02000 4.3900000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246798.40000 4070720.12000 3.3739000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246776.17000 4070717.90000 3.0709000e-04 -99 -99 -99 1-HR ALL 1ST
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00000000
246725.03000 4070723.46000 2.8561000e-04 -99 -99 -99 1-HR ALL 1ST
00000000

246695.01000 4070762.37000 2.7215000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246494.90000 4070530.02000 4.3659000e-04 -99 -99 -99 1-HR ALL 1ST
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246400.41000 4070674.54000 3.1918000e-04 -99 -99 -99 1-HR ALL 1ST
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246529.92000 4070895.22000 2.3797000e-04 -99 -99 -99 1-HR ALL 1ST
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246503.24000 4070897.44000 2.3131000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246499.35000 4070884.10000 2.3662000e-04 -99 -99 -99 1-HR ALL 1ST
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246503.24000 4070861.31000 2.3859000e-04 -99 -99 -99 1-HR ALL 1ST
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246415.42000 4070873.54000 2.3177000e-04 -99 -99 -99 1-HR ALL 1ST
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246396.52000 4070860.76000 2.3386000e-04 -99 -99 -99 1-HR ALL 1ST
00000000
246398.74000 4070868.54000 2.3190000e-04 -99 -99 -99 1-HR ALL 1ST
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* AERMOD (23132 ):  HARP GENERATED FILE                                01/17/25
* AERMET ( 21112):                                                    22:05:27
* MODELING OPTIONS USED:  RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
*       PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL
*       FOR A TOTAL OF   201 RECEPTORS.
*       FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)
*      X           Y     AVERAGE CONC   ZELEV   ZHILL   ZFLAG   AVE    GRP     NUM HRS   NET
ID
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* AERMOD (23132 ):  HARP GENERATED FILE                                01/17/25
* AERMET ( 21112):                                                    22:07:14
* MODELING OPTIONS USED:  RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
*       PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL
*       FOR A TOTAL OF   201 RECEPTORS.
*       FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)
*      X           Y     AVERAGE CONC   ZELEV   ZHILL   ZFLAG   AVE    GRP     NUM HRS   NET
ID
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245930.72000 4070098.11000 1.8008000e-03 -99 -99 -99 PERIOD ALL 00000000
245996.01000 4070002.94000 2.5003000e-03 -99 -99 -99 PERIOD ALL 00000000
245995.72000 4069989.30000 2.4634000e-03 -99 -99 -99 PERIOD ALL 00000000
245980.92000 4070004.10000 2.1083000e-03 -99 -99 -99 PERIOD ALL 00000000
245979.76000 4069987.56000 2.0311000e-03 -99 -99 -99 PERIOD ALL 00000000
245965.54000 4070001.49000 1.8343000e-03 -99 -99 -99 PERIOD ALL 00000000
245965.83000 4069986.11000 1.7908000e-03 -99 -99 -99 PERIOD ALL 00000000
245952.49000 4070001.49000 1.6783000e-03 -99 -99 -99 PERIOD ALL 00000000
245953.94000 4069985.82000 1.6455000e-03 -99 -99 -99 PERIOD ALL 00000000
245959.16000 4069974.50000 1.6709000e-03 -99 -99 -99 PERIOD ALL 00000000
245974.54000 4069970.73000 1.8823000e-03 -99 -99 -99 PERIOD ALL 00000000
245982.08000 4069972.47000 2.0357000e-03 -99 -99 -99 PERIOD ALL 00000000
245996.30000 4069857.57000 2.3233000e-03 -99 -99 -99 PERIOD ALL 00000000
245994.56000 4069865.40000 2.2448000e-03 -99 -99 -99 PERIOD ALL 00000000
245986.14000 4069875.85000 1.9504000e-03 -99 -99 -99 PERIOD ALL 00000000
245980.34000 4069863.37000 1.7885000e-03 -99 -99 -99 PERIOD ALL 00000000
245963.51000 4069873.81000 1.5031000e-03 -99 -99 -99 PERIOD ALL 00000000
245959.74000 4069859.89000 1.4318000e-03 -99 -99 -99 PERIOD ALL 00000000
245944.65000 4069874.68000 1.3030000e-03 -99 -99 -99 PERIOD ALL 00000000
245942.33000 4069862.21000 1.2599000e-03 -99 -99 -99 PERIOD ALL 00000000
245929.56000 4069872.07000 1.1830000e-03 -99 -99 -99 PERIOD ALL 00000000
245926.08000 4069859.89000 1.1373000e-03 -99 -99 -99 PERIOD ALL 00000000
246145.74000 4069853.50000 1.1357000e-03 -99 -99 -99 PERIOD ALL 00000000
246145.45000 4069844.22000 1.1172000e-03 -99 -99 -99 PERIOD ALL 00000000
246139.64000 4069815.49000 1.0726000e-03 -99 -99 -99 PERIOD ALL 00000000
246139.93000 4069802.14000 1.0380000e-03 -99 -99 -99 PERIOD ALL 00000000
246140.51000 4069790.83000 1.0088000e-03 -99 -99 -99 PERIOD ALL 00000000
246153.86000 4069792.86000 9.6129000e-04 -99 -99 -99 PERIOD ALL 00000000
246153.57000 4069805.34000 9.9162000e-04 -99 -99 -99 PERIOD ALL 00000000
246153.86000 4069813.46000 1.0104000e-03 -99 -99 -99 PERIOD ALL 00000000
246168.66000 4069804.75000 9.4062000e-04 -99 -99 -99 PERIOD ALL 00000000
246184.33000 4069805.34000 9.0153000e-04 -99 -99 -99 PERIOD ALL 00000000
246193.03000 4069804.17000 8.8057000e-04 -99 -99 -99 PERIOD ALL 00000000
246382.72000 4069976.20000 1.6956000e-03 -99 -99 -99 PERIOD ALL 00000000
246340.67000 4069978.09000 1.6528000e-03 -99 -99 -99 PERIOD ALL 00000000
246304.76000 4069979.50000 1.6178000e-03 -99 -99 -99 PERIOD ALL 00000000
246268.85000 4069978.56000 1.5615000e-03 -99 -99 -99 PERIOD ALL 00000000

246230.58000 4069978.56000 1.5191000e-03 -99 -99 -99 PERIOD ALL 00000000
246180.02000 4069955.88000 1.3988000e-03 -99 -99 -99 PERIOD ALL 00000000
246217.82000 4069953.04000 1.3472000e-03 -99 -99 -99 PERIOD ALL 00000000
246261.76000 4069953.99000 1.3695000e-03 -99 -99 -99 PERIOD ALL 00000000
246296.73000 4069951.15000 1.3810000e-03 -99 -99 -99 PERIOD ALL 00000000
246341.14000 4069947.37000 1.4103000e-03 -99 -99 -99 PERIOD ALL 00000000
246382.25000 4069942.18000 1.4178000e-03 -99 -99 -99 PERIOD ALL 00000000
246395.48000 4069920.44000 1.2835000e-03 -99 -99 -99 PERIOD ALL 00000000
246362.88000 4069921.86000 1.2715000e-03 -99 -99 -99 PERIOD ALL 00000000
246329.80000 4069922.33000 1.2432000e-03 -99 -99 -99 PERIOD ALL 00000000
246290.11000 4069918.08000 1.1844000e-03 -99 -99 -99 PERIOD ALL 00000000
246245.22000 4069922.33000 1.1852000e-03 -99 -99 -99 PERIOD ALL 00000000
246206.01000 4069925.17000 1.2184000e-03 -99 -99 -99 PERIOD ALL 00000000
246208.37000 4069892.56000 1.0968000e-03 -99 -99 -99 PERIOD ALL 00000000
246268.85000 4069890.67000 1.0544000e-03 -99 -99 -99 PERIOD ALL 00000000
246316.10000 4069890.20000 1.0711000e-03 -99 -99 -99 PERIOD ALL 00000000
246375.16000 4069886.42000 1.0930000e-03 -99 -99 -99 PERIOD ALL 00000000
246120.01000 4070099.99000 3.3856000e-03 -99 -99 -99 PERIOD ALL 00000000
246088.83000 4070099.52000 3.5604000e-03 -99 -99 -99 PERIOD ALL 00000000
246100.17000 4070069.28000 2.6389000e-03 -99 -99 -99 PERIOD ALL 00000000
246127.10000 4070070.22000 2.5146000e-03 -99 -99 -99 PERIOD ALL 00000000
246272.16000 4070072.11000 2.9375000e-03 -99 -99 -99 PERIOD ALL 00000000
246304.76000 4070070.22000 2.9528000e-03 -99 -99 -99 PERIOD ALL 00000000
246872.03000 4070188.34000 2.6880000e-03 -99 -99 -99 PERIOD ALL 00000000
246519.27000 4070399.64000 3.3545000e-03 -99 -99 -99 PERIOD ALL 00000000
246876.85000 4070338.70000 2.3579000e-03 -99 -99 -99 PERIOD ALL 00000000
246865.58000 4070391.33000 2.3115000e-03 -99 -99 -99 PERIOD ALL 00000000
246860.57000 4070426.41000 2.3917000e-03 -99 -99 -99 PERIOD ALL 00000000
246865.58000 4070450.21000 2.0991000e-03 -99 -99 -99 PERIOD ALL 00000000
246930.73000 4070337.45000 1.3213000e-03 -99 -99 -99 PERIOD ALL 00000000
246997.13000 4070332.44000 8.8654000e-04 -99 -99 -99 PERIOD ALL 00000000
246891.89000 4070381.30000 1.6226000e-03 -99 -99 -99 PERIOD ALL 00000000
246924.46000 4070378.80000 1.2067000e-03 -99 -99 -99 PERIOD ALL 00000000
246974.58000 4070376.29000 8.7592000e-04 -99 -99 -99 PERIOD ALL 00000000
246879.36000 4070420.14000 1.7099000e-03 -99 -99 -99 PERIOD ALL 00000000
246926.97000 4070412.62000 1.0986000e-03 -99 -99 -99 PERIOD ALL 00000000
246962.05000 4070412.62000 8.7550000e-04 -99 -99 -99 PERIOD ALL 00000000

PM 10				
Tons/Yr	T2	T2L3	T4f	
Year 1	0.07615	0.012955	0.00783	0
Year 2	0.09915	0.020405	0.01224	0
Year 3	0.045795	0.008795	0.004776	0
Year 4	0	0	0	0

PM 10				
Lbs /Yr	T2	T2L3	T4f	0
Year 1	152.3	25.91	15.66	0
Year 2	198.3	40.81	24.48	0
Year 3	91.59	17.59	9.551	0
Year 4	0	0	0	0

PM 10				
% Chng	T2	T2L3	T4f	0
Year 1	100%	17%	10%	0%
Year 2	100%	21%	12%	0%
Year 3	100%	19%	10%	0%
Year 4	0%	0%	0%	0%

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM2.5_RUNEX	PM10_RUNEX
Fresno	2025	HHDT	Aggregate	5	Diesel	0.102468249	0.107101408
Fresno	2025	HHDT	Aggregate	10	Diesel	0.017641697	0.018439376
Fresno	2025	HHDT	Aggregate	15	Diesel	0.009268271	0.009687342
					Average	0.043126072	0.045076042
Fresno	2025	LDT1	Aggregate	5	Diesel	0.949978088	0.992931882
Fresno	2025	LDT1	Aggregate	10	Diesel	0.6613481	0.691251327
Fresno	2025	LDT1	Aggregate	15	Diesel	0.481793797	0.503578374
Fresno	2025	LDT2	Aggregate	5	Diesel	0.017992461	0.018806
Fresno	2025	LDT2	Aggregate	10	Diesel	0.014535137	0.015192351
Fresno	2025	LDT2	Aggregate	15	Diesel	0.011701813	0.012230917
					Average	0.356224899	0.372331809
Fresno	2025	MHDT	Aggregate	5	Diesel	0.057268373	0.059857794
Fresno	2025	MHDT	Aggregate	10	Diesel	0.031402369	0.032822245
Fresno	2025	MHDT	Aggregate	15	Diesel	0.019201516	0.020069723
					Average	0.035957419	0.037583254

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Diesel %	Trips	PM2.5_RUNEX	PM10_RUNEX	TOG_RUNEX	TOG_RUNLOSS
Fresno	2025	LDA	Aggregate	Aggregate	Gasoline	316061.7189	12141533.24	12141533.24	0%	1465880.166	0.001071446	0.001165295	0.010357072	0.226508145
Fresno	2025	LDA	Aggregate	Aggregate	Diesel	664.1610576	19482.6747	19482.6747	53%	2790.563225	0.015891081	0.016609605	0.02875127	0
							12161015.91	64.2%						
Fresno	2025	LDT1	Aggregate	Aggregate	Gasoline	29804.00447	969835.576	969835.576	0%	128564.0922	0.001698338	0.001847098	0.044886226	0.648883193
Fresno	2025	LDT1	Aggregate	Aggregate	Diesel	16.92722929	189.0849739	189.0849739	0.5%	47.84291426	0.219070069	0.228975446	0.302484802	0
Fresno	2025	LDT2	Aggregate	Aggregate	Gasoline	148873.0637	5788459.351	5788459.351	0%	690571.455	0.001100417	0.001196804	0.015093607	0.257469385
Fresno	2025	LDT2	Aggregate	Aggregate	Diesel	403.4049479	16923.85816	16923.85816	46%	1923.279685	0.005556772	0.005808024	0.014393689	0
							6775407.871	35.8%	36596			Gasoline Avg EF	0.023445635	0.377620241

Diesel Wt EF 0.012711618

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	PM2.5_RUNEX	PM2.5_IDLEX	PM10_RUNEX	PM10_IDLEX
Fresno	2025	HHDT	Aggregate	Aggregate	Diesel	14894.83605	2098472.212	2098472.212	253493.7922	0.027319509	0.031959058	0.028554776	0.033404105
Fresno	2025	MHDT	Aggregate	Aggregate	Diesel	7969.311158	379793.7161	379793.7161	97264.40114	0.010363919	0.022301494	0.01083253	0.023309869
Fresno	2025	LHDT1	Aggregate	Aggregate	Diesel	10824.69883	383946.9386	383946.9386	136161.0938	0.042443802	0.026571167	0.044362923	0.027772597
Fresno	2025	LHDT2	Aggregate	Aggregate	Diesel	4061.658904	146655.6498	146655.6498	51090.55945	0.039140393	0.026571045	0.040910148	0.02777247
									Average	0.040792097	0.026571106	0.042636535	0.027772533

	Daily Trips
	2229

	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	69.0%	6.1%	6.1%	18.8%	100%
# Daily Vehicles	1537.00	137.00	137.00	418.00	2229
# Annual Vehicles	561,005	50,005	50,005	152,570	813,585

Traffic Study	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Building 1	585	52	52	159	848
Building 2	836	74.5	74.5	227	1212
Building 3	116	10.5	10.5	32	169
Totals	1537	137	137	418	2229
Pct	69.0%	6.1%	6.1%	18.8%	100%

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	50,005	19.8%	4.10E+01
3-Axle Trks	50,005	19.8%	4.14E+00
4-Axle Trks	152,570	60.4%	1.52E+01
Total	252,580	100%	---

DPM Lbs/ Yr	DW2	DW6	DW7				Total
Distance (m)	351.4	596.2	469.7	0	0	0	1417.3
%	34%	33%	33%	0%	0%	0%	100%
2-Axle Trks	3.05E+00	5.02E+00	3.95E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+01
3-Axle Trks	3.08E-01	5.07E-01	3.99E-01	0.00E+00	0.00E+00	0.00E+00	1.21E+00
4-Axle Trks	1.13E+00	1.85E+00	1.46E+00	0.00E+00	0.00E+00	0.00E+00	4.44E+00
Total	4.48E+00	7.38E+00	5.81E+00	0.00E+00	0.00E+00	0.00E+00	1.77E+01

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	50,005	19.8%	4.70E+00
3-Axle Trks	50,005	19.8%	1.19E+00
4-Axle Trks	152,570	60.4%	9.60E+00
Total	252,580	100%	---

DPM Lbs/ Yr	HUGHES1	HUGHES2	NIELSEN	HUGHES3	MARKS1	NIELSEN2	Total
Gas Only	N	N	N	N	N	N	
Distance (m)	379.9	60.2	410.4	474.2	476.5	369.8	2171
%	33%	33%	10%	10%	33%	15%	134%
2-Axle Trks	3.66E-01	5.80E-02	1.20E-01	1.39E-01	4.59E-01	1.62E-01	1.30E+00
3-Axle Trks	9.30E-02	1.47E-02	3.05E-02	3.52E-02	1.17E-01	4.12E-02	3.31E-01
4-Axle Trks	7.48E-01	1.19E-01	2.45E-01	2.83E-01	9.39E-01	3.31E-01	2.66E+00
Total	1.21E+00	1.91E-01	3.95E-01	4.57E-01	1.51E+00	5.34E-01	4.30E+00

Truck Idle

# of Idling Pts	28

Truck Idling						Idle						Total
Category	# of Trucks / Yr	Idle EF (lbs /Idle-Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	28	0	0	0	0	0	28
2-Axle Trks	50,005	6.12E-05	0.25	7.65E-01	2.73E-02	7.65E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-01
3-Axle Trks	50,005	5.14E-05	0.25	6.42E-01	2.29E-02	6.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-01
4-Axle Trks	152,570	7.36E-05	0.25	2.81E+00	1.00E-01	2.81E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E+00
Total	252,580	--	--	4.22E+00	1.51E-01	1.51E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E+00

TRUs

Percent of Trucks	0		# of Units	1

Onsite TRU Emissions					
Category	Percentage	# of TRUs / Yr	Time (Hr)	*DPM EF (lbs/Event)	Emissions (lb/Yr)
2-Axle Trks	15.5	0	0.50	4.19E-03	0.00
3-Axle Trks	4.9	0			0.00
4-Axle Trks	24.3	0			0.00
Total	45	0	Emission/Unit		0.00

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	561,005	64%	35.78%
# Vehicles		360,279	200,726

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	2.28E-05	4.99E-04
LDT	5.17E-05	8.32E-04

CARB TOG Speciation Profile Run Exhaust			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	2.30E-02	2.91E-02
107028	Acrolein	1.30E-03	1.07E-02	1.35E-02
71432	Benzene	2.47E-02	2.03E-01	2.56E-01
106990	1,3-Butadiene	5.50E-03	4.52E-02	5.71E-02
100414	Ethylbenzene	1.05E-02	8.64E-02	1.09E-01
50000	Formaldehyde	1.58E-02	1.30E-01	1.64E-01
110543	Hexane	1.60E-02	1.32E-01	1.66E-01
67561	Methanol	1.20E-03	9.87E-03	1.25E-02
78933	Methyl Ethyl Ketone	2.00E-04	1.65E-03	2.08E-03
91203	Naphthalene	5.00E-04	4.11E-03	5.19E-03
115071	Propylene	3.06E-02	2.52E-01	3.17E-01
100425	Styrene	1.20E-03	9.87E-03	1.25E-02
108883	Toluene	5.76E-02	4.74E-01	5.98E-01
1330207	Xylenes	4.80E-02	3.95E-01	4.98E-01
9901	Diesel	1.27E-02	1.01E+01	5.63E+00

CARB TOG Speciation Profile Evaporative Losses			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	2.96E-02	3.74E-02
100414	Ethylbenzene	1.180E-03	9.71E-03	1.22E-02
110543	Hexane	1.540E-02	1.27E-01	1.60E-01
108883	Toluene	1.700E-02	1.40E-01	1.76E-01
1330207	Xylenes	5.780E-03	4.75E-02	6.00E-02

Vehicle Emissions Travel Summary

Emissions Summary				Source Col	1		2		3		4		5		6		7		8		9		10		11		12		Total Percentage	Total Distance
				Vehicles	DW2		DW6		DW7		0		0		0		HUGHES1		HUGHES2		NIELSEN		HUGHES3		MARKS1		NIELSEN2			
				Cars	50%		10%		10%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
					50.00%		10.00%		10.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		70.00%	3588.3
				Trucks	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
					0.01%		0.01%		0.01%		0.01%		0.01%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%			
CAS#	Chemical Name	Lbs/mi/Hr	Lbs/mi/ Yr		Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr
75070	Acetaldehyde	1.74E-05	5.21E-02		8.68E-06	2.60E-02	1.74E-06	5.21E-03	1.74E-06	5.21E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-05	3.65E-02
107028	Acrolein	8.06E-06	2.42E-02		4.03E-06	1.21E-02	8.06E-07	2.42E-03	8.06E-07	2.42E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-06	1.69E-02
71432	Benzene	1.75E-04	5.26E-01		8.77E-05	2.63E-01	1.75E-05	5.26E-02	1.75E-05	5.26E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	3.68E-01
106990	1,3-Butadiene	3.41E-05	1.02E-01		1.71E-05	5.12E-02	3.41E-06	1.02E-02	3.41E-06	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-05	7.16E-02
100414	Ethylbenzene	7.24E-05	2.17E-01		3.62E-05	1.09E-01	7.24E-06	2.17E-02	7.24E-06	2.17E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05	1.52E-01
50000	Formaldehyde	9.80E-05	2.94E-01		4.90E-05	1.47E-01	9.80E-06	2.94E-02	9.80E-06	2.94E-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	0.00E+00	6.86E-05	2.06E-01
110543	Hexane	1.95E-04	5.84E-01		9.73E-05	2.92E-01	1.95E-05	5.84E-02	1.95E-05	5.84E-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	0.00E+00	1.36E-04	4.09E-01
67561	Methanol	7.44E-06	2.23E-02		3.72E-06	1.12E-02	7.44E-07	2.23E-03	7.44E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-06	1.56E-02
78933	Methyl Ethyl Ketone	1.24E-06	3.72E-03		6.20E-07	1.86E-03	1.24E-07	3.72E-04	1.24E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-07	2.60E-03
91203	Naphthalene	3.10E-06	9.30E-03		1.55E-06	4.65E-03	3.10E-07	9.30E-04	3.10E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-06	6.51E-03
115071	Propylene	1.90E-04	5.69E-01		9.49E-05	2.85E-01	1.90E-05	5.69E-02	1.90E-05	5.69E-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	0.00E+00	1.33E-04	3.98E-01
100425	Styrene	7.44E-06	2.23E-02		3.72E-06	1.12E-02	7.44E-07	2.23E-03	7.44E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-06	1.56E-02
108883	Toluene	4.63E-04	1.39E+00		2.31E-04	6.94E-01	4.63E-05	1.39E-01	4.63E-05	1.39E-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	0.00E+00	0.00E+00	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	9.71E-01
1330207	Xylenes	3.33E-04	1.00E+00		1.67E-04	5.00E-01	3.33E-05	1.00E-01	3.33E-05	1.00E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-04	7.00E-01
9901	Diesel	5.24E-03	1.57E+01		2.62E-03	1.23E+01	5.24E-04	8.95E+00	5.24E-04	7.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E+00	0.00E+00	1.91E-01	0.00E+00	3.95E-01	0.00E+00	4.57E-01	0.00E+00	1.51E+00	0.00E+00	5.34E-01	3.67E-03	3.30E+01

	Daily Trips				
	2229				
	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	69.0%	6.1%	6.1%	18.8%	100%
# Daily Vehicles	1537.00	137.00	137.00	418.00	2229
# Annual Vehicles	561,005	50,005	50,005	152,570	813,585

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	50,005	19.8%	4.97E+00
3-Axle Trks	50,005	19.8%	4.10E+01
4-Axle Trks	152,570	60.4%	1.26E+01
Total	252,580	100%	---

DPM Lbs/ Yr							Total
Distance (m)	0	0	0	0	0	0	0
5	0%	100%	0%	0%	0%	0%	100%
2-Axle Trks	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3-Axle Trks	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Axle Trks	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	50,005	19.8%	4.70E+00
3-Axle Trks	50,005	19.8%	1.19E+00
4-Axle Trks	152,570	60.4%	9.60E+00
Total	252,580	100%	---

DPM Lbs/ Yr	MARKS2	DW6_CAR	DW7CAR	DW5CAR	DW4CAR	DW3CAR	Total
Gas Only	N	Y	Y	Y	Y	Y	
Distance (m)	401.1	517.6	542.5	898.3	590.4	589.6	3539.5
%	50%	33%	10%	10%	33%	33%	169%
2-Axle Trks	5.86E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-01
3-Axle Trks	1.49E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-01
4-Axle Trks	1.20E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+00
Total	1.93E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E+00

Truck Idle

# of Idling Pts	1											
Truck Idling						Idle						Total
Category	# of Trucks / Yr	Idle EF (lbs / Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	0	0	0	0	0	0	0
2-Axle Trks	50,005	6.12E-05	0.25	7.65E-01	7.65E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3-Axle Trks	50,005	5.14E-05	0.25	6.42E-01	6.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Axle Trks	152,570	7.36E-05	0.25	2.81E+00	2.81E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total	252,580	--	--	4.22E+00	4.22E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TRUs

Percent of Trucks	0		# of Units	1	
Onsite TRU Emissions					
Category	Percentage	# of TRUs / Yr	Time (Hr)	*DPM EF (lbs/Event)	Emissions (lb/Yr)
2-Axle Trks	15.5	0	0.25	2.09E-03	0.00
3-Axle Trks	4.9	0			0.00
4-Axle Trks	24.3	0			0.00
Total	45	0	Emission/Unit		0.00

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	561,005	64%	35.78%
# Vehicles		360,279	200,726

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	2.28E-05	4.99E-04
LDT	5.17E-05	8.32E-04

CARB TOG Speciation Profile Run Exhaust			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	2.30E-02	2.91E-02
107028	Acrolein	1.30E-03	1.07E-02	1.35E-02
71432	Benzene	2.47E-02	2.03E-01	2.56E-01
106990	1,3-Butadiene	5.50E-03	4.52E-02	5.71E-02
100414	Ethylbenzene	1.05E-02	8.64E-02	1.09E-01
50000	Formaldehyde	1.58E-02	1.30E-01	1.64E-01
110543	Hexane	1.60E-02	1.32E-01	1.66E-01
67561	Methanol	1.20E-03	9.87E-03	1.25E-02
78933	Methyl Ethyl Ketone	2.00E-04	1.65E-03	2.08E-03
91203	Naphthalene	5.00E-04	4.11E-03	5.19E-03
115071	Propylene	3.06E-02	2.52E-01	3.17E-01
100425	Styrene	1.20E-03	9.87E-03	1.25E-02
108883	Toluene	5.76E-02	4.74E-01	5.98E-01
1330207	Xylenes	4.80E-02	3.95E-01	4.98E-01
9901	Diesel	1.27E-02	1.01E+01	5.63E+00

CARB TOG Speciation Profile Evaporative Losses			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	2.96E-02	3.74E-02
100414	Ethylbenzene	1.180E-03	9.71E-03	1.22E-02
110543	Hexane	1.540E-02	1.27E-01	1.60E-01
108883	Toluene	1.700E-02	1.40E-01	1.76E-01
1330207	Xylenes	5.780E-03	4.75E-02	6.00E-02

Vehicle Emissions Travel Summary

Emissions Summary				Source Col	1		2		3		4		5		6		7		8		9		10		11		12		Total Percentage	Total Distance
				Vehicles	0		0		0		0		0		0		MARKS2		DW6_CAR		DW7CAR		DW5CAR		DW4CAR		DW3CAR			
				Cars	0%		0%		0%		0%		0%		0%		0%		33%		10%		10%		33%		33%			
					0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		33.00%		10.00%		10.00%		33.00%		33.00%		119.00%	3539.5
				Trucks	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
					0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%			
CAS#	Chemical Name	Lbs/mi/Hr	Lbs/mi/ Yr		Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr
75070	Acetaldehyde	1.74E-05	5.21E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-06	5.67E-03	1.74E-07	5.21E-04	1.74E-07	5.21E-04	1.89E-06	5.67E-03	1.89E-06	5.67E-03	6.02E-06	1.81E-02
107028	Acrolein	8.06E-06	2.42E-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	8.78E-07	2.63E-03	8.06E-08	2.42E-04	8.06E-08	2.42E-04	8.78E-07	2.63E-03	8.78E-07	2.63E-03	2.79E-06	8.38E-03
71432	Benzene	1.75E-04	5.26E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05	5.73E-02	1.75E-06	5.26E-03	1.75E-06	5.26E-03	1.91E-05	5.73E-02	1.91E-05	5.73E-02	6.08E-05	1.83E-01
106990	1,3-Butadiene	3.41E-05	1.02E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-06	1.11E-02	3.41E-07	1.02E-03	3.41E-07	1.02E-03	3.71E-06	1.11E-02	3.71E-06	1.11E-02	1.18E-05	3.55E-02
100414	Ethylbenzene	7.24E-05	2.17E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-06	2.37E-02	7.24E-07	2.17E-03	7.24E-07	2.17E-03	7.89E-06	2.37E-02	7.89E-06	2.37E-02	2.51E-05	7.53E-02
50000	Formaldehyde	9.80E-05	2.94E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-05	3.20E-02	9.80E-07	2.94E-03	9.80E-07	2.94E-03	1.07E-05	3.20E-02	1.07E-05	3.20E-02	3.40E-05	1.02E-01
110543	Hexane	1.95E-04	5.84E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05	6.36E-02	1.95E-06	5.84E-03	1.95E-06	5.84E-03	2.12E-05	6.36E-02	2.12E-05	6.36E-02	6.75E-05	2.03E-01
67561	Methanol	7.44E-06	2.23E-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	8.10E-07	2.43E-03	7.44E-08	2.23E-04	7.44E-08	2.23E-04	8.10E-07	2.43E-03	8.10E-07	2.43E-03	2.58E-06	7.74E-03
78933	Methyl Ethyl Ketone	1.24E-06	3.72E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-07	4.05E-04	1.24E-08	3.72E-05	1.24E-08	3.72E-05	1.35E-07	4.05E-04	1.35E-07	4.05E-04	4.30E-07	1.29E-03
91203	Naphthalene	3.10E-06	9.30E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-07	1.01E-03	3.10E-08	9.30E-05	3.10E-08	9.30E-05	3.38E-07	1.01E-03	3.38E-07	1.01E-03	1.07E-06	3.22E-03
115071	Propylene	1.90E-04	5.69E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	6.20E-02	1.90E-06	5.69E-03	1.90E-06	5.69E-03	2.07E-05	6.20E-02	2.07E-05	6.20E-02	6.58E-05	1.97E-01
100425	Styrene	7.44E-06	2.23E-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	8.10E-07	2.43E-03	7.44E-08	2.23E-04	7.44E-08	2.23E-04	8.10E-07	2.43E-03	8.10E-07	2.43E-03	2.58E-06	7.74E-03
108883	Toluene	4.63E-04	1.39E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-05	1.51E-01	4.63E-06	1.39E-02	4.63E-06	1.39E-02	5.04E-05	1.51E-01	5.04E-05	1.51E-01	1.60E-04	4.81E-01
1330207	Xylenes	3.33E-04	1.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-05	1.09E-01	3.33E-06	1.00E-02	3.33E-06	1.00E-02	3.63E-05	1.09E-01	3.63E-05	1.09E-01	1.16E-04	3.47E-01
9901	Diesel	5.24E-03	1.57E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E+00	5.71E-04	1.71E+00	5.24E-05	1.57E-01	5.24E-05	1.57E-01	5.71E-04	1.71E+00	5.71E-04	1.71E+00	1.82E-03	7.38E+00

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/18/2025
** File: D:\LSA\2025\20241963\Construction\Construction.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE D:\LSA\2022\SNN2102\Construction\Construction.isc
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   POLLUTID OTHER
   RUNORNOT RUN
   ERRORFIL Construction.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION CONSTR       AREAPOLY   246584.738  4070171.058       90.560
** Source Parameters **
   SRCPARAM CONSTR       5.4988E-06     3.048        12
   AREAVERT CONSTR       246584.738 4070171.058 246803.767 4070167.220
   AREAVERT CONSTR       246808.535 4070350.780 246714.264 4070350.125
   AREAVERT CONSTR       246397.304 4070353.534 246397.376 4070365.278
   AREAVERT CONSTR       246077.264 4070371.528 246077.698 4070275.788
   AREAVERT CONSTR       246078.667 4070148.889 246211.239 4070145.175
   AREAVERT CONSTR       246399.930 4070142.059 246400.728 4070171.947

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Const"
** WeekDays:
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 1.0
   EMISFACT CONSTR       HRDOW 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT CONSTR       HRDOW 1.0 1.0 1.0 1.0 1.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONSTR       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   SRCGROUP CONSTR   CONSTR
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Construction.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\fresno-93193\Fresno_18-22.SFC
   PROFFILE ..\fresno-93193\Fresno_18-22.PFL
   SURFDATA 93193 2018 FRESNO/AIR_TERMINAL
   UAIRDATA 23230 2018 OAKLAND/WSO_AP
   PROFBASE 101.5 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 CONSTR 1ST Construction.AD\01H1G001.PLT 31
   PLOTFILE PERIOD CONSTR Construction.AD\PE00G001.PLT 32
   SUMMFILE Construction.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      85       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187      85       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- -

** Model Options Selected:
* Model Uses Regulatory DEFAULT Options
* Model Is Setup For Calculation of Average CONCentration Values.
* NO GAS DEPOSITION Data Provided.
* NO PARTICLE DEPOSITION Data Provided.
* Model Uses NO DRY DEPLETION. DDPLETE = F
* Model Uses NO WET DEPLETION. WETDPLT = F
* Stack-tip Downwash.
* Model Accounts for ELEVated Terrain Effects.
* Use Calms Processing Routine.
* Use Missing Data Processing Routine.
* No Exponential Decay.
* Model Uses RURAL Dispersion Only.
* ADJ_U* - Use ADJ_U* option for SBL in AERMET
* CCVR_Sub - Meteorological data includes CCVR substitutions
* TEMP_Sub - Meteorological data includes TEMP substitutions
* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: OTHER

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 49 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 21112

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 101.50 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

```
**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Construction.err
**File for Summary of Results:   Construction.sum
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
CONSTR	0	0.54988E-05	246584.7	4070171.1	90.6	3.05	12	0.00	NO	HRDOW	NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
CONSTR	CONSTR ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = CONSTR ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.1000E+01	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\fresno-93193\Fresno_18-22.SFC Met Version: 21112
Profile file: ..\fresno-93193\Fresno_18-22.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 93193 Upper air station no.: 23230
Name: FRESNO/AIR_TERMINAL Name: OAKLAND/WSO_AP
Year: 2018 Year: 2018

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
18	01	01	1	01	-6.0	0.108	-9.000	-9.000	-999.	85.	18.7	0.17	1.06	1.00	1.20	347.	10.0	280.9	2.0
18	01	01	1	02	-2.0	0.062	-9.000	-9.000	-999.	38.	10.9	0.02	1.06	1.00	0.91	174.	10.0	279.2	2.0
18	01	01	1	03	-3.4	0.076	-9.000	-9.000	-999.	50.	11.8	0.03	1.06	1.00	1.20	265.	10.0	279.2	2.0
18	01	01	1	04	-5.1	0.095	-9.000	-9.000	-999.	71.	15.2	0.06	1.06	1.00	1.35	316.	10.0	278.1	2.0
18	01	01	1	05	-8.8	0.123	-9.000	-9.000	-999.	104.	19.1	0.04	1.06	1.00	1.87	96.	10.0	277.0	2.0
18	01	01	1	06	-2.6	0.067	-9.000	-9.000	-999.	43.	10.7	0.02	1.06	1.00	1.08	177.	10.0	277.5	2.0
18	01	01	1	07	-3.7	0.078	-9.000	-9.000	-999.	52.	11.5	0.02	1.06	1.00	1.33	181.	10.0	277.5	2.0
18	01	01	1	08	-15.2	0.167	-9.000	-9.000	-999.	164.	30.7	0.06	1.06	0.65	2.32	76.	10.0	276.4	2.0
18	01	01	1	09	-3.5	0.149	-9.000	-9.000	-999.	139.	86.8	0.04	1.06	0.36	2.15	109.	10.0	278.1	2.0
18	01	01	1	10	56.2	0.204	0.651	0.006	177.	221.	-13.6	0.04	1.06	0.26	2.37	134.	10.0	281.4	2.0
18	01	01	1	11	92.0	0.233	1.067	0.016	477.	270.	-12.4	0.04	1.06	0.22	2.62	105.	10.0	283.1	2.0
18	01	01	1	12	116.8	0.202	1.234	0.018	581.	219.	-6.4	0.04	1.06	0.21	2.11	102.	10.0	285.9	2.0
18	01	01	1	13	112.5	0.144	1.280	0.019	673.	132.	-2.4	0.02	1.06	0.21	1.55	183.	10.0	287.5	2.0
18	01	01	1	14	84.0	0.122	1.190	0.019	723.	103.	-2.0	0.02	1.06	0.22	1.28	200.	10.0	289.2	2.0
18	01	01	1	15	57.9	0.161	1.059	0.019	738.	155.	-6.5	0.03	1.06	0.26	1.81	262.	10.0	290.4	2.0
18	01	01	1	16	16.8	0.124	0.702	0.019	742.	105.	-10.3	0.03	1.06	0.35	1.47	259.	10.0	289.9	2.0
18	01	01	1	17	-2.5	0.068	-9.000	-9.000	-999.	44.	11.3	0.02	1.06	0.62	1.14	297.	10.0	287.5	2.0
18	01	01	1	18	-7.4	0.111	-9.000	-9.000	-999.	89.	16.9	0.03	1.06	1.00	1.84	239.	10.0	286.4	2.0
18	01	01	1	19	-4.0	0.085	-9.000	-9.000	-999.	60.	13.8	0.06	1.06	1.00	1.21	83.	10.0	284.9	2.0
18	01	01	1	20	-10.4	0.137	-9.000	-9.000	-999.	122.	22.3	0.06	1.06	1.00	1.93	76.	10.0	283.8	2.0
18	01	01	1	21	-4.7	0.090	-9.000	-9.000	-999.	65.	14.0	0.04	1.06	1.00	1.38	109.	10.0	283.1	2.0
18	01	01	1	22	-4.1	0.084	-9.000	-9.000	-999.	58.	13.0	0.04	1.06	1.00	1.30	127.	10.0	281.4	2.0
18	01	01	1	23	-11.7	0.145	-9.000	-9.000	-999.	133.	23.6	0.06	1.06	1.00	2.04	70.	10.0	280.9	2.0
18	01	01	1	24	-3.4	0.079	-9.000	-9.000	-999.	54.	13.0	0.06	1.06	1.00	1.09	80.	10.0	281.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
18	01	01	01	10.0	1	347.	1.20	281.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
CONSTR	1ST HIGHEST VALUE IS	5.61912 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.54262 AT (246334.26, 4070099.50, 90.82, 90.82, 0.00)	DC	
	3RD HIGHEST VALUE IS	5.01047 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.90395 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.82394 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.25659 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	3.99556 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	3.29185 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	9TH HIGHEST VALUE IS	2.55083 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	1.92729 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
CONSTR	HIGH 1ST HIGH VALUE IS	362.22227	ON 21022308: AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 1361 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 750 Calm Hours Identified

A Total of 611 Missing Hours Identified (1.39 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	85	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	85	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W420	7582	METQA: Wind Speed Out-of-Range. KURDAT =	18111222
MX W420	7588	METQA: Wind Speed Out-of-Range. KURDAT =	18111304

****
*** AERMOD Finishes Successfully ***
****

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/18/2025
** File: D:\LSA\2025\20241963\Operational\Operation.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE D:\LSA\2021\SNN2102\Operation\Operation.isc
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   POLLUTID OTHER
   RUNORNOT RUN
   ERRORFIL Operation.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ------------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW6
** DESCRSRC Truck Driveway 6
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 3
** 246402.443, 4070177.560, 90.21, 0.00, 2.84
** 246403.156, 4070352.715, 93.26, 0.00, 2.84
** 246824.124, 4070342.813, 89.52, 0.00, 2.84
** ------------------------------------------------------------------------
   LOCATION L0007146     VOLUME   246402.449 4070179.084 90.21
   LOCATION L0007147     VOLUME   246402.474 4070185.180 90.65
   LOCATION L0007148     VOLUME   246402.499 4070191.276 91.02
   LOCATION L0007149     VOLUME   246402.523 4070197.372 91.14
   LOCATION L0007150     VOLUME   246402.548 4070203.468 91.26
   LOCATION L0007151     VOLUME   246402.573 4070209.564 91.38
   LOCATION L0007152     VOLUME   246402.598 4070215.660 91.50
   LOCATION L0007153     VOLUME   246402.623 4070221.756 91.61
   LOCATION L0007154     VOLUME   246402.647 4070227.852 91.73
   LOCATION L0007155     VOLUME   246402.672 4070233.948 91.85
   LOCATION L0007156     VOLUME   246402.697 4070240.044 91.96
   LOCATION L0007157     VOLUME   246402.722 4070246.140 92.08
```

```
LOCATION L0007158     VOLUME   246402.747 4070252.236 92.08
LOCATION L0007159     VOLUME   246402.771 4070258.331 91.87
LOCATION L0007160     VOLUME   246402.796 4070264.427 91.67
LOCATION L0007161     VOLUME   246402.821 4070270.523 91.46
LOCATION L0007162     VOLUME   246402.846 4070276.619 91.26
LOCATION L0007163     VOLUME   246402.871 4070282.715 91.08
LOCATION L0007164     VOLUME   246402.895 4070288.811 90.93
LOCATION L0007165     VOLUME   246402.920 4070294.907 90.79
LOCATION L0007166     VOLUME   246402.945 4070301.003 90.64
LOCATION L0007167     VOLUME   246402.970 4070307.099 90.50
LOCATION L0007168     VOLUME   246402.995 4070313.195 90.65
LOCATION L0007169     VOLUME   246403.020 4070319.291 91.05
LOCATION L0007170     VOLUME   246403.044 4070325.387 91.46
LOCATION L0007171     VOLUME   246403.069 4070331.483 91.87
LOCATION L0007172     VOLUME   246403.094 4070337.579 92.28
LOCATION L0007173     VOLUME   246403.119 4070343.675 92.68
LOCATION L0007174     VOLUME   246403.144 4070349.771 93.09
LOCATION L0007175     VOLUME   246406.306 4070352.641 93.39
LOCATION L0007176     VOLUME   246412.400 4070352.498 93.58
LOCATION L0007177     VOLUME   246418.494 4070352.355 93.77
LOCATION L0007178     VOLUME   246424.589 4070352.211 93.81
LOCATION L0007179     VOLUME   246430.683 4070352.068 93.80
LOCATION L0007180     VOLUME   246436.777 4070351.925 93.79
LOCATION L0007181     VOLUME   246442.872 4070351.781 93.79
LOCATION L0007182     VOLUME   246448.966 4070351.638 93.78
LOCATION L0007183     VOLUME   246455.060 4070351.494 93.83
LOCATION L0007184     VOLUME   246461.155 4070351.351 93.90
LOCATION L0007185     VOLUME   246467.249 4070351.208 93.96
LOCATION L0007186     VOLUME   246473.343 4070351.064 94.02
LOCATION L0007187     VOLUME   246479.438 4070350.921 94.09
LOCATION L0007188     VOLUME   246485.532 4070350.778 94.08
LOCATION L0007189     VOLUME   246491.626 4070350.634 94.06
LOCATION L0007190     VOLUME   246497.721 4070350.491 94.05
LOCATION L0007191     VOLUME   246503.815 4070350.348 94.03
LOCATION L0007192     VOLUME   246509.909 4070350.204 94.02
LOCATION L0007193     VOLUME   246516.004 4070350.061 93.81
LOCATION L0007194     VOLUME   246522.098 4070349.918 93.59
LOCATION L0007195     VOLUME   246528.192 4070349.774 93.37
LOCATION L0007196     VOLUME   246534.286 4070349.631 93.15
LOCATION L0007197     VOLUME   246540.381 4070349.487 92.96
LOCATION L0007198     VOLUME   246546.475 4070349.344 93.08
LOCATION L0007199     VOLUME   246552.569 4070349.201 93.21
LOCATION L0007200     VOLUME   246558.664 4070349.057 93.34
LOCATION L0007201     VOLUME   246564.758 4070348.914 93.47
LOCATION L0007202     VOLUME   246570.852 4070348.771 93.58
LOCATION L0007203     VOLUME   246576.947 4070348.627 93.51
LOCATION L0007204     VOLUME   246583.041 4070348.484 93.44
LOCATION L0007205     VOLUME   246589.135 4070348.341 93.38
LOCATION L0007206     VOLUME   246595.230 4070348.197 93.32
LOCATION L0007207     VOLUME   246601.324 4070348.054 93.24
LOCATION L0007208     VOLUME   246607.418 4070347.910 93.13
LOCATION L0007209     VOLUME   246613.513 4070347.767 93.03
LOCATION L0007210     VOLUME   246619.607 4070347.624 92.92
LOCATION L0007211     VOLUME   246625.701 4070347.480 92.82
LOCATION L0007212     VOLUME   246631.795 4070347.337 92.74
LOCATION L0007213     VOLUME   246637.890 4070347.194 92.70
LOCATION L0007214     VOLUME   246643.984 4070347.050 92.66
LOCATION L0007215     VOLUME   246650.078 4070346.907 92.62
LOCATION L0007216     VOLUME   246656.173 4070346.764 92.58
LOCATION L0007217     VOLUME   246662.267 4070346.620 92.48
LOCATION L0007218     VOLUME   246668.361 4070346.477 92.29
LOCATION L0007219     VOLUME   246674.456 4070346.333 92.10
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   LOCATION L0007220     VOLUME   246680.550 4070346.190 91.90
   LOCATION L0007221     VOLUME   246686.644 4070346.047 91.71
   LOCATION L0007222     VOLUME   246692.739 4070345.903 91.44
   LOCATION L0007223     VOLUME   246698.833 4070345.760 91.08
   LOCATION L0007224     VOLUME   246704.927 4070345.617 90.72
   LOCATION L0007225     VOLUME   246711.022 4070345.473 90.36
   LOCATION L0007226     VOLUME   246717.116 4070345.330 90.00
   LOCATION L0007227     VOLUME   246723.210 4070345.187 89.78
   LOCATION L0007228     VOLUME   246729.305 4070345.043 89.68
   LOCATION L0007229     VOLUME   246735.399 4070344.900 89.57
   LOCATION L0007230     VOLUME   246741.493 4070344.756 89.47
   LOCATION L0007231     VOLUME   246747.587 4070344.613 89.35
   LOCATION L0007232     VOLUME   246753.682 4070344.470 89.19
   LOCATION L0007233     VOLUME   246759.776 4070344.326 89.01
   LOCATION L0007234     VOLUME   246765.870 4070344.183 88.82
   LOCATION L0007235     VOLUME   246771.965 4070344.040 88.64
   LOCATION L0007236     VOLUME   246778.059 4070343.896 88.45
   LOCATION L0007237     VOLUME   246784.153 4070343.753 88.51
   LOCATION L0007238     VOLUME   246790.248 4070343.610 88.70
   LOCATION L0007239     VOLUME   246796.342 4070343.466 88.89
   LOCATION L0007240     VOLUME   246802.436 4070343.323 89.08
   LOCATION L0007241     VOLUME   246808.531 4070343.179 89.27
   LOCATION L0007242     VOLUME   246814.625 4070343.036 89.46
   LOCATION L0007243     VOLUME   246820.719 4070342.893 89.65
** End of LINE VOLUME Source ID = DW6
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = HUGHES1
** DESCRSRC Truck North Hughes Ave
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246832.540, 4070343.402, 89.90, 0.00, 2.84
** 246842.732, 4070723.116, 95.21, 0.00, 2.84
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   LOCATION L0007251     VOLUME   246832.581 4070344.925 90.25
   LOCATION L0007252     VOLUME   246832.745 4070351.019 90.86
   LOCATION L0007253     VOLUME   246832.908 4070357.113 91.47
   LOCATION L0007254     VOLUME   246833.072 4070363.207 92.09
   LOCATION L0007255     VOLUME   246833.235 4070369.301 92.70
   LOCATION L0007256     VOLUME   246833.399 4070375.395 92.96
   LOCATION L0007257     VOLUME   246833.563 4070381.488 93.17
   LOCATION L0007258     VOLUME   246833.726 4070387.582 93.38
   LOCATION L0007259     VOLUME   246833.890 4070393.676 93.59
   LOCATION L0007260     VOLUME   246834.053 4070399.770 93.79
   LOCATION L0007261     VOLUME   246834.217 4070405.864 93.77
   LOCATION L0007262     VOLUME   246834.380 4070411.957 93.74
   LOCATION L0007263     VOLUME   246834.544 4070418.051 93.71
   LOCATION L0007264     VOLUME   246834.707 4070424.145 93.68
   LOCATION L0007265     VOLUME   246834.871 4070430.239 93.65
   LOCATION L0007266     VOLUME   246835.035 4070436.333 93.46
   LOCATION L0007267     VOLUME   246835.198 4070442.426 93.27
   LOCATION L0007268     VOLUME   246835.362 4070448.520 93.07
   LOCATION L0007269     VOLUME   246835.525 4070454.614 92.88
   LOCATION L0007270     VOLUME   246835.689 4070460.708 92.69
   LOCATION L0007271     VOLUME   246835.852 4070466.802 92.53
   LOCATION L0007272     VOLUME   246836.016 4070472.895 92.36
   LOCATION L0007273     VOLUME   246836.180 4070478.989 92.19
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   LOCATION L0007274     VOLUME   246836.343 4070485.083 92.02
   LOCATION L0007275     VOLUME   246836.507 4070491.177 91.88
   LOCATION L0007276     VOLUME   246836.670 4070497.271 91.89
   LOCATION L0007277     VOLUME   246836.834 4070503.364 91.89
   LOCATION L0007278     VOLUME   246836.997 4070509.458 91.90
   LOCATION L0007279     VOLUME   246837.161 4070515.552 91.91
   LOCATION L0007280     VOLUME   246837.324 4070521.646 91.82
   LOCATION L0007281     VOLUME   246837.488 4070527.740 91.47
   LOCATION L0007282     VOLUME   246837.652 4070533.833 91.11
   LOCATION L0007283     VOLUME   246837.815 4070539.927 90.74
   LOCATION L0007284     VOLUME   246837.979 4070546.021 90.37
   LOCATION L0007285     VOLUME   246838.142 4070552.115 90.41
   LOCATION L0007286     VOLUME   246838.306 4070558.209 91.21
   LOCATION L0007287     VOLUME   246838.469 4070564.302 92.01
   LOCATION L0007288     VOLUME   246838.633 4070570.396 92.81
   LOCATION L0007289     VOLUME   246838.796 4070576.490 93.61
   LOCATION L0007290     VOLUME   246838.960 4070582.584 94.41
   LOCATION L0007291     VOLUME   246839.124 4070588.678 95.21
   LOCATION L0007292     VOLUME   246839.287 4070594.772 96.01
   LOCATION L0007293     VOLUME   246839.451 4070600.865 96.81
   LOCATION L0007294     VOLUME   246839.614 4070606.959 97.61
   LOCATION L0007295     VOLUME   246839.778 4070613.053 97.91
   LOCATION L0007296     VOLUME   246839.941 4070619.147 97.70
   LOCATION L0007297     VOLUME   246840.105 4070625.241 97.48
   LOCATION L0007298     VOLUME   246840.268 4070631.334 97.26
   LOCATION L0007299     VOLUME   246840.432 4070637.428 97.03
   LOCATION L0007300     VOLUME   246840.596 4070643.522 96.58
   LOCATION L0007301     VOLUME   246840.759 4070649.616 95.96
   LOCATION L0007302     VOLUME   246840.923 4070655.710 95.35
   LOCATION L0007303     VOLUME   246841.086 4070661.803 94.75
   LOCATION L0007304     VOLUME   246841.250 4070667.897 94.16
   LOCATION L0007305     VOLUME   246841.413 4070673.991 94.09
   LOCATION L0007306     VOLUME   246841.577 4070680.085 94.30
   LOCATION L0007307     VOLUME   246841.741 4070686.179 94.51
   LOCATION L0007308     VOLUME   246841.904 4070692.272 94.73
   LOCATION L0007309     VOLUME   246842.068 4070698.366 94.94
   LOCATION L0007310     VOLUME   246842.231 4070704.460 95.01
   LOCATION L0007311     VOLUME   246842.395 4070710.554 95.03
   LOCATION L0007312     VOLUME   246842.558 4070716.648 95.05
   LOCATION L0007313     VOLUME   246842.722 4070722.741 95.07
** End of LINE VOLUME Source ID = HUGHES1
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW7
** DESCRSRC Truck Driveway 7
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 8
** 246822.745, 4070187.958, 90.70, 0.00, 2.84
** 246801.622, 4070189.131, 89.96, 0.00, 2.84
** 246794.238, 4070177.077, 89.75, 0.00, 2.84
** 246784.731, 4070173.298, 89.33, 0.00, 2.84
** 246772.929, 4070172.229, 90.94, 0.00, 2.84
** 246580.284, 4070173.744, 90.11, 0.00, 2.84
** 246403.482, 4070178.099, 90.26, 0.00, 2.84
** 246401.010, 4070135.370, 88.12, 0.00, 2.84
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   LOCATION L0007314     VOLUME   246821.224 4070188.042 90.35
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LOCATION L0007315	VOLUME	246815.137	4070188.380	90.16
LOCATION L0007316	VOLUME	246809.050	4070188.719	89.97
LOCATION L0007317	VOLUME	246802.964	4070189.057	89.77
LOCATION L0007318	VOLUME	246799.140	4070185.078	89.70
LOCATION L0007319	VOLUME	246795.955	4070179.880	89.69
LOCATION L0007320	VOLUME	246791.628	4070176.040	89.67
LOCATION L0007321	VOLUME	246785.963	4070173.788	89.63
LOCATION L0007322	VOLUME	246779.981	4070172.868	89.57
LOCATION L0007323	VOLUME	246773.909	4070172.318	89.88
LOCATION L0007324	VOLUME	246767.818	4070172.269	90.16
LOCATION L0007325	VOLUME	246761.722	4070172.317	90.45
LOCATION L0007326	VOLUME	246755.626	4070172.365	90.74
LOCATION L0007327	VOLUME	246749.530	4070172.413	91.01
LOCATION L0007328	VOLUME	246743.434	4070172.461	91.17
LOCATION L0007329	VOLUME	246737.339	4070172.509	91.32
LOCATION L0007330	VOLUME	246731.243	4070172.557	91.47
LOCATION L0007331	VOLUME	246725.147	4070172.605	91.61
LOCATION L0007332	VOLUME	246719.051	4070172.653	91.65
LOCATION L0007333	VOLUME	246712.955	4070172.701	91.12
LOCATION L0007334	VOLUME	246706.860	4070172.749	90.60
LOCATION L0007335	VOLUME	246700.764	4070172.797	90.07
LOCATION L0007336	VOLUME	246694.668	4070172.845	89.54
LOCATION L0007337	VOLUME	246688.572	4070172.892	89.09
LOCATION L0007338	VOLUME	246682.476	4070172.940	88.85
LOCATION L0007339	VOLUME	246676.380	4070172.988	88.62
LOCATION L0007340	VOLUME	246670.285	4070173.036	88.39
LOCATION L0007341	VOLUME	246664.189	4070173.084	88.16
LOCATION L0007342	VOLUME	246658.093	4070173.132	88.09
LOCATION L0007343	VOLUME	246651.997	4070173.180	88.38
LOCATION L0007344	VOLUME	246645.901	4070173.228	88.68
LOCATION L0007345	VOLUME	246639.806	4070173.276	88.97
LOCATION L0007346	VOLUME	246633.710	4070173.324	89.27
LOCATION L0007347	VOLUME	246627.614	4070173.372	89.53
LOCATION L0007348	VOLUME	246621.518	4070173.420	89.73
LOCATION L0007349	VOLUME	246615.422	4070173.468	89.93
LOCATION L0007350	VOLUME	246609.327	4070173.515	90.14
LOCATION L0007351	VOLUME	246603.231	4070173.563	90.34
LOCATION L0007352	VOLUME	246597.135	4070173.611	90.50
LOCATION L0007353	VOLUME	246591.039	4070173.659	90.59
LOCATION L0007354	VOLUME	246584.943	4070173.707	90.69
LOCATION L0007355	VOLUME	246578.848	4070173.779	90.78
LOCATION L0007356	VOLUME	246572.754	4070173.929	90.89
LOCATION L0007357	VOLUME	246566.660	4070174.079	91.00
LOCATION L0007358	VOLUME	246560.565	4070174.229	91.11
LOCATION L0007359	VOLUME	246554.471	4070174.380	91.23
LOCATION L0007360	VOLUME	246548.377	4070174.530	91.34
LOCATION L0007361	VOLUME	246542.283	4070174.680	91.45
LOCATION L0007362	VOLUME	246536.189	4070174.830	91.56
LOCATION L0007363	VOLUME	246530.095	4070174.980	91.66
LOCATION L0007364	VOLUME	246524.001	4070175.130	91.77
LOCATION L0007365	VOLUME	246517.906	4070175.280	91.87
LOCATION L0007366	VOLUME	246511.812	4070175.430	91.97
LOCATION L0007367	VOLUME	246505.718	4070175.581	92.07
LOCATION L0007368	VOLUME	246499.624	4070175.731	92.16
LOCATION L0007369	VOLUME	246493.530	4070175.881	92.26
LOCATION L0007370	VOLUME	246487.436	4070176.031	92.35
LOCATION L0007371	VOLUME	246481.341	4070176.181	92.44
LOCATION L0007372	VOLUME	246475.247	4070176.331	92.30
LOCATION L0007373	VOLUME	246469.153	4070176.481	92.09
LOCATION L0007374	VOLUME	246463.059	4070176.631	91.88
LOCATION L0007375	VOLUME	246456.965	4070176.781	91.67
LOCATION L0007376	VOLUME	246450.871	4070176.932	91.46

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   LOCATION L0007377     VOLUME   246444.777 4070177.082 91.28
   LOCATION L0007378     VOLUME   246438.682 4070177.232 91.10
   LOCATION L0007379     VOLUME   246432.588 4070177.382 90.93
   LOCATION L0007380     VOLUME   246426.494 4070177.532 90.76
   LOCATION L0007381     VOLUME   246420.400 4070177.682 90.60
   LOCATION L0007382     VOLUME   246414.306 4070177.832 90.44
   LOCATION L0007383     VOLUME   246408.212 4070177.982 90.28
   LOCATION L0007384     VOLUME   246403.403 4070176.736 90.07
   LOCATION L0007385     VOLUME   246403.051 4070170.651 89.63
   LOCATION L0007386     VOLUME   246402.699 4070164.565 89.17
   LOCATION L0007387     VOLUME   246402.347 4070158.479 88.80
   LOCATION L0007388     VOLUME   246401.994 4070152.393 88.70
   LOCATION L0007389     VOLUME   246401.642 4070146.307 88.60
   LOCATION L0007390     VOLUME   246401.290 4070140.221 88.50
** End of LINE VOLUME Source ID = DW7
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = HUGHES2
** DESCRSRC Truck Hughes ave South intersection
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246826.623, 4070187.844, 90.86, 0.00, 2.84
** 246826.333, 4070127.649, 90.85, 0.00, 2.84
** ----------------------------------------------------------------------
   LOCATION L0007391     VOLUME   246826.616 4070186.320 90.49
   LOCATION L0007392     VOLUME   246826.586 4070180.224 90.37
   LOCATION L0007393     VOLUME   246826.557 4070174.128 90.26
   LOCATION L0007394     VOLUME   246826.528 4070168.032 90.15
   LOCATION L0007395     VOLUME   246826.498 4070161.936 90.04
   LOCATION L0007396     VOLUME   246826.469 4070155.840 90.08
   LOCATION L0007397     VOLUME   246826.439 4070149.744 90.19
   LOCATION L0007398     VOLUME   246826.410 4070143.648 90.30
   LOCATION L0007399     VOLUME   246826.380 4070137.552 90.41
   LOCATION L0007400     VOLUME   246826.351 4070131.456 90.52
** End of LINE VOLUME Source ID = HUGHES2
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = NIELSEN
** DESCRSRC Truck Nielsen Ave East
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 6
** 246827.705, 4070129.166, 90.79, 0.00, 2.84
** 246842.524, 4070122.082, 91.63, 0.00, 2.84
** 247115.180, 4070114.194, 84.40, 0.00, 2.84
** 247160.108, 4070111.793, 87.22, 0.00, 2.84
** 247222.528, 4070102.533, 87.97, 0.00, 2.84
** 247235.560, 4070101.161, 88.39, 0.00, 2.84
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   LOCATION L0007401     VOLUME   246829.080 4070128.508 90.69
   LOCATION L0007402     VOLUME   246834.580 4070125.879 90.96
   LOCATION L0007403     VOLUME   246840.080 4070123.250 91.22
   LOCATION L0007404     VOLUME   246845.910 4070121.984 91.27
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LOCATION	L0007405	VOLUME	246852.003	4070121.808	91.27
LOCATION	L0007406	VOLUME	246858.097	4070121.631	91.28
LOCATION	L0007407	VOLUME	246864.190	4070121.455	91.28
LOCATION	L0007408	VOLUME	246870.284	4070121.279	91.29
LOCATION	L0007409	VOLUME	246876.377	4070121.102	91.30
LOCATION	L0007410	VOLUME	246882.470	4070120.926	91.30
LOCATION	L0007411	VOLUME	246888.564	4070120.750	91.31
LOCATION	L0007412	VOLUME	246894.657	4070120.573	91.31
LOCATION	L0007413	VOLUME	246900.751	4070120.397	91.31
LOCATION	L0007414	VOLUME	246906.844	4070120.221	91.25
LOCATION	L0007415	VOLUME	246912.938	4070120.045	91.19
LOCATION	L0007416	VOLUME	246919.031	4070119.868	91.12
LOCATION	L0007417	VOLUME	246925.125	4070119.692	91.06
LOCATION	L0007418	VOLUME	246931.218	4070119.516	91.05
LOCATION	L0007419	VOLUME	246937.312	4070119.339	91.33
LOCATION	L0007420	VOLUME	246943.405	4070119.163	91.61
LOCATION	L0007421	VOLUME	246949.498	4070118.987	91.89
LOCATION	L0007422	VOLUME	246955.592	4070118.811	92.17
LOCATION	L0007423	VOLUME	246961.685	4070118.634	92.44
LOCATION	L0007424	VOLUME	246967.779	4070118.458	92.64
LOCATION	L0007425	VOLUME	246973.872	4070118.282	92.85
LOCATION	L0007426	VOLUME	246979.966	4070118.105	93.06
LOCATION	L0007427	VOLUME	246986.059	4070117.929	93.27
LOCATION	L0007428	VOLUME	246992.153	4070117.753	93.41
LOCATION	L0007429	VOLUME	246998.246	4070117.577	93.41
LOCATION	L0007430	VOLUME	247004.339	4070117.400	93.42
LOCATION	L0007431	VOLUME	247010.433	4070117.224	93.43
LOCATION	L0007432	VOLUME	247016.526	4070117.048	93.43
LOCATION	L0007433	VOLUME	247022.620	4070116.871	93.14
LOCATION	L0007434	VOLUME	247028.713	4070116.695	92.44
LOCATION	L0007435	VOLUME	247034.807	4070116.519	91.75
LOCATION	L0007436	VOLUME	247040.900	4070116.343	91.05
LOCATION	L0007437	VOLUME	247046.994	4070116.166	90.35
LOCATION	L0007438	VOLUME	247053.087	4070115.990	89.75
LOCATION	L0007439	VOLUME	247059.181	4070115.814	89.24
LOCATION	L0007440	VOLUME	247065.274	4070115.637	88.74
LOCATION	L0007441	VOLUME	247071.367	4070115.461	88.23
LOCATION	L0007442	VOLUME	247077.461	4070115.285	87.72
LOCATION	L0007443	VOLUME	247083.554	4070115.109	87.21
LOCATION	L0007444	VOLUME	247089.648	4070114.932	86.69
LOCATION	L0007445	VOLUME	247095.741	4070114.756	86.18
LOCATION	L0007446	VOLUME	247101.835	4070114.580	85.66
LOCATION	L0007447	VOLUME	247107.928	4070114.403	85.13
LOCATION	L0007448	VOLUME	247114.022	4070114.227	84.95
LOCATION	L0007449	VOLUME	247120.110	4070113.930	84.93
LOCATION	L0007450	VOLUME	247126.197	4070113.605	84.91
LOCATION	L0007451	VOLUME	247132.285	4070113.280	84.89
LOCATION	L0007452	VOLUME	247138.372	4070112.954	84.86
LOCATION	L0007453	VOLUME	247144.459	4070112.629	85.31
LOCATION	L0007454	VOLUME	247150.547	4070112.304	85.94
LOCATION	L0007455	VOLUME	247156.634	4070111.978	86.57
LOCATION	L0007456	VOLUME	247162.697	4070111.409	87.21
LOCATION	L0007457	VOLUME	247168.727	4070110.514	87.86
LOCATION	L0007458	VOLUME	247174.757	4070109.620	88.05
LOCATION	L0007459	VOLUME	247180.787	4070108.725	88.10
LOCATION	L0007460	VOLUME	247186.817	4070107.831	88.15
LOCATION	L0007461	VOLUME	247192.847	4070106.936	88.18
LOCATION	L0007462	VOLUME	247198.877	4070106.041	88.19
LOCATION	L0007463	VOLUME	247204.907	4070105.147	88.17
LOCATION	L0007464	VOLUME	247210.937	4070104.252	88.14
LOCATION	L0007465	VOLUME	247216.967	4070103.358	88.11
LOCATION	L0007466	VOLUME	247222.999	4070102.483	88.08

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   LOCATION L0007467     VOLUME   247229.062 4070101.845 88.06
   LOCATION L0007468     VOLUME   247235.124 4070101.207 88.21
** End of LINE VOLUME Source ID = NIELSEN
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = HUGHES3
** DESCRSRC Truck Hughes ave south 2
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 7
** 246826.168, 4070127.314, 90.86, 0.00, 2.84
** 246816.811, 4070044.143, 90.82, 0.00, 2.84
** 246822.693, 4069946.565, 90.94, 0.00, 2.84
** 246822.693, 4069923.778, 90.57, 0.00, 2.84
** 246859.722, 4069849.245, 87.83, 0.00, 2.84
** 246910.043, 4069799.873, 87.61, 0.00, 2.84
** 246993.596, 4069719.023, 86.10, 0.00, 2.84
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   LOCATION L0007469     VOLUME   246825.998 4070125.799 90.67
   LOCATION L0007470     VOLUME   246825.316 4070119.742 90.85
   LOCATION L0007471     VOLUME   246824.635 4070113.684 91.03
   LOCATION L0007472     VOLUME   246823.953 4070107.626 91.21
   LOCATION L0007473     VOLUME   246823.271 4070101.568 91.39
   LOCATION L0007474     VOLUME   246822.590 4070095.511 91.42
   LOCATION L0007475     VOLUME   246821.908 4070089.453 91.40
   LOCATION L0007476     VOLUME   246821.227 4070083.395 91.37
   LOCATION L0007477     VOLUME   246820.545 4070077.337 91.35
   LOCATION L0007478     VOLUME   246819.864 4070071.279 91.33
   LOCATION L0007479     VOLUME   246819.182 4070065.222 91.26
   LOCATION L0007480     VOLUME   246818.501 4070059.164 91.18
   LOCATION L0007481     VOLUME   246817.819 4070053.106 91.11
   LOCATION L0007482     VOLUME   246817.138 4070047.048 91.06
   LOCATION L0007483     VOLUME   246817.002 4070040.976 91.01
   LOCATION L0007484     VOLUME   246817.368 4070034.891 90.96
   LOCATION L0007485     VOLUME   246817.735 4070028.806 90.90
   LOCATION L0007486     VOLUME   246818.102 4070022.722 90.84
   LOCATION L0007487     VOLUME   246818.469 4070016.637 90.78
   LOCATION L0007488     VOLUME   246818.836 4070010.552 90.71
   LOCATION L0007489     VOLUME   246819.202 4070004.467 90.82
   LOCATION L0007490     VOLUME   246819.569 4069998.382 90.94
   LOCATION L0007491     VOLUME   246819.936 4069992.297 91.06
   LOCATION L0007492     VOLUME   246820.303 4069986.212 91.18
   LOCATION L0007493     VOLUME   246820.670 4069980.127 91.29
   LOCATION L0007494     VOLUME   246821.036 4069974.042 91.26
   LOCATION L0007495     VOLUME   246821.403 4069967.957 91.24
   LOCATION L0007496     VOLUME   246821.770 4069961.872 91.22
   LOCATION L0007497     VOLUME   246822.137 4069955.787 91.19
   LOCATION L0007498     VOLUME   246822.504 4069949.702 91.15
   LOCATION L0007499     VOLUME   246822.693 4069943.612 90.91
   LOCATION L0007500     VOLUME   246822.693 4069937.516 90.67
   LOCATION L0007501     VOLUME   246822.693 4069931.420 90.44
   LOCATION L0007502     VOLUME   246822.693 4069925.324 90.20
   LOCATION L0007503     VOLUME   246824.717 4069919.703 89.99
   LOCATION L0007504     VOLUME   246827.430 4069914.244 89.81
   LOCATION L0007505     VOLUME   246830.142 4069908.784 89.63
   LOCATION L0007506     VOLUME   246832.854 4069903.325 89.44
   LOCATION L0007507     VOLUME   246835.566 4069897.865 89.26
   LOCATION L0007508     VOLUME   246838.279 4069892.406 89.08
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   LOCATION L0007509     VOLUME   246840.991 4069886.947 88.90
   LOCATION L0007510     VOLUME   246843.703 4069881.487 88.75
   LOCATION L0007511     VOLUME   246846.416 4069876.028 88.63
   LOCATION L0007512     VOLUME   246849.128 4069870.569 88.55
   LOCATION L0007513     VOLUME   246851.840 4069865.109 88.50
   LOCATION L0007514     VOLUME   246854.552 4069859.650 88.48
   LOCATION L0007515     VOLUME   246857.265 4069854.191 88.46
   LOCATION L0007516     VOLUME   246860.131 4069848.843 88.42
   LOCATION L0007517     VOLUME   246864.483 4069844.574 88.40
   LOCATION L0007518     VOLUME   246868.834 4069840.305 88.33
   LOCATION L0007519     VOLUME   246873.185 4069836.035 88.22
   LOCATION L0007520     VOLUME   246877.537 4069831.766 88.07
   LOCATION L0007521     VOLUME   246881.888 4069827.497 87.82
   LOCATION L0007522     VOLUME   246886.240 4069823.228 87.57
   LOCATION L0007523     VOLUME   246890.591 4069818.958 87.40
   LOCATION L0007524     VOLUME   246894.942 4069814.689 87.32
   LOCATION L0007525     VOLUME   246899.294 4069810.420 87.32
   LOCATION L0007526     VOLUME   246903.645 4069806.150 87.33
   LOCATION L0007527     VOLUME   246907.996 4069801.881 87.33
   LOCATION L0007528     VOLUME   246912.363 4069797.628 87.38
   LOCATION L0007529     VOLUME   246916.744 4069793.389 87.44
   LOCATION L0007530     VOLUME   246921.125 4069789.150 87.45
   LOCATION L0007531     VOLUME   246925.506 4069784.911 87.42
   LOCATION L0007532     VOLUME   246929.887 4069780.672 87.35
   LOCATION L0007533     VOLUME   246934.267 4069776.432 87.04
   LOCATION L0007534     VOLUME   246938.648 4069772.193 86.76
   LOCATION L0007535     VOLUME   246943.029 4069767.954 86.53
   LOCATION L0007536     VOLUME   246947.410 4069763.715 86.33
   LOCATION L0007537     VOLUME   246951.791 4069759.476 86.18
   LOCATION L0007538     VOLUME   246956.171 4069755.237 86.06
   LOCATION L0007539     VOLUME   246960.552 4069750.998 86.00
   LOCATION L0007540     VOLUME   246964.933 4069746.759 86.00
   LOCATION L0007541     VOLUME   246969.314 4069742.520 86.00
   LOCATION L0007542     VOLUME   246973.695 4069738.281 86.00
   LOCATION L0007543     VOLUME   246978.075 4069734.042 86.00
   LOCATION L0007544     VOLUME   246982.456 4069729.803 86.00
   LOCATION L0007545     VOLUME   246986.837 4069725.563 86.00
   LOCATION L0007546     VOLUME   246991.218 4069721.324 86.03
** End of LINE VOLUME Source ID = HUGHES3
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW2
** DESCRSRC Truck Driveway 2
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246400.631, 4070245.330, 91.21, 0.00, 2.84
** 246049.301, 4070249.703, 89.10, 0.00, 2.84
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   LOCATION L0007547     VOLUME   246399.107 4070245.349 92.28
   LOCATION L0007548     VOLUME   246393.011 4070245.425 92.66
   LOCATION L0007549     VOLUME   246386.916 4070245.501 93.07
   LOCATION L0007550     VOLUME   246380.820 4070245.577 93.51
   LOCATION L0007551     VOLUME   246374.725 4070245.653 93.95
   LOCATION L0007552     VOLUME   246368.629 4070245.729 94.38
   LOCATION L0007553     VOLUME   246362.534 4070245.804 94.82
   LOCATION L0007554     VOLUME   246356.438 4070245.880 95.36
   LOCATION L0007555     VOLUME   246350.343 4070245.956 95.97
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   LOCATION L0007556     VOLUME   246344.247 4070246.032 96.58
   LOCATION L0007557     VOLUME   246338.152 4070246.108 97.18
   LOCATION L0007558     VOLUME   246332.056 4070246.184 97.79
   LOCATION L0007559     VOLUME   246325.961 4070246.260 98.12
   LOCATION L0007560     VOLUME   246319.865 4070246.335 98.30
   LOCATION L0007561     VOLUME   246313.769 4070246.411 98.48
   LOCATION L0007562     VOLUME   246307.674 4070246.487 98.66
   LOCATION L0007563     VOLUME   246301.578 4070246.563 98.84
   LOCATION L0007564     VOLUME   246295.483 4070246.639 98.08
   LOCATION L0007565     VOLUME   246289.387 4070246.715 97.01
   LOCATION L0007566     VOLUME   246283.292 4070246.791 95.93
   LOCATION L0007567     VOLUME   246277.196 4070246.867 94.86
   LOCATION L0007568     VOLUME   246271.101 4070246.942 93.79
   LOCATION L0007569     VOLUME   246265.005 4070247.018 92.94
   LOCATION L0007570     VOLUME   246258.910 4070247.094 92.13
   LOCATION L0007571     VOLUME   246252.814 4070247.170 91.33
   LOCATION L0007572     VOLUME   246246.719 4070247.246 90.53
   LOCATION L0007573     VOLUME   246240.623 4070247.322 89.73
   LOCATION L0007574     VOLUME   246234.528 4070247.398 89.50
   LOCATION L0007575     VOLUME   246228.432 4070247.473 89.34
   LOCATION L0007576     VOLUME   246222.337 4070247.549 89.18
   LOCATION L0007577     VOLUME   246216.241 4070247.625 89.02
   LOCATION L0007578     VOLUME   246210.146 4070247.701 88.85
   LOCATION L0007579     VOLUME   246204.050 4070247.777 89.08
   LOCATION L0007580     VOLUME   246197.954 4070247.853 89.32
   LOCATION L0007581     VOLUME   246191.859 4070247.929 89.55
   LOCATION L0007582     VOLUME   246185.763 4070248.004 89.78
   LOCATION L0007583     VOLUME   246179.668 4070248.080 90.02
   LOCATION L0007584     VOLUME   246173.572 4070248.156 90.45
   LOCATION L0007585     VOLUME   246167.477 4070248.232 90.88
   LOCATION L0007586     VOLUME   246161.381 4070248.308 91.31
   LOCATION L0007587     VOLUME   246155.286 4070248.384 91.74
   LOCATION L0007588     VOLUME   246149.190 4070248.460 92.10
   LOCATION L0007589     VOLUME   246143.095 4070248.535 92.10
   LOCATION L0007590     VOLUME   246136.999 4070248.611 92.09
   LOCATION L0007591     VOLUME   246130.904 4070248.687 92.09
   LOCATION L0007592     VOLUME   246124.808 4070248.763 92.08
   LOCATION L0007593     VOLUME   246118.713 4070248.839 91.99
   LOCATION L0007594     VOLUME   246112.617 4070248.915 91.58
   LOCATION L0007595     VOLUME   246106.522 4070248.991 91.17
   LOCATION L0007596     VOLUME   246100.426 4070249.066 90.76
   LOCATION L0007597     VOLUME   246094.330 4070249.142 90.35
   LOCATION L0007598     VOLUME   246088.235 4070249.218 89.99
   LOCATION L0007599     VOLUME   246082.139 4070249.294 89.77
   LOCATION L0007600     VOLUME   246076.044 4070249.370 89.56
   LOCATION L0007601     VOLUME   246069.948 4070249.446 89.34
   LOCATION L0007602     VOLUME   246063.853 4070249.522 89.13
   LOCATION L0007603     VOLUME   246057.757 4070249.598 89.00
   LOCATION L0007604     VOLUME   246051.662 4070249.673 89.00
** End of LINE VOLUME Source ID = DW2
** ----------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = MARKS1
** DESCRSRC Truck Marks Ave North
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246046.685, 4070248.070, 89.10, 0.00, 2.84
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** 246067.431, 4070724.139, 88.41, 0.00, 2.84
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   LOCATION L0007605     VOLUME   246046.751 4070249.592 89.00
   LOCATION L0007606     VOLUME   246047.017 4070255.683 89.08
   LOCATION L0007607     VOLUME   246047.282 4070261.773 89.17
   LOCATION L0007608     VOLUME   246047.547 4070267.863 89.25
   LOCATION L0007609     VOLUME   246047.813 4070273.953 89.32
   LOCATION L0007610     VOLUME   246048.078 4070280.043 89.40
   LOCATION L0007611     VOLUME   246048.344 4070286.134 89.59
   LOCATION L0007612     VOLUME   246048.609 4070292.224 89.79
   LOCATION L0007613     VOLUME   246048.874 4070298.314 89.98
   LOCATION L0007614     VOLUME   246049.140 4070304.404 90.18
   LOCATION L0007615     VOLUME   246049.405 4070310.495 90.36
   LOCATION L0007616     VOLUME   246049.670 4070316.585 90.41
   LOCATION L0007617     VOLUME   246049.936 4070322.675 90.47
   LOCATION L0007618     VOLUME   246050.201 4070328.765 90.54
   LOCATION L0007619     VOLUME   246050.467 4070334.855 90.62
   LOCATION L0007620     VOLUME   246050.732 4070340.946 90.67
   LOCATION L0007621     VOLUME   246050.997 4070347.036 90.54
   LOCATION L0007622     VOLUME   246051.263 4070353.126 90.40
   LOCATION L0007623     VOLUME   246051.528 4070359.216 90.26
   LOCATION L0007624     VOLUME   246051.794 4070365.307 90.11
   LOCATION L0007625     VOLUME   246052.059 4070371.397 89.92
   LOCATION L0007626     VOLUME   246052.324 4070377.487 89.56
   LOCATION L0007627     VOLUME   246052.590 4070383.577 89.21
   LOCATION L0007628     VOLUME   246052.855 4070389.667 88.85
   LOCATION L0007629     VOLUME   246053.121 4070395.758 88.48
   LOCATION L0007630     VOLUME   246053.386 4070401.848 88.16
   LOCATION L0007631     VOLUME   246053.651 4070407.938 87.95
   LOCATION L0007632     VOLUME   246053.917 4070414.028 87.74
   LOCATION L0007633     VOLUME   246054.182 4070420.119 87.52
   LOCATION L0007634     VOLUME   246054.448 4070426.209 87.31
   LOCATION L0007635     VOLUME   246054.713 4070432.299 87.18
   LOCATION L0007636     VOLUME   246054.978 4070438.389 87.17
   LOCATION L0007637     VOLUME   246055.244 4070444.479 87.16
   LOCATION L0007638     VOLUME   246055.509 4070450.570 87.15
   LOCATION L0007639     VOLUME   246055.775 4070456.660 87.14
   LOCATION L0007640     VOLUME   246056.040 4070462.750 87.21
   LOCATION L0007641     VOLUME   246056.305 4070468.840 87.38
   LOCATION L0007642     VOLUME   246056.571 4070474.931 87.56
   LOCATION L0007643     VOLUME   246056.836 4070481.021 87.73
   LOCATION L0007644     VOLUME   246057.102 4070487.111 87.91
   LOCATION L0007645     VOLUME   246057.367 4070493.201 88.00
   LOCATION L0007646     VOLUME   246057.632 4070499.291 88.00
   LOCATION L0007647     VOLUME   246057.898 4070505.382 88.00
   LOCATION L0007648     VOLUME   246058.163 4070511.472 88.00
   LOCATION L0007649     VOLUME   246058.428 4070517.562 88.00
   LOCATION L0007650     VOLUME   246058.694 4070523.652 88.23
   LOCATION L0007651     VOLUME   246058.959 4070529.743 88.63
   LOCATION L0007652     VOLUME   246059.225 4070535.833 89.03
   LOCATION L0007653     VOLUME   246059.490 4070541.923 89.44
   LOCATION L0007654     VOLUME   246059.755 4070548.013 89.85
   LOCATION L0007655     VOLUME   246060.021 4070554.103 90.14
   LOCATION L0007656     VOLUME   246060.286 4070560.194 90.33
   LOCATION L0007657     VOLUME   246060.552 4070566.284 90.52
   LOCATION L0007658     VOLUME   246060.817 4070572.374 90.72
   LOCATION L0007659     VOLUME   246061.082 4070578.464 90.91
   LOCATION L0007660     VOLUME   246061.348 4070584.554 90.81
   LOCATION L0007661     VOLUME   246061.613 4070590.645 90.61
   LOCATION L0007662     VOLUME   246061.879 4070596.735 90.41
   LOCATION L0007663     VOLUME   246062.144 4070602.825 90.22
   LOCATION L0007664     VOLUME   246062.409 4070608.915 90.03
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   LOCATION L0007665     VOLUME   246062.675 4070615.006 89.83
   LOCATION L0007666     VOLUME   246062.940 4070621.096 89.63
   LOCATION L0007667     VOLUME   246063.206 4070627.186 89.43
   LOCATION L0007668     VOLUME   246063.471 4070633.276 89.22
   LOCATION L0007669     VOLUME   246063.736 4070639.366 89.02
   LOCATION L0007670     VOLUME   246064.002 4070645.457 89.18
   LOCATION L0007671     VOLUME   246064.267 4070651.547 89.38
   LOCATION L0007672     VOLUME   246064.533 4070657.637 89.59
   LOCATION L0007673     VOLUME   246064.798 4070663.727 89.79
   LOCATION L0007674     VOLUME   246065.063 4070669.818 89.99
   LOCATION L0007675     VOLUME   246065.329 4070675.908 90.03
   LOCATION L0007676     VOLUME   246065.594 4070681.998 90.07
   LOCATION L0007677     VOLUME   246065.860 4070688.088 90.12
   LOCATION L0007678     VOLUME   246066.125 4070694.178 90.16
   LOCATION L0007679     VOLUME   246066.390 4070700.269 90.19
   LOCATION L0007680     VOLUME   246066.656 4070706.359 89.75
   LOCATION L0007681     VOLUME   246066.921 4070712.449 89.31
   LOCATION L0007682     VOLUME   246067.187 4070718.539 88.86
** End of LINE VOLUME Source ID = MARKS1
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = NIELSEN2
** DESCRSRC Truck Nielsen ave West
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246407.218, 4070132.763, 88.03, 0.00, 2.84
** 246037.461, 4070128.549, 90.86, 0.00, 2.84
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   LOCATION L0007683     VOLUME   246405.694 4070132.745 88.57
   LOCATION L0007684     VOLUME   246399.599 4070132.676 88.35
   LOCATION L0007685     VOLUME   246393.503 4070132.606 88.13
   LOCATION L0007686     VOLUME   246387.408 4070132.537 88.17
   LOCATION L0007687     VOLUME   246381.312 4070132.468 88.58
   LOCATION L0007688     VOLUME   246375.216 4070132.398 88.99
   LOCATION L0007689     VOLUME   246369.121 4070132.329 89.39
   LOCATION L0007690     VOLUME   246363.025 4070132.259 89.80
   LOCATION L0007691     VOLUME   246356.930 4070132.190 90.10
   LOCATION L0007692     VOLUME   246350.834 4070132.120 90.31
   LOCATION L0007693     VOLUME   246344.738 4070132.051 90.51
   LOCATION L0007694     VOLUME   246338.643 4070131.981 90.71
   LOCATION L0007695     VOLUME   246332.547 4070131.912 90.92
   LOCATION L0007696     VOLUME   246326.452 4070131.842 91.01
   LOCATION L0007697     VOLUME   246320.356 4070131.773 91.02
   LOCATION L0007698     VOLUME   246314.260 4070131.703 91.03
   LOCATION L0007699     VOLUME   246308.165 4070131.634 91.04
   LOCATION L0007700     VOLUME   246302.069 4070131.565 91.05
   LOCATION L0007701     VOLUME   246295.974 4070131.495 91.17
   LOCATION L0007702     VOLUME   246289.878 4070131.426 91.35
   LOCATION L0007703     VOLUME   246283.782 4070131.356 91.54
   LOCATION L0007704     VOLUME   246277.687 4070131.287 91.72
   LOCATION L0007705     VOLUME   246271.591 4070131.217 91.91
   LOCATION L0007706     VOLUME   246265.496 4070131.148 91.96
   LOCATION L0007707     VOLUME   246259.400 4070131.078 91.96
   LOCATION L0007708     VOLUME   246253.304 4070131.009 91.97
   LOCATION L0007709     VOLUME   246247.209 4070130.939 91.97
   LOCATION L0007710     VOLUME   246241.113 4070130.870 91.97
   LOCATION L0007711     VOLUME   246235.018 4070130.800 92.14
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   LOCATION L0007712     VOLUME   246228.922 4070130.731 92.34
   LOCATION L0007713     VOLUME   246222.826 4070130.661 92.55
   LOCATION L0007714     VOLUME   246216.731 4070130.592 92.76
   LOCATION L0007715     VOLUME   246210.635 4070130.523 92.96
   LOCATION L0007716     VOLUME   246204.540 4070130.453 93.17
   LOCATION L0007717     VOLUME   246198.444 4070130.384 93.37
   LOCATION L0007718     VOLUME   246192.348 4070130.314 93.58
   LOCATION L0007719     VOLUME   246186.253 4070130.245 93.78
   LOCATION L0007720     VOLUME   246180.157 4070130.175 93.99
   LOCATION L0007721     VOLUME   246174.061 4070130.106 93.60
   LOCATION L0007722     VOLUME   246167.966 4070130.036 93.20
   LOCATION L0007723     VOLUME   246161.870 4070129.967 92.79
   LOCATION L0007724     VOLUME   246155.775 4070129.897 92.38
   LOCATION L0007725     VOLUME   246149.679 4070129.828 91.99
   LOCATION L0007726     VOLUME   246143.583 4070129.758 91.98
   LOCATION L0007727     VOLUME   246137.488 4070129.689 91.98
   LOCATION L0007728     VOLUME   246131.392 4070129.619 91.97
   LOCATION L0007729     VOLUME   246125.297 4070129.550 91.97
   LOCATION L0007730     VOLUME   246119.201 4070129.481 91.99
   LOCATION L0007731     VOLUME   246113.105 4070129.411 92.20
   LOCATION L0007732     VOLUME   246107.010 4070129.342 92.40
   LOCATION L0007733     VOLUME   246100.914 4070129.272 92.60
   LOCATION L0007734     VOLUME   246094.819 4070129.203 92.81
   LOCATION L0007735     VOLUME   246088.723 4070129.133 92.93
   LOCATION L0007736     VOLUME   246082.627 4070129.064 92.72
   LOCATION L0007737     VOLUME   246076.532 4070128.994 92.52
   LOCATION L0007738     VOLUME   246070.436 4070128.925 92.31
   LOCATION L0007739     VOLUME   246064.341 4070128.855 92.11
   LOCATION L0007740     VOLUME   246058.245 4070128.786 91.90
   LOCATION L0007741     VOLUME   246052.149 4070128.716 91.70
   LOCATION L0007742     VOLUME   246046.054 4070128.647 91.49
   LOCATION L0007743     VOLUME   246039.958 4070128.577 91.28
** End of LINE VOLUME Source ID = NIELSEN2
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = MARKS2
** DESCRSRC Truck Marks South
** PREFIX
** Length of Side = 3.05
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 3.05
** SZINIT = 1.42
** Nodes = 2
** 246039.054, 4070125.811, 90.75, 0.00, 2.84
** 246024.070, 4069725.019, 88.06, 0.00, 2.84
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   LOCATION L0007744     VOLUME   246038.997 4070124.288 91.11
   LOCATION L0007745     VOLUME   246038.769 4070118.197 90.90
   LOCATION L0007746     VOLUME   246038.542 4070112.105 90.69
   LOCATION L0007747     VOLUME   246038.314 4070106.013 90.48
   LOCATION L0007748     VOLUME   246038.086 4070099.921 90.27
   LOCATION L0007749     VOLUME   246037.858 4070093.830 90.06
   LOCATION L0007750     VOLUME   246037.631 4070087.738 89.85
   LOCATION L0007751     VOLUME   246037.403 4070081.646 89.63
   LOCATION L0007752     VOLUME   246037.175 4070075.554 89.42
   LOCATION L0007753     VOLUME   246036.947 4070069.463 89.25
   LOCATION L0007754     VOLUME   246036.720 4070063.371 89.40
   LOCATION L0007755     VOLUME   246036.492 4070057.279 89.55
   LOCATION L0007756     VOLUME   246036.264 4070051.187 89.70
   LOCATION L0007757     VOLUME   246036.036 4070045.096 89.86
   LOCATION L0007758     VOLUME   246035.809 4070039.004 90.03
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   LOCATION L0007759     VOLUME   246035.581 4070032.912 90.24
   LOCATION L0007760     VOLUME   246035.353 4070026.820 90.44
   LOCATION L0007761     VOLUME   246035.125 4070020.729 90.64
   LOCATION L0007762     VOLUME   246034.898 4070014.637 90.85
   LOCATION L0007763     VOLUME   246034.670 4070008.545 90.99
   LOCATION L0007764     VOLUME   246034.442 4070002.453 90.96
   LOCATION L0007765     VOLUME   246034.214 4069996.362 90.94
   LOCATION L0007766     VOLUME   246033.987 4069990.270 90.91
   LOCATION L0007767     VOLUME   246033.759 4069984.178 90.89
   LOCATION L0007768     VOLUME   246033.531 4069978.086 90.76
   LOCATION L0007769     VOLUME   246033.303 4069971.995 90.39
   LOCATION L0007770     VOLUME   246033.076 4069965.903 90.01
   LOCATION L0007771     VOLUME   246032.848 4069959.811 89.62
   LOCATION L0007772     VOLUME   246032.620 4069953.719 89.24
   LOCATION L0007773     VOLUME   246032.392 4069947.628 88.92
   LOCATION L0007774     VOLUME   246032.165 4069941.536 88.72
   LOCATION L0007775     VOLUME   246031.937 4069935.444 88.51
   LOCATION L0007776     VOLUME   246031.709 4069929.352 88.31
   LOCATION L0007777     VOLUME   246031.481 4069923.261 88.11
   LOCATION L0007778     VOLUME   246031.253 4069917.169 87.81
   LOCATION L0007779     VOLUME   246031.026 4069911.077 87.41
   LOCATION L0007780     VOLUME   246030.798 4069904.985 87.00
   LOCATION L0007781     VOLUME   246030.570 4069898.894 86.59
   LOCATION L0007782     VOLUME   246030.342 4069892.802 86.19
   LOCATION L0007783     VOLUME   246030.115 4069886.710 85.89
   LOCATION L0007784     VOLUME   246029.887 4069880.618 85.69
   LOCATION L0007785     VOLUME   246029.659 4069874.527 85.50
   LOCATION L0007786     VOLUME   246029.431 4069868.435 85.30
   LOCATION L0007787     VOLUME   246029.204 4069862.343 85.10
   LOCATION L0007788     VOLUME   246028.976 4069856.252 85.28
   LOCATION L0007789     VOLUME   246028.748 4069850.160 85.68
   LOCATION L0007790     VOLUME   246028.520 4069844.068 86.09
   LOCATION L0007791     VOLUME   246028.293 4069837.976 86.48
   LOCATION L0007792     VOLUME   246028.065 4069831.885 86.88
   LOCATION L0007793     VOLUME   246027.837 4069825.793 87.01
   LOCATION L0007794     VOLUME   246027.609 4069819.701 87.03
   LOCATION L0007795     VOLUME   246027.382 4069813.609 87.05
   LOCATION L0007796     VOLUME   246027.154 4069807.518 87.07
   LOCATION L0007797     VOLUME   246026.926 4069801.426 87.10
   LOCATION L0007798     VOLUME   246026.698 4069795.334 87.27
   LOCATION L0007799     VOLUME   246026.471 4069789.242 87.48
   LOCATION L0007800     VOLUME   246026.243 4069783.151 87.69
   LOCATION L0007801     VOLUME   246026.015 4069777.059 87.90
   LOCATION L0007802     VOLUME   246025.787 4069770.967 88.11
   LOCATION L0007803     VOLUME   246025.560 4069764.875 88.17
   LOCATION L0007804     VOLUME   246025.332 4069758.784 88.21
   LOCATION L0007805     VOLUME   246025.104 4069752.692 88.26
   LOCATION L0007806     VOLUME   246024.876 4069746.600 88.30
   LOCATION L0007807     VOLUME   246024.649 4069740.508 88.35
   LOCATION L0007808     VOLUME   246024.421 4069734.417 88.30
   LOCATION L0007809     VOLUME   246024.193 4069728.325 88.24
** End of LINE VOLUME Source ID = MARKS2
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW6_CAR
** DESCRSRC
** PREFIX
** Length of Side = 1.83
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 1.83
** SZINIT = 0.85
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** Nodes = 4
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** 246802.237, 4070342.915, 88.88, 0.00, 1.70
** 246832.057, 4070342.296, 89.91, 0.00, 1.70
** 246842.157, 4070724.242, 95.19, 0.00, 1.70
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   LOCATION L0007811     VOLUME   246802.051 4070241.818 90.12
   LOCATION L0007812     VOLUME   246802.058 4070245.476 90.18
   LOCATION L0007813     VOLUME   246802.064 4070249.133 90.25
   LOCATION L0007814     VOLUME   246802.071 4070252.791 90.24
   LOCATION L0007815     VOLUME   246802.078 4070256.449 90.21
   LOCATION L0007816     VOLUME   246802.084 4070260.106 90.17
   LOCATION L0007817     VOLUME   246802.091 4070263.764 90.14
   LOCATION L0007818     VOLUME   246802.098 4070267.421 90.11
   LOCATION L0007819     VOLUME   246802.105 4070271.079 90.08
   LOCATION L0007820     VOLUME   246802.111 4070274.737 90.05
   LOCATION L0007821     VOLUME   246802.118 4070278.394 90.01
   LOCATION L0007822     VOLUME   246802.125 4070282.052 89.91
   LOCATION L0007823     VOLUME   246802.132 4070285.709 89.76
   LOCATION L0007824     VOLUME   246802.138 4070289.367 89.61
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   LOCATION L0007828     VOLUME   246802.165 4070303.997 88.99
   LOCATION L0007829     VOLUME   246802.172 4070307.655 88.84
   LOCATION L0007830     VOLUME   246802.179 4070311.313 88.74
   LOCATION L0007831     VOLUME   246802.185 4070314.970 88.74
   LOCATION L0007832     VOLUME   246802.192 4070318.628 88.74
   LOCATION L0007833     VOLUME   246802.199 4070322.285 88.74
   LOCATION L0007834     VOLUME   246802.206 4070325.943 88.74
   LOCATION L0007835     VOLUME   246802.212 4070329.601 88.74
   LOCATION L0007836     VOLUME   246802.219 4070333.258 88.74
   LOCATION L0007837     VOLUME   246802.226 4070336.916 88.74
   LOCATION L0007838     VOLUME   246802.233 4070340.573 88.80
   LOCATION L0007839     VOLUME   246803.553 4070342.887 89.07
   LOCATION L0007840     VOLUME   246807.210 4070342.811 89.19
   LOCATION L0007841     VOLUME   246810.866 4070342.736 89.30
   LOCATION L0007842     VOLUME   246814.523 4070342.660 89.42
   LOCATION L0007843     VOLUME   246818.180 4070342.584 89.53
   LOCATION L0007844     VOLUME   246821.837 4070342.508 89.65
   LOCATION L0007845     VOLUME   246825.494 4070342.432 89.76
   LOCATION L0007846     VOLUME   246829.150 4070342.356 89.87
   LOCATION L0007847     VOLUME   246832.077 4070343.045 90.04
   LOCATION L0007848     VOLUME   246832.174 4070346.701 90.41
   LOCATION L0007849     VOLUME   246832.271 4070350.358 90.78
   LOCATION L0007850     VOLUME   246832.367 4070354.014 91.15
   LOCATION L0007851     VOLUME   246832.464 4070357.670 91.52
   LOCATION L0007852     VOLUME   246832.561 4070361.327 91.88
   LOCATION L0007853     VOLUME   246832.657 4070364.983 92.25
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   LOCATION L0007856     VOLUME   246832.947 4070375.952 92.96
   LOCATION L0007857     VOLUME   246833.044 4070379.608 93.09
   LOCATION L0007858     VOLUME   246833.141 4070383.265 93.21
   LOCATION L0007859     VOLUME   246833.237 4070386.921 93.34
   LOCATION L0007860     VOLUME   246833.334 4070390.577 93.46
   LOCATION L0007861     VOLUME   246833.431 4070394.234 93.59
   LOCATION L0007862     VOLUME   246833.527 4070397.890 93.71
   LOCATION L0007863     VOLUME   246833.624 4070401.546 93.78
   LOCATION L0007864     VOLUME   246833.721 4070405.203 93.75
   LOCATION L0007865     VOLUME   246833.817 4070408.859 93.73
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LOCATION L0007867 VOLUME 246834.011 4070416.172 93.69
LOCATION L0007868 VOLUME 246834.107 4070419.828 93.67
LOCATION L0007869 VOLUME 246834.204 4070423.484 93.66
LOCATION L0007870 VOLUME 246834.301 4070427.141 93.64
LOCATION L0007871 VOLUME 246834.398 4070430.797 93.60
LOCATION L0007872 VOLUME 246834.494 4070434.453 93.48
LOCATION L0007873 VOLUME 246834.591 4070438.110 93.37
LOCATION L0007874 VOLUME 246834.688 4070441.766 93.25
LOCATION L0007875 VOLUME 246834.784 4070445.422 93.14
LOCATION L0007876 VOLUME 246834.881 4070449.079 93.02
LOCATION L0007877 VOLUME 246834.978 4070452.735 92.91
LOCATION L0007878 VOLUME 246835.074 4070456.391 92.79
LOCATION L0007879 VOLUME 246835.171 4070460.047 92.68
LOCATION L0007880 VOLUME 246835.268 4070463.704 92.58
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LOCATION L0007883 VOLUME 246835.558 4070474.673 92.29
LOCATION L0007884 VOLUME 246835.654 4070478.329 92.19
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LOCATION L0007887 VOLUME 246835.944 4070489.298 91.89
LOCATION L0007888 VOLUME 246836.041 4070492.954 91.87
LOCATION L0007889 VOLUME 246836.138 4070496.611 91.87
LOCATION L0007890 VOLUME 246836.234 4070500.267 91.87
LOCATION L0007891 VOLUME 246836.331 4070503.923 91.88
LOCATION L0007892 VOLUME 246836.428 4070507.580 91.88
LOCATION L0007893 VOLUME 246836.524 4070511.236 91.88
LOCATION L0007894 VOLUME 246836.621 4070514.892 91.89
LOCATION L0007895 VOLUME 246836.718 4070518.549 91.89
LOCATION L0007896 VOLUME 246836.814 4070522.205 91.77
LOCATION L0007897 VOLUME 246836.911 4070525.861 91.57
LOCATION L0007898 VOLUME 246837.008 4070529.518 91.36
LOCATION L0007899 VOLUME 246837.104 4070533.174 91.15
LOCATION L0007900 VOLUME 246837.201 4070536.830 90.94
LOCATION L0007901 VOLUME 246837.298 4070540.487 90.73
LOCATION L0007902 VOLUME 246837.395 4070544.143 90.51
LOCATION L0007903 VOLUME 246837.491 4070547.799 90.30
LOCATION L0007904 VOLUME 246837.588 4070551.456 90.35
LOCATION L0007905 VOLUME 246837.685 4070555.112 90.84
LOCATION L0007906 VOLUME 246837.781 4070558.768 91.32
LOCATION L0007907 VOLUME 246837.878 4070562.424 91.80
LOCATION L0007908 VOLUME 246837.975 4070566.081 92.28
LOCATION L0007909 VOLUME 246838.071 4070569.737 92.76
LOCATION L0007910 VOLUME 246838.168 4070573.393 93.24
LOCATION L0007911 VOLUME 246838.265 4070577.050 93.72
LOCATION L0007912 VOLUME 246838.361 4070580.706 94.20
LOCATION L0007913 VOLUME 246838.458 4070584.362 94.68
LOCATION L0007914 VOLUME 246838.555 4070588.019 95.15
LOCATION L0007915 VOLUME 246838.651 4070591.675 95.63
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LOCATION L0007921 VOLUME 246839.231 4070613.613 97.91
LOCATION L0007922 VOLUME 246839.328 4070617.269 97.79
LOCATION L0007923 VOLUME 246839.425 4070620.926 97.66
LOCATION L0007924 VOLUME 246839.521 4070624.582 97.54
LOCATION L0007925 VOLUME 246839.618 4070628.238 97.41
LOCATION L0007926 VOLUME 246839.715 4070631.895 97.29
LOCATION L0007927 VOLUME 246839.811 4070635.551 97.16

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   LOCATION L0007929     VOLUME   246840.005 4070642.864 96.71
   LOCATION L0007930     VOLUME   246840.101 4070646.520 96.34
   LOCATION L0007931     VOLUME   246840.198 4070650.176 95.96
   LOCATION L0007932     VOLUME   246840.295 4070653.833 95.59
   LOCATION L0007933     VOLUME   246840.392 4070657.489 95.22
   LOCATION L0007934     VOLUME   246840.488 4070661.145 94.85
   LOCATION L0007935     VOLUME   246840.585 4070664.802 94.49
   LOCATION L0007936     VOLUME   246840.682 4070668.458 94.13
   LOCATION L0007937     VOLUME   246840.778 4070672.114 94.05
   LOCATION L0007938     VOLUME   246840.875 4070675.770 94.17
   LOCATION L0007939     VOLUME   246840.972 4070679.427 94.29
   LOCATION L0007940     VOLUME   246841.068 4070683.083 94.42
   LOCATION L0007941     VOLUME   246841.165 4070686.739 94.54
   LOCATION L0007942     VOLUME   246841.262 4070690.396 94.67
   LOCATION L0007943     VOLUME   246841.358 4070694.052 94.79
   LOCATION L0007944     VOLUME   246841.455 4070697.708 94.92
   LOCATION L0007945     VOLUME   246841.552 4070701.365 95.00
   LOCATION L0007946     VOLUME   246841.648 4070705.021 95.01
   LOCATION L0007947     VOLUME   246841.745 4070708.677 95.02
   LOCATION L0007948     VOLUME   246841.842 4070712.334 95.03
   LOCATION L0007949     VOLUME   246841.938 4070715.990 95.03
   LOCATION L0007950     VOLUME   246842.035 4070719.646 95.04
   LOCATION L0007951     VOLUME   246842.132 4070723.303 95.06
** End of LINE VOLUME Source ID = DW6_CAR
** ----------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW7CAR
** DESCRSRC
** PREFIX
** Length of Side = 1.83
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 8
** 246802.558, 4070236.261, 90.14, 0.00, 1.70
** 246801.393, 4070188.350, 89.97, 0.00, 1.70
** 246825.084, 4070188.401, 90.82, 0.00, 1.70
** 246826.079, 4070129.375, 90.77, 0.00, 1.70
** 246843.050, 4070121.932, 91.67, 0.00, 1.70
** 247121.428, 4070113.596, 84.03, 0.00, 1.70
** 247167.279, 4070110.916, 88.45, 0.00, 1.70
** 247235.459, 4070101.091, 88.38, 0.00, 1.70
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   LOCATION L0007953     VOLUME   246802.447 4070231.690 89.94
   LOCATION L0007954     VOLUME   246802.358 4070228.034 89.88
   LOCATION L0007955     VOLUME   246802.269 4070224.377 89.82
   LOCATION L0007956     VOLUME   246802.180 4070220.720 89.75
   LOCATION L0007957     VOLUME   246802.091 4070217.064 89.74
   LOCATION L0007958     VOLUME   246802.002 4070213.407 89.73
   LOCATION L0007959     VOLUME   246801.913 4070209.751 89.73
   LOCATION L0007960     VOLUME   246801.825 4070206.094 89.73
   LOCATION L0007961     VOLUME   246801.736 4070202.438 89.72
   LOCATION L0007962     VOLUME   246801.647 4070198.781 89.72
   LOCATION L0007963     VOLUME   246801.558 4070195.125 89.72
   LOCATION L0007964     VOLUME   246801.469 4070191.468 89.72
   LOCATION L0007965     VOLUME   246801.931 4070188.351 89.75
   LOCATION L0007966     VOLUME   246805.589 4070188.359 89.86
   LOCATION L0007967     VOLUME   246809.246 4070188.367 89.98
   LOCATION L0007968     VOLUME   246812.904 4070188.375 90.09
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LOCATION L0007969 VOLUME 246816.562 4070188.383 90.21
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LOCATION L0007972 VOLUME 246825.125 4070185.951 90.44
LOCATION L0007973 VOLUME 246825.187 4070182.294 90.38
LOCATION L0007974 VOLUME 246825.248 4070178.637 90.32
LOCATION L0007975 VOLUME 246825.310 4070174.980 90.25
LOCATION L0007976 VOLUME 246825.372 4070171.323 90.19
LOCATION L0007977 VOLUME 246825.433 4070167.665 90.13
LOCATION L0007978 VOLUME 246825.495 4070164.008 90.07
LOCATION L0007979 VOLUME 246825.557 4070160.351 90.01
LOCATION L0007980 VOLUME 246825.618 4070156.694 90.06
LOCATION L0007981 VOLUME 246825.680 4070153.037 90.12
LOCATION L0007982 VOLUME 246825.742 4070149.380 90.19
LOCATION L0007983 VOLUME 246825.803 4070145.723 90.25
LOCATION L0007984 VOLUME 246825.865 4070142.066 90.32
LOCATION L0007985 VOLUME 246825.927 4070138.409 90.38
LOCATION L0007986 VOLUME 246825.988 4070134.752 90.45
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** LINE VOLUME Source ID = DW5CAR
** DESCRSRC
** PREFIX
** Length of Side = 1.83
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 6
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LOCATION L0008293 VOLUME 246857.118 4069855.292 88.48
LOCATION L0008294 VOLUME 246858.697 4069851.993 88.46
LOCATION L0008295 VOLUME 246860.276 4069848.694 88.42
LOCATION L0008296 VOLUME 246862.374 4069845.768 88.39
LOCATION L0008297 VOLUME 246865.000 4069843.221 88.37
LOCATION L0008298 VOLUME 246867.625 4069840.675 88.33
LOCATION L0008299 VOLUME 246870.250 4069838.128 88.27
LOCATION L0008300 VOLUME 246872.876 4069835.581 88.20
LOCATION L0008301 VOLUME 246875.501 4069833.034 88.12
LOCATION L0008302 VOLUME 246878.126 4069830.488 88.02
LOCATION L0008303 VOLUME 246880.751 4069827.941 87.84
LOCATION L0008304 VOLUME 246883.377 4069825.394 87.68
LOCATION L0008305 VOLUME 246886.002 4069822.847 87.54
LOCATION L0008306 VOLUME 246888.627 4069820.301 87.43
LOCATION L0008307 VOLUME 246891.253 4069817.754 87.35
LOCATION L0008308 VOLUME 246893.878 4069815.207 87.31
LOCATION L0008309 VOLUME 246896.503 4069812.660 87.29
LOCATION L0008310 VOLUME 246899.128 4069810.114 87.30
LOCATION L0008311 VOLUME 246901.754 4069807.567 87.31
LOCATION L0008312 VOLUME 246904.379 4069805.020 87.31
LOCATION L0008313 VOLUME 246907.004 4069802.473 87.32
LOCATION L0008314 VOLUME 246909.630 4069799.927 87.32
LOCATION L0008315 VOLUME 246912.255 4069797.380 87.37
LOCATION L0008316 VOLUME 246914.880 4069794.833 87.41
LOCATION L0008317 VOLUME 246917.505 4069792.286 87.43
LOCATION L0008318 VOLUME 246920.131 4069789.740 87.44
LOCATION L0008319 VOLUME 246922.756 4069787.193 87.43
LOCATION L0008320 VOLUME 246925.381 4069784.646 87.41
LOCATION L0008321 VOLUME 246928.007 4069782.099 87.38

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   LOCATION L0008322     VOLUME   246930.632 4069779.553 87.29
   LOCATION L0008323     VOLUME   246933.257 4069777.006 87.10
   LOCATION L0008324     VOLUME   246935.882 4069774.459 86.92
   LOCATION L0008325     VOLUME   246938.508 4069771.912 86.76
   LOCATION L0008326     VOLUME   246941.133 4069769.366 86.62
   LOCATION L0008327     VOLUME   246943.758 4069766.819 86.48
   LOCATION L0008328     VOLUME   246946.383 4069764.272 86.37
   LOCATION L0008329     VOLUME   246949.009 4069761.725 86.27
   LOCATION L0008330     VOLUME   246951.634 4069759.179 86.18
   LOCATION L0008331     VOLUME   246954.259 4069756.632 86.11
   LOCATION L0008332     VOLUME   246956.885 4069754.085 86.05
   LOCATION L0008333     VOLUME   246959.510 4069751.538 86.01
   LOCATION L0008334     VOLUME   246962.135 4069748.992 86.00
   LOCATION L0008335     VOLUME   246964.760 4069746.445 86.00
   LOCATION L0008336     VOLUME   246967.386 4069743.898 86.00
   LOCATION L0008337     VOLUME   246970.011 4069741.351 86.00
   LOCATION L0008338     VOLUME   246972.636 4069738.805 86.00
   LOCATION L0008339     VOLUME   246975.262 4069736.258 86.00
   LOCATION L0008340     VOLUME   246977.887 4069733.711 86.00
   LOCATION L0008341     VOLUME   246980.512 4069731.164 86.00
   LOCATION L0008342     VOLUME   246983.137 4069728.618 86.00
   LOCATION L0008343     VOLUME   246985.763 4069726.071 86.00
   LOCATION L0008344     VOLUME   246988.388 4069723.524 86.00
   LOCATION L0008345     VOLUME   246991.013 4069720.977 86.02
   LOCATION L0008346     VOLUME   246993.639 4069718.431 86.09
** End of LINE VOLUME Source ID = DW5CAR
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW4CAR
** DESCRSRC
** PREFIX
** Length of Side = 1.83
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
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** 246038.601, 4070128.794, 90.89, 0.00, 1.70
** 246023.201, 4069726.114, 88.07, 0.00, 1.70
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   LOCATION L0008408     VOLUME   246221.421 4070130.463 92.60
   LOCATION L0008409     VOLUME   246217.763 4070130.429 92.73
   LOCATION L0008410     VOLUME   246214.106 4070130.396 92.85
   LOCATION L0008411     VOLUME   246210.449 4070130.363 92.97
   LOCATION L0008412     VOLUME   246206.791 4070130.329 93.10
   LOCATION L0008413     VOLUME   246203.134 4070130.296 93.22
   LOCATION L0008414     VOLUME   246199.476 4070130.263 93.34
   LOCATION L0008415     VOLUME   246195.819 4070130.229 93.47
   LOCATION L0008416     VOLUME   246192.161 4070130.196 93.59
   LOCATION L0008417     VOLUME   246188.504 4070130.162 93.71
   LOCATION L0008418     VOLUME   246184.846 4070130.129 93.83
   LOCATION L0008419     VOLUME   246181.189 4070130.096 93.96
   LOCATION L0008420     VOLUME   246177.532 4070130.062 93.83
   LOCATION L0008421     VOLUME   246173.874 4070130.029 93.59
   LOCATION L0008422     VOLUME   246170.217 4070129.995 93.35
   LOCATION L0008423     VOLUME   246166.559 4070129.962 93.10
   LOCATION L0008424     VOLUME   246162.902 4070129.929 92.85
   LOCATION L0008425     VOLUME   246159.244 4070129.895 92.61
   LOCATION L0008426     VOLUME   246155.587 4070129.862 92.36
   LOCATION L0008427     VOLUME   246151.929 4070129.828 92.12
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LOCATION L0008428	VOLUME	246148.272	4070129.795	91.99
LOCATION L0008429	VOLUME	246144.614	4070129.762	91.98
LOCATION L0008430	VOLUME	246140.957	4070129.728	91.98
LOCATION L0008431	VOLUME	246137.300	4070129.695	91.98
LOCATION L0008432	VOLUME	246133.642	4070129.661	91.98
LOCATION L0008433	VOLUME	246129.985	4070129.628	91.98
LOCATION L0008434	VOLUME	246126.327	4070129.595	91.97
LOCATION L0008435	VOLUME	246122.670	4070129.561	91.97
LOCATION L0008436	VOLUME	246119.012	4070129.528	92.00
LOCATION L0008437	VOLUME	246115.355	4070129.494	92.12
LOCATION L0008438	VOLUME	246111.697	4070129.461	92.25
LOCATION L0008439	VOLUME	246108.040	4070129.428	92.37
LOCATION L0008440	VOLUME	246104.383	4070129.394	92.49
LOCATION L0008441	VOLUME	246100.725	4070129.361	92.61
LOCATION L0008442	VOLUME	246097.068	4070129.327	92.74
LOCATION L0008443	VOLUME	246093.410	4070129.294	92.86
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LOCATION L0008446	VOLUME	246082.438	4070129.194	92.72
LOCATION L0008447	VOLUME	246078.780	4070129.160	92.60
LOCATION L0008448	VOLUME	246075.123	4070129.127	92.48
LOCATION L0008449	VOLUME	246071.466	4070129.094	92.35
LOCATION L0008450	VOLUME	246067.808	4070129.060	92.23
LOCATION L0008451	VOLUME	246064.151	4070129.027	92.11
LOCATION L0008452	VOLUME	246060.493	4070128.993	91.98
LOCATION L0008453	VOLUME	246056.836	4070128.960	91.86
LOCATION L0008454	VOLUME	246053.178	4070128.927	91.74
LOCATION L0008455	VOLUME	246049.521	4070128.893	91.61
LOCATION L0008456	VOLUME	246045.863	4070128.860	91.49
LOCATION L0008457	VOLUME	246042.206	4070128.826	91.37
LOCATION L0008458	VOLUME	246038.599	4070128.741	91.24
LOCATION L0008459	VOLUME	246038.460	4070125.086	91.12
LOCATION L0008460	VOLUME	246038.320	4070121.431	90.99
LOCATION L0008461	VOLUME	246038.180	4070117.776	90.87
LOCATION L0008462	VOLUME	246038.040	4070114.121	90.74
LOCATION L0008463	VOLUME	246037.900	4070110.466	90.61
LOCATION L0008464	VOLUME	246037.761	4070106.811	90.49
LOCATION L0008465	VOLUME	246037.621	4070103.156	90.36
LOCATION L0008466	VOLUME	246037.481	4070099.501	90.23
LOCATION L0008467	VOLUME	246037.341	4070095.846	90.11
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LOCATION L0008469	VOLUME	246037.062	4070088.536	89.85
LOCATION L0008470	VOLUME	246036.922	4070084.882	89.73
LOCATION L0008471	VOLUME	246036.782	4070081.227	89.60
LOCATION L0008472	VOLUME	246036.642	4070077.572	89.47
LOCATION L0008473	VOLUME	246036.503	4070073.917	89.35
LOCATION L0008474	VOLUME	246036.363	4070070.262	89.22
LOCATION L0008475	VOLUME	246036.223	4070066.607	89.30
LOCATION L0008476	VOLUME	246036.083	4070062.952	89.39
LOCATION L0008477	VOLUME	246035.944	4070059.297	89.48
LOCATION L0008478	VOLUME	246035.804	4070055.642	89.58
LOCATION L0008479	VOLUME	246035.664	4070051.987	89.68
LOCATION L0008480	VOLUME	246035.524	4070048.332	89.77
LOCATION L0008481	VOLUME	246035.384	4070044.677	89.87
LOCATION L0008482	VOLUME	246035.245	4070041.022	89.97
LOCATION L0008483	VOLUME	246035.105	4070037.367	90.09
LOCATION L0008484	VOLUME	246034.965	4070033.713	90.21
LOCATION L0008485	VOLUME	246034.825	4070030.058	90.33
LOCATION L0008486	VOLUME	246034.686	4070026.403	90.45
LOCATION L0008487	VOLUME	246034.546	4070022.748	90.58
LOCATION L0008488	VOLUME	246034.406	4070019.093	90.70
LOCATION L0008489	VOLUME	246034.266	4070015.438	90.82

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LOCATION L0008491 VOLUME 246033.987 4070008.128 90.99
LOCATION L0008492 VOLUME 246033.847 4070004.473 90.98
LOCATION L0008493 VOLUME 246033.707 4070000.818 90.96
LOCATION L0008494 VOLUME 246033.567 4069997.163 90.95
LOCATION L0008495 VOLUME 246033.428 4069993.508 90.94
LOCATION L0008496 VOLUME 246033.288 4069989.853 90.93
LOCATION L0008497 VOLUME 246033.148 4069986.198 90.92
LOCATION L0008498 VOLUME 246033.008 4069982.544 90.91
LOCATION L0008499 VOLUME 246032.868 4069978.889 90.83
LOCATION L0008500 VOLUME 246032.729 4069975.234 90.61
LOCATION L0008501 VOLUME 246032.589 4069971.579 90.38
LOCATION L0008502 VOLUME 246032.449 4069967.924 90.15
LOCATION L0008503 VOLUME 246032.309 4069964.269 89.91
LOCATION L0008504 VOLUME 246032.170 4069960.614 89.68
LOCATION L0008505 VOLUME 246032.030 4069956.959 89.45
LOCATION L0008506 VOLUME 246031.890 4069953.304 89.21
LOCATION L0008507 VOLUME 246031.750 4069949.649 88.99
LOCATION L0008508 VOLUME 246031.610 4069945.994 88.87
LOCATION L0008509 VOLUME 246031.471 4069942.339 88.74
LOCATION L0008510 VOLUME 246031.331 4069938.684 88.62
LOCATION L0008511 VOLUME 246031.191 4069935.030 88.50
LOCATION L0008512 VOLUME 246031.051 4069931.375 88.38
LOCATION L0008513 VOLUME 246030.912 4069927.720 88.26
LOCATION L0008514 VOLUME 246030.772 4069924.065 88.14
LOCATION L0008515 VOLUME 246030.632 4069920.410 88.01
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LOCATION L0008517 VOLUME 246030.352 4069913.100 87.54
LOCATION L0008518 VOLUME 246030.213 4069909.445 87.30
LOCATION L0008519 VOLUME 246030.073 4069905.790 87.05
LOCATION L0008520 VOLUME 246029.933 4069902.135 86.81
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LOCATION L0008522 VOLUME 246029.654 4069894.825 86.34
LOCATION L0008523 VOLUME 246029.514 4069891.170 86.09
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LOCATION L0008525 VOLUME 246029.234 4069883.861 85.82
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LOCATION L0008527 VOLUME 246028.955 4069876.551 85.59
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LOCATION L0008530 VOLUME 246028.535 4069865.586 85.24
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LOCATION L0008532 VOLUME 246028.256 4069858.276 85.17
LOCATION L0008533 VOLUME 246028.116 4069854.621 85.41
LOCATION L0008534 VOLUME 246027.976 4069850.966 85.65
LOCATION L0008535 VOLUME 246027.836 4069847.311 85.89
LOCATION L0008536 VOLUME 246027.697 4069843.656 86.12
LOCATION L0008537 VOLUME 246027.557 4069840.001 86.36
LOCATION L0008538 VOLUME 246027.417 4069836.346 86.60
LOCATION L0008539 VOLUME 246027.277 4069832.692 86.83
LOCATION L0008540 VOLUME 246027.138 4069829.037 87.00
LOCATION L0008541 VOLUME 246026.998 4069825.382 87.02
LOCATION L0008542 VOLUME 246026.858 4069821.727 87.03
LOCATION L0008543 VOLUME 246026.718 4069818.072 87.04
LOCATION L0008544 VOLUME 246026.578 4069814.417 87.06
LOCATION L0008545 VOLUME 246026.439 4069810.762 87.08
LOCATION L0008546 VOLUME 246026.299 4069807.107 87.09
LOCATION L0008547 VOLUME 246026.159 4069803.452 87.11
LOCATION L0008548 VOLUME 246026.019 4069799.797 87.14
LOCATION L0008549 VOLUME 246025.880 4069796.142 87.27
LOCATION L0008550 VOLUME 246025.740 4069792.487 87.39
LOCATION L0008551 VOLUME 246025.600 4069788.832 87.52

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   LOCATION L0008553     VOLUME   246025.320 4069781.523 87.77
   LOCATION L0008554     VOLUME   246025.181 4069777.868 87.90
   LOCATION L0008555     VOLUME   246025.041 4069774.213 88.02
   LOCATION L0008556     VOLUME   246024.901 4069770.558 88.15
   LOCATION L0008557     VOLUME   246024.761 4069766.903 88.19
   LOCATION L0008558     VOLUME   246024.622 4069763.248 88.22
   LOCATION L0008559     VOLUME   246024.482 4069759.593 88.25
   LOCATION L0008560     VOLUME   246024.342 4069755.938 88.28
   LOCATION L0008561     VOLUME   246024.202 4069752.283 88.31
   LOCATION L0008562     VOLUME   246024.062 4069748.628 88.34
   LOCATION L0008563     VOLUME   246023.923 4069744.973 88.37
   LOCATION L0008564     VOLUME   246023.783 4069741.318 88.41
   LOCATION L0008565     VOLUME   246023.643 4069737.663 88.39
   LOCATION L0008566     VOLUME   246023.503 4069734.008 88.35
   LOCATION L0008567     VOLUME   246023.364 4069730.354 88.30
   LOCATION L0008568     VOLUME   246023.224 4069726.699 88.25
** End of LINE VOLUME Source ID = DW4CAR
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = DW3CAR
** DESCRSRC
** PREFIX
** Length of Side = 1.83
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
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** 246067.120, 4070725.398, 87.92, 0.00, 1.70
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   LOCATION L0008590     VOLUME   246040.961 4070140.991 91.23
   LOCATION L0008591     VOLUME   246041.124 4070144.645 91.19
   LOCATION L0008592     VOLUME   246041.288 4070148.299 91.15
   LOCATION L0008593     VOLUME   246041.451 4070151.953 91.10
   LOCATION L0008594     VOLUME   246041.615 4070155.607 91.06
   LOCATION L0008595     VOLUME   246041.779 4070159.261 91.01
   LOCATION L0008596     VOLUME   246041.942 4070162.915 90.84
   LOCATION L0008597     VOLUME   246042.106 4070166.568 90.65
   LOCATION L0008598     VOLUME   246042.269 4070170.222 90.46
   LOCATION L0008599     VOLUME   246042.433 4070173.876 90.27
   LOCATION L0008600     VOLUME   246042.596 4070177.530 90.08
   LOCATION L0008601     VOLUME   246042.760 4070181.184 89.89
   LOCATION L0008602     VOLUME   246042.923 4070184.838 89.70
   LOCATION L0008603     VOLUME   246043.087 4070188.492 89.51
   LOCATION L0008604     VOLUME   246043.251 4070192.146 89.41
   LOCATION L0008605     VOLUME   246043.414 4070195.800 89.36
   LOCATION L0008606     VOLUME   246043.578 4070199.454 89.31
   LOCATION L0008607     VOLUME   246043.741 4070203.108 89.26
   LOCATION L0008608     VOLUME   246043.905 4070206.762 89.20
   LOCATION L0008609     VOLUME   246044.068 4070210.416 89.15
   LOCATION L0008610     VOLUME   246044.232 4070214.070 89.09
   LOCATION L0008611     VOLUME   246044.395 4070217.724 89.04
   LOCATION L0008612     VOLUME   246044.559 4070221.378 89.00
   LOCATION L0008613     VOLUME   246044.723 4070225.032 89.00
   LOCATION L0008614     VOLUME   246044.886 4070228.685 89.00
   LOCATION L0008615     VOLUME   246045.050 4070232.339 89.00
   LOCATION L0008616     VOLUME   246045.213 4070235.993 89.00
   LOCATION L0008617     VOLUME   246045.377 4070239.647 89.00
   LOCATION L0008618     VOLUME   246045.540 4070243.301 89.00
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LOCATION L0008622 VOLUME 246046.195 4070257.917 89.12
LOCATION L0008623 VOLUME 246046.358 4070261.571 89.18
LOCATION L0008624 VOLUME 246046.522 4070265.225 89.23
LOCATION L0008625 VOLUME 246046.685 4070268.879 89.28
LOCATION L0008626 VOLUME 246046.849 4070272.533 89.33
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LOCATION L0008645 VOLUME 246049.956 4070341.958 90.62
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LOCATION L0008655 VOLUME 246051.592 4070378.497 89.51
LOCATION L0008656 VOLUME 246051.755 4070382.151 89.30
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LOCATION L0008659 VOLUME 246052.246 4070393.113 88.66
LOCATION L0008660 VOLUME 246052.410 4070396.767 88.44
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LOCATION L0008662 VOLUME 246052.737 4070404.075 88.11
LOCATION L0008663 VOLUME 246052.900 4070407.729 87.98
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LOCATION L0008669 VOLUME 246053.882 4070429.652 87.22
LOCATION L0008670 VOLUME 246054.045 4070433.306 87.20
LOCATION L0008671 VOLUME 246054.209 4070436.960 87.19
LOCATION L0008672 VOLUME 246054.372 4070440.614 87.19
LOCATION L0008673 VOLUME 246054.536 4070444.268 87.18
LOCATION L0008674 VOLUME 246054.700 4070447.922 87.18
LOCATION L0008675 VOLUME 246054.863 4070451.576 87.17
LOCATION L0008676 VOLUME 246055.027 4070455.230 87.17
LOCATION L0008677 VOLUME 246055.190 4070458.884 87.16
LOCATION L0008678 VOLUME 246055.354 4070462.538 87.23
LOCATION L0008679 VOLUME 246055.517 4070466.192 87.32
LOCATION L0008680 VOLUME 246055.681 4070469.846 87.42

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LOCATION L0008681     VOLUME   246055.844 4070473.500 87.53
LOCATION L0008682     VOLUME   246056.008 4070477.153 87.63
LOCATION L0008683     VOLUME   246056.172 4070480.807 87.73
LOCATION L0008684     VOLUME   246056.335 4070484.461 87.84
LOCATION L0008685     VOLUME   246056.499 4070488.115 87.94
LOCATION L0008686     VOLUME   246056.662 4070491.769 88.00
LOCATION L0008687     VOLUME   246056.826 4070495.423 88.00
LOCATION L0008688     VOLUME   246056.989 4070499.077 88.00
LOCATION L0008689     VOLUME   246057.153 4070502.731 88.00
LOCATION L0008690     VOLUME   246057.316 4070506.385 88.00
LOCATION L0008691     VOLUME   246057.480 4070510.039 88.00
LOCATION L0008692     VOLUME   246057.644 4070513.693 88.00
LOCATION L0008693     VOLUME   246057.807 4070517.347 88.00
LOCATION L0008694     VOLUME   246057.971 4070521.001 88.06
LOCATION L0008695     VOLUME   246058.134 4070524.655 88.29
LOCATION L0008696     VOLUME   246058.298 4070528.309 88.52
LOCATION L0008697     VOLUME   246058.461 4070531.963 88.76
LOCATION L0008698     VOLUME   246058.625 4070535.617 88.99
LOCATION L0008699     VOLUME   246058.788 4070539.270 89.23
LOCATION L0008700     VOLUME   246058.952 4070542.924 89.47
LOCATION L0008701     VOLUME   246059.116 4070546.578 89.72
LOCATION L0008702     VOLUME   246059.279 4070550.232 89.96
LOCATION L0008703     VOLUME   246059.443 4070553.886 90.09
LOCATION L0008704     VOLUME   246059.606 4070557.540 90.23
LOCATION L0008705     VOLUME   246059.770 4070561.194 90.36
LOCATION L0008706     VOLUME   246059.933 4070564.848 90.49
LOCATION L0008707     VOLUME   246060.097 4070568.502 90.61
LOCATION L0008708     VOLUME   246060.260 4070572.156 90.73
LOCATION L0008709     VOLUME   246060.424 4070575.810 90.85
LOCATION L0008710     VOLUME   246060.588 4070579.464 90.96
LOCATION L0008711     VOLUME   246060.751 4070583.118 90.87
LOCATION L0008712     VOLUME   246060.915 4070586.772 90.75
LOCATION L0008713     VOLUME   246061.078 4070590.426 90.63
LOCATION L0008714     VOLUME   246061.242 4070594.080 90.51
LOCATION L0008715     VOLUME   246061.405 4070597.734 90.39
LOCATION L0008716     VOLUME   246061.569 4070601.387 90.27
LOCATION L0008717     VOLUME   246061.732 4070605.041 90.16
LOCATION L0008718     VOLUME   246061.896 4070608.695 90.04
LOCATION L0008719     VOLUME   246062.060 4070612.349 89.92
LOCATION L0008720     VOLUME   246062.223 4070616.003 89.80
LOCATION L0008721     VOLUME   246062.387 4070619.657 89.68
LOCATION L0008722     VOLUME   246062.550 4070623.311 89.56
LOCATION L0008723     VOLUME   246062.714 4070626.965 89.43
LOCATION L0008724     VOLUME   246062.877 4070630.619 89.31
LOCATION L0008725     VOLUME   246063.041 4070634.273 89.19
LOCATION L0008726     VOLUME   246063.204 4070637.927 89.07
LOCATION L0008727     VOLUME   246063.368 4070641.581 89.05
LOCATION L0008728     VOLUME   246063.532 4070645.235 89.17
LOCATION L0008729     VOLUME   246063.695 4070648.889 89.30
LOCATION L0008730     VOLUME   246063.859 4070652.543 89.42
LOCATION L0008731     VOLUME   246064.022 4070656.197 89.54
LOCATION L0008732     VOLUME   246064.186 4070659.851 89.66
LOCATION L0008733     VOLUME   246064.349 4070663.504 89.78
LOCATION L0008734     VOLUME   246064.513 4070667.158 89.91
LOCATION L0008735     VOLUME   246064.676 4070670.812 90.00
LOCATION L0008736     VOLUME   246064.840 4070674.466 90.02
LOCATION L0008737     VOLUME   246065.004 4070678.120 90.05
LOCATION L0008738     VOLUME   246065.167 4070681.774 90.07
LOCATION L0008739     VOLUME   246065.331 4070685.428 90.09
LOCATION L0008740     VOLUME   246065.494 4070689.082 90.12
LOCATION L0008741     VOLUME   246065.658 4070692.736 90.14
LOCATION L0008742     VOLUME   246065.821 4070696.390 90.17
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   LOCATION L0008743     VOLUME   246065.985 4070700.044 90.20
   LOCATION L0008744     VOLUME   246066.148 4070703.698 89.93
   LOCATION L0008745     VOLUME   246066.312 4070707.352 89.67
   LOCATION L0008746     VOLUME   246066.476 4070711.006 89.40
   LOCATION L0008747     VOLUME   246066.639 4070714.660 89.14
   LOCATION L0008748     VOLUME   246066.803 4070718.314 88.87
   LOCATION L0008749     VOLUME   246066.966 4070721.968 88.60
** End of LINE VOLUME Source ID = DW3CAR
   LOCATION STCK1        POINT      246139.728  4070272.082       91.750
   LOCATION STCK2        POINT      246165.866  4070271.101       91.690
   LOCATION STCK3        POINT      246197.073  4070270.804       91.610
   LOCATION STCK4        POINT      246230.360  4070270.506       91.490
   LOCATION STCK5        POINT      246262.459  4070269.912       91.840
   LOCATION STCK6        POINT      246291.883  4070269.615       94.730
   LOCATION STCK7        POINT      246323.981  4070269.912       95.410
   LOCATION STCK10       POINT      246280.882  4070220.811       92.980
   LOCATION STCK11       POINT      246306.442  4070220.811       98.020
   LOCATION STCK12       POINT      246330.813  4070220.513       97.920
   LOCATION STCK13       POINT      246485.253  4070332.400       92.280
   LOCATION STCK14       POINT      246515.283  4070331.989       92.340
   LOCATION STCK15       POINT      246546.136  4070331.166       91.850
   LOCATION STCK16       POINT      246577.811  4070331.166       92.410
   LOCATION STCK17       POINT      246609.075  4070330.343       92.450
   LOCATION STCK18       POINT      246640.750  4070330.343       92.680
   LOCATION STCK19       POINT      246670.779  4070329.521       92.290
   LOCATION STCK20       POINT      246703.689  4070329.932       90.900
   LOCATION STCK21       POINT      246732.073  4070329.521       89.600
   LOCATION STCK22       POINT      246735.943  4070184.699       90.780
   LOCATION STCK23       POINT      246706.736  4070184.699       89.570
   LOCATION STCK24       POINT      246677.117  4070185.110       88.190
   LOCATION STCK25       POINT      246644.619  4070184.699       88.930
   LOCATION STCK26       POINT      246614.178  4070185.933       90.390
   LOCATION STCK27       POINT      246582.092  4070186.756       91.420
   LOCATION STCK28       POINT      246552.474  4070187.167       91.870
   LOCATION STCK29       POINT      246520.798  4070187.167       91.970
   LOCATION STCK30       POINT      246490.769  4070187.578       92.050
** Source Parameters **
** LINE VOLUME Source ID = DW6
   SRCPARAM L0007146     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007147     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007148     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007149     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007150     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007151     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007152     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007153     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007154     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007155     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007156     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007157     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007158     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007159     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007160     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007161     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007162     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007163     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007164     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007165     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007166     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007167     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007168     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007169     0.0102040816      0.00      2.84      1.42
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SRCPARAM L0007170     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007171     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007172     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007173     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007174     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007175     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007176     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007177     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007178     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007179     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007180     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007181     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007182     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007183     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007184     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007185     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007186     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007187     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007188     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007189     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007190     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007191     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007192     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007193     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007194     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007195     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007196     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007197     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007198     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007199     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007200     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007201     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007202     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007203     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007204     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007205     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007206     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007207     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007208     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007209     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007210     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007211     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007212     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007213     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007214     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007215     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007216     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007217     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007218     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007219     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007220     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007221     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007222     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007223     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007224     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007225     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007226     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007227     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007228     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007229     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007230     0.0102040816      0.00      2.84      1.42
SRCPARAM L0007231     0.0102040816      0.00      2.84      1.42
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   SRCPARAM L0007232     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007233     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007234     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007235     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007236     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007237     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007238     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007239     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007240     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007241     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007242     0.0102040816      0.00      2.84      1.42
   SRCPARAM L0007243     0.0102040816      0.00      2.84      1.42
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** LINE VOLUME Source ID = HUGHES1
   SRCPARAM L0007251     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007252     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007253     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007254     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007255     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007256     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007257     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007258     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007259     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007260     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007261     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007262     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007263     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007264     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007265     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007266     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007267     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007268     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007269     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007270     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007271     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007272     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007273     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007274     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007275     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007276     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007277     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007278     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007279     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007280     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007281     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007282     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007283     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007284     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007285     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007286     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007287     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007288     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007289     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007290     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007291     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007292     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007293     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007294     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007295     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007296     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007297     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007298     0.0158730159      0.00      2.84      1.42
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   SRCPARAM L0007299     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007300     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007301     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007302     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007303     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007304     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007305     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007306     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007307     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007308     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007309     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007310     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007311     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007312     0.0158730159      0.00      2.84      1.42
   SRCPARAM L0007313     0.0158730159      0.00      2.84      1.42
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** LINE VOLUME Source ID = DW7
   SRCPARAM L0007314     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007315     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007316     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007317     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007318     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007319     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007320     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007321     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007322     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007323     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007324     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007325     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007326     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007327     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007328     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007329     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007330     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007331     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007332     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007333     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007334     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007335     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007336     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007337     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007338     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007339     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007340     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007341     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007342     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007343     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007344     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007345     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007346     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007347     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007348     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007349     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007350     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007351     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007352     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007353     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007354     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007355     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007356     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007357     0.012987013       0.00      2.84      1.42
   SRCPARAM L0007358     0.012987013       0.00      2.84      1.42
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   SRCPARAM L0007359     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007360     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007361     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007362     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007363     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007364     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007365     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007366     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007367     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007368     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007369     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007370     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007371     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007372     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007373     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007374     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007375     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007376     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007377     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007378     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007379     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007380     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007381     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007382     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007383     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007384     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007385     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007386     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007387     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007388     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007389     0.012987013      0.00      2.84      1.42
   SRCPARAM L0007390     0.012987013      0.00      2.84      1.42
** --------------------------------------------------------------------
** LINE VOLUME Source ID = HUGHES2
   SRCPARAM L0007391           0.1      0.00      2.84      1.42
   SRCPARAM L0007392           0.1      0.00      2.84      1.42
   SRCPARAM L0007393           0.1      0.00      2.84      1.42
   SRCPARAM L0007394           0.1      0.00      2.84      1.42
   SRCPARAM L0007395           0.1      0.00      2.84      1.42
   SRCPARAM L0007396           0.1      0.00      2.84      1.42
   SRCPARAM L0007397           0.1      0.00      2.84      1.42
   SRCPARAM L0007398           0.1      0.00      2.84      1.42
   SRCPARAM L0007399           0.1      0.00      2.84      1.42
   SRCPARAM L0007400           0.1      0.00      2.84      1.42
** --------------------------------------------------------------------
** LINE VOLUME Source ID = NIELSEN
   SRCPARAM L0007401     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007402     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007403     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007404     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007405     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007406     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007407     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007408     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007409     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007410     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007411     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007412     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007413     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007414     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007415     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007416     0.0147058824      0.00      2.84      1.42
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   SRCPARAM L0007417     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007418     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007419     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007420     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007421     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007422     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007423     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007424     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007425     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007426     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007427     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007428     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007429     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007430     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007431     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007432     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007433     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007434     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007435     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007436     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007437     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007438     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007439     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007440     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007441     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007442     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007443     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007444     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007445     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007446     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007447     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007448     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007449     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007450     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007451     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007452     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007453     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007454     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007455     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007456     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007457     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007458     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007459     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007460     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007461     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007462     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007463     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007464     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007465     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007466     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007467     0.0147058824      0.00      2.84      1.42
   SRCPARAM L0007468     0.0147058824      0.00      2.84      1.42
** ------------------------------------------------------------------
** LINE VOLUME Source ID = HUGHES3
   SRCPARAM L0007469     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007470     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007471     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007472     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007473     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007474     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007475     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007476     0.0128205128      0.00      2.84      1.42
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SRCPARAM L0007477     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007478     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007479     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007480     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007481     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007482     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007483     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007484     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007485     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007486     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007487     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007488     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007489     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007490     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007491     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007492     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007493     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007494     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007495     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007496     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007497     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007498     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007499     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007500     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007501     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007502     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007503     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007504     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007505     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007506     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007507     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007508     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007509     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007510     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007511     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007512     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007513     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007514     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007515     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007516     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007517     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007518     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007519     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007520     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007521     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007522     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007523     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007524     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007525     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007526     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007527     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007528     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007529     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007530     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007531     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007532     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007533     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007534     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007535     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007536     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007537     0.0128205128      0.00      2.84      1.42
SRCPARAM L0007538     0.0128205128      0.00      2.84      1.42
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   SRCPARAM L0007539     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007540     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007541     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007542     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007543     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007544     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007545     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007546     0.0128205128      0.00      2.84      1.42
** ------------------------------------------------------------------
** LINE VOLUME Source ID = DW2
   SRCPARAM L0007547     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007548     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007549     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007550     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007551     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007552     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007553     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007554     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007555     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007556     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007557     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007558     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007559     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007560     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007561     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007562     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007563     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007564     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007565     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007566     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007567     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007568     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007569     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007570     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007571     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007572     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007573     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007574     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007575     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007576     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007577     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007578     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007579     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007580     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007581     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007582     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007583     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007584     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007585     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007586     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007587     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007588     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007589     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007590     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007591     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007592     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007593     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007594     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007595     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007596     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007597     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007598     0.0172413793      0.00      2.84      1.42
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   SRCPARAM L0007599     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007600     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007601     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007602     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007603     0.0172413793      0.00      2.84      1.42
   SRCPARAM L0007604     0.0172413793      0.00      2.84      1.42
** ------------------------------------------------------------------
** LINE VOLUME Source ID = MARKS1
   SRCPARAM L0007605     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007606     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007607     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007608     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007609     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007610     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007611     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007612     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007613     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007614     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007615     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007616     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007617     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007618     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007619     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007620     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007621     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007622     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007623     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007624     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007625     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007626     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007627     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007628     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007629     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007630     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007631     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007632     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007633     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007634     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007635     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007636     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007637     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007638     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007639     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007640     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007641     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007642     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007643     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007644     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007645     0.0128205128      0.00      2.84      1.42
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   SRCPARAM L0007649     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007650     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007651     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007652     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007653     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007654     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007655     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007656     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007657     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007658     0.0128205128      0.00      2.84      1.42
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   SRCPARAM L0007659     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007660     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007661     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007662     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007663     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007664     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007665     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007666     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007667     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007668     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007669     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007670     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007671     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007672     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007673     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007674     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007675     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007676     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007677     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007678     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007679     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007680     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007681     0.0128205128      0.00      2.84      1.42
   SRCPARAM L0007682     0.0128205128      0.00      2.84      1.42
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** LINE VOLUME Source ID = NIELSEN2
   SRCPARAM L0007683     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007684     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007685     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007686     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007687     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007688     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007689     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007690     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007691     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007692     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007693     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007694     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007695     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007696     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007697     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007698     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007699     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007700     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007701     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007702     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007703     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007704     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007705     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007706     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007707     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007708     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007709     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007710     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007711     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007712     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007713     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007714     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007715     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007716     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007717     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007718     0.0163934426      0.00      2.84      1.42
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   SRCPARAM L0007719     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007720     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007721     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007722     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007723     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007724     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007725     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007726     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007727     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007728     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007729     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007730     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007731     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007732     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007733     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007734     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007735     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007736     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007737     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007738     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007739     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007740     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007741     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007742     0.0163934426      0.00      2.84      1.42
   SRCPARAM L0007743     0.0163934426      0.00      2.84      1.42
** ------------------------------------------------------------------
** LINE VOLUME Source ID = MARKS2
   SRCPARAM L0007744     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007745     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007746     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007747     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007748     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007749     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007750     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007751     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007752     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007753     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007754     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007755     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007756     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007757     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007758     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007759     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007760     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007761     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007762     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007763     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007764     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007765     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007766     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007767     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007768     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007769     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007770     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007771     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007772     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007773     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007774     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007775     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007776     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007777     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007778     0.0151515152      0.00      2.84      1.42
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   SRCPARAM L0007779     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007780     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007781     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007782     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007783     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007784     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007785     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007786     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007787     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007788     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007789     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007790     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007791     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007792     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007793     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007794     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007795     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007796     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007797     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007798     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007799     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007800     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007801     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007802     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007803     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007804     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007805     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007806     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007807     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007808     0.0151515152      0.00      2.84      1.42
   SRCPARAM L0007809     0.0151515152      0.00      2.84      1.42
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** LINE VOLUME Source ID = DW6_CAR
   SRCPARAM L0007810     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007811     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007812     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007813     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007814     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007815     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007816     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007817     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007818     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007819     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007820     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007821     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007822     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007823     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007824     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007825     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007826     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007827     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007828     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007829     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007830     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007831     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007832     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007833     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007834     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007835     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007836     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007837     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007838     0.0070422535      0.00      1.70      0.85
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SRCPARAM L0007839     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007840     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007841     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007842     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007843     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007844     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007845     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007846     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007847     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007848     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007849     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007850     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007851     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007852     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007853     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007854     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007855     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007856     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007857     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007858     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007859     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007860     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007861     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007862     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007863     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007864     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007865     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007866     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007867     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007868     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007869     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007870     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007871     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007872     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007873     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007874     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007875     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007876     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007877     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007878     0.0070422535      0.00      1.70      0.85
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SRCPARAM L0007896     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007897     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007898     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007899     0.0070422535      0.00      1.70      0.85
SRCPARAM L0007900     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007904     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007905     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007906     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007910     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007915     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007921     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007933     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007934     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007938     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007940     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007941     0.0070422535      0.00      1.70      0.85
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   SRCPARAM L0007944     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007945     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007946     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007947     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007948     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007949     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007950     0.0070422535      0.00      1.70      0.85
   SRCPARAM L0007951     0.0070422535      0.00      1.70      0.85
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** LINE VOLUME Source ID = DW7CAR
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   SRCPARAM L0007954     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007955     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007956     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007957     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007958     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007959     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0007960     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0007961     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007962     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007963     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007964     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007965     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007966     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007967     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007968     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007969     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007970     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007971     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007972     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007973     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007974     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007975     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007976     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007977     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007978     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0007980     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007981     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0007983     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007984     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007985     0.0067114094      0.00      1.70      0.85
SRCPARAM L0007986     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0007999     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008002     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008004     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008005     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008020     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008021     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008022     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008027     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008030     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008031     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008032     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008065     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008069     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008072     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008073     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008074     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008075     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008077     0.0067114094      0.00      1.70      0.85
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SRCPARAM L0008081     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008082     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008083     0.0067114094      0.00      1.70      0.85
SRCPARAM L0008084     0.0067114094      0.00      1.70      0.85
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   SRCPARAM L0008088     0.0067114094      0.00      1.70      0.85
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   SRCPARAM L0008091     0.0067114094      0.00      1.70      0.85
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   SRCPARAM L0008098     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0008099     0.0067114094      0.00      1.70      0.85
   SRCPARAM L0008100     0.0067114094      0.00      1.70      0.85
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** LINE VOLUME Source ID = DW5CAR
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   SRCPARAM L0008102     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008103     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008104     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008105     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008106     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008107     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008108     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008109     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008110     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008111     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008112     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008113     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008114     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008115     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008116     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008117     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008118     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008119     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008120     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008121     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008122     0.0040650407      0.00      1.70      0.85
   SRCPARAM L0008123     0.0040650407      0.00      1.70      0.85
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   SRCPARAM L0008137     0.0040650407      0.00      1.70      0.85
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   SRCPARAM L0008144     0.0040650407      0.00      1.70      0.85
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SRCPARAM L0008147     0.0040650407      0.00      1.70      0.85
SRCPARAM L0008148     0.0040650407      0.00      1.70      0.85
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SRCPARAM L0008498     0.0061728395      0.00      1.70      0.85
SRCPARAM L0008499     0.0061728395      0.00      1.70      0.85
SRCPARAM L0008500     0.0061728395      0.00      1.70      0.85
SRCPARAM L0008501     0.0061728395      0.00      1.70      0.85
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SRCPARAM L0008508     0.0061728395      0.00      1.70      0.85
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SRCPARAM L0008510     0.0061728395      0.00      1.70      0.85
SRCPARAM L0008511     0.0061728395      0.00      1.70      0.85
SRCPARAM L0008512     0.0061728395      0.00      1.70      0.85
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   SRCPARAM L0008516     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008517     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008518     0.0061728395      0.00      1.70      0.85
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   SRCPARAM L0008520     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008521     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008522     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008523     0.0061728395      0.00      1.70      0.85
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   SRCPARAM L0008540     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008541     0.0061728395      0.00      1.70      0.85
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   SRCPARAM L0008561     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008562     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008563     0.0061728395      0.00      1.70      0.85
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   SRCPARAM L0008566     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008567     0.0061728395      0.00      1.70      0.85
   SRCPARAM L0008568     0.0061728395      0.00      1.70      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = DW3CAR
   SRCPARAM L0008589     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008590     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008591     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008592     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008593     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008595     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008596     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008597     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008598     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008599     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008601     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008614     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008615     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008616     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008617     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008618     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008620     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008621     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008631     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008633     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008653     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008654     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008667     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008701     0.0062111801      0.00      1.70      0.85
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SRCPARAM L0008712     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008713     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008714     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008715     0.0062111801      0.00      1.70      0.85
SRCPARAM L0008716     0.0062111801      0.00      1.70      0.85
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   SRCPARAM L0008720     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008721     0.0062111801      0.00      1.70      0.85
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   SRCPARAM L0008725     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008726     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008727     0.0062111801      0.00      1.70      0.85
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   SRCPARAM L0008729     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008730     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008731     0.0062111801      0.00      1.70      0.85
   SRCPARAM L0008732     0.0062111801      0.00      1.70      0.85
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   SRCPARAM L0008749     0.0062111801      0.00      1.70      0.85
** ------------------------------------------------------------------
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   SRCPARAM STCK2              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK3              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK4              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK5              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK6              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK7              1.0     3.840   366.000        25       0.1
   SRCPARAM STCK10             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK11             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK12             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK13             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK14             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK15             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK16             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK17             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK18             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK19             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK20             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK21             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK22             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK23             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK24             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK25             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK26             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK27             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK28             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK29             1.0     3.840   366.000        25       0.1
   SRCPARAM STCK30             1.0     3.840   366.000        25       0.1
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** Building Downwash **
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK1          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK2          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK3          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK4          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK5          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK5          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK5          18.29    18.29    18.29    18.29    18.29    18.29
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   BUILDHGT STCK5          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK5          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK6          18.29    18.29    18.29    18.29    18.29    18.29
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   BUILDHGT STCK6          18.29    18.29    18.29    18.29    18.29    18.29
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   BUILDHGT STCK6          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK6          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK7          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK7          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK7          18.29    18.29    18.29    18.29    18.29    18.29
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   BUILDHGT STCK7          18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK7          18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK10         18.29    18.29    18.29    18.29    18.29    18.29

   BUILDHGT STCK11         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK11         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK11         18.29    18.29    18.29    18.29    18.29    18.29
   BUILDHGT STCK11         18.29    18.29    18.29    18.29    18.29    18.29
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BUILDHGT STCK11	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK11	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK12	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK12	18.29	18.29	18.29	18.29	18.29	18.29
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BUILDHGT STCK12	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK13	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK13	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK13	18.29	18.29	18.29	18.29	18.29	18.29
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BUILDHGT STCK15	18.29	18.29	18.29	18.29	18.29	18.29
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BUILDHGT STCK20	18.29	18.29	18.29	18.29	18.29	18.29
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BUILDHGT STCK20	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK21	18.29	18.29	18.29	18.29	18.29	18.29
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BUILDHGT STCK30	18.29	18.29	18.29	18.29	18.29	18.29
BUILDHGT STCK30	18.29	18.29	18.29	18.29	18.29	18.29
BUILDWID STCK1	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK1	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK1	249.17	273.21	288.95	295.91	293.87	282.91
BUILDWID STCK1	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK1	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK1	249.17	273.21	288.95	295.91	293.87	282.91
BUILDWID STCK2	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK2	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK2	249.17	273.21	288.95	295.91	293.87	282.91
BUILDWID STCK2	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK2	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK2	141.18	148.43	151.18	295.91	293.87	282.91
BUILDWID STCK3	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK3	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK3	249.17	273.21	288.95	295.91	293.87	282.91
BUILDWID STCK3	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK3	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK3	141.18	148.43	151.18	149.33	293.87	282.91
BUILDWID STCK4	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK4	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK4	249.17	273.21	288.95	295.91	293.87	282.91
BUILDWID STCK4	292.26	296.03	290.81	276.75	254.28	224.09
BUILDWID STCK4	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK4	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK5	139.70	147.01	149.86	276.75	254.28	224.09
BUILDWID STCK5	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK5	141.18	148.43	151.18	149.33	293.87	282.91
BUILDWID STCK5	139.70	147.01	149.86	276.75	254.28	224.09
BUILDWID STCK5	187.08	144.40	97.32	135.67	114.15	129.64
BUILDWID STCK5	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK6	139.70	147.01	149.86	148.15	141.93	224.09
BUILDWID STCK6	187.08	144.40	97.32	135.67	179.34	129.64
BUILDWID STCK6	141.18	148.43	151.18	149.33	142.94	282.91
BUILDWID STCK6	139.70	147.01	149.86	148.15	141.93	224.09
BUILDWID STCK6	187.08	144.40	97.32	135.67	179.34	129.64
BUILDWID STCK6	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK7	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK7	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK7	141.18	148.43	151.18	149.33	142.94	282.91
BUILDWID STCK7	292.26	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK7	187.08	144.40	97.32	135.67	179.34	217.56
BUILDWID STCK7	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK10	139.70	147.01	149.86	148.15	141.93	131.41

BUILDWID STCK10	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK10	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK10	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK10	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK10	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK11	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK11	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK11	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK11	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK11	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK11	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK12	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK12	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK12	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK12	139.70	147.01	149.86	148.15	141.93	131.41
BUILDWID STCK12	116.89	98.82	77.75	95.20	114.15	129.64
BUILDWID STCK12	141.18	148.43	151.18	149.33	142.94	132.21
BUILDWID STCK13	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK13	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK13	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK13	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK13	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK13	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK14	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK14	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK14	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK14	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK14	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK14	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK15	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK15	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK15	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK15	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK15	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK15	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK16	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK16	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK16	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK16	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK16	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK16	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK17	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK17	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK17	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK17	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK17	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK17	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK18	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK18	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK18	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK18	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK18	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK18	335.34	361.90	377.47	381.56	374.06	355.20

BUILDWID STCK19	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK19	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK19	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK19	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK19	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK19	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK20	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK20	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK20	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK20	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK20	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK20	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK21	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK21	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK21	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK21	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK21	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK21	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK22	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK22	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK22	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK22	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK22	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK22	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK23	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK23	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK23	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK23	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK23	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK23	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK24	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK24	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK24	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK24	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK24	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK24	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK25	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK25	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK25	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK25	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK25	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK25	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK26	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK26	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK26	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK26	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK26	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK26	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK27	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK27	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK27	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK27	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK27	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK27	335.34	361.90	377.47	381.56	374.06	355.20

BUILDWID STCK28	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK28	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK28	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK28	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK28	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK28	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK29	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK29	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK29	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK29	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK29	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK29	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK30	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK30	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK30	335.34	361.90	377.47	381.56	374.06	355.20
BUILDWID STCK30	369.93	378.69	375.94	361.76	336.60	301.20
BUILDWID STCK30	256.66	204.31	145.76	199.27	252.77	298.59
BUILDWID STCK30	335.34	361.90	377.47	381.56	374.06	355.20
BUILDLEN STCK1	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK1	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK1	276.75	254.28	224.09	187.08	144.40	97.32
BUILDLEN STCK1	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK1	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK1	276.75	254.28	224.09	187.08	144.40	97.32
BUILDLEN STCK2	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK2	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK2	276.75	254.28	224.09	187.08	144.40	97.32
BUILDLEN STCK2	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK2	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK2	148.15	141.93	131.41	187.08	144.40	97.32
BUILDLEN STCK3	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK3	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK3	276.75	254.28	224.09	187.08	144.40	97.32
BUILDLEN STCK3	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK3	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK3	148.15	141.93	131.41	116.89	144.40	97.32
BUILDLEN STCK4	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK4	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK4	276.75	254.28	224.09	187.08	144.40	97.32
BUILDLEN STCK4	135.67	179.34	217.56	249.17	273.21	288.95
BUILDLEN STCK4	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK4	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK5	95.20	114.15	129.64	249.17	273.21	288.95
BUILDLEN STCK5	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK5	148.15	141.93	131.41	116.89	144.40	97.32
BUILDLEN STCK5	95.20	114.15	129.64	249.17	273.21	288.95
BUILDLEN STCK5	295.91	293.87	282.91	292.26	147.01	149.86
BUILDLEN STCK5	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK6	95.20	114.15	129.64	141.18	148.43	288.95
BUILDLEN STCK6	295.91	293.87	282.91	292.26	296.03	149.86
BUILDLEN STCK6	148.15	141.93	131.41	116.89	98.82	97.32
BUILDLEN STCK6	95.20	114.15	129.64	141.18	148.43	288.95
BUILDLEN STCK6	295.91	293.87	282.91	292.26	296.03	149.86

BUILDLEN STCK6	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK7	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK7	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK7	148.15	141.93	131.41	116.89	98.82	97.32
BUILDLEN STCK7	135.67	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK7	295.91	293.87	282.91	292.26	296.03	290.81
BUILDLEN STCK7	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK10	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK10	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK10	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK10	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK10	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK10	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK11	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK11	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK11	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK11	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK11	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK11	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK12	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK12	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK12	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK12	95.20	114.15	129.64	141.18	148.43	151.18
BUILDLEN STCK12	149.33	142.94	132.21	139.70	147.01	149.86
BUILDLEN STCK12	148.15	141.93	131.41	116.89	98.82	77.75
BUILDLEN STCK13	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK13	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK13	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK13	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK13	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK13	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK14	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK14	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK14	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK14	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK14	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK14	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK15	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK15	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK15	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK15	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK15	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK15	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK16	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK16	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK16	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK16	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK16	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK16	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK17	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK17	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK17	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK17	199.27	252.77	298.59	335.34	361.90	377.47

BUILDLEN STCK17	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK17	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK18	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK18	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK18	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK18	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK18	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK18	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK19	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK19	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK19	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK19	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK19	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK19	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK20	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK20	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK20	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK20	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK20	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK20	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK21	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK21	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK21	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK21	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK21	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK21	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK22	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK22	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK22	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK22	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK22	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK22	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK23	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK23	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK23	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK23	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK23	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK23	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK24	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK24	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK24	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK24	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK24	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK24	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK25	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK25	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK25	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK25	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK25	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK25	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN STCK26	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN STCK26	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN STCK26	361.76	336.60	301.20	256.66	204.31	145.76

BUILDLEN	STCK26	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK26	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK26	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK27	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK27	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK27	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK27	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK27	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK27	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK28	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK28	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK28	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK28	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK28	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK28	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK29	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK29	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK29	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK29	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK29	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK29	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK30	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK30	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK30	361.76	336.60	301.20	256.66	204.31	145.76
BUILDLEN	STCK30	199.27	252.77	298.59	335.34	361.90	377.47
BUILDLEN	STCK30	381.56	374.06	355.20	369.93	378.69	375.94
BUILDLEN	STCK30	361.76	336.60	301.20	256.66	204.31	145.76
XBADJ	STCK1	-8.34	-16.69	-24.52	-31.62	-37.75	-42.74
XBADJ	STCK1	-46.43	-48.70	-49.50	-62.50	-75.72	-86.63
XBADJ	STCK1	-94.91	-100.31	-102.66	-101.89	-98.02	-91.18
XBADJ	STCK1	-127.33	-162.66	-193.04	-217.55	-235.46	-246.21
XBADJ	STCK1	-249.48	-245.17	-233.41	-229.76	-220.32	-204.18
XBADJ	STCK1	-181.84	-153.97	-121.43	-85.19	-46.37	-6.14
XBADJ	STCK2	-11.91	-24.71	-36.75	-47.67	-57.15	-64.89
XBADJ	STCK2	-70.65	-74.28	-75.64	-88.42	-100.62	-109.76
XBADJ	STCK2	-115.57	-117.86	-116.58	-111.75	-103.53	-92.16
XBADJ	STCK2	-123.76	-154.64	-180.82	-201.50	-216.06	-224.06
XBADJ	STCK2	-225.25	-219.60	-207.27	-203.85	-234.41	-238.92
XBADJ	STCK2	-236.17	-226.25	-209.45	-75.33	-40.87	-5.16
XBADJ	STCK3	-17.04	-35.09	-52.09	-67.50	-80.85	-91.76
XBADJ	STCK3	-99.87	-104.95	-106.84	-119.19	-130.04	-136.93
XBADJ	STCK3	-139.66	-138.15	-132.44	-122.70	-109.24	-92.46
XBADJ	STCK3	-118.64	-144.25	-165.48	-181.68	-192.36	-197.19
XBADJ	STCK3	-196.04	-188.92	-176.07	-173.07	-204.99	-211.75
XBADJ	STCK3	-212.08	-205.96	-193.59	-175.33	-35.15	-4.86
XBADJ	STCK4	-22.53	-46.21	-68.48	-88.67	-106.17	-120.44
XBADJ	STCK4	-131.05	-137.68	-140.13	-152.03	26.60	32.92
XBADJ	STCK4	-165.35	-159.77	-149.33	-134.36	-115.31	-92.75
XBADJ	STCK4	-113.14	-133.13	-149.08	-160.50	-167.04	-168.51
XBADJ	STCK4	-164.85	-156.19	-142.78	-140.23	-173.61	-182.78
XBADJ	STCK4	-186.39	-184.34	-176.69	-163.67	-145.68	-123.26
XBADJ	STCK5	-122.31	-120.77	-115.57	-108.85	-130.37	-147.94
XBADJ	STCK5	-161.01	-169.19	-172.23	-183.75	-3.77	4.82

XBADJ	STCK5	13.27	21.32	28.71	35.24	-121.47	-93.35
XBADJ	STCK5	27.11	6.62	-14.07	-140.33	-142.84	-141.01
XBADJ	STCK5	-134.89	-124.68	-110.68	-108.52	-143.24	-154.68
XBADJ	STCK5	-161.42	-163.25	-160.12	-152.13	-139.51	-122.66
XBADJ	STCK6	-127.12	-130.55	-130.02	-125.53	-117.23	-173.27
XBADJ	STCK6	-188.56	-198.11	-201.65	-212.77	-219.54	-20.81
XBADJ	STCK6	-9.46	2.18	13.74	24.89	35.29	-93.65
XBADJ	STCK6	31.92	16.40	0.38	-15.65	-31.21	-115.68
XBADJ	STCK6	-107.35	-95.76	-81.26	-79.49	-76.50	-129.05
XBADJ	STCK6	-138.69	-144.11	-145.15	-141.78	-134.11	-122.36
XBADJ	STCK7	-132.99	-141.81	-146.33	-146.39	-142.01	-133.31
XBADJ	STCK7	-218.82	-229.78	-233.75	-244.33	-249.60	-247.28
XBADJ	STCK7	-33.86	-18.23	-2.05	14.20	30.01	-93.35
XBADJ	STCK7	-97.47	27.66	16.69	5.21	-6.42	-17.86
XBADJ	STCK7	-77.08	-64.10	-49.16	-47.93	-46.43	-43.53
XBADJ	STCK7	-114.29	-123.70	-129.36	-131.09	-128.83	-122.66
XBADJ	STCK10	-77.15	-80.93	-82.25	-81.07	-77.43	-71.44
XBADJ	STCK10	-63.27	-53.18	-41.48	-38.92	-37.87	-35.68
XBADJ	STCK10	-32.40	-28.14	-23.02	-17.20	-10.86	-4.19
XBADJ	STCK10	-18.05	-33.22	-47.38	-60.11	-71.00	-79.74
XBADJ	STCK10	-86.06	-89.76	-90.73	-100.79	-109.14	-114.18
XBADJ	STCK10	-115.74	-113.80	-108.39	-99.69	-87.96	-73.56
XBADJ	STCK11	-81.59	-89.68	-95.03	-97.50	-97.01	-93.57
XBADJ	STCK11	-87.29	-78.36	-67.04	-64.09	-61.89	-57.82
XBADJ	STCK11	-51.98	-44.57	-35.80	-25.94	-15.30	-4.19
XBADJ	STCK11	-13.61	-24.48	-34.60	-43.68	-51.42	-57.60
XBADJ	STCK11	-62.04	-64.58	-65.17	-75.61	-85.12	-92.04
XBADJ	STCK11	-96.16	-97.37	-95.61	-90.95	-83.52	-73.56
XBADJ	STCK12	-85.53	-97.73	-106.96	-112.94	-115.49	-114.53
XBADJ	STCK12	-110.09	-102.30	-91.41	-88.14	-84.90	-79.07
XBADJ	STCK12	-70.84	-60.46	-48.24	-34.56	-19.83	-4.49
XBADJ	STCK12	-9.67	-16.43	-22.68	-28.24	-32.95	-36.65
XBADJ	STCK12	-39.24	-40.64	-40.80	-51.56	-62.12	-70.79
XBADJ	STCK12	-77.30	-81.47	-83.17	-82.33	-79.00	-73.26
XBADJ	STCK13	-149.89	-152.75	-150.98	-144.61	-133.86	-119.03
XBADJ	STCK13	-100.59	-79.09	-55.19	-51.62	-48.92	-44.73
XBADJ	STCK13	-39.18	-32.43	-24.71	-16.23	-7.26	1.93
XBADJ	STCK13	-49.38	-100.02	-147.61	-190.73	-228.05	-258.44
XBADJ	STCK13	-280.97	-294.97	-300.01	-318.31	-329.77	-331.21
XBADJ	STCK13	-322.59	-304.16	-276.49	-240.42	-197.05	-147.69
XBADJ	STCK14	-154.70	-162.64	-165.64	-163.60	-156.60	-144.83
XBADJ	STCK14	-128.67	-108.59	-85.22	-81.27	-77.28	-70.94
XBADJ	STCK14	-62.44	-52.05	-40.08	-26.89	-12.88	1.52
XBADJ	STCK14	-44.57	-90.13	-132.95	-171.74	-205.31	-232.63
XBADJ	STCK14	-252.89	-265.47	-269.98	-288.67	-301.41	-305.00
XBADJ	STCK14	-299.32	-284.54	-261.12	-229.77	-191.43	-147.28
XBADJ	STCK15	-159.25	-172.42	-180.36	-182.81	-179.71	-171.15
XBADJ	STCK15	-157.39	-138.84	-116.08	-111.80	-106.56	-98.07
XBADJ	STCK15	-86.61	-72.52	-56.22	-38.21	-19.05	0.70
XBADJ	STCK15	-40.02	-80.35	-118.24	-152.53	-182.19	-206.32
XBADJ	STCK15	-224.18	-235.22	-239.12	-258.13	-272.13	-277.86
XBADJ	STCK15	-275.15	-264.08	-244.98	-218.44	-185.27	-146.46
XBADJ	STCK16	-164.75	-183.26	-196.19	-203.17	-203.97	-198.58

XBADJ	STCK16	-187.15	-170.03	-147.75	-142.99	-136.32	-125.50
XBADJ	STCK16	-110.87	-92.87	-72.05	-49.04	-24.55	0.70
XBADJ	STCK16	-34.52	-69.51	-102.40	-132.17	-157.93	-178.89
XBADJ	STCK16	-194.42	-204.03	-207.45	-226.94	-242.37	-250.44
XBADJ	STCK16	-250.89	-243.72	-229.15	-207.61	-179.77	-146.46
XBADJ	STCK17	-169.36	-193.17	-211.10	-222.63	-227.38	-225.23
XBADJ	STCK17	-216.24	-200.67	-179.01	-173.92	-165.98	-152.99
XBADJ	STCK17	-135.35	-113.60	-88.40	-60.52	-30.79	-0.13
XBADJ	STCK17	-29.91	-59.60	-87.49	-112.72	-134.52	-152.24
XBADJ	STCK17	-165.33	-173.39	-176.19	-196.01	-212.71	-222.95
XBADJ	STCK17	-226.41	-222.99	-212.80	-196.14	-173.52	-145.63
XBADJ	STCK18	-174.86	-204.00	-226.94	-242.99	-251.65	-252.67
XBADJ	STCK18	-246.01	-231.87	-210.69	-205.12	-195.74	-180.42
XBADJ	STCK18	-159.62	-133.97	-104.24	-71.35	-36.29	-0.13
XBADJ	STCK18	-24.40	-48.77	-71.65	-92.35	-110.25	-124.80
XBADJ	STCK18	-135.56	-142.19	-144.51	-164.82	-182.94	-195.51
XBADJ	STCK18	-202.14	-202.63	-196.96	-185.30	-168.02	-145.63
XBADJ	STCK19	-179.27	-213.50	-241.25	-261.66	-274.13	-278.26
XBADJ	STCK19	-273.95	-261.30	-240.72	-234.83	-224.24	-206.84
XBADJ	STCK19	-183.15	-153.90	-119.97	-82.39	-42.31	-0.95
XBADJ	STCK19	-20.00	-39.27	-57.34	-73.68	-87.77	-99.20
XBADJ	STCK19	-107.62	-112.76	-114.48	-135.10	-154.44	-169.10
XBADJ	STCK19	-178.61	-182.70	-181.23	-174.26	-162.00	-144.81
XBADJ	STCK20	-185.39	-225.14	-258.06	-283.13	-299.60	-306.97
XBADJ	STCK20	-305.01	-293.78	-273.63	-267.17	-255.03	-235.14
XBADJ	STCK20	-208.10	-174.74	-136.07	-93.26	-47.63	-0.54
XBADJ	STCK20	-13.88	-27.63	-40.53	-52.21	-62.30	-70.50
XBADJ	STCK20	-76.55	-80.28	-81.57	-102.76	-123.66	-140.80
XBADJ	STCK20	-153.66	-161.86	-165.13	-163.39	-156.69	-145.22
XBADJ	STCK21	-189.91	-234.47	-271.89	-301.06	-321.08	-331.34
XBADJ	STCK21	-331.54	-321.66	-302.01	-295.19	-281.84	-259.92
XBADJ	STCK21	-230.10	-193.29	-150.61	-103.35	-52.96	-0.95
XBADJ	STCK21	-9.35	-18.30	-26.70	-34.28	-40.82	-46.12
XBADJ	STCK21	-50.02	-52.40	-53.19	-74.74	-96.85	-116.02
XBADJ	STCK21	-131.66	-143.30	-150.59	-153.30	-151.35	-144.81
XBADJ	STCK22	-47.96	-99.70	-148.41	-192.61	-230.96	-262.28
XBADJ	STCK22	-285.64	-300.32	-305.88	-324.15	-335.01	-335.68
XBADJ	STCK22	-326.16	-306.72	-277.97	-240.76	-196.25	-145.77
XBADJ	STCK22	-151.30	-153.07	-150.18	-142.73	-130.95	-115.18
XBADJ	STCK22	-95.92	-73.74	-49.32	-45.78	-43.68	-40.26
XBADJ	STCK22	-35.61	-29.88	-23.24	-15.89	-8.06	0.01
XBADJ	STCK23	-42.89	-89.72	-133.81	-173.84	-208.59	-237.00
XBADJ	STCK23	-258.21	-271.57	-276.68	-295.40	-307.57	-310.39
XBADJ	STCK23	-303.79	-287.95	-263.37	-230.78	-191.18	-145.77
XBADJ	STCK23	-156.37	-163.05	-164.78	-161.50	-153.32	-140.47
XBADJ	STCK23	-123.36	-102.50	-78.52	-74.54	-71.12	-65.54
XBADJ	STCK23	-57.98	-48.64	-37.84	-25.88	-13.13	0.01
XBADJ	STCK24	-38.15	-79.97	-119.36	-155.11	-186.16	-211.55
XBADJ	STCK24	-230.51	-242.47	-247.06	-266.16	-279.59	-284.54
XBADJ	STCK24	-280.83	-268.60	-248.20	-220.26	-185.63	-145.36
XBADJ	STCK24	-161.11	-172.80	-179.24	-180.23	-175.74	-165.92
XBADJ	STCK24	-151.05	-131.59	-108.14	-103.78	-99.10	-91.40
XBADJ	STCK24	-80.93	-68.00	-53.00	-36.39	-18.68	-0.40

XBADJ	STCK25	-32.11	-68.47	-102.75	-133.91	-161.00	-183.20
XBADJ	STCK25	-199.83	-210.39	-214.56	-234.22	-249.19	-256.60
XBADJ	STCK25	-256.20	-248.02	-232.31	-209.53	-180.39	-145.77
XBADJ	STCK25	-167.16	-184.30	-195.84	-201.43	-200.90	-194.27
XBADJ	STCK25	-181.73	-163.67	-140.64	-135.71	-129.50	-119.34
XBADJ	STCK25	-105.56	-88.57	-68.90	-47.12	-23.92	0.01
XBADJ	STCK26	-28.03	-59.21	-88.60	-115.29	-138.47	-157.45
XBADJ	STCK26	-171.65	-180.63	-184.12	-204.03	-220.17	-229.62
XBADJ	STCK26	-232.09	-227.51	-216.02	-197.96	-173.89	-144.54
XBADJ	STCK26	-171.23	-193.56	-210.00	-220.06	-223.43	-220.01
XBADJ	STCK26	-209.91	-193.44	-171.08	-165.91	-158.52	-146.32
XBADJ	STCK26	-129.67	-109.08	-85.18	-58.69	-30.42	-1.22
XBADJ	STCK27	-23.28	-49.02	-73.27	-95.29	-114.42	-130.08
XBADJ	STCK27	-141.78	-149.17	-152.03	-172.28	-189.73	-201.41
XBADJ	STCK27	-206.98	-206.25	-199.26	-186.21	-167.50	-143.71
XBADJ	STCK27	-175.99	-203.75	-225.32	-240.05	-247.48	-247.39
XBADJ	STCK27	-239.79	-224.89	-203.17	-197.65	-188.96	-174.52
XBADJ	STCK27	-154.79	-130.35	-101.95	-70.45	-36.81	-2.05
XBADJ	STCK28	-18.54	-39.27	-58.81	-76.57	-92.00	-104.63
XBADJ	STCK28	-114.08	-120.07	-122.41	-143.04	-161.76	-175.56
XBADJ	STCK28	-184.02	-186.90	-184.09	-175.69	-161.96	-143.30
XBADJ	STCK28	-180.73	-213.50	-239.78	-258.77	-269.91	-272.84
XBADJ	STCK28	-267.48	-253.99	-232.79	-226.89	-216.93	-200.38
XBADJ	STCK28	-177.74	-149.70	-117.11	-80.96	-42.35	-2.46
XBADJ	STCK29	-13.04	-28.44	-42.98	-56.21	-67.74	-77.20
XBADJ	STCK29	-84.32	-88.88	-90.74	-111.85	-132.00	-148.13
XBADJ	STCK29	-159.76	-166.54	-168.26	-164.86	-156.46	-143.30
XBADJ	STCK29	-186.23	-224.33	-255.61	-279.13	-294.17	-300.26
XBADJ	STCK29	-297.24	-285.18	-264.46	-258.08	-246.69	-227.81
XBADJ	STCK29	-202.00	-170.06	-132.95	-91.79	-47.85	-2.46
XBADJ	STCK30	-8.23	-18.56	-28.32	-37.22	-45.00	-51.40
XBADJ	STCK30	-56.25	-59.38	-60.71	-82.21	-103.64	-121.92
XBADJ	STCK30	-136.49	-146.92	-152.89	-154.21	-150.84	-142.89
XBADJ	STCK30	-191.04	-234.21	-270.27	-298.12	-316.91	-326.07
XBADJ	STCK30	-325.32	-314.68	-294.49	-287.73	-275.05	-254.02
XBADJ	STCK30	-225.27	-189.67	-148.32	-102.45	-53.47	-2.87
YBADJ	STCK1	-83.63	-72.30	-58.77	-43.46	-26.83	-9.38
YBADJ	STCK1	8.35	25.83	42.52	59.50	72.98	84.26
YBADJ	STCK1	92.97	98.85	101.74	101.53	98.23	91.95
YBADJ	STCK1	83.63	72.30	58.77	43.46	26.83	9.38
YBADJ	STCK1	-8.35	-25.83	-42.52	-59.50	-72.98	-84.26
YBADJ	STCK1	-92.97	-98.85	-101.74	-101.53	-98.23	-91.95
YBADJ	STCK2	-57.71	-47.40	-35.65	-22.81	-9.28	4.53
YBADJ	STCK2	18.21	31.33	43.50	55.92	64.97	72.03
YBADJ	STCK2	76.91	79.46	79.59	77.30	72.66	65.81
YBADJ	STCK2	57.71	47.40	35.65	22.81	9.28	-4.53
YBADJ	STCK2	-18.21	-31.33	-43.50	-55.92	31.78	3.48
YBADJ	STCK2	-24.92	-52.56	-78.61	-77.30	-72.66	-65.81
YBADJ	STCK3	-26.94	-17.98	-8.48	1.29	11.01	20.39
YBADJ	STCK3	29.16	37.04	43.80	50.80	54.58	56.69
YBADJ	STCK3	57.09	55.75	52.72	48.08	41.99	34.61
YBADJ	STCK3	26.94	17.98	8.48	-1.29	-11.01	-20.39
YBADJ	STCK3	-29.16	-37.04	-43.80	-50.80	42.17	18.82
YBADJ	STCK3	-5.09	-28.85	-51.74	-73.05	-41.99	-34.61

YBADJ	STCK4	5.90	13.40	20.50	26.97	32.63	37.29
YBADJ	STCK4	40.82	43.11	44.09	45.30	-53.28	-35.22
YBADJ	STCK4	35.91	30.44	24.03	16.90	9.25	1.32
YBADJ	STCK4	-5.90	-13.40	-20.50	-26.97	-32.63	-37.29
YBADJ	STCK4	-40.82	-43.11	-44.09	-45.30	53.28	35.22
YBADJ	STCK4	16.08	-3.54	-23.05	-41.87	-59.41	-75.15
YBADJ	STCK5	-57.60	-69.73	-79.75	51.95	53.72	53.86
YBADJ	STCK5	52.36	49.28	44.69	40.32	-63.70	-50.75
YBADJ	STCK5	-36.26	-20.67	-4.45	11.91	-22.26	-30.78
YBADJ	STCK5	57.60	69.73	79.75	-51.95	-53.72	-53.86
YBADJ	STCK5	-52.36	-49.28	-44.69	-40.32	63.70	50.75
YBADJ	STCK5	36.26	20.67	4.45	-11.91	-27.90	-43.05
YBADJ	STCK6	-28.57	-41.99	-54.12	-64.61	-73.14	68.83
YBADJ	STCK6	62.71	54.68	44.99	35.51	23.27	-65.20
YBADJ	STCK6	-54.94	-43.01	-29.78	-15.64	-1.02	-60.20
YBADJ	STCK6	28.57	41.99	54.12	64.61	73.14	-68.83
YBADJ	STCK6	-62.71	-54.68	-44.99	-35.51	-23.27	65.20
YBADJ	STCK6	54.94	43.01	29.78	15.64	1.02	-13.63
YBADJ	STCK7	2.99	-11.92	-26.47	-40.22	-52.74	-63.66
YBADJ	STCK7	73.40	59.96	44.69	29.64	12.01	-5.99
YBADJ	STCK7	-75.80	-67.79	-57.72	-45.90	-32.69	-92.30
YBADJ	STCK7	-98.20	11.92	26.47	40.22	52.74	63.66
YBADJ	STCK7	-73.40	-59.96	-44.69	-29.64	-12.01	5.99
YBADJ	STCK7	75.80	67.79	57.72	45.90	32.69	18.47
YBADJ	STCK10	-30.93	-35.63	-39.25	-41.67	-42.83	-42.69
YBADJ	STCK10	-41.24	-38.55	-34.68	-29.55	-23.86	-17.44
YBADJ	STCK10	-10.48	-3.22	4.15	11.39	18.29	24.63
YBADJ	STCK10	30.93	35.63	39.25	41.67	42.83	42.69
YBADJ	STCK10	41.24	38.55	34.68	29.55	23.86	17.44
YBADJ	STCK10	10.48	3.22	-4.15	-11.39	-18.29	-24.63
YBADJ	STCK11	-5.76	-11.61	-17.11	-22.09	-26.40	-29.91
YBADJ	STCK11	-32.50	-34.11	-34.68	-33.99	-32.60	-30.22
YBADJ	STCK11	-26.91	-22.80	-17.98	-12.63	-6.89	-0.93
YBADJ	STCK11	5.76	11.61	17.11	22.09	26.40	29.91
YBADJ	STCK11	32.50	34.11	34.68	33.99	32.60	30.22
YBADJ	STCK11	26.91	22.80	17.98	12.63	6.89	0.93
YBADJ	STCK12	18.29	11.39	4.14	-3.23	-10.51	-17.46
YBADJ	STCK12	-23.89	-29.58	-34.38	-37.93	-40.65	-42.14
YBADJ	STCK12	-42.35	-41.27	-38.94	-35.42	-30.83	-25.30
YBADJ	STCK12	-18.29	-11.39	-4.14	3.23	10.51	17.46
YBADJ	STCK12	23.89	29.58	34.39	37.93	40.65	42.14
YBADJ	STCK12	42.35	41.27	38.94	35.42	30.83	25.30
YBADJ	STCK13	-133.34	-140.43	-143.24	-141.71	-135.86	-125.89
YBADJ	STCK13	-112.10	-94.89	-74.81	-50.26	-26.37	-1.68
YBADJ	STCK13	23.06	47.10	69.70	90.19	107.94	122.41
YBADJ	STCK13	133.34	140.43	143.24	141.71	135.86	125.89
YBADJ	STCK13	112.10	94.89	74.81	50.26	26.37	1.68
YBADJ	STCK13	-23.06	-47.10	-69.70	-90.19	-107.94	-122.41
YBADJ	STCK14	-103.70	-112.07	-117.03	-118.44	-116.25	-110.52
YBADJ	STCK14	-101.44	-89.28	-74.40	-55.07	-36.25	-16.34
YBADJ	STCK14	4.07	24.35	43.90	62.11	78.44	92.38
YBADJ	STCK14	103.70	112.07	117.03	118.44	116.25	110.52
YBADJ	STCK14	101.44	89.28	74.40	55.07	36.25	16.34

YBADJ	STCK14	-4.07	-24.35	-43.90	-62.11	-78.44	-92.38
YBADJ	STCK15	-73.17	-82.79	-89.89	-94.27	-95.78	-94.38
YBADJ	STCK15	-90.12	-83.11	-73.58	-59.62	-46.04	-31.06
YBADJ	STCK15	-15.14	1.24	17.59	33.39	48.19	61.52
YBADJ	STCK15	73.17	82.79	89.89	94.27	95.78	94.38
YBADJ	STCK15	90.12	83.11	73.58	59.62	46.04	31.06
YBADJ	STCK15	15.14	-1.24	-17.59	-33.39	-48.19	-61.52
YBADJ	STCK16	-41.98	-53.03	-62.47	-70.01	-75.42	-78.55
YBADJ	STCK16	-79.28	-77.61	-73.58	-65.12	-56.87	-46.90
YBADJ	STCK16	-35.50	-23.02	-9.84	3.63	17.00	29.85
YBADJ	STCK16	41.98	53.03	62.47	70.01	75.42	78.55
YBADJ	STCK16	79.28	77.61	73.58	65.12	56.87	46.90
YBADJ	STCK16	35.50	23.02	9.84	-3.63	-17.00	-29.85
YBADJ	STCK17	-11.05	-23.37	-34.98	-45.53	-54.69	-62.20
YBADJ	STCK17	-67.81	-71.37	-72.75	-69.73	-66.78	-61.81
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YBADJ	STCK17	11.05	23.37	34.98	45.53	54.69	62.20
YBADJ	STCK17	67.81	71.37	72.75	69.73	66.78	61.81
YBADJ	STCK17	54.95	46.43	36.50	25.46	13.64	1.41
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YBADJ	STCK18	-56.98	-65.86	-72.75	-75.23	-77.62	-77.65
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YBADJ	STCK22	-24.94	-50.00	-73.55	-94.86	-113.29	-128.28
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YBADJ	STCK22	-112.44	-94.09	-72.89	-51.67	-26.68	-0.89
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YBADJ	STCK23	-110.43	-118.22	-122.42	-122.91	-119.65	-112.76

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YBADJ    STCK30        102.76    85.71    66.05    44.39    21.38    -2.29
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SRCGROUP DW6      L0007218 L0007219 L0007220 L0007221 L0007222 L0007223
SRCGROUP DW6      L0007224 L0007225 L0007226 L0007227 L0007228 L0007229
SRCGROUP DW6      L0007230 L0007231 L0007232 L0007233 L0007234 L0007235
SRCGROUP DW6      L0007236 L0007237 L0007238 L0007239 L0007240 L0007241
SRCGROUP DW6      L0007242 L0007243
SRCGROUP DW6_CAR  L0007810 L0007811 L0007812 L0007813 L0007814 L0007815
SRCGROUP DW6_CAR  L0007816 L0007817 L0007818 L0007819 L0007820 L0007821
SRCGROUP DW6_CAR  L0007822 L0007823 L0007824 L0007825 L0007826 L0007827
SRCGROUP DW6_CAR  L0007828 L0007829 L0007830 L0007831 L0007832 L0007833
SRCGROUP DW6_CAR  L0007834 L0007835 L0007836 L0007837 L0007838 L0007839
SRCGROUP DW6_CAR  L0007840 L0007841 L0007842 L0007843 L0007844 L0007845
SRCGROUP DW6_CAR  L0007846 L0007847 L0007848 L0007849 L0007850 L0007851
SRCGROUP DW6_CAR  L0007852 L0007853 L0007854 L0007855 L0007856 L0007857
SRCGROUP DW6_CAR  L0007858 L0007859 L0007860 L0007861 L0007862 L0007863
SRCGROUP DW6_CAR  L0007864 L0007865 L0007866 L0007867 L0007868 L0007869
SRCGROUP DW6_CAR  L0007870 L0007871 L0007872 L0007873 L0007874 L0007875
SRCGROUP DW6_CAR  L0007876 L0007877 L0007878 L0007879 L0007880 L0007881
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SRCGROUP DW6_CAR  L0007882 L0007883 L0007884 L0007885 L0007886 L0007887
SRCGROUP DW6_CAR  L0007888 L0007889 L0007890 L0007891 L0007892 L0007893
SRCGROUP DW6_CAR  L0007894 L0007895 L0007896 L0007897 L0007898 L0007899
SRCGROUP DW6_CAR  L0007900 L0007901 L0007902 L0007903 L0007904 L0007905
SRCGROUP DW6_CAR  L0007906 L0007907 L0007908 L0007909 L0007910 L0007911
SRCGROUP DW6_CAR  L0007912 L0007913 L0007914 L0007915 L0007916 L0007917
SRCGROUP DW6_CAR  L0007918 L0007919 L0007920 L0007921 L0007922 L0007923
SRCGROUP DW6_CAR  L0007924 L0007925 L0007926 L0007927 L0007928 L0007929
SRCGROUP DW6_CAR  L0007930 L0007931 L0007932 L0007933 L0007934 L0007935
SRCGROUP DW6_CAR  L0007936 L0007937 L0007938 L0007939 L0007940 L0007941
SRCGROUP DW6_CAR  L0007942 L0007943 L0007944 L0007945 L0007946 L0007947
SRCGROUP DW6_CAR  L0007948 L0007949 L0007950 L0007951
SRCGROUP DW7      L0007314 L0007315 L0007316 L0007317 L0007318 L0007319
SRCGROUP DW7      L0007320 L0007321 L0007322 L0007323 L0007324 L0007325
SRCGROUP DW7      L0007326 L0007327 L0007328 L0007329 L0007330 L0007331
SRCGROUP DW7      L0007332 L0007333 L0007334 L0007335 L0007336 L0007337
SRCGROUP DW7      L0007338 L0007339 L0007340 L0007341 L0007342 L0007343
SRCGROUP DW7      L0007344 L0007345 L0007346 L0007347 L0007348 L0007349
SRCGROUP DW7      L0007350 L0007351 L0007352 L0007353 L0007354 L0007355
SRCGROUP DW7      L0007356 L0007357 L0007358 L0007359 L0007360 L0007361
SRCGROUP DW7      L0007362 L0007363 L0007364 L0007365 L0007366 L0007367
SRCGROUP DW7      L0007368 L0007369 L0007370 L0007371 L0007372 L0007373
SRCGROUP DW7      L0007374 L0007375 L0007376 L0007377 L0007378 L0007379
SRCGROUP DW7      L0007380 L0007381 L0007382 L0007383 L0007384 L0007385
SRCGROUP DW7      L0007386 L0007387 L0007388 L0007389 L0007390
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SRCGROUP DW7CAR   L0007994 L0007995 L0007996 L0007997 L0007998 L0007999
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SRCGROUP DW7CAR   L0008006 L0008007 L0008008 L0008009 L0008010 L0008011
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SRCGROUP DW7CAR   L0008030 L0008031 L0008032 L0008033 L0008034 L0008035
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SRCGROUP DW7CAR   L0008042 L0008043 L0008044 L0008045 L0008046 L0008047
SRCGROUP DW7CAR   L0008048 L0008049 L0008050 L0008051 L0008052 L0008053
SRCGROUP DW7CAR   L0008054 L0008055 L0008056 L0008057 L0008058 L0008059
SRCGROUP DW7CAR   L0008060 L0008061 L0008062 L0008063 L0008064 L0008065
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SRCGROUP DW7CAR   L0008072 L0008073 L0008074 L0008075 L0008076 L0008077
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SRCGROUP DW7CAR   L0008084 L0008085 L0008086 L0008087 L0008088 L0008089
SRCGROUP DW7CAR   L0008090 L0008091 L0008092 L0008093 L0008094 L0008095
SRCGROUP DW7CAR   L0008096 L0008097 L0008098 L0008099 L0008100
SRCGROUP HUGHES1  L0007251 L0007252 L0007253 L0007254 L0007255 L0007256
SRCGROUP HUGHES1  L0007257 L0007258 L0007259 L0007260 L0007261 L0007262
SRCGROUP HUGHES1  L0007263 L0007264 L0007265 L0007266 L0007267 L0007268
SRCGROUP HUGHES1  L0007269 L0007270 L0007271 L0007272 L0007273 L0007274
SRCGROUP HUGHES1  L0007275 L0007276 L0007277 L0007278 L0007279 L0007280
SRCGROUP HUGHES1  L0007281 L0007282 L0007283 L0007284 L0007285 L0007286
SRCGROUP HUGHES1  L0007287 L0007288 L0007289 L0007290 L0007291 L0007292
SRCGROUP HUGHES1  L0007293 L0007294 L0007295 L0007296 L0007297 L0007298
SRCGROUP HUGHES1  L0007299 L0007300 L0007301 L0007302 L0007303 L0007304
SRCGROUP HUGHES1  L0007305 L0007306 L0007307 L0007308 L0007309 L0007310
SRCGROUP HUGHES1  L0007311 L0007312 L0007313
SRCGROUP HUGHES2  L0007391 L0007392 L0007393 L0007394 L0007395 L0007396
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SRCGROUP HUGHES2  L0007397 L0007398 L0007399 L0007400
SRCGROUP HUGHES3  L0007469 L0007470 L0007471 L0007472 L0007473 L0007474
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SRCGROUP HUGHES3  L0007481 L0007482 L0007483 L0007484 L0007485 L0007486
SRCGROUP HUGHES3  L0007487 L0007488 L0007489 L0007490 L0007491 L0007492
SRCGROUP HUGHES3  L0007493 L0007494 L0007495 L0007496 L0007497 L0007498
SRCGROUP HUGHES3  L0007499 L0007500 L0007501 L0007502 L0007503 L0007504
SRCGROUP HUGHES3  L0007505 L0007506 L0007507 L0007508 L0007509 L0007510
SRCGROUP HUGHES3  L0007511 L0007512 L0007513 L0007514 L0007515 L0007516
SRCGROUP HUGHES3  L0007517 L0007518 L0007519 L0007520 L0007521 L0007522
SRCGROUP HUGHES3  L0007523 L0007524 L0007525 L0007526 L0007527 L0007528
SRCGROUP HUGHES3  L0007529 L0007530 L0007531 L0007532 L0007533 L0007534
SRCGROUP HUGHES3  L0007535 L0007536 L0007537 L0007538 L0007539 L0007540
SRCGROUP HUGHES3  L0007541 L0007542 L0007543 L0007544 L0007545 L0007546
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SRCGROUP MARKS1   L0007611 L0007612 L0007613 L0007614 L0007615 L0007616
SRCGROUP MARKS1   L0007617 L0007618 L0007619 L0007620 L0007621 L0007622
SRCGROUP MARKS1   L0007623 L0007624 L0007625 L0007626 L0007627 L0007628
SRCGROUP MARKS1   L0007629 L0007630 L0007631 L0007632 L0007633 L0007634
SRCGROUP MARKS1   L0007635 L0007636 L0007637 L0007638 L0007639 L0007640
SRCGROUP MARKS1   L0007641 L0007642 L0007643 L0007644 L0007645 L0007646
SRCGROUP MARKS1   L0007647 L0007648 L0007649 L0007650 L0007651 L0007652
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SRCGROUP MARKS1   L0007659 L0007660 L0007661 L0007662 L0007663 L0007664
SRCGROUP MARKS1   L0007665 L0007666 L0007667 L0007668 L0007669 L0007670
SRCGROUP MARKS1   L0007671 L0007672 L0007673 L0007674 L0007675 L0007676
SRCGROUP MARKS1   L0007677 L0007678 L0007679 L0007680 L0007681 L0007682
SRCGROUP MARKS2   L0007744 L0007745 L0007746 L0007747 L0007748 L0007749
SRCGROUP MARKS2   L0007750 L0007751 L0007752 L0007753 L0007754 L0007755
SRCGROUP MARKS2   L0007756 L0007757 L0007758 L0007759 L0007760 L0007761
SRCGROUP MARKS2   L0007762 L0007763 L0007764 L0007765 L0007766 L0007767
SRCGROUP MARKS2   L0007768 L0007769 L0007770 L0007771 L0007772 L0007773
SRCGROUP MARKS2   L0007774 L0007775 L0007776 L0007777 L0007778 L0007779
SRCGROUP MARKS2   L0007780 L0007781 L0007782 L0007783 L0007784 L0007785
SRCGROUP MARKS2   L0007786 L0007787 L0007788 L0007789 L0007790 L0007791
SRCGROUP MARKS2   L0007792 L0007793 L0007794 L0007795 L0007796 L0007797
SRCGROUP MARKS2   L0007798 L0007799 L0007800 L0007801 L0007802 L0007803
SRCGROUP MARKS2   L0007804 L0007805 L0007806 L0007807 L0007808 L0007809
SRCGROUP NIELSEN  L0007401 L0007402 L0007403 L0007404 L0007405 L0007406
SRCGROUP NIELSEN  L0007407 L0007408 L0007409 L0007410 L0007411 L0007412
SRCGROUP NIELSEN  L0007413 L0007414 L0007415 L0007416 L0007417 L0007418
SRCGROUP NIELSEN  L0007419 L0007420 L0007421 L0007422 L0007423 L0007424
SRCGROUP NIELSEN  L0007425 L0007426 L0007427 L0007428 L0007429 L0007430
SRCGROUP NIELSEN  L0007431 L0007432 L0007433 L0007434 L0007435 L0007436
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SRCGROUP NIELSEN  L0007449 L0007450 L0007451 L0007452 L0007453 L0007454
SRCGROUP NIELSEN  L0007455 L0007456 L0007457 L0007458 L0007459 L0007460
SRCGROUP NIELSEN  L0007461 L0007462 L0007463 L0007464 L0007465 L0007466
SRCGROUP NIELSEN  L0007467 L0007468
SRCGROUP NIELSEN2 L0007683 L0007684 L0007685 L0007686 L0007687 L0007688
SRCGROUP NIELSEN2 L0007689 L0007690 L0007691 L0007692 L0007693 L0007694
SRCGROUP NIELSEN2 L0007695 L0007696 L0007697 L0007698 L0007699 L0007700
SRCGROUP NIELSEN2 L0007701 L0007702 L0007703 L0007704 L0007705 L0007706
SRCGROUP NIELSEN2 L0007707 L0007708 L0007709 L0007710 L0007711 L0007712
SRCGROUP NIELSEN2 L0007713 L0007714 L0007715 L0007716 L0007717 L0007718
SRCGROUP NIELSEN2 L0007719 L0007720 L0007721 L0007722 L0007723 L0007724
SRCGROUP NIELSEN2 L0007725 L0007726 L0007727 L0007728 L0007729 L0007730
SRCGROUP NIELSEN2 L0007731 L0007732 L0007733 L0007734 L0007735 L0007736
SRCGROUP NIELSEN2 L0007737 L0007738 L0007739 L0007740 L0007741 L0007742
SRCGROUP NIELSEN2 L0007743
SRCGROUP STCK1    STCK1
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   SRCGROUP STCK10   STCK10
   SRCGROUP STCK11   STCK11
   SRCGROUP STCK12   STCK12
   SRCGROUP STCK13   STCK13
   SRCGROUP STCK14   STCK14
   SRCGROUP STCK15   STCK15
   SRCGROUP STCK16   STCK16
   SRCGROUP STCK17   STCK17
   SRCGROUP STCK18   STCK18
   SRCGROUP STCK19   STCK19
   SRCGROUP STCK2    STCK2
   SRCGROUP STCK20   STCK20
   SRCGROUP STCK21   STCK21
   SRCGROUP STCK22   STCK22
   SRCGROUP STCK23   STCK23
   SRCGROUP STCK24   STCK24
   SRCGROUP STCK25   STCK25
   SRCGROUP STCK26   STCK26
   SRCGROUP STCK27   STCK27
   SRCGROUP STCK28   STCK28
   SRCGROUP STCK29   STCK29
   SRCGROUP STCK3    STCK3
   SRCGROUP STCK30   STCK30
   SRCGROUP STCK4    STCK4
   SRCGROUP STCK5    STCK5
   SRCGROUP STCK6    STCK6
   SRCGROUP STCK7    STCK7
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Operation.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\fresno-93193\Fresno_18-22.SFC
   PROFFILE ..\fresno-93193\Fresno_18-22.PFL
   SURFDATA 93193 2018 FRESNO/AIR_TERMINAL
   UAIRDATA 23230 2018 OAKLAND/WSO_AP
   PROFBASE 10.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 DW2 1ST Operation.AD\01H1G001.PLT 31
   PLOTFILE 1 DW3CAR 1ST Operation.AD\01H1G002.PLT 32
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PLOTFILE 1 DW4CAR 1ST Operation.AD\01H1G003.PLT 33
PLOTFILE 1 DW5CAR 1ST Operation.AD\01H1G004.PLT 34
PLOTFILE 1 DW6 1ST Operation.AD\01H1G005.PLT 35
PLOTFILE 1 DW6_CAR 1ST Operation.AD\01H1G006.PLT 36
PLOTFILE 1 DW7 1ST Operation.AD\01H1G007.PLT 37
PLOTFILE 1 DW7CAR 1ST Operation.AD\01H1G008.PLT 38
PLOTFILE 1 HUGHES1 1ST Operation.AD\01H1G009.PLT 39
PLOTFILE 1 HUGHES2 1ST Operation.AD\01H1G010.PLT 40
PLOTFILE 1 HUGHES3 1ST Operation.AD\01H1G011.PLT 41
PLOTFILE 1 MARKS1 1ST Operation.AD\01H1G012.PLT 42
PLOTFILE 1 MARKS2 1ST Operation.AD\01H1G013.PLT 43
PLOTFILE 1 NIELSEN 1ST Operation.AD\01H1G014.PLT 44
PLOTFILE 1 NIELSEN2 1ST Operation.AD\01H1G015.PLT 45
PLOTFILE 1 STCK1 1ST Operation.AD\01H1G016.PLT 46
PLOTFILE 1 STCK10 1ST Operation.AD\01H1G017.PLT 47
PLOTFILE 1 STCK11 1ST Operation.AD\01H1G018.PLT 48
PLOTFILE 1 STCK12 1ST Operation.AD\01H1G019.PLT 49
PLOTFILE 1 STCK13 1ST Operation.AD\01H1G020.PLT 50
PLOTFILE 1 STCK14 1ST Operation.AD\01H1G021.PLT 51
PLOTFILE 1 STCK15 1ST Operation.AD\01H1G022.PLT 52
PLOTFILE 1 STCK16 1ST Operation.AD\01H1G023.PLT 53
PLOTFILE 1 STCK17 1ST Operation.AD\01H1G024.PLT 54
PLOTFILE 1 STCK18 1ST Operation.AD\01H1G025.PLT 55
PLOTFILE 1 STCK19 1ST Operation.AD\01H1G026.PLT 56
PLOTFILE 1 STCK2 1ST Operation.AD\01H1G027.PLT 57
PLOTFILE 1 STCK20 1ST Operation.AD\01H1G028.PLT 58
PLOTFILE 1 STCK21 1ST Operation.AD\01H1G029.PLT 59
PLOTFILE 1 STCK22 1ST Operation.AD\01H1G030.PLT 60
PLOTFILE 1 STCK23 1ST Operation.AD\01H1G031.PLT 61
PLOTFILE 1 STCK24 1ST Operation.AD\01H1G032.PLT 62
PLOTFILE 1 STCK25 1ST Operation.AD\01H1G033.PLT 63
PLOTFILE 1 STCK26 1ST Operation.AD\01H1G034.PLT 64
PLOTFILE 1 STCK27 1ST Operation.AD\01H1G035.PLT 65
PLOTFILE 1 STCK28 1ST Operation.AD\01H1G036.PLT 66
PLOTFILE 1 STCK29 1ST Operation.AD\01H1G037.PLT 67
PLOTFILE 1 STCK3 1ST Operation.AD\01H1G038.PLT 68
PLOTFILE 1 STCK30 1ST Operation.AD\01H1G039.PLT 69
PLOTFILE 1 STCK4 1ST Operation.AD\01H1G040.PLT 70
PLOTFILE 1 STCK5 1ST Operation.AD\01H1G041.PLT 71
PLOTFILE 1 STCK6 1ST Operation.AD\01H1G042.PLT 72
PLOTFILE 1 STCK7 1ST Operation.AD\01H1G043.PLT 73
PLOTFILE PERIOD DW2 Operation.AD\PE00G001.PLT 74
PLOTFILE PERIOD DW3CAR Operation.AD\PE00G002.PLT 75
PLOTFILE PERIOD DW4CAR Operation.AD\PE00G003.PLT 76
PLOTFILE PERIOD DW5CAR Operation.AD\PE00G004.PLT 77
PLOTFILE PERIOD DW6 Operation.AD\PE00G005.PLT 78
PLOTFILE PERIOD DW6_CAR Operation.AD\PE00G006.PLT 79
PLOTFILE PERIOD DW7 Operation.AD\PE00G007.PLT 80
PLOTFILE PERIOD DW7CAR Operation.AD\PE00G008.PLT 81
PLOTFILE PERIOD HUGHES1 Operation.AD\PE00G009.PLT 82
PLOTFILE PERIOD HUGHES2 Operation.AD\PE00G010.PLT 83
PLOTFILE PERIOD HUGHES3 Operation.AD\PE00G011.PLT 84
PLOTFILE PERIOD MARKS1 Operation.AD\PE00G012.PLT 85
PLOTFILE PERIOD MARKS2 Operation.AD\PE00G013.PLT 86
PLOTFILE PERIOD NIELSEN Operation.AD\PE00G014.PLT 87
PLOTFILE PERIOD NIELSEN2 Operation.AD\PE00G015.PLT 88
PLOTFILE PERIOD STCK1 Operation.AD\PE00G016.PLT 89
PLOTFILE PERIOD STCK10 Operation.AD\PE00G017.PLT 90
PLOTFILE PERIOD STCK11 Operation.AD\PE00G018.PLT 91
PLOTFILE PERIOD STCK12 Operation.AD\PE00G019.PLT 92
PLOTFILE PERIOD STCK13 Operation.AD\PE00G020.PLT 93
PLOTFILE PERIOD STCK14 Operation.AD\PE00G021.PLT 94
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   PLOTFILE PERIOD STCK15 Operation.AD\PE00G022.PLT 95
   PLOTFILE PERIOD STCK16 Operation.AD\PE00G023.PLT 96
   PLOTFILE PERIOD STCK17 Operation.AD\PE00G024.PLT 97
   PLOTFILE PERIOD STCK18 Operation.AD\PE00G025.PLT 98
   PLOTFILE PERIOD STCK19 Operation.AD\PE00G026.PLT 99
   PLOTFILE PERIOD STCK2 Operation.AD\PE00G027.PLT 100
   PLOTFILE PERIOD STCK20 Operation.AD\PE00G028.PLT 101
   PLOTFILE PERIOD STCK21 Operation.AD\PE00G029.PLT 102
   PLOTFILE PERIOD STCK22 Operation.AD\PE00G030.PLT 103
   PLOTFILE PERIOD STCK23 Operation.AD\PE00G031.PLT 104
   PLOTFILE PERIOD STCK24 Operation.AD\PE00G032.PLT 105
   PLOTFILE PERIOD STCK25 Operation.AD\PE00G033.PLT 106
   PLOTFILE PERIOD STCK26 Operation.AD\PE00G034.PLT 107
   PLOTFILE PERIOD STCK27 Operation.AD\PE00G035.PLT 108
   PLOTFILE PERIOD STCK28 Operation.AD\PE00G036.PLT 109
   PLOTFILE PERIOD STCK29 Operation.AD\PE00G037.PLT 110
   PLOTFILE PERIOD STCK3 Operation.AD\PE00G038.PLT 111
   PLOTFILE PERIOD STCK30 Operation.AD\PE00G039.PLT 112
   PLOTFILE PERIOD STCK4 Operation.AD\PE00G040.PLT 113
   PLOTFILE PERIOD STCK5 Operation.AD\PE00G041.PLT 114
   PLOTFILE PERIOD STCK6 Operation.AD\PE00G042.PLT 115
   PLOTFILE PERIOD STCK7 Operation.AD\PE00G043.PLT 116
   SUMMFILE Operation.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           18 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    4699       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187    4699       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
 OU W565    4780       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4781       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4782       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4783       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4784       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4785       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4786       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4787       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4788       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4789       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4790       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4791       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4792       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4793       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4794       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE
 OU W565    4795       PERPLT: Possible Conflict With Dynamically Allocated FUNIT     PLOTFILE

 **********************************
 *** SETUP Finishes Successfully ***
 **********************************
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:
* Model Uses Regulatory DEFAULT Options
* Model Is Setup For Calculation of Average CONCentration Values.
* NO GAS DEPOSITION Data Provided.
* NO PARTICLE DEPOSITION Data Provided.
* Model Uses NO DRY DEPLETION. DDPLETE = F
* Model Uses NO WET DEPLETION. WETDPLT = F
* Stack-tip Downwash.
* Model Accounts for ELEVated Terrain Effects.
* Use Calms Processing Routine.
* Use Missing Data Processing Routine.
* No Exponential Decay.
* Model Uses RURAL Dispersion Only.
* ADJ_U* - Use ADJ_U* option for SBL in AERMET
* CCVR_Sub - Meteorological data includes CCVR substitutions
* TEMP_Sub - Meteorological data includes TEMP substitutions
* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: OTHER

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 1545 Source(s); 43 Source Group(s); and 49 Receptor(s)

with: 28 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 1517 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 21112

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 6.6 MB of RAM.

```
**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Operation.err
**File for Summary of Results:   Operation.sum
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
STCK1	0	0.10000E+01	246139.7	4070272.1	91.8	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK2	0	0.10000E+01	246165.9	4070271.1	91.7	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK3	0	0.10000E+01	246197.1	4070270.8	91.6	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK4	0	0.10000E+01	246230.4	4070270.5	91.5	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK5	0	0.10000E+01	246262.5	4070269.9	91.8	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK6	0	0.10000E+01	246291.9	4070269.6	94.7	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK7	0	0.10000E+01	246324.0	4070269.9	95.4	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK10	0	0.10000E+01	246280.9	4070220.8	93.0	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK11	0	0.10000E+01	246306.4	4070220.8	98.0	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK12	0	0.10000E+01	246330.8	4070220.5	97.9	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK13	0	0.10000E+01	246485.3	4070332.4	92.3	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK14	0	0.10000E+01	246515.3	4070332.0	92.3	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK15	0	0.10000E+01	246546.1	4070331.2	91.8	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK16	0	0.10000E+01	246577.8	4070331.2	92.4	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK17	0	0.10000E+01	246609.1	4070330.3	92.5	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK18	0	0.10000E+01	246640.8	4070330.3	92.7	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK19	0	0.10000E+01	246670.8	4070329.5	92.3	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK20	0	0.10000E+01	246703.7	4070329.9	90.9	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK21	0	0.10000E+01	246732.1	4070329.5	89.6	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK22	0	0.10000E+01	246735.9	4070184.7	90.8	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK23	0	0.10000E+01	246706.7	4070184.7	89.6	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK24	0	0.10000E+01	246677.1	4070185.1	88.2	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK25	0	0.10000E+01	246644.6	4070184.7	88.9	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK26	0	0.10000E+01	246614.2	4070185.9	90.4	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK27	0	0.10000E+01	246582.1	4070186.8	91.4	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK28	0	0.10000E+01	246552.5	4070187.2	91.9	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK29	0	0.10000E+01	246520.8	4070187.2	92.0	3.84	366.00	25.00	0.10	YES	NO	NO	
STCK30	0	0.10000E+01	246490.8	4070187.6	92.0	3.84	366.00	25.00	0.10	YES	NO	NO	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007146	0	0.10204E-01	246402.4	4070179.1	90.2	0.00	2.84	1.42	NO		NO
L0007147	0	0.10204E-01	246402.5	4070185.2	90.6	0.00	2.84	1.42	NO		NO
L0007148	0	0.10204E-01	246402.5	4070191.3	91.0	0.00	2.84	1.42	NO		NO
L0007149	0	0.10204E-01	246402.5	4070197.4	91.1	0.00	2.84	1.42	NO		NO
L0007150	0	0.10204E-01	246402.5	4070203.5	91.3	0.00	2.84	1.42	NO		NO
L0007151	0	0.10204E-01	246402.6	4070209.6	91.4	0.00	2.84	1.42	NO		NO
L0007152	0	0.10204E-01	246402.6	4070215.7	91.5	0.00	2.84	1.42	NO		NO
L0007153	0	0.10204E-01	246402.6	4070221.8	91.6	0.00	2.84	1.42	NO		NO
L0007154	0	0.10204E-01	246402.6	4070227.9	91.7	0.00	2.84	1.42	NO		NO
L0007155	0	0.10204E-01	246402.7	4070233.9	91.8	0.00	2.84	1.42	NO		NO
L0007156	0	0.10204E-01	246402.7	4070240.0	92.0	0.00	2.84	1.42	NO		NO
L0007157	0	0.10204E-01	246402.7	4070246.1	92.1	0.00	2.84	1.42	NO		NO
L0007158	0	0.10204E-01	246402.7	4070252.2	92.1	0.00	2.84	1.42	NO		NO
L0007159	0	0.10204E-01	246402.8	4070258.3	91.9	0.00	2.84	1.42	NO		NO
L0007160	0	0.10204E-01	246402.8	4070264.4	91.7	0.00	2.84	1.42	NO		NO
L0007161	0	0.10204E-01	246402.8	4070270.5	91.5	0.00	2.84	1.42	NO		NO
L0007162	0	0.10204E-01	246402.8	4070276.6	91.3	0.00	2.84	1.42	NO		NO
L0007163	0	0.10204E-01	246402.9	4070282.7	91.1	0.00	2.84	1.42	NO		NO
L0007164	0	0.10204E-01	246402.9	4070288.8	90.9	0.00	2.84	1.42	NO		NO
L0007165	0	0.10204E-01	246402.9	4070294.9	90.8	0.00	2.84	1.42	NO		NO
L0007166	0	0.10204E-01	246402.9	4070301.0	90.6	0.00	2.84	1.42	NO		NO
L0007167	0	0.10204E-01	246403.0	4070307.1	90.5	0.00	2.84	1.42	NO		NO
L0007168	0	0.10204E-01	246403.0	4070313.2	90.6	0.00	2.84	1.42	NO		NO
L0007169	0	0.10204E-01	246403.0	4070319.3	91.0	0.00	2.84	1.42	NO		NO
L0007170	0	0.10204E-01	246403.0	4070325.4	91.5	0.00	2.84	1.42	NO		NO
L0007171	0	0.10204E-01	246403.1	4070331.5	91.9	0.00	2.84	1.42	NO		NO
L0007172	0	0.10204E-01	246403.1	4070337.6	92.3	0.00	2.84	1.42	NO		NO
L0007173	0	0.10204E-01	246403.1	4070343.7	92.7	0.00	2.84	1.42	NO		NO
L0007174	0	0.10204E-01	246403.1	4070349.8	93.1	0.00	2.84	1.42	NO		NO
L0007175	0	0.10204E-01	246406.3	4070352.6	93.4	0.00	2.84	1.42	NO		NO
L0007176	0	0.10204E-01	246412.4	4070352.5	93.6	0.00	2.84	1.42	NO		NO
L0007177	0	0.10204E-01	246418.5	4070352.4	93.8	0.00	2.84	1.42	NO		NO
L0007178	0	0.10204E-01	246424.6	4070352.2	93.8	0.00	2.84	1.42	NO		NO
L0007179	0	0.10204E-01	246430.7	4070352.1	93.8	0.00	2.84	1.42	NO		NO
L0007180	0	0.10204E-01	246436.8	4070351.9	93.8	0.00	2.84	1.42	NO		NO
L0007181	0	0.10204E-01	246442.9	4070351.8	93.8	0.00	2.84	1.42	NO		NO
L0007182	0	0.10204E-01	246449.0	4070351.6	93.8	0.00	2.84	1.42	NO		NO
L0007183	0	0.10204E-01	246455.1	4070351.5	93.8	0.00	2.84	1.42	NO		NO
L0007184	0	0.10204E-01	246461.2	4070351.4	93.9	0.00	2.84	1.42	NO		NO
L0007185	0	0.10204E-01	246467.2	4070351.2	94.0	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007186	0	0.10204E-01	246473.3	4070351.1	94.0	0.00	2.84	1.42	NO		NO
L0007187	0	0.10204E-01	246479.4	4070350.9	94.1	0.00	2.84	1.42	NO		NO
L0007188	0	0.10204E-01	246485.5	4070350.8	94.1	0.00	2.84	1.42	NO		NO
L0007189	0	0.10204E-01	246491.6	4070350.6	94.1	0.00	2.84	1.42	NO		NO
L0007190	0	0.10204E-01	246497.7	4070350.5	94.0	0.00	2.84	1.42	NO		NO
L0007191	0	0.10204E-01	246503.8	4070350.3	94.0	0.00	2.84	1.42	NO		NO
L0007192	0	0.10204E-01	246509.9	4070350.2	94.0	0.00	2.84	1.42	NO		NO
L0007193	0	0.10204E-01	246516.0	4070350.1	93.8	0.00	2.84	1.42	NO		NO
L0007194	0	0.10204E-01	246522.1	4070349.9	93.6	0.00	2.84	1.42	NO		NO
L0007195	0	0.10204E-01	246528.2	4070349.8	93.4	0.00	2.84	1.42	NO		NO
L0007196	0	0.10204E-01	246534.3	4070349.6	93.1	0.00	2.84	1.42	NO		NO
L0007197	0	0.10204E-01	246540.4	4070349.5	93.0	0.00	2.84	1.42	NO		NO
L0007198	0	0.10204E-01	246546.5	4070349.3	93.1	0.00	2.84	1.42	NO		NO
L0007199	0	0.10204E-01	246552.6	4070349.2	93.2	0.00	2.84	1.42	NO		NO
L0007200	0	0.10204E-01	246558.7	4070349.1	93.3	0.00	2.84	1.42	NO		NO
L0007201	0	0.10204E-01	246564.8	4070348.9	93.5	0.00	2.84	1.42	NO		NO
L0007202	0	0.10204E-01	246570.9	4070348.8	93.6	0.00	2.84	1.42	NO		NO
L0007203	0	0.10204E-01	246576.9	4070348.6	93.5	0.00	2.84	1.42	NO		NO
L0007204	0	0.10204E-01	246583.0	4070348.5	93.4	0.00	2.84	1.42	NO		NO
L0007205	0	0.10204E-01	246589.1	4070348.3	93.4	0.00	2.84	1.42	NO		NO
L0007206	0	0.10204E-01	246595.2	4070348.2	93.3	0.00	2.84	1.42	NO		NO
L0007207	0	0.10204E-01	246601.3	4070348.1	93.2	0.00	2.84	1.42	NO		NO
L0007208	0	0.10204E-01	246607.4	4070347.9	93.1	0.00	2.84	1.42	NO		NO
L0007209	0	0.10204E-01	246613.5	4070347.8	93.0	0.00	2.84	1.42	NO		NO
L0007210	0	0.10204E-01	246619.6	4070347.6	92.9	0.00	2.84	1.42	NO		NO
L0007211	0	0.10204E-01	246625.7	4070347.5	92.8	0.00	2.84	1.42	NO		NO
L0007212	0	0.10204E-01	246631.8	4070347.3	92.7	0.00	2.84	1.42	NO		NO
L0007213	0	0.10204E-01	246637.9	4070347.2	92.7	0.00	2.84	1.42	NO		NO
L0007214	0	0.10204E-01	246644.0	4070347.0	92.7	0.00	2.84	1.42	NO		NO
L0007215	0	0.10204E-01	246650.1	4070346.9	92.6	0.00	2.84	1.42	NO		NO
L0007216	0	0.10204E-01	246656.2	4070346.8	92.6	0.00	2.84	1.42	NO		NO
L0007217	0	0.10204E-01	246662.3	4070346.6	92.5	0.00	2.84	1.42	NO		NO
L0007218	0	0.10204E-01	246668.4	4070346.5	92.3	0.00	2.84	1.42	NO		NO
L0007219	0	0.10204E-01	246674.5	4070346.3	92.1	0.00	2.84	1.42	NO		NO
L0007220	0	0.10204E-01	246680.5	4070346.2	91.9	0.00	2.84	1.42	NO		NO
L0007221	0	0.10204E-01	246686.6	4070346.0	91.7	0.00	2.84	1.42	NO		NO
L0007222	0	0.10204E-01	246692.7	4070345.9	91.4	0.00	2.84	1.42	NO		NO
L0007223	0	0.10204E-01	246698.8	4070345.8	91.1	0.00	2.84	1.42	NO		NO
L0007224	0	0.10204E-01	246704.9	4070345.6	90.7	0.00	2.84	1.42	NO		NO
L0007225	0	0.10204E-01	246711.0	4070345.5	90.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007226	0	0.10204E-01	246717.1	4070345.3	90.0	0.00	2.84	1.42	NO		NO
L0007227	0	0.10204E-01	246723.2	4070345.2	89.8	0.00	2.84	1.42	NO		NO
L0007228	0	0.10204E-01	246729.3	4070345.0	89.7	0.00	2.84	1.42	NO		NO
L0007229	0	0.10204E-01	246735.4	4070344.9	89.6	0.00	2.84	1.42	NO		NO
L0007230	0	0.10204E-01	246741.5	4070344.8	89.5	0.00	2.84	1.42	NO		NO
L0007231	0	0.10204E-01	246747.6	4070344.6	89.3	0.00	2.84	1.42	NO		NO
L0007232	0	0.10204E-01	246753.7	4070344.5	89.2	0.00	2.84	1.42	NO		NO
L0007233	0	0.10204E-01	246759.8	4070344.3	89.0	0.00	2.84	1.42	NO		NO
L0007234	0	0.10204E-01	246765.9	4070344.2	88.8	0.00	2.84	1.42	NO		NO
L0007235	0	0.10204E-01	246772.0	4070344.0	88.6	0.00	2.84	1.42	NO		NO
L0007236	0	0.10204E-01	246778.1	4070343.9	88.5	0.00	2.84	1.42	NO		NO
L0007237	0	0.10204E-01	246784.2	4070343.8	88.5	0.00	2.84	1.42	NO		NO
L0007238	0	0.10204E-01	246790.2	4070343.6	88.7	0.00	2.84	1.42	NO		NO
L0007239	0	0.10204E-01	246796.3	4070343.5	88.9	0.00	2.84	1.42	NO		NO
L0007240	0	0.10204E-01	246802.4	4070343.3	89.1	0.00	2.84	1.42	NO		NO
L0007241	0	0.10204E-01	246808.5	4070343.2	89.3	0.00	2.84	1.42	NO		NO
L0007242	0	0.10204E-01	246814.6	4070343.0	89.5	0.00	2.84	1.42	NO		NO
L0007243	0	0.10204E-01	246820.7	4070342.9	89.6	0.00	2.84	1.42	NO		NO
L0007251	0	0.15873E-01	246832.6	4070344.9	90.2	0.00	2.84	1.42	NO		NO
L0007252	0	0.15873E-01	246832.7	4070351.0	90.9	0.00	2.84	1.42	NO		NO
L0007253	0	0.15873E-01	246832.9	4070357.1	91.5	0.00	2.84	1.42	NO		NO
L0007254	0	0.15873E-01	246833.1	4070363.2	92.1	0.00	2.84	1.42	NO		NO
L0007255	0	0.15873E-01	246833.2	4070369.3	92.7	0.00	2.84	1.42	NO		NO
L0007256	0	0.15873E-01	246833.4	4070375.4	93.0	0.00	2.84	1.42	NO		NO
L0007257	0	0.15873E-01	246833.6	4070381.5	93.2	0.00	2.84	1.42	NO		NO
L0007258	0	0.15873E-01	246833.7	4070387.6	93.4	0.00	2.84	1.42	NO		NO
L0007259	0	0.15873E-01	246833.9	4070393.7	93.6	0.00	2.84	1.42	NO		NO
L0007260	0	0.15873E-01	246834.1	4070399.8	93.8	0.00	2.84	1.42	NO		NO
L0007261	0	0.15873E-01	246834.2	4070405.9	93.8	0.00	2.84	1.42	NO		NO
L0007262	0	0.15873E-01	246834.4	4070412.0	93.7	0.00	2.84	1.42	NO		NO
L0007263	0	0.15873E-01	246834.5	4070418.1	93.7	0.00	2.84	1.42	NO		NO
L0007264	0	0.15873E-01	246834.7	4070424.1	93.7	0.00	2.84	1.42	NO		NO
L0007265	0	0.15873E-01	246834.9	4070430.2	93.6	0.00	2.84	1.42	NO		NO
L0007266	0	0.15873E-01	246835.0	4070436.3	93.5	0.00	2.84	1.42	NO		NO
L0007267	0	0.15873E-01	246835.2	4070442.4	93.3	0.00	2.84	1.42	NO		NO
L0007268	0	0.15873E-01	246835.4	4070448.5	93.1	0.00	2.84	1.42	NO		NO
L0007269	0	0.15873E-01	246835.5	4070454.6	92.9	0.00	2.84	1.42	NO		NO
L0007270	0	0.15873E-01	246835.7	4070460.7	92.7	0.00	2.84	1.42	NO		NO
L0007271	0	0.15873E-01	246835.9	4070466.8	92.5	0.00	2.84	1.42	NO		NO
L0007272	0	0.15873E-01	246836.0	4070472.9	92.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007273	0	0.15873E-01	246836.2	4070479.0	92.2	0.00	2.84	1.42	NO		NO
L0007274	0	0.15873E-01	246836.3	4070485.1	92.0	0.00	2.84	1.42	NO		NO
L0007275	0	0.15873E-01	246836.5	4070491.2	91.9	0.00	2.84	1.42	NO		NO
L0007276	0	0.15873E-01	246836.7	4070497.3	91.9	0.00	2.84	1.42	NO		NO
L0007277	0	0.15873E-01	246836.8	4070503.4	91.9	0.00	2.84	1.42	NO		NO
L0007278	0	0.15873E-01	246837.0	4070509.5	91.9	0.00	2.84	1.42	NO		NO
L0007279	0	0.15873E-01	246837.2	4070515.6	91.9	0.00	2.84	1.42	NO		NO
L0007280	0	0.15873E-01	246837.3	4070521.6	91.8	0.00	2.84	1.42	NO		NO
L0007281	0	0.15873E-01	246837.5	4070527.7	91.5	0.00	2.84	1.42	NO		NO
L0007282	0	0.15873E-01	246837.7	4070533.8	91.1	0.00	2.84	1.42	NO		NO
L0007283	0	0.15873E-01	246837.8	4070539.9	90.7	0.00	2.84	1.42	NO		NO
L0007284	0	0.15873E-01	246838.0	4070546.0	90.4	0.00	2.84	1.42	NO		NO
L0007285	0	0.15873E-01	246838.1	4070552.1	90.4	0.00	2.84	1.42	NO		NO
L0007286	0	0.15873E-01	246838.3	4070558.2	91.2	0.00	2.84	1.42	NO		NO
L0007287	0	0.15873E-01	246838.5	4070564.3	92.0	0.00	2.84	1.42	NO		NO
L0007288	0	0.15873E-01	246838.6	4070570.4	92.8	0.00	2.84	1.42	NO		NO
L0007289	0	0.15873E-01	246838.8	4070576.5	93.6	0.00	2.84	1.42	NO		NO
L0007290	0	0.15873E-01	246839.0	4070582.6	94.4	0.00	2.84	1.42	NO		NO
L0007291	0	0.15873E-01	246839.1	4070588.7	95.2	0.00	2.84	1.42	NO		NO
L0007292	0	0.15873E-01	246839.3	4070594.8	96.0	0.00	2.84	1.42	NO		NO
L0007293	0	0.15873E-01	246839.5	4070600.9	96.8	0.00	2.84	1.42	NO		NO
L0007294	0	0.15873E-01	246839.6	4070607.0	97.6	0.00	2.84	1.42	NO		NO
L0007295	0	0.15873E-01	246839.8	4070613.1	97.9	0.00	2.84	1.42	NO		NO
L0007296	0	0.15873E-01	246839.9	4070619.1	97.7	0.00	2.84	1.42	NO		NO
L0007297	0	0.15873E-01	246840.1	4070625.2	97.5	0.00	2.84	1.42	NO		NO
L0007298	0	0.15873E-01	246840.3	4070631.3	97.3	0.00	2.84	1.42	NO		NO
L0007299	0	0.15873E-01	246840.4	4070637.4	97.0	0.00	2.84	1.42	NO		NO
L0007300	0	0.15873E-01	246840.6	4070643.5	96.6	0.00	2.84	1.42	NO		NO
L0007301	0	0.15873E-01	246840.8	4070649.6	96.0	0.00	2.84	1.42	NO		NO
L0007302	0	0.15873E-01	246840.9	4070655.7	95.3	0.00	2.84	1.42	NO		NO
L0007303	0	0.15873E-01	246841.1	4070661.8	94.8	0.00	2.84	1.42	NO		NO
L0007304	0	0.15873E-01	246841.2	4070667.9	94.2	0.00	2.84	1.42	NO		NO
L0007305	0	0.15873E-01	246841.4	4070674.0	94.1	0.00	2.84	1.42	NO		NO
L0007306	0	0.15873E-01	246841.6	4070680.1	94.3	0.00	2.84	1.42	NO		NO
L0007307	0	0.15873E-01	246841.7	4070686.2	94.5	0.00	2.84	1.42	NO		NO
L0007308	0	0.15873E-01	246841.9	4070692.3	94.7	0.00	2.84	1.42	NO		NO
L0007309	0	0.15873E-01	246842.1	4070698.4	94.9	0.00	2.84	1.42	NO		NO
L0007310	0	0.15873E-01	246842.2	4070704.5	95.0	0.00	2.84	1.42	NO		NO
L0007311	0	0.15873E-01	246842.4	4070710.6	95.0	0.00	2.84	1.42	NO		NO
L0007312	0	0.15873E-01	246842.6	4070716.6	95.0	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007313	0	0.15873E-01	246842.7	4070722.7	95.1	0.00	2.84	1.42	NO		NO
L0007314	0	0.12987E-01	246821.2	4070188.0	90.3	0.00	2.84	1.42	NO		NO
L0007315	0	0.12987E-01	246815.1	4070188.4	90.2	0.00	2.84	1.42	NO		NO
L0007316	0	0.12987E-01	246809.0	4070188.7	90.0	0.00	2.84	1.42	NO		NO
L0007317	0	0.12987E-01	246803.0	4070189.1	89.8	0.00	2.84	1.42	NO		NO
L0007318	0	0.12987E-01	246799.1	4070185.1	89.7	0.00	2.84	1.42	NO		NO
L0007319	0	0.12987E-01	246796.0	4070179.9	89.7	0.00	2.84	1.42	NO		NO
L0007320	0	0.12987E-01	246791.6	4070176.0	89.7	0.00	2.84	1.42	NO		NO
L0007321	0	0.12987E-01	246786.0	4070173.8	89.6	0.00	2.84	1.42	NO		NO
L0007322	0	0.12987E-01	246780.0	4070172.9	89.6	0.00	2.84	1.42	NO		NO
L0007323	0	0.12987E-01	246773.9	4070172.3	89.9	0.00	2.84	1.42	NO		NO
L0007324	0	0.12987E-01	246767.8	4070172.3	90.2	0.00	2.84	1.42	NO		NO
L0007325	0	0.12987E-01	246761.7	4070172.3	90.5	0.00	2.84	1.42	NO		NO
L0007326	0	0.12987E-01	246755.6	4070172.4	90.7	0.00	2.84	1.42	NO		NO
L0007327	0	0.12987E-01	246749.5	4070172.4	91.0	0.00	2.84	1.42	NO		NO
L0007328	0	0.12987E-01	246743.4	4070172.5	91.2	0.00	2.84	1.42	NO		NO
L0007329	0	0.12987E-01	246737.3	4070172.5	91.3	0.00	2.84	1.42	NO		NO
L0007330	0	0.12987E-01	246731.2	4070172.6	91.5	0.00	2.84	1.42	NO		NO
L0007331	0	0.12987E-01	246725.1	4070172.6	91.6	0.00	2.84	1.42	NO		NO
L0007332	0	0.12987E-01	246719.1	4070172.7	91.6	0.00	2.84	1.42	NO		NO
L0007333	0	0.12987E-01	246713.0	4070172.7	91.1	0.00	2.84	1.42	NO		NO
L0007334	0	0.12987E-01	246706.9	4070172.7	90.6	0.00	2.84	1.42	NO		NO
L0007335	0	0.12987E-01	246700.8	4070172.8	90.1	0.00	2.84	1.42	NO		NO
L0007336	0	0.12987E-01	246694.7	4070172.8	89.5	0.00	2.84	1.42	NO		NO
L0007337	0	0.12987E-01	246688.6	4070172.9	89.1	0.00	2.84	1.42	NO		NO
L0007338	0	0.12987E-01	246682.5	4070172.9	88.8	0.00	2.84	1.42	NO		NO
L0007339	0	0.12987E-01	246676.4	4070173.0	88.6	0.00	2.84	1.42	NO		NO
L0007340	0	0.12987E-01	246670.3	4070173.0	88.4	0.00	2.84	1.42	NO		NO
L0007341	0	0.12987E-01	246664.2	4070173.1	88.2	0.00	2.84	1.42	NO		NO
L0007342	0	0.12987E-01	246658.1	4070173.1	88.1	0.00	2.84	1.42	NO		NO
L0007343	0	0.12987E-01	246652.0	4070173.2	88.4	0.00	2.84	1.42	NO		NO
L0007344	0	0.12987E-01	246645.9	4070173.2	88.7	0.00	2.84	1.42	NO		NO
L0007345	0	0.12987E-01	246639.8	4070173.3	89.0	0.00	2.84	1.42	NO		NO
L0007346	0	0.12987E-01	246633.7	4070173.3	89.3	0.00	2.84	1.42	NO		NO
L0007347	0	0.12987E-01	246627.6	4070173.4	89.5	0.00	2.84	1.42	NO		NO
L0007348	0	0.12987E-01	246621.5	4070173.4	89.7	0.00	2.84	1.42	NO		NO
L0007349	0	0.12987E-01	246615.4	4070173.5	89.9	0.00	2.84	1.42	NO		NO
L0007350	0	0.12987E-01	246609.3	4070173.5	90.1	0.00	2.84	1.42	NO		NO
L0007351	0	0.12987E-01	246603.2	4070173.6	90.3	0.00	2.84	1.42	NO		NO
L0007352	0	0.12987E-01	246597.1	4070173.6	90.5	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007353	0	0.12987E-01	246591.0	4070173.7	90.6	0.00	2.84	1.42	NO		NO
L0007354	0	0.12987E-01	246584.9	4070173.7	90.7	0.00	2.84	1.42	NO		NO
L0007355	0	0.12987E-01	246578.8	4070173.8	90.8	0.00	2.84	1.42	NO		NO
L0007356	0	0.12987E-01	246572.8	4070173.9	90.9	0.00	2.84	1.42	NO		NO
L0007357	0	0.12987E-01	246566.7	4070174.1	91.0	0.00	2.84	1.42	NO		NO
L0007358	0	0.12987E-01	246560.6	4070174.2	91.1	0.00	2.84	1.42	NO		NO
L0007359	0	0.12987E-01	246554.5	4070174.4	91.2	0.00	2.84	1.42	NO		NO
L0007360	0	0.12987E-01	246548.4	4070174.5	91.3	0.00	2.84	1.42	NO		NO
L0007361	0	0.12987E-01	246542.3	4070174.7	91.5	0.00	2.84	1.42	NO		NO
L0007362	0	0.12987E-01	246536.2	4070174.8	91.6	0.00	2.84	1.42	NO		NO
L0007363	0	0.12987E-01	246530.1	4070175.0	91.7	0.00	2.84	1.42	NO		NO
L0007364	0	0.12987E-01	246524.0	4070175.1	91.8	0.00	2.84	1.42	NO		NO
L0007365	0	0.12987E-01	246517.9	4070175.3	91.9	0.00	2.84	1.42	NO		NO
L0007366	0	0.12987E-01	246511.8	4070175.4	92.0	0.00	2.84	1.42	NO		NO
L0007367	0	0.12987E-01	246505.7	4070175.6	92.1	0.00	2.84	1.42	NO		NO
L0007368	0	0.12987E-01	246499.6	4070175.7	92.2	0.00	2.84	1.42	NO		NO
L0007369	0	0.12987E-01	246493.5	4070175.9	92.3	0.00	2.84	1.42	NO		NO
L0007370	0	0.12987E-01	246487.4	4070176.0	92.3	0.00	2.84	1.42	NO		NO
L0007371	0	0.12987E-01	246481.3	4070176.2	92.4	0.00	2.84	1.42	NO		NO
L0007372	0	0.12987E-01	246475.2	4070176.3	92.3	0.00	2.84	1.42	NO		NO
L0007373	0	0.12987E-01	246469.2	4070176.5	92.1	0.00	2.84	1.42	NO		NO
L0007374	0	0.12987E-01	246463.1	4070176.6	91.9	0.00	2.84	1.42	NO		NO
L0007375	0	0.12987E-01	246457.0	4070176.8	91.7	0.00	2.84	1.42	NO		NO
L0007376	0	0.12987E-01	246450.9	4070176.9	91.5	0.00	2.84	1.42	NO		NO
L0007377	0	0.12987E-01	246444.8	4070177.1	91.3	0.00	2.84	1.42	NO		NO
L0007378	0	0.12987E-01	246438.7	4070177.2	91.1	0.00	2.84	1.42	NO		NO
L0007379	0	0.12987E-01	246432.6	4070177.4	90.9	0.00	2.84	1.42	NO		NO
L0007380	0	0.12987E-01	246426.5	4070177.5	90.8	0.00	2.84	1.42	NO		NO
L0007381	0	0.12987E-01	246420.4	4070177.7	90.6	0.00	2.84	1.42	NO		NO
L0007382	0	0.12987E-01	246414.3	4070177.8	90.4	0.00	2.84	1.42	NO		NO
L0007383	0	0.12987E-01	246408.2	4070178.0	90.3	0.00	2.84	1.42	NO		NO
L0007384	0	0.12987E-01	246403.4	4070176.7	90.1	0.00	2.84	1.42	NO		NO
L0007385	0	0.12987E-01	246403.1	4070170.7	89.6	0.00	2.84	1.42	NO		NO
L0007386	0	0.12987E-01	246402.7	4070164.6	89.2	0.00	2.84	1.42	NO		NO
L0007387	0	0.12987E-01	246402.3	4070158.5	88.8	0.00	2.84	1.42	NO		NO
L0007388	0	0.12987E-01	246402.0	4070152.4	88.7	0.00	2.84	1.42	NO		NO
L0007389	0	0.12987E-01	246401.6	4070146.3	88.6	0.00	2.84	1.42	NO		NO
L0007390	0	0.12987E-01	246401.3	4070140.2	88.5	0.00	2.84	1.42	NO		NO
L0007391	0	0.10000E+00	246826.6	4070186.3	90.5	0.00	2.84	1.42	NO		NO
L0007392	0	0.10000E+00	246826.6	4070180.2	90.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007393	0	0.10000E+00	246826.6	4070174.1	90.3	0.00	2.84	1.42	NO		NO
L0007394	0	0.10000E+00	246826.5	4070168.0	90.1	0.00	2.84	1.42	NO		NO
L0007395	0	0.10000E+00	246826.5	4070161.9	90.0	0.00	2.84	1.42	NO		NO
L0007396	0	0.10000E+00	246826.5	4070155.8	90.1	0.00	2.84	1.42	NO		NO
L0007397	0	0.10000E+00	246826.4	4070149.7	90.2	0.00	2.84	1.42	NO		NO
L0007398	0	0.10000E+00	246826.4	4070143.6	90.3	0.00	2.84	1.42	NO		NO
L0007399	0	0.10000E+00	246826.4	4070137.6	90.4	0.00	2.84	1.42	NO		NO
L0007400	0	0.10000E+00	246826.4	4070131.5	90.5	0.00	2.84	1.42	NO		NO
L0007401	0	0.14706E-01	246829.1	4070128.5	90.7	0.00	2.84	1.42	NO		NO
L0007402	0	0.14706E-01	246834.6	4070125.9	91.0	0.00	2.84	1.42	NO		NO
L0007403	0	0.14706E-01	246840.1	4070123.2	91.2	0.00	2.84	1.42	NO		NO
L0007404	0	0.14706E-01	246845.9	4070122.0	91.3	0.00	2.84	1.42	NO		NO
L0007405	0	0.14706E-01	246852.0	4070121.8	91.3	0.00	2.84	1.42	NO		NO
L0007406	0	0.14706E-01	246858.1	4070121.6	91.3	0.00	2.84	1.42	NO		NO
L0007407	0	0.14706E-01	246864.2	4070121.5	91.3	0.00	2.84	1.42	NO		NO
L0007408	0	0.14706E-01	246870.3	4070121.3	91.3	0.00	2.84	1.42	NO		NO
L0007409	0	0.14706E-01	246876.4	4070121.1	91.3	0.00	2.84	1.42	NO		NO
L0007410	0	0.14706E-01	246882.5	4070120.9	91.3	0.00	2.84	1.42	NO		NO
L0007411	0	0.14706E-01	246888.6	4070120.8	91.3	0.00	2.84	1.42	NO		NO
L0007412	0	0.14706E-01	246894.7	4070120.6	91.3	0.00	2.84	1.42	NO		NO
L0007413	0	0.14706E-01	246900.8	4070120.4	91.3	0.00	2.84	1.42	NO		NO
L0007414	0	0.14706E-01	246906.8	4070120.2	91.2	0.00	2.84	1.42	NO		NO
L0007415	0	0.14706E-01	246912.9	4070120.0	91.2	0.00	2.84	1.42	NO		NO
L0007416	0	0.14706E-01	246919.0	4070119.9	91.1	0.00	2.84	1.42	NO		NO
L0007417	0	0.14706E-01	246925.1	4070119.7	91.1	0.00	2.84	1.42	NO		NO
L0007418	0	0.14706E-01	246931.2	4070119.5	91.0	0.00	2.84	1.42	NO		NO
L0007419	0	0.14706E-01	246937.3	4070119.3	91.3	0.00	2.84	1.42	NO		NO
L0007420	0	0.14706E-01	246943.4	4070119.2	91.6	0.00	2.84	1.42	NO		NO
L0007421	0	0.14706E-01	246949.5	4070119.0	91.9	0.00	2.84	1.42	NO		NO
L0007422	0	0.14706E-01	246955.6	4070118.8	92.2	0.00	2.84	1.42	NO		NO
L0007423	0	0.14706E-01	246961.7	4070118.6	92.4	0.00	2.84	1.42	NO		NO
L0007424	0	0.14706E-01	246967.8	4070118.5	92.6	0.00	2.84	1.42	NO		NO
L0007425	0	0.14706E-01	246973.9	4070118.3	92.8	0.00	2.84	1.42	NO		NO
L0007426	0	0.14706E-01	246980.0	4070118.1	93.1	0.00	2.84	1.42	NO		NO
L0007427	0	0.14706E-01	246986.1	4070117.9	93.3	0.00	2.84	1.42	NO		NO
L0007428	0	0.14706E-01	246992.2	4070117.8	93.4	0.00	2.84	1.42	NO		NO
L0007429	0	0.14706E-01	246998.2	4070117.6	93.4	0.00	2.84	1.42	NO		NO
L0007430	0	0.14706E-01	247004.3	4070117.4	93.4	0.00	2.84	1.42	NO		NO
L0007431	0	0.14706E-01	247010.4	4070117.2	93.4	0.00	2.84	1.42	NO		NO
L0007432	0	0.14706E-01	247016.5	4070117.0	93.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007433	0	0.14706E-01	247022.6	4070116.9	93.1	0.00	2.84	1.42	NO		NO
L0007434	0	0.14706E-01	247028.7	4070116.7	92.4	0.00	2.84	1.42	NO		NO
L0007435	0	0.14706E-01	247034.8	4070116.5	91.8	0.00	2.84	1.42	NO		NO
L0007436	0	0.14706E-01	247040.9	4070116.3	91.0	0.00	2.84	1.42	NO		NO
L0007437	0	0.14706E-01	247047.0	4070116.2	90.3	0.00	2.84	1.42	NO		NO
L0007438	0	0.14706E-01	247053.1	4070116.0	89.8	0.00	2.84	1.42	NO		NO
L0007439	0	0.14706E-01	247059.2	4070115.8	89.2	0.00	2.84	1.42	NO		NO
L0007440	0	0.14706E-01	247065.3	4070115.6	88.7	0.00	2.84	1.42	NO		NO
L0007441	0	0.14706E-01	247071.4	4070115.5	88.2	0.00	2.84	1.42	NO		NO
L0007442	0	0.14706E-01	247077.5	4070115.3	87.7	0.00	2.84	1.42	NO		NO
L0007443	0	0.14706E-01	247083.6	4070115.1	87.2	0.00	2.84	1.42	NO		NO
L0007444	0	0.14706E-01	247089.6	4070114.9	86.7	0.00	2.84	1.42	NO		NO
L0007445	0	0.14706E-01	247095.7	4070114.8	86.2	0.00	2.84	1.42	NO		NO
L0007446	0	0.14706E-01	247101.8	4070114.6	85.7	0.00	2.84	1.42	NO		NO
L0007447	0	0.14706E-01	247107.9	4070114.4	85.1	0.00	2.84	1.42	NO		NO
L0007448	0	0.14706E-01	247114.0	4070114.2	85.0	0.00	2.84	1.42	NO		NO
L0007449	0	0.14706E-01	247120.1	4070113.9	84.9	0.00	2.84	1.42	NO		NO
L0007450	0	0.14706E-01	247126.2	4070113.6	84.9	0.00	2.84	1.42	NO		NO
L0007451	0	0.14706E-01	247132.3	4070113.3	84.9	0.00	2.84	1.42	NO		NO
L0007452	0	0.14706E-01	247138.4	4070113.0	84.9	0.00	2.84	1.42	NO		NO
L0007453	0	0.14706E-01	247144.5	4070112.6	85.3	0.00	2.84	1.42	NO		NO
L0007454	0	0.14706E-01	247150.5	4070112.3	85.9	0.00	2.84	1.42	NO		NO
L0007455	0	0.14706E-01	247156.6	4070112.0	86.6	0.00	2.84	1.42	NO		NO
L0007456	0	0.14706E-01	247162.7	4070111.4	87.2	0.00	2.84	1.42	NO		NO
L0007457	0	0.14706E-01	247168.7	4070110.5	87.9	0.00	2.84	1.42	NO		NO
L0007458	0	0.14706E-01	247174.8	4070109.6	88.0	0.00	2.84	1.42	NO		NO
L0007459	0	0.14706E-01	247180.8	4070108.7	88.1	0.00	2.84	1.42	NO		NO
L0007460	0	0.14706E-01	247186.8	4070107.8	88.1	0.00	2.84	1.42	NO		NO
L0007461	0	0.14706E-01	247192.8	4070106.9	88.2	0.00	2.84	1.42	NO		NO
L0007462	0	0.14706E-01	247198.9	4070106.0	88.2	0.00	2.84	1.42	NO		NO
L0007463	0	0.14706E-01	247204.9	4070105.1	88.2	0.00	2.84	1.42	NO		NO
L0007464	0	0.14706E-01	247210.9	4070104.3	88.1	0.00	2.84	1.42	NO		NO
L0007465	0	0.14706E-01	247217.0	4070103.4	88.1	0.00	2.84	1.42	NO		NO
L0007466	0	0.14706E-01	247223.0	4070102.5	88.1	0.00	2.84	1.42	NO		NO
L0007467	0	0.14706E-01	247229.1	4070101.8	88.1	0.00	2.84	1.42	NO		NO
L0007468	0	0.14706E-01	247235.1	4070101.2	88.2	0.00	2.84	1.42	NO		NO
L0007469	0	0.12821E-01	246826.0	4070125.8	90.7	0.00	2.84	1.42	NO		NO
L0007470	0	0.12821E-01	246825.3	4070119.7	90.8	0.00	2.84	1.42	NO		NO
L0007471	0	0.12821E-01	246824.6	4070113.7	91.0	0.00	2.84	1.42	NO		NO
L0007472	0	0.12821E-01	246824.0	4070107.6	91.2	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007473	0	0.12821E-01	246823.3	4070101.6	91.4	0.00	2.84	1.42	NO		NO
L0007474	0	0.12821E-01	246822.6	4070095.5	91.4	0.00	2.84	1.42	NO		NO
L0007475	0	0.12821E-01	246821.9	4070089.5	91.4	0.00	2.84	1.42	NO		NO
L0007476	0	0.12821E-01	246821.2	4070083.4	91.4	0.00	2.84	1.42	NO		NO
L0007477	0	0.12821E-01	246820.5	4070077.3	91.3	0.00	2.84	1.42	NO		NO
L0007478	0	0.12821E-01	246819.9	4070071.3	91.3	0.00	2.84	1.42	NO		NO
L0007479	0	0.12821E-01	246819.2	4070065.2	91.3	0.00	2.84	1.42	NO		NO
L0007480	0	0.12821E-01	246818.5	4070059.2	91.2	0.00	2.84	1.42	NO		NO
L0007481	0	0.12821E-01	246817.8	4070053.1	91.1	0.00	2.84	1.42	NO		NO
L0007482	0	0.12821E-01	246817.1	4070047.0	91.1	0.00	2.84	1.42	NO		NO
L0007483	0	0.12821E-01	246817.0	4070041.0	91.0	0.00	2.84	1.42	NO		NO
L0007484	0	0.12821E-01	246817.4	4070034.9	91.0	0.00	2.84	1.42	NO		NO
L0007485	0	0.12821E-01	246817.7	4070028.8	90.9	0.00	2.84	1.42	NO		NO
L0007486	0	0.12821E-01	246818.1	4070022.7	90.8	0.00	2.84	1.42	NO		NO
L0007487	0	0.12821E-01	246818.5	4070016.6	90.8	0.00	2.84	1.42	NO		NO
L0007488	0	0.12821E-01	246818.8	4070010.6	90.7	0.00	2.84	1.42	NO		NO
L0007489	0	0.12821E-01	246819.2	4070004.5	90.8	0.00	2.84	1.42	NO		NO
L0007490	0	0.12821E-01	246819.6	4069998.4	90.9	0.00	2.84	1.42	NO		NO
L0007491	0	0.12821E-01	246819.9	4069992.3	91.1	0.00	2.84	1.42	NO		NO
L0007492	0	0.12821E-01	246820.3	4069986.2	91.2	0.00	2.84	1.42	NO		NO
L0007493	0	0.12821E-01	246820.7	4069980.1	91.3	0.00	2.84	1.42	NO		NO
L0007494	0	0.12821E-01	246821.0	4069974.0	91.3	0.00	2.84	1.42	NO		NO
L0007495	0	0.12821E-01	246821.4	4069968.0	91.2	0.00	2.84	1.42	NO		NO
L0007496	0	0.12821E-01	246821.8	4069961.9	91.2	0.00	2.84	1.42	NO		NO
L0007497	0	0.12821E-01	246822.1	4069955.8	91.2	0.00	2.84	1.42	NO		NO
L0007498	0	0.12821E-01	246822.5	4069949.7	91.1	0.00	2.84	1.42	NO		NO
L0007499	0	0.12821E-01	246822.7	4069943.6	90.9	0.00	2.84	1.42	NO		NO
L0007500	0	0.12821E-01	246822.7	4069937.5	90.7	0.00	2.84	1.42	NO		NO
L0007501	0	0.12821E-01	246822.7	4069931.4	90.4	0.00	2.84	1.42	NO		NO
L0007502	0	0.12821E-01	246822.7	4069925.3	90.2	0.00	2.84	1.42	NO		NO
L0007503	0	0.12821E-01	246824.7	4069919.7	90.0	0.00	2.84	1.42	NO		NO
L0007504	0	0.12821E-01	246827.4	4069914.2	89.8	0.00	2.84	1.42	NO		NO
L0007505	0	0.12821E-01	246830.1	4069908.8	89.6	0.00	2.84	1.42	NO		NO
L0007506	0	0.12821E-01	246832.9	4069903.3	89.4	0.00	2.84	1.42	NO		NO
L0007507	0	0.12821E-01	246835.6	4069897.9	89.3	0.00	2.84	1.42	NO		NO
L0007508	0	0.12821E-01	246838.3	4069892.4	89.1	0.00	2.84	1.42	NO		NO
L0007509	0	0.12821E-01	246841.0	4069886.9	88.9	0.00	2.84	1.42	NO		NO
L0007510	0	0.12821E-01	246843.7	4069881.5	88.8	0.00	2.84	1.42	NO		NO
L0007511	0	0.12821E-01	246846.4	4069876.0	88.6	0.00	2.84	1.42	NO		NO
L0007512	0	0.12821E-01	246849.1	4069870.6	88.5	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007513	0	0.12821E-01	246851.8	4069865.1	88.5	0.00	2.84	1.42	NO		NO
L0007514	0	0.12821E-01	246854.6	4069859.6	88.5	0.00	2.84	1.42	NO		NO
L0007515	0	0.12821E-01	246857.3	4069854.2	88.5	0.00	2.84	1.42	NO		NO
L0007516	0	0.12821E-01	246860.1	4069848.8	88.4	0.00	2.84	1.42	NO		NO
L0007517	0	0.12821E-01	246864.5	4069844.6	88.4	0.00	2.84	1.42	NO		NO
L0007518	0	0.12821E-01	246868.8	4069840.3	88.3	0.00	2.84	1.42	NO		NO
L0007519	0	0.12821E-01	246873.2	4069836.0	88.2	0.00	2.84	1.42	NO		NO
L0007520	0	0.12821E-01	246877.5	4069831.8	88.1	0.00	2.84	1.42	NO		NO
L0007521	0	0.12821E-01	246881.9	4069827.5	87.8	0.00	2.84	1.42	NO		NO
L0007522	0	0.12821E-01	246886.2	4069823.2	87.6	0.00	2.84	1.42	NO		NO
L0007523	0	0.12821E-01	246890.6	4069819.0	87.4	0.00	2.84	1.42	NO		NO
L0007524	0	0.12821E-01	246894.9	4069814.7	87.3	0.00	2.84	1.42	NO		NO
L0007525	0	0.12821E-01	246899.3	4069810.4	87.3	0.00	2.84	1.42	NO		NO
L0007526	0	0.12821E-01	246903.6	4069806.1	87.3	0.00	2.84	1.42	NO		NO
L0007527	0	0.12821E-01	246908.0	4069801.9	87.3	0.00	2.84	1.42	NO		NO
L0007528	0	0.12821E-01	246912.4	4069797.6	87.4	0.00	2.84	1.42	NO		NO
L0007529	0	0.12821E-01	246916.7	4069793.4	87.4	0.00	2.84	1.42	NO		NO
L0007530	0	0.12821E-01	246921.1	4069789.1	87.5	0.00	2.84	1.42	NO		NO
L0007531	0	0.12821E-01	246925.5	4069784.9	87.4	0.00	2.84	1.42	NO		NO
L0007532	0	0.12821E-01	246929.9	4069780.7	87.3	0.00	2.84	1.42	NO		NO
L0007533	0	0.12821E-01	246934.3	4069776.4	87.0	0.00	2.84	1.42	NO		NO
L0007534	0	0.12821E-01	246938.6	4069772.2	86.8	0.00	2.84	1.42	NO		NO
L0007535	0	0.12821E-01	246943.0	4069768.0	86.5	0.00	2.84	1.42	NO		NO
L0007536	0	0.12821E-01	246947.4	4069763.7	86.3	0.00	2.84	1.42	NO		NO
L0007537	0	0.12821E-01	246951.8	4069759.5	86.2	0.00	2.84	1.42	NO		NO
L0007538	0	0.12821E-01	246956.2	4069755.2	86.1	0.00	2.84	1.42	NO		NO
L0007539	0	0.12821E-01	246960.6	4069751.0	86.0	0.00	2.84	1.42	NO		NO
L0007540	0	0.12821E-01	246964.9	4069746.8	86.0	0.00	2.84	1.42	NO		NO
L0007541	0	0.12821E-01	246969.3	4069742.5	86.0	0.00	2.84	1.42	NO		NO
L0007542	0	0.12821E-01	246973.7	4069738.3	86.0	0.00	2.84	1.42	NO		NO
L0007543	0	0.12821E-01	246978.1	4069734.0	86.0	0.00	2.84	1.42	NO		NO
L0007544	0	0.12821E-01	246982.5	4069729.8	86.0	0.00	2.84	1.42	NO		NO
L0007545	0	0.12821E-01	246986.8	4069725.6	86.0	0.00	2.84	1.42	NO		NO
L0007546	0	0.12821E-01	246991.2	4069721.3	86.0	0.00	2.84	1.42	NO		NO
L0007547	0	0.17241E-01	246399.1	4070245.3	92.3	0.00	2.84	1.42	NO		NO
L0007548	0	0.17241E-01	246393.0	4070245.4	92.7	0.00	2.84	1.42	NO		NO
L0007549	0	0.17241E-01	246386.9	4070245.5	93.1	0.00	2.84	1.42	NO		NO
L0007550	0	0.17241E-01	246380.8	4070245.6	93.5	0.00	2.84	1.42	NO		NO
L0007551	0	0.17241E-01	246374.7	4070245.7	94.0	0.00	2.84	1.42	NO		NO
L0007552	0	0.17241E-01	246368.6	4070245.7	94.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007553	0	0.17241E-01	246362.5	4070245.8	94.8	0.00	2.84	1.42	NO		NO
L0007554	0	0.17241E-01	246356.4	4070245.9	95.4	0.00	2.84	1.42	NO		NO
L0007555	0	0.17241E-01	246350.3	4070246.0	96.0	0.00	2.84	1.42	NO		NO
L0007556	0	0.17241E-01	246344.2	4070246.0	96.6	0.00	2.84	1.42	NO		NO
L0007557	0	0.17241E-01	246338.2	4070246.1	97.2	0.00	2.84	1.42	NO		NO
L0007558	0	0.17241E-01	246332.1	4070246.2	97.8	0.00	2.84	1.42	NO		NO
L0007559	0	0.17241E-01	246326.0	4070246.3	98.1	0.00	2.84	1.42	NO		NO
L0007560	0	0.17241E-01	246319.9	4070246.3	98.3	0.00	2.84	1.42	NO		NO
L0007561	0	0.17241E-01	246313.8	4070246.4	98.5	0.00	2.84	1.42	NO		NO
L0007562	0	0.17241E-01	246307.7	4070246.5	98.7	0.00	2.84	1.42	NO		NO
L0007563	0	0.17241E-01	246301.6	4070246.6	98.8	0.00	2.84	1.42	NO		NO
L0007564	0	0.17241E-01	246295.5	4070246.6	98.1	0.00	2.84	1.42	NO		NO
L0007565	0	0.17241E-01	246289.4	4070246.7	97.0	0.00	2.84	1.42	NO		NO
L0007566	0	0.17241E-01	246283.3	4070246.8	95.9	0.00	2.84	1.42	NO		NO
L0007567	0	0.17241E-01	246277.2	4070246.9	94.9	0.00	2.84	1.42	NO		NO
L0007568	0	0.17241E-01	246271.1	4070246.9	93.8	0.00	2.84	1.42	NO		NO
L0007569	0	0.17241E-01	246265.0	4070247.0	92.9	0.00	2.84	1.42	NO		NO
L0007570	0	0.17241E-01	246258.9	4070247.1	92.1	0.00	2.84	1.42	NO		NO
L0007571	0	0.17241E-01	246252.8	4070247.2	91.3	0.00	2.84	1.42	NO		NO
L0007572	0	0.17241E-01	246246.7	4070247.2	90.5	0.00	2.84	1.42	NO		NO
L0007573	0	0.17241E-01	246240.6	4070247.3	89.7	0.00	2.84	1.42	NO		NO
L0007574	0	0.17241E-01	246234.5	4070247.4	89.5	0.00	2.84	1.42	NO		NO
L0007575	0	0.17241E-01	246228.4	4070247.5	89.3	0.00	2.84	1.42	NO		NO
L0007576	0	0.17241E-01	246222.3	4070247.5	89.2	0.00	2.84	1.42	NO		NO
L0007577	0	0.17241E-01	246216.2	4070247.6	89.0	0.00	2.84	1.42	NO		NO
L0007578	0	0.17241E-01	246210.1	4070247.7	88.8	0.00	2.84	1.42	NO		NO
L0007579	0	0.17241E-01	246204.0	4070247.8	89.1	0.00	2.84	1.42	NO		NO
L0007580	0	0.17241E-01	246198.0	4070247.9	89.3	0.00	2.84	1.42	NO		NO
L0007581	0	0.17241E-01	246191.9	4070247.9	89.5	0.00	2.84	1.42	NO		NO
L0007582	0	0.17241E-01	246185.8	4070248.0	89.8	0.00	2.84	1.42	NO		NO
L0007583	0	0.17241E-01	246179.7	4070248.1	90.0	0.00	2.84	1.42	NO		NO
L0007584	0	0.17241E-01	246173.6	4070248.2	90.5	0.00	2.84	1.42	NO		NO
L0007585	0	0.17241E-01	246167.5	4070248.2	90.9	0.00	2.84	1.42	NO		NO
L0007586	0	0.17241E-01	246161.4	4070248.3	91.3	0.00	2.84	1.42	NO		NO
L0007587	0	0.17241E-01	246155.3	4070248.4	91.7	0.00	2.84	1.42	NO		NO
L0007588	0	0.17241E-01	246149.2	4070248.5	92.1	0.00	2.84	1.42	NO		NO
L0007589	0	0.17241E-01	246143.1	4070248.5	92.1	0.00	2.84	1.42	NO		NO
L0007590	0	0.17241E-01	246137.0	4070248.6	92.1	0.00	2.84	1.42	NO		NO
L0007591	0	0.17241E-01	246130.9	4070248.7	92.1	0.00	2.84	1.42	NO		NO
L0007592	0	0.17241E-01	246124.8	4070248.8	92.1	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007593	0	0.17241E-01	246118.7	4070248.8	92.0	0.00	2.84	1.42	NO		NO
L0007594	0	0.17241E-01	246112.6	4070248.9	91.6	0.00	2.84	1.42	NO		NO
L0007595	0	0.17241E-01	246106.5	4070249.0	91.2	0.00	2.84	1.42	NO		NO
L0007596	0	0.17241E-01	246100.4	4070249.1	90.8	0.00	2.84	1.42	NO		NO
L0007597	0	0.17241E-01	246094.3	4070249.1	90.3	0.00	2.84	1.42	NO		NO
L0007598	0	0.17241E-01	246088.2	4070249.2	90.0	0.00	2.84	1.42	NO		NO
L0007599	0	0.17241E-01	246082.1	4070249.3	89.8	0.00	2.84	1.42	NO		NO
L0007600	0	0.17241E-01	246076.0	4070249.4	89.6	0.00	2.84	1.42	NO		NO
L0007601	0	0.17241E-01	246069.9	4070249.4	89.3	0.00	2.84	1.42	NO		NO
L0007602	0	0.17241E-01	246063.9	4070249.5	89.1	0.00	2.84	1.42	NO		NO
L0007603	0	0.17241E-01	246057.8	4070249.6	89.0	0.00	2.84	1.42	NO		NO
L0007604	0	0.17241E-01	246051.7	4070249.7	89.0	0.00	2.84	1.42	NO		NO
L0007605	0	0.12821E-01	246046.8	4070249.6	89.0	0.00	2.84	1.42	NO		NO
L0007606	0	0.12821E-01	246047.0	4070255.7	89.1	0.00	2.84	1.42	NO		NO
L0007607	0	0.12821E-01	246047.3	4070261.8	89.2	0.00	2.84	1.42	NO		NO
L0007608	0	0.12821E-01	246047.5	4070267.9	89.2	0.00	2.84	1.42	NO		NO
L0007609	0	0.12821E-01	246047.8	4070274.0	89.3	0.00	2.84	1.42	NO		NO
L0007610	0	0.12821E-01	246048.1	4070280.0	89.4	0.00	2.84	1.42	NO		NO
L0007611	0	0.12821E-01	246048.3	4070286.1	89.6	0.00	2.84	1.42	NO		NO
L0007612	0	0.12821E-01	246048.6	4070292.2	89.8	0.00	2.84	1.42	NO		NO
L0007613	0	0.12821E-01	246048.9	4070298.3	90.0	0.00	2.84	1.42	NO		NO
L0007614	0	0.12821E-01	246049.1	4070304.4	90.2	0.00	2.84	1.42	NO		NO
L0007615	0	0.12821E-01	246049.4	4070310.5	90.4	0.00	2.84	1.42	NO		NO
L0007616	0	0.12821E-01	246049.7	4070316.6	90.4	0.00	2.84	1.42	NO		NO
L0007617	0	0.12821E-01	246049.9	4070322.7	90.5	0.00	2.84	1.42	NO		NO
L0007618	0	0.12821E-01	246050.2	4070328.8	90.5	0.00	2.84	1.42	NO		NO
L0007619	0	0.12821E-01	246050.5	4070334.9	90.6	0.00	2.84	1.42	NO		NO
L0007620	0	0.12821E-01	246050.7	4070340.9	90.7	0.00	2.84	1.42	NO		NO
L0007621	0	0.12821E-01	246051.0	4070347.0	90.5	0.00	2.84	1.42	NO		NO
L0007622	0	0.12821E-01	246051.3	4070353.1	90.4	0.00	2.84	1.42	NO		NO
L0007623	0	0.12821E-01	246051.5	4070359.2	90.3	0.00	2.84	1.42	NO		NO
L0007624	0	0.12821E-01	246051.8	4070365.3	90.1	0.00	2.84	1.42	NO		NO
L0007625	0	0.12821E-01	246052.1	4070371.4	89.9	0.00	2.84	1.42	NO		NO
L0007626	0	0.12821E-01	246052.3	4070377.5	89.6	0.00	2.84	1.42	NO		NO
L0007627	0	0.12821E-01	246052.6	4070383.6	89.2	0.00	2.84	1.42	NO		NO
L0007628	0	0.12821E-01	246052.9	4070389.7	88.8	0.00	2.84	1.42	NO		NO
L0007629	0	0.12821E-01	246053.1	4070395.8	88.5	0.00	2.84	1.42	NO		NO
L0007630	0	0.12821E-01	246053.4	4070401.8	88.2	0.00	2.84	1.42	NO		NO
L0007631	0	0.12821E-01	246053.7	4070407.9	88.0	0.00	2.84	1.42	NO		NO
L0007632	0	0.12821E-01	246053.9	4070414.0	87.7	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007633	0	0.12821E-01	246054.2	4070420.1	87.5	0.00	2.84	1.42	NO		NO
L0007634	0	0.12821E-01	246054.4	4070426.2	87.3	0.00	2.84	1.42	NO		NO
L0007635	0	0.12821E-01	246054.7	4070432.3	87.2	0.00	2.84	1.42	NO		NO
L0007636	0	0.12821E-01	246055.0	4070438.4	87.2	0.00	2.84	1.42	NO		NO
L0007637	0	0.12821E-01	246055.2	4070444.5	87.2	0.00	2.84	1.42	NO		NO
L0007638	0	0.12821E-01	246055.5	4070450.6	87.1	0.00	2.84	1.42	NO		NO
L0007639	0	0.12821E-01	246055.8	4070456.7	87.1	0.00	2.84	1.42	NO		NO
L0007640	0	0.12821E-01	246056.0	4070462.8	87.2	0.00	2.84	1.42	NO		NO
L0007641	0	0.12821E-01	246056.3	4070468.8	87.4	0.00	2.84	1.42	NO		NO
L0007642	0	0.12821E-01	246056.6	4070474.9	87.6	0.00	2.84	1.42	NO		NO
L0007643	0	0.12821E-01	246056.8	4070481.0	87.7	0.00	2.84	1.42	NO		NO
L0007644	0	0.12821E-01	246057.1	4070487.1	87.9	0.00	2.84	1.42	NO		NO
L0007645	0	0.12821E-01	246057.4	4070493.2	88.0	0.00	2.84	1.42	NO		NO
L0007646	0	0.12821E-01	246057.6	4070499.3	88.0	0.00	2.84	1.42	NO		NO
L0007647	0	0.12821E-01	246057.9	4070505.4	88.0	0.00	2.84	1.42	NO		NO
L0007648	0	0.12821E-01	246058.2	4070511.5	88.0	0.00	2.84	1.42	NO		NO
L0007649	0	0.12821E-01	246058.4	4070517.6	88.0	0.00	2.84	1.42	NO		NO
L0007650	0	0.12821E-01	246058.7	4070523.7	88.2	0.00	2.84	1.42	NO		NO
L0007651	0	0.12821E-01	246059.0	4070529.7	88.6	0.00	2.84	1.42	NO		NO
L0007652	0	0.12821E-01	246059.2	4070535.8	89.0	0.00	2.84	1.42	NO		NO
L0007653	0	0.12821E-01	246059.5	4070541.9	89.4	0.00	2.84	1.42	NO		NO
L0007654	0	0.12821E-01	246059.8	4070548.0	89.8	0.00	2.84	1.42	NO		NO
L0007655	0	0.12821E-01	246060.0	4070554.1	90.1	0.00	2.84	1.42	NO		NO
L0007656	0	0.12821E-01	246060.3	4070560.2	90.3	0.00	2.84	1.42	NO		NO
L0007657	0	0.12821E-01	246060.6	4070566.3	90.5	0.00	2.84	1.42	NO		NO
L0007658	0	0.12821E-01	246060.8	4070572.4	90.7	0.00	2.84	1.42	NO		NO
L0007659	0	0.12821E-01	246061.1	4070578.5	90.9	0.00	2.84	1.42	NO		NO
L0007660	0	0.12821E-01	246061.3	4070584.6	90.8	0.00	2.84	1.42	NO		NO
L0007661	0	0.12821E-01	246061.6	4070590.6	90.6	0.00	2.84	1.42	NO		NO
L0007662	0	0.12821E-01	246061.9	4070596.7	90.4	0.00	2.84	1.42	NO		NO
L0007663	0	0.12821E-01	246062.1	4070602.8	90.2	0.00	2.84	1.42	NO		NO
L0007664	0	0.12821E-01	246062.4	4070608.9	90.0	0.00	2.84	1.42	NO		NO
L0007665	0	0.12821E-01	246062.7	4070615.0	89.8	0.00	2.84	1.42	NO		NO
L0007666	0	0.12821E-01	246062.9	4070621.1	89.6	0.00	2.84	1.42	NO		NO
L0007667	0	0.12821E-01	246063.2	4070627.2	89.4	0.00	2.84	1.42	NO		NO
L0007668	0	0.12821E-01	246063.5	4070633.3	89.2	0.00	2.84	1.42	NO		NO
L0007669	0	0.12821E-01	246063.7	4070639.4	89.0	0.00	2.84	1.42	NO		NO
L0007670	0	0.12821E-01	246064.0	4070645.5	89.2	0.00	2.84	1.42	NO		NO
L0007671	0	0.12821E-01	246064.3	4070651.5	89.4	0.00	2.84	1.42	NO		NO
L0007672	0	0.12821E-01	246064.5	4070657.6	89.6	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007673	0	0.12821E-01	246064.8	4070663.7	89.8	0.00	2.84	1.42	NO		NO
L0007674	0	0.12821E-01	246065.1	4070669.8	90.0	0.00	2.84	1.42	NO		NO
L0007675	0	0.12821E-01	246065.3	4070675.9	90.0	0.00	2.84	1.42	NO		NO
L0007676	0	0.12821E-01	246065.6	4070682.0	90.1	0.00	2.84	1.42	NO		NO
L0007677	0	0.12821E-01	246065.9	4070688.1	90.1	0.00	2.84	1.42	NO		NO
L0007678	0	0.12821E-01	246066.1	4070694.2	90.2	0.00	2.84	1.42	NO		NO
L0007679	0	0.12821E-01	246066.4	4070700.3	90.2	0.00	2.84	1.42	NO		NO
L0007680	0	0.12821E-01	246066.7	4070706.4	89.8	0.00	2.84	1.42	NO		NO
L0007681	0	0.12821E-01	246066.9	4070712.4	89.3	0.00	2.84	1.42	NO		NO
L0007682	0	0.12821E-01	246067.2	4070718.5	88.9	0.00	2.84	1.42	NO		NO
L0007683	0	0.16393E-01	246405.7	4070132.7	88.6	0.00	2.84	1.42	NO		NO
L0007684	0	0.16393E-01	246399.6	4070132.7	88.3	0.00	2.84	1.42	NO		NO
L0007685	0	0.16393E-01	246393.5	4070132.6	88.1	0.00	2.84	1.42	NO		NO
L0007686	0	0.16393E-01	246387.4	4070132.5	88.2	0.00	2.84	1.42	NO		NO
L0007687	0	0.16393E-01	246381.3	4070132.5	88.6	0.00	2.84	1.42	NO		NO
L0007688	0	0.16393E-01	246375.2	4070132.4	89.0	0.00	2.84	1.42	NO		NO
L0007689	0	0.16393E-01	246369.1	4070132.3	89.4	0.00	2.84	1.42	NO		NO
L0007690	0	0.16393E-01	246363.0	4070132.3	89.8	0.00	2.84	1.42	NO		NO
L0007691	0	0.16393E-01	246356.9	4070132.2	90.1	0.00	2.84	1.42	NO		NO
L0007692	0	0.16393E-01	246350.8	4070132.1	90.3	0.00	2.84	1.42	NO		NO
L0007693	0	0.16393E-01	246344.7	4070132.1	90.5	0.00	2.84	1.42	NO		NO
L0007694	0	0.16393E-01	246338.6	4070132.0	90.7	0.00	2.84	1.42	NO		NO
L0007695	0	0.16393E-01	246332.5	4070131.9	90.9	0.00	2.84	1.42	NO		NO
L0007696	0	0.16393E-01	246326.5	4070131.8	91.0	0.00	2.84	1.42	NO		NO
L0007697	0	0.16393E-01	246320.4	4070131.8	91.0	0.00	2.84	1.42	NO		NO
L0007698	0	0.16393E-01	246314.3	4070131.7	91.0	0.00	2.84	1.42	NO		NO
L0007699	0	0.16393E-01	246308.2	4070131.6	91.0	0.00	2.84	1.42	NO		NO
L0007700	0	0.16393E-01	246302.1	4070131.6	91.0	0.00	2.84	1.42	NO		NO
L0007701	0	0.16393E-01	246296.0	4070131.5	91.2	0.00	2.84	1.42	NO		NO
L0007702	0	0.16393E-01	246289.9	4070131.4	91.3	0.00	2.84	1.42	NO		NO
L0007703	0	0.16393E-01	246283.8	4070131.4	91.5	0.00	2.84	1.42	NO		NO
L0007704	0	0.16393E-01	246277.7	4070131.3	91.7	0.00	2.84	1.42	NO		NO
L0007705	0	0.16393E-01	246271.6	4070131.2	91.9	0.00	2.84	1.42	NO		NO
L0007706	0	0.16393E-01	246265.5	4070131.1	92.0	0.00	2.84	1.42	NO		NO
L0007707	0	0.16393E-01	246259.4	4070131.1	92.0	0.00	2.84	1.42	NO		NO
L0007708	0	0.16393E-01	246253.3	4070131.0	92.0	0.00	2.84	1.42	NO		NO
L0007709	0	0.16393E-01	246247.2	4070130.9	92.0	0.00	2.84	1.42	NO		NO
L0007710	0	0.16393E-01	246241.1	4070130.9	92.0	0.00	2.84	1.42	NO		NO
L0007711	0	0.16393E-01	246235.0	4070130.8	92.1	0.00	2.84	1.42	NO		NO
L0007712	0	0.16393E-01	246228.9	4070130.7	92.3	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007713	0	0.16393E-01	246222.8	4070130.7	92.5	0.00	2.84	1.42	NO		NO
L0007714	0	0.16393E-01	246216.7	4070130.6	92.8	0.00	2.84	1.42	NO		NO
L0007715	0	0.16393E-01	246210.6	4070130.5	93.0	0.00	2.84	1.42	NO		NO
L0007716	0	0.16393E-01	246204.5	4070130.5	93.2	0.00	2.84	1.42	NO		NO
L0007717	0	0.16393E-01	246198.4	4070130.4	93.4	0.00	2.84	1.42	NO		NO
L0007718	0	0.16393E-01	246192.3	4070130.3	93.6	0.00	2.84	1.42	NO		NO
L0007719	0	0.16393E-01	246186.3	4070130.2	93.8	0.00	2.84	1.42	NO		NO
L0007720	0	0.16393E-01	246180.2	4070130.2	94.0	0.00	2.84	1.42	NO		NO
L0007721	0	0.16393E-01	246174.1	4070130.1	93.6	0.00	2.84	1.42	NO		NO
L0007722	0	0.16393E-01	246168.0	4070130.0	93.2	0.00	2.84	1.42	NO		NO
L0007723	0	0.16393E-01	246161.9	4070130.0	92.8	0.00	2.84	1.42	NO		NO
L0007724	0	0.16393E-01	246155.8	4070129.9	92.4	0.00	2.84	1.42	NO		NO
L0007725	0	0.16393E-01	246149.7	4070129.8	92.0	0.00	2.84	1.42	NO		NO
L0007726	0	0.16393E-01	246143.6	4070129.8	92.0	0.00	2.84	1.42	NO		NO
L0007727	0	0.16393E-01	246137.5	4070129.7	92.0	0.00	2.84	1.42	NO		NO
L0007728	0	0.16393E-01	246131.4	4070129.6	92.0	0.00	2.84	1.42	NO		NO
L0007729	0	0.16393E-01	246125.3	4070129.5	92.0	0.00	2.84	1.42	NO		NO
L0007730	0	0.16393E-01	246119.2	4070129.5	92.0	0.00	2.84	1.42	NO		NO
L0007731	0	0.16393E-01	246113.1	4070129.4	92.2	0.00	2.84	1.42	NO		NO
L0007732	0	0.16393E-01	246107.0	4070129.3	92.4	0.00	2.84	1.42	NO		NO
L0007733	0	0.16393E-01	246100.9	4070129.3	92.6	0.00	2.84	1.42	NO		NO
L0007734	0	0.16393E-01	246094.8	4070129.2	92.8	0.00	2.84	1.42	NO		NO
L0007735	0	0.16393E-01	246088.7	4070129.1	92.9	0.00	2.84	1.42	NO		NO
L0007736	0	0.16393E-01	246082.6	4070129.1	92.7	0.00	2.84	1.42	NO		NO
L0007737	0	0.16393E-01	246076.5	4070129.0	92.5	0.00	2.84	1.42	NO		NO
L0007738	0	0.16393E-01	246070.4	4070128.9	92.3	0.00	2.84	1.42	NO		NO
L0007739	0	0.16393E-01	246064.3	4070128.9	92.1	0.00	2.84	1.42	NO		NO
L0007740	0	0.16393E-01	246058.2	4070128.8	91.9	0.00	2.84	1.42	NO		NO
L0007741	0	0.16393E-01	246052.1	4070128.7	91.7	0.00	2.84	1.42	NO		NO
L0007742	0	0.16393E-01	246046.1	4070128.6	91.5	0.00	2.84	1.42	NO		NO
L0007743	0	0.16393E-01	246040.0	4070128.6	91.3	0.00	2.84	1.42	NO		NO
L0007744	0	0.15152E-01	246039.0	4070124.3	91.1	0.00	2.84	1.42	NO		NO
L0007745	0	0.15152E-01	246038.8	4070118.2	90.9	0.00	2.84	1.42	NO		NO
L0007746	0	0.15152E-01	246038.5	4070112.1	90.7	0.00	2.84	1.42	NO		NO
L0007747	0	0.15152E-01	246038.3	4070106.0	90.5	0.00	2.84	1.42	NO		NO
L0007748	0	0.15152E-01	246038.1	4070099.9	90.3	0.00	2.84	1.42	NO		NO
L0007749	0	0.15152E-01	246037.9	4070093.8	90.1	0.00	2.84	1.42	NO		NO
L0007750	0	0.15152E-01	246037.6	4070087.7	89.8	0.00	2.84	1.42	NO		NO
L0007751	0	0.15152E-01	246037.4	4070081.6	89.6	0.00	2.84	1.42	NO		NO
L0007752	0	0.15152E-01	246037.2	4070075.6	89.4	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007753	0	0.15152E-01	246036.9	4070069.5	89.2	0.00	2.84	1.42	NO		NO
L0007754	0	0.15152E-01	246036.7	4070063.4	89.4	0.00	2.84	1.42	NO		NO
L0007755	0	0.15152E-01	246036.5	4070057.3	89.5	0.00	2.84	1.42	NO		NO
L0007756	0	0.15152E-01	246036.3	4070051.2	89.7	0.00	2.84	1.42	NO		NO
L0007757	0	0.15152E-01	246036.0	4070045.1	89.9	0.00	2.84	1.42	NO		NO
L0007758	0	0.15152E-01	246035.8	4070039.0	90.0	0.00	2.84	1.42	NO		NO
L0007759	0	0.15152E-01	246035.6	4070032.9	90.2	0.00	2.84	1.42	NO		NO
L0007760	0	0.15152E-01	246035.4	4070026.8	90.4	0.00	2.84	1.42	NO		NO
L0007761	0	0.15152E-01	246035.1	4070020.7	90.6	0.00	2.84	1.42	NO		NO
L0007762	0	0.15152E-01	246034.9	4070014.6	90.8	0.00	2.84	1.42	NO		NO
L0007763	0	0.15152E-01	246034.7	4070008.5	91.0	0.00	2.84	1.42	NO		NO
L0007764	0	0.15152E-01	246034.4	4070002.5	91.0	0.00	2.84	1.42	NO		NO
L0007765	0	0.15152E-01	246034.2	4069996.4	90.9	0.00	2.84	1.42	NO		NO
L0007766	0	0.15152E-01	246034.0	4069990.3	90.9	0.00	2.84	1.42	NO		NO
L0007767	0	0.15152E-01	246033.8	4069984.2	90.9	0.00	2.84	1.42	NO		NO
L0007768	0	0.15152E-01	246033.5	4069978.1	90.8	0.00	2.84	1.42	NO		NO
L0007769	0	0.15152E-01	246033.3	4069972.0	90.4	0.00	2.84	1.42	NO		NO
L0007770	0	0.15152E-01	246033.1	4069965.9	90.0	0.00	2.84	1.42	NO		NO
L0007771	0	0.15152E-01	246032.8	4069959.8	89.6	0.00	2.84	1.42	NO		NO
L0007772	0	0.15152E-01	246032.6	4069953.7	89.2	0.00	2.84	1.42	NO		NO
L0007773	0	0.15152E-01	246032.4	4069947.6	88.9	0.00	2.84	1.42	NO		NO
L0007774	0	0.15152E-01	246032.2	4069941.5	88.7	0.00	2.84	1.42	NO		NO
L0007775	0	0.15152E-01	246031.9	4069935.4	88.5	0.00	2.84	1.42	NO		NO
L0007776	0	0.15152E-01	246031.7	4069929.4	88.3	0.00	2.84	1.42	NO		NO
L0007777	0	0.15152E-01	246031.5	4069923.3	88.1	0.00	2.84	1.42	NO		NO
L0007778	0	0.15152E-01	246031.3	4069917.2	87.8	0.00	2.84	1.42	NO		NO
L0007779	0	0.15152E-01	246031.0	4069911.1	87.4	0.00	2.84	1.42	NO		NO
L0007780	0	0.15152E-01	246030.8	4069905.0	87.0	0.00	2.84	1.42	NO		NO
L0007781	0	0.15152E-01	246030.6	4069898.9	86.6	0.00	2.84	1.42	NO		NO
L0007782	0	0.15152E-01	246030.3	4069892.8	86.2	0.00	2.84	1.42	NO		NO
L0007783	0	0.15152E-01	246030.1	4069886.7	85.9	0.00	2.84	1.42	NO		NO
L0007784	0	0.15152E-01	246029.9	4069880.6	85.7	0.00	2.84	1.42	NO		NO
L0007785	0	0.15152E-01	246029.7	4069874.5	85.5	0.00	2.84	1.42	NO		NO
L0007786	0	0.15152E-01	246029.4	4069868.4	85.3	0.00	2.84	1.42	NO		NO
L0007787	0	0.15152E-01	246029.2	4069862.3	85.1	0.00	2.84	1.42	NO		NO
L0007788	0	0.15152E-01	246029.0	4069856.3	85.3	0.00	2.84	1.42	NO		NO
L0007789	0	0.15152E-01	246028.7	4069850.2	85.7	0.00	2.84	1.42	NO		NO
L0007790	0	0.15152E-01	246028.5	4069844.1	86.1	0.00	2.84	1.42	NO		NO
L0007791	0	0.15152E-01	246028.3	4069838.0	86.5	0.00	2.84	1.42	NO		NO
L0007792	0	0.15152E-01	246028.1	4069831.9	86.9	0.00	2.84	1.42	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007793	0	0.15152E-01	246027.8	4069825.8	87.0	0.00	2.84	1.42	NO		NO
L0007794	0	0.15152E-01	246027.6	4069819.7	87.0	0.00	2.84	1.42	NO		NO
L0007795	0	0.15152E-01	246027.4	4069813.6	87.0	0.00	2.84	1.42	NO		NO
L0007796	0	0.15152E-01	246027.2	4069807.5	87.1	0.00	2.84	1.42	NO		NO
L0007797	0	0.15152E-01	246026.9	4069801.4	87.1	0.00	2.84	1.42	NO		NO
L0007798	0	0.15152E-01	246026.7	4069795.3	87.3	0.00	2.84	1.42	NO		NO
L0007799	0	0.15152E-01	246026.5	4069789.2	87.5	0.00	2.84	1.42	NO		NO
L0007800	0	0.15152E-01	246026.2	4069783.2	87.7	0.00	2.84	1.42	NO		NO
L0007801	0	0.15152E-01	246026.0	4069777.1	87.9	0.00	2.84	1.42	NO		NO
L0007802	0	0.15152E-01	246025.8	4069771.0	88.1	0.00	2.84	1.42	NO		NO
L0007803	0	0.15152E-01	246025.6	4069764.9	88.2	0.00	2.84	1.42	NO		NO
L0007804	0	0.15152E-01	246025.3	4069758.8	88.2	0.00	2.84	1.42	NO		NO
L0007805	0	0.15152E-01	246025.1	4069752.7	88.3	0.00	2.84	1.42	NO		NO
L0007806	0	0.15152E-01	246024.9	4069746.6	88.3	0.00	2.84	1.42	NO		NO
L0007807	0	0.15152E-01	246024.6	4069740.5	88.3	0.00	2.84	1.42	NO		NO
L0007808	0	0.15152E-01	246024.4	4069734.4	88.3	0.00	2.84	1.42	NO		NO
L0007809	0	0.15152E-01	246024.2	4069728.3	88.2	0.00	2.84	1.42	NO		NO
L0007810	0	0.70423E-02	246802.0	4070238.2	90.1	0.00	1.70	0.85	NO		NO
L0007811	0	0.70423E-02	246802.1	4070241.8	90.1	0.00	1.70	0.85	NO		NO
L0007812	0	0.70423E-02	246802.1	4070245.5	90.2	0.00	1.70	0.85	NO		NO
L0007813	0	0.70423E-02	246802.1	4070249.1	90.2	0.00	1.70	0.85	NO		NO
L0007814	0	0.70423E-02	246802.1	4070252.8	90.2	0.00	1.70	0.85	NO		NO
L0007815	0	0.70423E-02	246802.1	4070256.4	90.2	0.00	1.70	0.85	NO		NO
L0007816	0	0.70423E-02	246802.1	4070260.1	90.2	0.00	1.70	0.85	NO		NO
L0007817	0	0.70423E-02	246802.1	4070263.8	90.1	0.00	1.70	0.85	NO		NO
L0007818	0	0.70423E-02	246802.1	4070267.4	90.1	0.00	1.70	0.85	NO		NO
L0007819	0	0.70423E-02	246802.1	4070271.1	90.1	0.00	1.70	0.85	NO		NO
L0007820	0	0.70423E-02	246802.1	4070274.7	90.0	0.00	1.70	0.85	NO		NO
L0007821	0	0.70423E-02	246802.1	4070278.4	90.0	0.00	1.70	0.85	NO		NO
L0007822	0	0.70423E-02	246802.1	4070282.1	89.9	0.00	1.70	0.85	NO		NO
L0007823	0	0.70423E-02	246802.1	4070285.7	89.8	0.00	1.70	0.85	NO		NO
L0007824	0	0.70423E-02	246802.1	4070289.4	89.6	0.00	1.70	0.85	NO		NO
L0007825	0	0.70423E-02	246802.1	4070293.0	89.5	0.00	1.70	0.85	NO		NO
L0007826	0	0.70423E-02	246802.2	4070296.7	89.3	0.00	1.70	0.85	NO		NO
L0007827	0	0.70423E-02	246802.2	4070300.3	89.1	0.00	1.70	0.85	NO		NO
L0007828	0	0.70423E-02	246802.2	4070304.0	89.0	0.00	1.70	0.85	NO		NO
L0007829	0	0.70423E-02	246802.2	4070307.7	88.8	0.00	1.70	0.85	NO		NO
L0007830	0	0.70423E-02	246802.2	4070311.3	88.7	0.00	1.70	0.85	NO		NO
L0007831	0	0.70423E-02	246802.2	4070315.0	88.7	0.00	1.70	0.85	NO		NO
L0007832	0	0.70423E-02	246802.2	4070318.6	88.7	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007833	0	0.70423E-02	246802.2	4070322.3	88.7	0.00	1.70	0.85	NO		NO
L0007834	0	0.70423E-02	246802.2	4070325.9	88.7	0.00	1.70	0.85	NO		NO
L0007835	0	0.70423E-02	246802.2	4070329.6	88.7	0.00	1.70	0.85	NO		NO
L0007836	0	0.70423E-02	246802.2	4070333.3	88.7	0.00	1.70	0.85	NO		NO
L0007837	0	0.70423E-02	246802.2	4070336.9	88.7	0.00	1.70	0.85	NO		NO
L0007838	0	0.70423E-02	246802.2	4070340.6	88.8	0.00	1.70	0.85	NO		NO
L0007839	0	0.70423E-02	246803.6	4070342.9	89.1	0.00	1.70	0.85	NO		NO
L0007840	0	0.70423E-02	246807.2	4070342.8	89.2	0.00	1.70	0.85	NO		NO
L0007841	0	0.70423E-02	246810.9	4070342.7	89.3	0.00	1.70	0.85	NO		NO
L0007842	0	0.70423E-02	246814.5	4070342.7	89.4	0.00	1.70	0.85	NO		NO
L0007843	0	0.70423E-02	246818.2	4070342.6	89.5	0.00	1.70	0.85	NO		NO
L0007844	0	0.70423E-02	246821.8	4070342.5	89.6	0.00	1.70	0.85	NO		NO
L0007845	0	0.70423E-02	246825.5	4070342.4	89.8	0.00	1.70	0.85	NO		NO
L0007846	0	0.70423E-02	246829.1	4070342.4	89.9	0.00	1.70	0.85	NO		NO
L0007847	0	0.70423E-02	246832.1	4070343.0	90.0	0.00	1.70	0.85	NO		NO
L0007848	0	0.70423E-02	246832.2	4070346.7	90.4	0.00	1.70	0.85	NO		NO
L0007849	0	0.70423E-02	246832.3	4070350.4	90.8	0.00	1.70	0.85	NO		NO
L0007850	0	0.70423E-02	246832.4	4070354.0	91.1	0.00	1.70	0.85	NO		NO
L0007851	0	0.70423E-02	246832.5	4070357.7	91.5	0.00	1.70	0.85	NO		NO
L0007852	0	0.70423E-02	246832.6	4070361.3	91.9	0.00	1.70	0.85	NO		NO
L0007853	0	0.70423E-02	246832.7	4070365.0	92.2	0.00	1.70	0.85	NO		NO
L0007854	0	0.70423E-02	246832.8	4070368.6	92.6	0.00	1.70	0.85	NO		NO
L0007855	0	0.70423E-02	246832.9	4070372.3	92.8	0.00	1.70	0.85	NO		NO
L0007856	0	0.70423E-02	246832.9	4070376.0	93.0	0.00	1.70	0.85	NO		NO
L0007857	0	0.70423E-02	246833.0	4070379.6	93.1	0.00	1.70	0.85	NO		NO
L0007858	0	0.70423E-02	246833.1	4070383.3	93.2	0.00	1.70	0.85	NO		NO
L0007859	0	0.70423E-02	246833.2	4070386.9	93.3	0.00	1.70	0.85	NO		NO
L0007860	0	0.70423E-02	246833.3	4070390.6	93.5	0.00	1.70	0.85	NO		NO
L0007861	0	0.70423E-02	246833.4	4070394.2	93.6	0.00	1.70	0.85	NO		NO
L0007862	0	0.70423E-02	246833.5	4070397.9	93.7	0.00	1.70	0.85	NO		NO
L0007863	0	0.70423E-02	246833.6	4070401.5	93.8	0.00	1.70	0.85	NO		NO
L0007864	0	0.70423E-02	246833.7	4070405.2	93.8	0.00	1.70	0.85	NO		NO
L0007865	0	0.70423E-02	246833.8	4070408.9	93.7	0.00	1.70	0.85	NO		NO
L0007866	0	0.70423E-02	246833.9	4070412.5	93.7	0.00	1.70	0.85	NO		NO
L0007867	0	0.70423E-02	246834.0	4070416.2	93.7	0.00	1.70	0.85	NO		NO
L0007868	0	0.70423E-02	246834.1	4070419.8	93.7	0.00	1.70	0.85	NO		NO
L0007869	0	0.70423E-02	246834.2	4070423.5	93.7	0.00	1.70	0.85	NO		NO
L0007870	0	0.70423E-02	246834.3	4070427.1	93.6	0.00	1.70	0.85	NO		NO
L0007871	0	0.70423E-02	246834.4	4070430.8	93.6	0.00	1.70	0.85	NO		NO
L0007872	0	0.70423E-02	246834.5	4070434.5	93.5	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007873	0	0.70423E-02	246834.6	4070438.1	93.4	0.00	1.70	0.85	NO		NO
L0007874	0	0.70423E-02	246834.7	4070441.8	93.2	0.00	1.70	0.85	NO		NO
L0007875	0	0.70423E-02	246834.8	4070445.4	93.1	0.00	1.70	0.85	NO		NO
L0007876	0	0.70423E-02	246834.9	4070449.1	93.0	0.00	1.70	0.85	NO		NO
L0007877	0	0.70423E-02	246835.0	4070452.7	92.9	0.00	1.70	0.85	NO		NO
L0007878	0	0.70423E-02	246835.1	4070456.4	92.8	0.00	1.70	0.85	NO		NO
L0007879	0	0.70423E-02	246835.2	4070460.0	92.7	0.00	1.70	0.85	NO		NO
L0007880	0	0.70423E-02	246835.3	4070463.7	92.6	0.00	1.70	0.85	NO		NO
L0007881	0	0.70423E-02	246835.4	4070467.4	92.5	0.00	1.70	0.85	NO		NO
L0007882	0	0.70423E-02	246835.5	4070471.0	92.4	0.00	1.70	0.85	NO		NO
L0007883	0	0.70423E-02	246835.6	4070474.7	92.3	0.00	1.70	0.85	NO		NO
L0007884	0	0.70423E-02	246835.7	4070478.3	92.2	0.00	1.70	0.85	NO		NO
L0007885	0	0.70423E-02	246835.8	4070482.0	92.1	0.00	1.70	0.85	NO		NO
L0007886	0	0.70423E-02	246835.8	4070485.6	92.0	0.00	1.70	0.85	NO		NO
L0007887	0	0.70423E-02	246835.9	4070489.3	91.9	0.00	1.70	0.85	NO		NO
L0007888	0	0.70423E-02	246836.0	4070493.0	91.9	0.00	1.70	0.85	NO		NO
L0007889	0	0.70423E-02	246836.1	4070496.6	91.9	0.00	1.70	0.85	NO		NO
L0007890	0	0.70423E-02	246836.2	4070500.3	91.9	0.00	1.70	0.85	NO		NO
L0007891	0	0.70423E-02	246836.3	4070503.9	91.9	0.00	1.70	0.85	NO		NO
L0007892	0	0.70423E-02	246836.4	4070507.6	91.9	0.00	1.70	0.85	NO		NO
L0007893	0	0.70423E-02	246836.5	4070511.2	91.9	0.00	1.70	0.85	NO		NO
L0007894	0	0.70423E-02	246836.6	4070514.9	91.9	0.00	1.70	0.85	NO		NO
L0007895	0	0.70423E-02	246836.7	4070518.5	91.9	0.00	1.70	0.85	NO		NO
L0007896	0	0.70423E-02	246836.8	4070522.2	91.8	0.00	1.70	0.85	NO		NO
L0007897	0	0.70423E-02	246836.9	4070525.9	91.6	0.00	1.70	0.85	NO		NO
L0007898	0	0.70423E-02	246837.0	4070529.5	91.4	0.00	1.70	0.85	NO		NO
L0007899	0	0.70423E-02	246837.1	4070533.2	91.1	0.00	1.70	0.85	NO		NO
L0007900	0	0.70423E-02	246837.2	4070536.8	90.9	0.00	1.70	0.85	NO		NO
L0007901	0	0.70423E-02	246837.3	4070540.5	90.7	0.00	1.70	0.85	NO		NO
L0007902	0	0.70423E-02	246837.4	4070544.1	90.5	0.00	1.70	0.85	NO		NO
L0007903	0	0.70423E-02	246837.5	4070547.8	90.3	0.00	1.70	0.85	NO		NO
L0007904	0	0.70423E-02	246837.6	4070551.5	90.3	0.00	1.70	0.85	NO		NO
L0007905	0	0.70423E-02	246837.7	4070555.1	90.8	0.00	1.70	0.85	NO		NO
L0007906	0	0.70423E-02	246837.8	4070558.8	91.3	0.00	1.70	0.85	NO		NO
L0007907	0	0.70423E-02	246837.9	4070562.4	91.8	0.00	1.70	0.85	NO		NO
L0007908	0	0.70423E-02	246838.0	4070566.1	92.3	0.00	1.70	0.85	NO		NO
L0007909	0	0.70423E-02	246838.1	4070569.7	92.8	0.00	1.70	0.85	NO		NO
L0007910	0	0.70423E-02	246838.2	4070573.4	93.2	0.00	1.70	0.85	NO		NO
L0007911	0	0.70423E-02	246838.3	4070577.0	93.7	0.00	1.70	0.85	NO		NO
L0007912	0	0.70423E-02	246838.4	4070580.7	94.2	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007913	0	0.70423E-02	246838.5	4070584.4	94.7	0.00	1.70	0.85	NO		NO
L0007914	0	0.70423E-02	246838.6	4070588.0	95.1	0.00	1.70	0.85	NO		NO
L0007915	0	0.70423E-02	246838.7	4070591.7	95.6	0.00	1.70	0.85	NO		NO
L0007916	0	0.70423E-02	246838.7	4070595.3	96.1	0.00	1.70	0.85	NO		NO
L0007917	0	0.70423E-02	246838.8	4070599.0	96.6	0.00	1.70	0.85	NO		NO
L0007918	0	0.70423E-02	246838.9	4070602.6	97.1	0.00	1.70	0.85	NO		NO
L0007919	0	0.70423E-02	246839.0	4070606.3	97.5	0.00	1.70	0.85	NO		NO
L0007920	0	0.70423E-02	246839.1	4070610.0	98.0	0.00	1.70	0.85	NO		NO
L0007921	0	0.70423E-02	246839.2	4070613.6	97.9	0.00	1.70	0.85	NO		NO
L0007922	0	0.70423E-02	246839.3	4070617.3	97.8	0.00	1.70	0.85	NO		NO
L0007923	0	0.70423E-02	246839.4	4070620.9	97.7	0.00	1.70	0.85	NO		NO
L0007924	0	0.70423E-02	246839.5	4070624.6	97.5	0.00	1.70	0.85	NO		NO
L0007925	0	0.70423E-02	246839.6	4070628.2	97.4	0.00	1.70	0.85	NO		NO
L0007926	0	0.70423E-02	246839.7	4070631.9	97.3	0.00	1.70	0.85	NO		NO
L0007927	0	0.70423E-02	246839.8	4070635.6	97.2	0.00	1.70	0.85	NO		NO
L0007928	0	0.70423E-02	246839.9	4070639.2	97.0	0.00	1.70	0.85	NO		NO
L0007929	0	0.70423E-02	246840.0	4070642.9	96.7	0.00	1.70	0.85	NO		NO
L0007930	0	0.70423E-02	246840.1	4070646.5	96.3	0.00	1.70	0.85	NO		NO
L0007931	0	0.70423E-02	246840.2	4070650.2	96.0	0.00	1.70	0.85	NO		NO
L0007932	0	0.70423E-02	246840.3	4070653.8	95.6	0.00	1.70	0.85	NO		NO
L0007933	0	0.70423E-02	246840.4	4070657.5	95.2	0.00	1.70	0.85	NO		NO
L0007934	0	0.70423E-02	246840.5	4070661.1	94.8	0.00	1.70	0.85	NO		NO
L0007935	0	0.70423E-02	246840.6	4070664.8	94.5	0.00	1.70	0.85	NO		NO
L0007936	0	0.70423E-02	246840.7	4070668.5	94.1	0.00	1.70	0.85	NO		NO
L0007937	0	0.70423E-02	246840.8	4070672.1	94.0	0.00	1.70	0.85	NO		NO
L0007938	0	0.70423E-02	246840.9	4070675.8	94.2	0.00	1.70	0.85	NO		NO
L0007939	0	0.70423E-02	246841.0	4070679.4	94.3	0.00	1.70	0.85	NO		NO
L0007940	0	0.70423E-02	246841.1	4070683.1	94.4	0.00	1.70	0.85	NO		NO
L0007941	0	0.70423E-02	246841.2	4070686.7	94.5	0.00	1.70	0.85	NO		NO
L0007942	0	0.70423E-02	246841.3	4070690.4	94.7	0.00	1.70	0.85	NO		NO
L0007943	0	0.70423E-02	246841.4	4070694.1	94.8	0.00	1.70	0.85	NO		NO
L0007944	0	0.70423E-02	246841.5	4070697.7	94.9	0.00	1.70	0.85	NO		NO
L0007945	0	0.70423E-02	246841.6	4070701.4	95.0	0.00	1.70	0.85	NO		NO
L0007946	0	0.70423E-02	246841.6	4070705.0	95.0	0.00	1.70	0.85	NO		NO
L0007947	0	0.70423E-02	246841.7	4070708.7	95.0	0.00	1.70	0.85	NO		NO
L0007948	0	0.70423E-02	246841.8	4070712.3	95.0	0.00	1.70	0.85	NO		NO
L0007949	0	0.70423E-02	246841.9	4070716.0	95.0	0.00	1.70	0.85	NO		NO
L0007950	0	0.70423E-02	246842.0	4070719.6	95.0	0.00	1.70	0.85	NO		NO
L0007951	0	0.70423E-02	246842.1	4070723.3	95.1	0.00	1.70	0.85	NO		NO
L0007952	0	0.67114E-02	246802.5	4070235.3	90.0	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007953	0	0.67114E-02	246802.4	4070231.7	89.9	0.00	1.70	0.85	NO		NO
L0007954	0	0.67114E-02	246802.4	4070228.0	89.9	0.00	1.70	0.85	NO		NO
L0007955	0	0.67114E-02	246802.3	4070224.4	89.8	0.00	1.70	0.85	NO		NO
L0007956	0	0.67114E-02	246802.2	4070220.7	89.8	0.00	1.70	0.85	NO		NO
L0007957	0	0.67114E-02	246802.1	4070217.1	89.7	0.00	1.70	0.85	NO		NO
L0007958	0	0.67114E-02	246802.0	4070213.4	89.7	0.00	1.70	0.85	NO		NO
L0007959	0	0.67114E-02	246801.9	4070209.8	89.7	0.00	1.70	0.85	NO		NO
L0007960	0	0.67114E-02	246801.8	4070206.1	89.7	0.00	1.70	0.85	NO		NO
L0007961	0	0.67114E-02	246801.7	4070202.4	89.7	0.00	1.70	0.85	NO		NO
L0007962	0	0.67114E-02	246801.6	4070198.8	89.7	0.00	1.70	0.85	NO		NO
L0007963	0	0.67114E-02	246801.6	4070195.1	89.7	0.00	1.70	0.85	NO		NO
L0007964	0	0.67114E-02	246801.5	4070191.5	89.7	0.00	1.70	0.85	NO		NO
L0007965	0	0.67114E-02	246801.9	4070188.4	89.8	0.00	1.70	0.85	NO		NO
L0007966	0	0.67114E-02	246805.6	4070188.4	89.9	0.00	1.70	0.85	NO		NO
L0007967	0	0.67114E-02	246809.2	4070188.4	90.0	0.00	1.70	0.85	NO		NO
L0007968	0	0.67114E-02	246812.9	4070188.4	90.1	0.00	1.70	0.85	NO		NO
L0007969	0	0.67114E-02	246816.6	4070188.4	90.2	0.00	1.70	0.85	NO		NO
L0007970	0	0.67114E-02	246820.2	4070188.4	90.3	0.00	1.70	0.85	NO		NO
L0007971	0	0.67114E-02	246823.9	4070188.4	90.4	0.00	1.70	0.85	NO		NO
L0007972	0	0.67114E-02	246825.1	4070186.0	90.4	0.00	1.70	0.85	NO		NO
L0007973	0	0.67114E-02	246825.2	4070182.3	90.4	0.00	1.70	0.85	NO		NO
L0007974	0	0.67114E-02	246825.2	4070178.6	90.3	0.00	1.70	0.85	NO		NO
L0007975	0	0.67114E-02	246825.3	4070175.0	90.2	0.00	1.70	0.85	NO		NO
L0007976	0	0.67114E-02	246825.4	4070171.3	90.2	0.00	1.70	0.85	NO		NO
L0007977	0	0.67114E-02	246825.4	4070167.7	90.1	0.00	1.70	0.85	NO		NO
L0007978	0	0.67114E-02	246825.5	4070164.0	90.1	0.00	1.70	0.85	NO		NO
L0007979	0	0.67114E-02	246825.6	4070160.4	90.0	0.00	1.70	0.85	NO		NO
L0007980	0	0.67114E-02	246825.6	4070156.7	90.1	0.00	1.70	0.85	NO		NO
L0007981	0	0.67114E-02	246825.7	4070153.0	90.1	0.00	1.70	0.85	NO		NO
L0007982	0	0.67114E-02	246825.7	4070149.4	90.2	0.00	1.70	0.85	NO		NO
L0007983	0	0.67114E-02	246825.8	4070145.7	90.2	0.00	1.70	0.85	NO		NO
L0007984	0	0.67114E-02	246825.9	4070142.1	90.3	0.00	1.70	0.85	NO		NO
L0007985	0	0.67114E-02	246825.9	4070138.4	90.4	0.00	1.70	0.85	NO		NO
L0007986	0	0.67114E-02	246826.0	4070134.8	90.5	0.00	1.70	0.85	NO		NO
L0007987	0	0.67114E-02	246826.0	4070131.1	90.5	0.00	1.70	0.85	NO		NO
L0007988	0	0.67114E-02	246827.9	4070128.6	90.6	0.00	1.70	0.85	NO		NO
L0007989	0	0.67114E-02	246831.2	4070127.1	90.8	0.00	1.70	0.85	NO		NO
L0007990	0	0.67114E-02	246834.6	4070125.7	91.0	0.00	1.70	0.85	NO		NO
L0007991	0	0.67114E-02	246837.9	4070124.2	91.1	0.00	1.70	0.85	NO		NO
L0007992	0	0.67114E-02	246841.3	4070122.7	91.2	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0007993	0	0.67114E-02	246844.7	4070121.9	91.3	0.00	1.70	0.85	NO		NO
L0007994	0	0.67114E-02	246848.4	4070121.8	91.3	0.00	1.70	0.85	NO		NO
L0007995	0	0.67114E-02	246852.1	4070121.7	91.3	0.00	1.70	0.85	NO		NO
L0007996	0	0.67114E-02	246855.7	4070121.6	91.3	0.00	1.70	0.85	NO		NO
L0007997	0	0.67114E-02	246859.4	4070121.4	91.3	0.00	1.70	0.85	NO		NO
L0007998	0	0.67114E-02	246863.0	4070121.3	91.3	0.00	1.70	0.85	NO		NO
L0007999	0	0.67114E-02	246866.7	4070121.2	91.3	0.00	1.70	0.85	NO		NO
L0008000	0	0.67114E-02	246870.3	4070121.1	91.3	0.00	1.70	0.85	NO		NO
L0008001	0	0.67114E-02	246874.0	4070121.0	91.3	0.00	1.70	0.85	NO		NO
L0008002	0	0.67114E-02	246877.6	4070120.9	91.3	0.00	1.70	0.85	NO		NO
L0008003	0	0.67114E-02	246881.3	4070120.8	91.3	0.00	1.70	0.85	NO		NO
L0008004	0	0.67114E-02	246885.0	4070120.7	91.3	0.00	1.70	0.85	NO		NO
L0008005	0	0.67114E-02	246888.6	4070120.6	91.3	0.00	1.70	0.85	NO		NO
L0008006	0	0.67114E-02	246892.3	4070120.5	91.3	0.00	1.70	0.85	NO		NO
L0008007	0	0.67114E-02	246895.9	4070120.3	91.3	0.00	1.70	0.85	NO		NO
L0008008	0	0.67114E-02	246899.6	4070120.2	91.3	0.00	1.70	0.85	NO		NO
L0008009	0	0.67114E-02	246903.2	4070120.1	91.3	0.00	1.70	0.85	NO		NO
L0008010	0	0.67114E-02	246906.9	4070120.0	91.3	0.00	1.70	0.85	NO		NO
L0008011	0	0.67114E-02	246910.6	4070119.9	91.2	0.00	1.70	0.85	NO		NO
L0008012	0	0.67114E-02	246914.2	4070119.8	91.2	0.00	1.70	0.85	NO		NO
L0008013	0	0.67114E-02	246917.9	4070119.7	91.1	0.00	1.70	0.85	NO		NO
L0008014	0	0.67114E-02	246921.5	4070119.6	91.1	0.00	1.70	0.85	NO		NO
L0008015	0	0.67114E-02	246925.2	4070119.5	91.1	0.00	1.70	0.85	NO		NO
L0008016	0	0.67114E-02	246928.8	4070119.4	91.0	0.00	1.70	0.85	NO		NO
L0008017	0	0.67114E-02	246932.5	4070119.3	91.1	0.00	1.70	0.85	NO		NO
L0008018	0	0.67114E-02	246936.1	4070119.1	91.3	0.00	1.70	0.85	NO		NO
L0008019	0	0.67114E-02	246939.8	4070119.0	91.5	0.00	1.70	0.85	NO		NO
L0008020	0	0.67114E-02	246943.5	4070118.9	91.6	0.00	1.70	0.85	NO		NO
L0008021	0	0.67114E-02	246947.1	4070118.8	91.8	0.00	1.70	0.85	NO		NO
L0008022	0	0.67114E-02	246950.8	4070118.7	92.0	0.00	1.70	0.85	NO		NO
L0008023	0	0.67114E-02	246954.4	4070118.6	92.1	0.00	1.70	0.85	NO		NO
L0008024	0	0.67114E-02	246958.1	4070118.5	92.3	0.00	1.70	0.85	NO		NO
L0008025	0	0.67114E-02	246961.7	4070118.4	92.5	0.00	1.70	0.85	NO		NO
L0008026	0	0.67114E-02	246965.4	4070118.3	92.6	0.00	1.70	0.85	NO		NO
L0008027	0	0.67114E-02	246969.0	4070118.2	92.7	0.00	1.70	0.85	NO		NO
L0008028	0	0.67114E-02	246972.7	4070118.0	92.8	0.00	1.70	0.85	NO		NO
L0008029	0	0.67114E-02	246976.4	4070117.9	93.0	0.00	1.70	0.85	NO		NO
L0008030	0	0.67114E-02	246980.0	4070117.8	93.1	0.00	1.70	0.85	NO		NO
L0008031	0	0.67114E-02	246983.7	4070117.7	93.2	0.00	1.70	0.85	NO		NO
L0008032	0	0.67114E-02	246987.3	4070117.6	93.3	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008033	0	0.67114E-02	246991.0	4070117.5	93.4	0.00	1.70	0.85	NO		NO
L0008034	0	0.67114E-02	246994.6	4070117.4	93.4	0.00	1.70	0.85	NO		NO
L0008035	0	0.67114E-02	246998.3	4070117.3	93.4	0.00	1.70	0.85	NO		NO
L0008036	0	0.67114E-02	247001.9	4070117.2	93.4	0.00	1.70	0.85	NO		NO
L0008037	0	0.67114E-02	247005.6	4070117.1	93.4	0.00	1.70	0.85	NO		NO
L0008038	0	0.67114E-02	247009.3	4070117.0	93.4	0.00	1.70	0.85	NO		NO
L0008039	0	0.67114E-02	247012.9	4070116.8	93.4	0.00	1.70	0.85	NO		NO
L0008040	0	0.67114E-02	247016.6	4070116.7	93.4	0.00	1.70	0.85	NO		NO
L0008041	0	0.67114E-02	247020.2	4070116.6	93.4	0.00	1.70	0.85	NO		NO
L0008042	0	0.67114E-02	247023.9	4070116.5	93.0	0.00	1.70	0.85	NO		NO
L0008043	0	0.67114E-02	247027.5	4070116.4	92.6	0.00	1.70	0.85	NO		NO
L0008044	0	0.67114E-02	247031.2	4070116.3	92.2	0.00	1.70	0.85	NO		NO
L0008045	0	0.67114E-02	247034.9	4070116.2	91.8	0.00	1.70	0.85	NO		NO
L0008046	0	0.67114E-02	247038.5	4070116.1	91.3	0.00	1.70	0.85	NO		NO
L0008047	0	0.67114E-02	247042.2	4070116.0	90.9	0.00	1.70	0.85	NO		NO
L0008048	0	0.67114E-02	247045.8	4070115.9	90.5	0.00	1.70	0.85	NO		NO
L0008049	0	0.67114E-02	247049.5	4070115.8	90.1	0.00	1.70	0.85	NO		NO
L0008050	0	0.67114E-02	247053.1	4070115.6	89.7	0.00	1.70	0.85	NO		NO
L0008051	0	0.67114E-02	247056.8	4070115.5	89.4	0.00	1.70	0.85	NO		NO
L0008052	0	0.67114E-02	247060.4	4070115.4	89.1	0.00	1.70	0.85	NO		NO
L0008053	0	0.67114E-02	247064.1	4070115.3	88.8	0.00	1.70	0.85	NO		NO
L0008054	0	0.67114E-02	247067.8	4070115.2	88.5	0.00	1.70	0.85	NO		NO
L0008055	0	0.67114E-02	247071.4	4070115.1	88.2	0.00	1.70	0.85	NO		NO
L0008056	0	0.67114E-02	247075.1	4070115.0	87.9	0.00	1.70	0.85	NO		NO
L0008057	0	0.67114E-02	247078.7	4070114.9	87.6	0.00	1.70	0.85	NO		NO
L0008058	0	0.67114E-02	247082.4	4070114.8	87.3	0.00	1.70	0.85	NO		NO
L0008059	0	0.67114E-02	247086.0	4070114.7	87.0	0.00	1.70	0.85	NO		NO
L0008060	0	0.67114E-02	247089.7	4070114.5	86.7	0.00	1.70	0.85	NO		NO
L0008061	0	0.67114E-02	247093.3	4070114.4	86.4	0.00	1.70	0.85	NO		NO
L0008062	0	0.67114E-02	247097.0	4070114.3	86.0	0.00	1.70	0.85	NO		NO
L0008063	0	0.67114E-02	247100.7	4070114.2	85.7	0.00	1.70	0.85	NO		NO
L0008064	0	0.67114E-02	247104.3	4070114.1	85.4	0.00	1.70	0.85	NO		NO
L0008065	0	0.67114E-02	247108.0	4070114.0	85.1	0.00	1.70	0.85	NO		NO
L0008066	0	0.67114E-02	247111.6	4070113.9	84.9	0.00	1.70	0.85	NO		NO
L0008067	0	0.67114E-02	247115.3	4070113.8	84.9	0.00	1.70	0.85	NO		NO
L0008068	0	0.67114E-02	247118.9	4070113.7	84.9	0.00	1.70	0.85	NO		NO
L0008069	0	0.67114E-02	247122.6	4070113.5	84.9	0.00	1.70	0.85	NO		NO
L0008070	0	0.67114E-02	247126.2	4070113.3	84.9	0.00	1.70	0.85	NO		NO
L0008071	0	0.67114E-02	247129.9	4070113.1	84.9	0.00	1.70	0.85	NO		NO
L0008072	0	0.67114E-02	247133.5	4070112.9	84.9	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008073	0	0.67114E-02	247137.2	4070112.7	84.8	0.00	1.70	0.85	NO		NO
L0008074	0	0.67114E-02	247140.9	4070112.5	84.9	0.00	1.70	0.85	NO		NO
L0008075	0	0.67114E-02	247144.5	4070112.2	85.3	0.00	1.70	0.85	NO		NO
L0008076	0	0.67114E-02	247148.2	4070112.0	85.7	0.00	1.70	0.85	NO		NO
L0008077	0	0.67114E-02	247151.8	4070111.8	86.0	0.00	1.70	0.85	NO		NO
L0008078	0	0.67114E-02	247155.5	4070111.6	86.4	0.00	1.70	0.85	NO		NO
L0008079	0	0.67114E-02	247159.1	4070111.4	86.8	0.00	1.70	0.85	NO		NO
L0008080	0	0.67114E-02	247162.8	4070111.2	87.2	0.00	1.70	0.85	NO		NO
L0008081	0	0.67114E-02	247166.4	4070111.0	87.6	0.00	1.70	0.85	NO		NO
L0008082	0	0.67114E-02	247170.0	4070110.5	88.0	0.00	1.70	0.85	NO		NO
L0008083	0	0.67114E-02	247173.7	4070110.0	88.0	0.00	1.70	0.85	NO		NO
L0008084	0	0.67114E-02	247177.3	4070109.5	88.1	0.00	1.70	0.85	NO		NO
L0008085	0	0.67114E-02	247180.9	4070109.0	88.1	0.00	1.70	0.85	NO		NO
L0008086	0	0.67114E-02	247184.5	4070108.4	88.1	0.00	1.70	0.85	NO		NO
L0008087	0	0.67114E-02	247188.1	4070107.9	88.2	0.00	1.70	0.85	NO		NO
L0008088	0	0.67114E-02	247191.8	4070107.4	88.2	0.00	1.70	0.85	NO		NO
L0008089	0	0.67114E-02	247195.4	4070106.9	88.2	0.00	1.70	0.85	NO		NO
L0008090	0	0.67114E-02	247199.0	4070106.3	88.2	0.00	1.70	0.85	NO		NO
L0008091	0	0.67114E-02	247202.6	4070105.8	88.2	0.00	1.70	0.85	NO		NO
L0008092	0	0.67114E-02	247206.2	4070105.3	88.2	0.00	1.70	0.85	NO		NO
L0008093	0	0.67114E-02	247209.9	4070104.8	88.2	0.00	1.70	0.85	NO		NO
L0008094	0	0.67114E-02	247213.5	4070104.3	88.1	0.00	1.70	0.85	NO		NO
L0008095	0	0.67114E-02	247217.1	4070103.7	88.1	0.00	1.70	0.85	NO		NO
L0008096	0	0.67114E-02	247220.7	4070103.2	88.1	0.00	1.70	0.85	NO		NO
L0008097	0	0.67114E-02	247224.3	4070102.7	88.1	0.00	1.70	0.85	NO		NO
L0008098	0	0.67114E-02	247228.0	4070102.2	88.1	0.00	1.70	0.85	NO		NO
L0008099	0	0.67114E-02	247231.6	4070101.6	88.1	0.00	1.70	0.85	NO		NO
L0008100	0	0.67114E-02	247235.2	4070101.1	88.2	0.00	1.70	0.85	NO		NO
L0008101	0	0.40650E-02	246402.6	4070132.6	88.5	0.00	1.70	0.85	NO		NO
L0008102	0	0.40650E-02	246406.3	4070132.5	88.6	0.00	1.70	0.85	NO		NO
L0008103	0	0.40650E-02	246409.9	4070132.5	88.7	0.00	1.70	0.85	NO		NO
L0008104	0	0.40650E-02	246413.6	4070132.4	88.8	0.00	1.70	0.85	NO		NO
L0008105	0	0.40650E-02	246417.3	4070132.3	89.0	0.00	1.70	0.85	NO		NO
L0008106	0	0.40650E-02	246420.9	4070132.3	89.2	0.00	1.70	0.85	NO		NO
L0008107	0	0.40650E-02	246424.6	4070132.2	89.5	0.00	1.70	0.85	NO		NO
L0008108	0	0.40650E-02	246428.2	4070132.2	89.9	0.00	1.70	0.85	NO		NO
L0008109	0	0.40650E-02	246431.9	4070132.1	90.2	0.00	1.70	0.85	NO		NO
L0008110	0	0.40650E-02	246435.5	4070132.0	90.6	0.00	1.70	0.85	NO		NO
L0008111	0	0.40650E-02	246439.2	4070132.0	90.9	0.00	1.70	0.85	NO		NO
L0008112	0	0.40650E-02	246442.9	4070131.9	91.3	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008113	0	0.40650E-02	246446.5	4070131.9	91.7	0.00	1.70	0.85	NO		NO
L0008114	0	0.40650E-02	246450.2	4070131.8	92.0	0.00	1.70	0.85	NO		NO
L0008115	0	0.40650E-02	246453.8	4070131.7	92.1	0.00	1.70	0.85	NO		NO
L0008116	0	0.40650E-02	246457.5	4070131.7	92.2	0.00	1.70	0.85	NO		NO
L0008117	0	0.40650E-02	246461.1	4070131.6	92.4	0.00	1.70	0.85	NO		NO
L0008118	0	0.40650E-02	246464.8	4070131.5	92.5	0.00	1.70	0.85	NO		NO
L0008119	0	0.40650E-02	246468.5	4070131.5	92.6	0.00	1.70	0.85	NO		NO
L0008120	0	0.40650E-02	246472.1	4070131.4	92.7	0.00	1.70	0.85	NO		NO
L0008121	0	0.40650E-02	246475.8	4070131.4	92.9	0.00	1.70	0.85	NO		NO
L0008122	0	0.40650E-02	246479.4	4070131.3	93.0	0.00	1.70	0.85	NO		NO
L0008123	0	0.40650E-02	246483.1	4070131.2	92.9	0.00	1.70	0.85	NO		NO
L0008124	0	0.40650E-02	246486.7	4070131.2	92.8	0.00	1.70	0.85	NO		NO
L0008125	0	0.40650E-02	246490.4	4070131.1	92.6	0.00	1.70	0.85	NO		NO
L0008126	0	0.40650E-02	246494.1	4070131.0	92.5	0.00	1.70	0.85	NO		NO
L0008127	0	0.40650E-02	246497.7	4070131.0	92.4	0.00	1.70	0.85	NO		NO
L0008128	0	0.40650E-02	246501.4	4070130.9	92.3	0.00	1.70	0.85	NO		NO
L0008129	0	0.40650E-02	246505.0	4070130.9	92.2	0.00	1.70	0.85	NO		NO
L0008130	0	0.40650E-02	246508.7	4070130.8	92.0	0.00	1.70	0.85	NO		NO
L0008131	0	0.40650E-02	246512.3	4070130.7	91.9	0.00	1.70	0.85	NO		NO
L0008132	0	0.40650E-02	246516.0	4070130.7	91.8	0.00	1.70	0.85	NO		NO
L0008133	0	0.40650E-02	246519.7	4070130.6	91.7	0.00	1.70	0.85	NO		NO
L0008134	0	0.40650E-02	246523.3	4070130.5	91.6	0.00	1.70	0.85	NO		NO
L0008135	0	0.40650E-02	246527.0	4070130.5	91.4	0.00	1.70	0.85	NO		NO
L0008136	0	0.40650E-02	246530.6	4070130.4	91.3	0.00	1.70	0.85	NO		NO
L0008137	0	0.40650E-02	246534.3	4070130.4	91.2	0.00	1.70	0.85	NO		NO
L0008138	0	0.40650E-02	246537.9	4070130.3	91.1	0.00	1.70	0.85	NO		NO
L0008139	0	0.40650E-02	246541.6	4070130.2	90.9	0.00	1.70	0.85	NO		NO
L0008140	0	0.40650E-02	246545.3	4070130.2	90.6	0.00	1.70	0.85	NO		NO
L0008141	0	0.40650E-02	246548.9	4070130.1	90.4	0.00	1.70	0.85	NO		NO
L0008142	0	0.40650E-02	246552.6	4070130.0	90.2	0.00	1.70	0.85	NO		NO
L0008143	0	0.40650E-02	246556.2	4070130.0	89.9	0.00	1.70	0.85	NO		NO
L0008144	0	0.40650E-02	246559.9	4070129.9	89.7	0.00	1.70	0.85	NO		NO
L0008145	0	0.40650E-02	246563.5	4070129.9	89.4	0.00	1.70	0.85	NO		NO
L0008146	0	0.40650E-02	246567.2	4070129.8	89.2	0.00	1.70	0.85	NO		NO
L0008147	0	0.40650E-02	246570.9	4070129.7	89.0	0.00	1.70	0.85	NO		NO
L0008148	0	0.40650E-02	246574.5	4070129.7	88.9	0.00	1.70	0.85	NO		NO
L0008149	0	0.40650E-02	246578.2	4070129.6	88.7	0.00	1.70	0.85	NO		NO
L0008150	0	0.40650E-02	246581.8	4070129.5	88.6	0.00	1.70	0.85	NO		NO
L0008151	0	0.40650E-02	246585.5	4070129.5	88.5	0.00	1.70	0.85	NO		NO
L0008152	0	0.40650E-02	246589.1	4070129.4	88.4	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

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L0008153	0	0.40650E-02	246592.8	4070129.4	88.2	0.00	1.70	0.85	NO		NO
L0008154	0	0.40650E-02	246596.5	4070129.3	88.1	0.00	1.70	0.85	NO		NO
L0008155	0	0.40650E-02	246600.1	4070129.2	88.0	0.00	1.70	0.85	NO		NO
L0008156	0	0.40650E-02	246603.8	4070129.2	87.9	0.00	1.70	0.85	NO		NO
L0008157	0	0.40650E-02	246607.4	4070129.1	87.8	0.00	1.70	0.85	NO		NO
L0008158	0	0.40650E-02	246611.1	4070129.0	87.6	0.00	1.70	0.85	NO		NO
L0008159	0	0.40650E-02	246614.7	4070129.0	87.5	0.00	1.70	0.85	NO		NO
L0008160	0	0.40650E-02	246618.4	4070128.9	87.4	0.00	1.70	0.85	NO		NO
L0008161	0	0.40650E-02	246622.1	4070128.9	87.3	0.00	1.70	0.85	NO		NO
L0008162	0	0.40650E-02	246625.7	4070128.8	87.2	0.00	1.70	0.85	NO		NO
L0008163	0	0.40650E-02	246629.4	4070128.7	87.1	0.00	1.70	0.85	NO		NO
L0008164	0	0.40650E-02	246633.0	4070128.7	87.0	0.00	1.70	0.85	NO		NO
L0008165	0	0.40650E-02	246636.7	4070128.6	87.0	0.00	1.70	0.85	NO		NO
L0008166	0	0.40650E-02	246640.3	4070128.5	87.0	0.00	1.70	0.85	NO		NO
L0008167	0	0.40650E-02	246644.0	4070128.5	87.0	0.00	1.70	0.85	NO		NO
L0008168	0	0.40650E-02	246647.7	4070128.4	87.0	0.00	1.70	0.85	NO		NO
L0008169	0	0.40650E-02	246651.3	4070128.4	87.0	0.00	1.70	0.85	NO		NO
L0008170	0	0.40650E-02	246655.0	4070128.3	87.0	0.00	1.70	0.85	NO		NO
L0008171	0	0.40650E-02	246658.6	4070128.2	87.0	0.00	1.70	0.85	NO		NO
L0008172	0	0.40650E-02	246662.3	4070128.2	87.1	0.00	1.70	0.85	NO		NO
L0008173	0	0.40650E-02	246665.9	4070128.1	87.4	0.00	1.70	0.85	NO		NO
L0008174	0	0.40650E-02	246669.6	4070128.0	87.6	0.00	1.70	0.85	NO		NO
L0008175	0	0.40650E-02	246673.3	4070128.0	87.9	0.00	1.70	0.85	NO		NO
L0008176	0	0.40650E-02	246676.9	4070127.9	88.1	0.00	1.70	0.85	NO		NO
L0008177	0	0.40650E-02	246680.6	4070127.9	88.4	0.00	1.70	0.85	NO		NO
L0008178	0	0.40650E-02	246684.2	4070127.8	88.6	0.00	1.70	0.85	NO		NO
L0008179	0	0.40650E-02	246687.9	4070127.7	88.9	0.00	1.70	0.85	NO		NO
L0008180	0	0.40650E-02	246691.5	4070127.7	89.1	0.00	1.70	0.85	NO		NO
L0008181	0	0.40650E-02	246695.2	4070127.6	89.5	0.00	1.70	0.85	NO		NO
L0008182	0	0.40650E-02	246698.9	4070127.5	89.9	0.00	1.70	0.85	NO		NO
L0008183	0	0.40650E-02	246702.5	4070127.5	90.2	0.00	1.70	0.85	NO		NO
L0008184	0	0.40650E-02	246706.2	4070127.4	90.6	0.00	1.70	0.85	NO		NO
L0008185	0	0.40650E-02	246709.8	4070127.4	91.0	0.00	1.70	0.85	NO		NO
L0008186	0	0.40650E-02	246713.5	4070127.3	91.3	0.00	1.70	0.85	NO		NO
L0008187	0	0.40650E-02	246717.1	4070127.2	91.7	0.00	1.70	0.85	NO		NO
L0008188	0	0.40650E-02	246720.8	4070127.2	92.0	0.00	1.70	0.85	NO		NO
L0008189	0	0.40650E-02	246724.5	4070127.1	92.3	0.00	1.70	0.85	NO		NO
L0008190	0	0.40650E-02	246728.1	4070127.0	92.5	0.00	1.70	0.85	NO		NO
L0008191	0	0.40650E-02	246731.8	4070127.0	92.8	0.00	1.70	0.85	NO		NO
L0008192	0	0.40650E-02	246735.4	4070126.9	93.0	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008193	0	0.40650E-02	246739.1	4070126.9	93.2	0.00	1.70	0.85	NO		NO
L0008194	0	0.40650E-02	246742.7	4070126.8	93.4	0.00	1.70	0.85	NO		NO
L0008195	0	0.40650E-02	246746.4	4070126.7	93.7	0.00	1.70	0.85	NO		NO
L0008196	0	0.40650E-02	246750.1	4070126.7	93.9	0.00	1.70	0.85	NO		NO
L0008197	0	0.40650E-02	246753.7	4070126.6	93.6	0.00	1.70	0.85	NO		NO
L0008198	0	0.40650E-02	246757.4	4070126.5	93.4	0.00	1.70	0.85	NO		NO
L0008199	0	0.40650E-02	246761.0	4070126.5	93.2	0.00	1.70	0.85	NO		NO
L0008200	0	0.40650E-02	246764.7	4070126.4	93.0	0.00	1.70	0.85	NO		NO
L0008201	0	0.40650E-02	246768.3	4070126.4	92.7	0.00	1.70	0.85	NO		NO
L0008202	0	0.40650E-02	246772.0	4070126.3	92.5	0.00	1.70	0.85	NO		NO
L0008203	0	0.40650E-02	246775.7	4070126.2	92.3	0.00	1.70	0.85	NO		NO
L0008204	0	0.40650E-02	246779.3	4070126.2	92.0	0.00	1.70	0.85	NO		NO
L0008205	0	0.40650E-02	246783.0	4070126.1	91.8	0.00	1.70	0.85	NO		NO
L0008206	0	0.40650E-02	246786.6	4070126.0	91.6	0.00	1.70	0.85	NO		NO
L0008207	0	0.40650E-02	246790.3	4070126.0	91.4	0.00	1.70	0.85	NO		NO
L0008208	0	0.40650E-02	246793.9	4070125.9	91.1	0.00	1.70	0.85	NO		NO
L0008209	0	0.40650E-02	246797.6	4070125.9	90.9	0.00	1.70	0.85	NO		NO
L0008210	0	0.40650E-02	246801.3	4070125.8	90.7	0.00	1.70	0.85	NO		NO
L0008211	0	0.40650E-02	246804.9	4070125.7	90.5	0.00	1.70	0.85	NO		NO
L0008212	0	0.40650E-02	246808.6	4070125.7	90.2	0.00	1.70	0.85	NO		NO
L0008213	0	0.40650E-02	246812.2	4070125.6	90.2	0.00	1.70	0.85	NO		NO
L0008214	0	0.40650E-02	246815.9	4070125.5	90.3	0.00	1.70	0.85	NO		NO
L0008215	0	0.40650E-02	246819.5	4070125.5	90.5	0.00	1.70	0.85	NO		NO
L0008216	0	0.40650E-02	246823.2	4070125.4	90.6	0.00	1.70	0.85	NO		NO
L0008217	0	0.40650E-02	246826.2	4070124.8	90.7	0.00	1.70	0.85	NO		NO
L0008218	0	0.40650E-02	246825.8	4070121.2	90.8	0.00	1.70	0.85	NO		NO
L0008219	0	0.40650E-02	246825.3	4070117.5	90.9	0.00	1.70	0.85	NO		NO
L0008220	0	0.40650E-02	246824.9	4070113.9	91.0	0.00	1.70	0.85	NO		NO
L0008221	0	0.40650E-02	246824.4	4070110.3	91.1	0.00	1.70	0.85	NO		NO
L0008222	0	0.40650E-02	246824.0	4070106.7	91.2	0.00	1.70	0.85	NO		NO
L0008223	0	0.40650E-02	246823.5	4070103.0	91.3	0.00	1.70	0.85	NO		NO
L0008224	0	0.40650E-02	246823.1	4070099.4	91.4	0.00	1.70	0.85	NO		NO
L0008225	0	0.40650E-02	246822.6	4070095.8	91.4	0.00	1.70	0.85	NO		NO
L0008226	0	0.40650E-02	246822.2	4070092.1	91.4	0.00	1.70	0.85	NO		NO
L0008227	0	0.40650E-02	246821.7	4070088.5	91.4	0.00	1.70	0.85	NO		NO
L0008228	0	0.40650E-02	246821.3	4070084.9	91.4	0.00	1.70	0.85	NO		NO
L0008229	0	0.40650E-02	246820.8	4070081.2	91.4	0.00	1.70	0.85	NO		NO
L0008230	0	0.40650E-02	246820.4	4070077.6	91.3	0.00	1.70	0.85	NO		NO
L0008231	0	0.40650E-02	246819.9	4070074.0	91.3	0.00	1.70	0.85	NO		NO
L0008232	0	0.40650E-02	246819.5	4070070.4	91.3	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008233	0	0.40650E-02	246819.0	4070066.7	91.3	0.00	1.70	0.85	NO		NO
L0008234	0	0.40650E-02	246818.6	4070063.1	91.2	0.00	1.70	0.85	NO		NO
L0008235	0	0.40650E-02	246818.1	4070059.5	91.2	0.00	1.70	0.85	NO		NO
L0008236	0	0.40650E-02	246817.7	4070055.8	91.1	0.00	1.70	0.85	NO		NO
L0008237	0	0.40650E-02	246817.2	4070052.2	91.1	0.00	1.70	0.85	NO		NO
L0008238	0	0.40650E-02	246817.3	4070048.6	91.1	0.00	1.70	0.85	NO		NO
L0008239	0	0.40650E-02	246817.5	4070044.9	91.0	0.00	1.70	0.85	NO		NO
L0008240	0	0.40650E-02	246817.6	4070041.2	91.0	0.00	1.70	0.85	NO		NO
L0008241	0	0.40650E-02	246817.8	4070037.6	91.0	0.00	1.70	0.85	NO		NO
L0008242	0	0.40650E-02	246818.0	4070033.9	91.0	0.00	1.70	0.85	NO		NO
L0008243	0	0.40650E-02	246818.1	4070030.3	90.9	0.00	1.70	0.85	NO		NO
L0008244	0	0.40650E-02	246818.3	4070026.6	90.9	0.00	1.70	0.85	NO		NO
L0008245	0	0.40650E-02	246818.5	4070023.0	90.8	0.00	1.70	0.85	NO		NO
L0008246	0	0.40650E-02	246818.6	4070019.3	90.8	0.00	1.70	0.85	NO		NO
L0008247	0	0.40650E-02	246818.8	4070015.7	90.8	0.00	1.70	0.85	NO		NO
L0008248	0	0.40650E-02	246819.0	4070012.0	90.7	0.00	1.70	0.85	NO		NO
L0008249	0	0.40650E-02	246819.1	4070008.4	90.7	0.00	1.70	0.85	NO		NO
L0008250	0	0.40650E-02	246819.3	4070004.7	90.8	0.00	1.70	0.85	NO		NO
L0008251	0	0.40650E-02	246819.5	4070001.1	90.9	0.00	1.70	0.85	NO		NO
L0008252	0	0.40650E-02	246819.6	4069997.4	91.0	0.00	1.70	0.85	NO		NO
L0008253	0	0.40650E-02	246819.8	4069993.8	91.0	0.00	1.70	0.85	NO		NO
L0008254	0	0.40650E-02	246820.0	4069990.1	91.1	0.00	1.70	0.85	NO		NO
L0008255	0	0.40650E-02	246820.1	4069986.4	91.2	0.00	1.70	0.85	NO		NO
L0008256	0	0.40650E-02	246820.3	4069982.8	91.2	0.00	1.70	0.85	NO		NO
L0008257	0	0.40650E-02	246820.5	4069979.1	91.3	0.00	1.70	0.85	NO		NO
L0008258	0	0.40650E-02	246820.6	4069975.5	91.3	0.00	1.70	0.85	NO		NO
L0008259	0	0.40650E-02	246820.8	4069971.8	91.3	0.00	1.70	0.85	NO		NO
L0008260	0	0.40650E-02	246821.0	4069968.2	91.3	0.00	1.70	0.85	NO		NO
L0008261	0	0.40650E-02	246821.1	4069964.5	91.3	0.00	1.70	0.85	NO		NO
L0008262	0	0.40650E-02	246821.3	4069960.9	91.2	0.00	1.70	0.85	NO		NO
L0008263	0	0.40650E-02	246821.5	4069957.2	91.2	0.00	1.70	0.85	NO		NO
L0008264	0	0.40650E-02	246821.6	4069953.6	91.2	0.00	1.70	0.85	NO		NO
L0008265	0	0.40650E-02	246821.8	4069949.9	91.2	0.00	1.70	0.85	NO		NO
L0008266	0	0.40650E-02	246822.0	4069946.3	91.0	0.00	1.70	0.85	NO		NO
L0008267	0	0.40650E-02	246822.1	4069942.6	90.9	0.00	1.70	0.85	NO		NO
L0008268	0	0.40650E-02	246822.3	4069938.9	90.7	0.00	1.70	0.85	NO		NO
L0008269	0	0.40650E-02	246822.5	4069935.3	90.6	0.00	1.70	0.85	NO		NO
L0008270	0	0.40650E-02	246822.6	4069931.6	90.5	0.00	1.70	0.85	NO		NO
L0008271	0	0.40650E-02	246822.8	4069928.0	90.3	0.00	1.70	0.85	NO		NO
L0008272	0	0.40650E-02	246824.0	4069924.6	90.2	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

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L0008273	0	0.40650E-02	246825.5	4069921.3	90.0	0.00	1.70	0.85	NO		NO
L0008274	0	0.40650E-02	246827.1	4069918.0	89.9	0.00	1.70	0.85	NO		NO
L0008275	0	0.40650E-02	246828.7	4069914.7	89.8	0.00	1.70	0.85	NO		NO
L0008276	0	0.40650E-02	246830.3	4069911.4	89.7	0.00	1.70	0.85	NO		NO
L0008277	0	0.40650E-02	246831.9	4069908.1	89.6	0.00	1.70	0.85	NO		NO
L0008278	0	0.40650E-02	246833.4	4069904.8	89.5	0.00	1.70	0.85	NO		NO
L0008279	0	0.40650E-02	246835.0	4069901.5	89.4	0.00	1.70	0.85	NO		NO
L0008280	0	0.40650E-02	246836.6	4069898.2	89.3	0.00	1.70	0.85	NO		NO
L0008281	0	0.40650E-02	246838.2	4069894.9	89.2	0.00	1.70	0.85	NO		NO
L0008282	0	0.40650E-02	246839.8	4069891.6	89.0	0.00	1.70	0.85	NO		NO
L0008283	0	0.40650E-02	246841.3	4069888.3	89.0	0.00	1.70	0.85	NO		NO
L0008284	0	0.40650E-02	246842.9	4069885.0	88.8	0.00	1.70	0.85	NO		NO
L0008285	0	0.40650E-02	246844.5	4069881.7	88.8	0.00	1.70	0.85	NO		NO
L0008286	0	0.40650E-02	246846.1	4069878.4	88.7	0.00	1.70	0.85	NO		NO
L0008287	0	0.40650E-02	246847.6	4069875.1	88.6	0.00	1.70	0.85	NO		NO
L0008288	0	0.40650E-02	246849.2	4069871.8	88.6	0.00	1.70	0.85	NO		NO
L0008289	0	0.40650E-02	246850.8	4069868.5	88.5	0.00	1.70	0.85	NO		NO
L0008290	0	0.40650E-02	246852.4	4069865.2	88.5	0.00	1.70	0.85	NO		NO
L0008291	0	0.40650E-02	246854.0	4069861.9	88.5	0.00	1.70	0.85	NO		NO
L0008292	0	0.40650E-02	246855.5	4069858.6	88.5	0.00	1.70	0.85	NO		NO
L0008293	0	0.40650E-02	246857.1	4069855.3	88.5	0.00	1.70	0.85	NO		NO
L0008294	0	0.40650E-02	246858.7	4069852.0	88.5	0.00	1.70	0.85	NO		NO
L0008295	0	0.40650E-02	246860.3	4069848.7	88.4	0.00	1.70	0.85	NO		NO
L0008296	0	0.40650E-02	246862.4	4069845.8	88.4	0.00	1.70	0.85	NO		NO
L0008297	0	0.40650E-02	246865.0	4069843.2	88.4	0.00	1.70	0.85	NO		NO
L0008298	0	0.40650E-02	246867.6	4069840.7	88.3	0.00	1.70	0.85	NO		NO
L0008299	0	0.40650E-02	246870.2	4069838.1	88.3	0.00	1.70	0.85	NO		NO
L0008300	0	0.40650E-02	246872.9	4069835.6	88.2	0.00	1.70	0.85	NO		NO
L0008301	0	0.40650E-02	246875.5	4069833.0	88.1	0.00	1.70	0.85	NO		NO
L0008302	0	0.40650E-02	246878.1	4069830.5	88.0	0.00	1.70	0.85	NO		NO
L0008303	0	0.40650E-02	246880.8	4069827.9	87.8	0.00	1.70	0.85	NO		NO
L0008304	0	0.40650E-02	246883.4	4069825.4	87.7	0.00	1.70	0.85	NO		NO
L0008305	0	0.40650E-02	246886.0	4069822.8	87.5	0.00	1.70	0.85	NO		NO
L0008306	0	0.40650E-02	246888.6	4069820.3	87.4	0.00	1.70	0.85	NO		NO
L0008307	0	0.40650E-02	246891.3	4069817.8	87.3	0.00	1.70	0.85	NO		NO
L0008308	0	0.40650E-02	246893.9	4069815.2	87.3	0.00	1.70	0.85	NO		NO
L0008309	0	0.40650E-02	246896.5	4069812.7	87.3	0.00	1.70	0.85	NO		NO
L0008310	0	0.40650E-02	246899.1	4069810.1	87.3	0.00	1.70	0.85	NO		NO
L0008311	0	0.40650E-02	246901.8	4069807.6	87.3	0.00	1.70	0.85	NO		NO
L0008312	0	0.40650E-02	246904.4	4069805.0	87.3	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

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L0008313	0	0.40650E-02	246907.0	4069802.5	87.3	0.00	1.70	0.85	NO		NO
L0008314	0	0.40650E-02	246909.6	4069799.9	87.3	0.00	1.70	0.85	NO		NO
L0008315	0	0.40650E-02	246912.3	4069797.4	87.4	0.00	1.70	0.85	NO		NO
L0008316	0	0.40650E-02	246914.9	4069794.8	87.4	0.00	1.70	0.85	NO		NO
L0008317	0	0.40650E-02	246917.5	4069792.3	87.4	0.00	1.70	0.85	NO		NO
L0008318	0	0.40650E-02	246920.1	4069789.7	87.4	0.00	1.70	0.85	NO		NO
L0008319	0	0.40650E-02	246922.8	4069787.2	87.4	0.00	1.70	0.85	NO		NO
L0008320	0	0.40650E-02	246925.4	4069784.6	87.4	0.00	1.70	0.85	NO		NO
L0008321	0	0.40650E-02	246928.0	4069782.1	87.4	0.00	1.70	0.85	NO		NO
L0008322	0	0.40650E-02	246930.6	4069779.6	87.3	0.00	1.70	0.85	NO		NO
L0008323	0	0.40650E-02	246933.3	4069777.0	87.1	0.00	1.70	0.85	NO		NO
L0008324	0	0.40650E-02	246935.9	4069774.5	86.9	0.00	1.70	0.85	NO		NO
L0008325	0	0.40650E-02	246938.5	4069771.9	86.8	0.00	1.70	0.85	NO		NO
L0008326	0	0.40650E-02	246941.1	4069769.4	86.6	0.00	1.70	0.85	NO		NO
L0008327	0	0.40650E-02	246943.8	4069766.8	86.5	0.00	1.70	0.85	NO		NO
L0008328	0	0.40650E-02	246946.4	4069764.3	86.4	0.00	1.70	0.85	NO		NO
L0008329	0	0.40650E-02	246949.0	4069761.7	86.3	0.00	1.70	0.85	NO		NO
L0008330	0	0.40650E-02	246951.6	4069759.2	86.2	0.00	1.70	0.85	NO		NO
L0008331	0	0.40650E-02	246954.3	4069756.6	86.1	0.00	1.70	0.85	NO		NO
L0008332	0	0.40650E-02	246956.9	4069754.1	86.0	0.00	1.70	0.85	NO		NO
L0008333	0	0.40650E-02	246959.5	4069751.5	86.0	0.00	1.70	0.85	NO		NO
L0008334	0	0.40650E-02	246962.1	4069749.0	86.0	0.00	1.70	0.85	NO		NO
L0008335	0	0.40650E-02	246964.8	4069746.4	86.0	0.00	1.70	0.85	NO		NO
L0008336	0	0.40650E-02	246967.4	4069743.9	86.0	0.00	1.70	0.85	NO		NO
L0008337	0	0.40650E-02	246970.0	4069741.4	86.0	0.00	1.70	0.85	NO		NO
L0008338	0	0.40650E-02	246972.6	4069738.8	86.0	0.00	1.70	0.85	NO		NO
L0008339	0	0.40650E-02	246975.3	4069736.3	86.0	0.00	1.70	0.85	NO		NO
L0008340	0	0.40650E-02	246977.9	4069733.7	86.0	0.00	1.70	0.85	NO		NO
L0008341	0	0.40650E-02	246980.5	4069731.2	86.0	0.00	1.70	0.85	NO		NO
L0008342	0	0.40650E-02	246983.1	4069728.6	86.0	0.00	1.70	0.85	NO		NO
L0008343	0	0.40650E-02	246985.8	4069726.1	86.0	0.00	1.70	0.85	NO		NO
L0008344	0	0.40650E-02	246988.4	4069723.5	86.0	0.00	1.70	0.85	NO		NO
L0008345	0	0.40650E-02	246991.0	4069721.0	86.0	0.00	1.70	0.85	NO		NO
L0008346	0	0.40650E-02	246993.6	4069718.4	86.1	0.00	1.70	0.85	NO		NO
L0008407	0	0.61728E-02	246225.1	4070130.5	92.5	0.00	1.70	0.85	NO		NO
L0008408	0	0.61728E-02	246221.4	4070130.5	92.6	0.00	1.70	0.85	NO		NO
L0008409	0	0.61728E-02	246217.8	4070130.4	92.7	0.00	1.70	0.85	NO		NO
L0008410	0	0.61728E-02	246214.1	4070130.4	92.8	0.00	1.70	0.85	NO		NO
L0008411	0	0.61728E-02	246210.4	4070130.4	93.0	0.00	1.70	0.85	NO		NO
L0008412	0	0.61728E-02	246206.8	4070130.3	93.1	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

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L0008413	0	0.61728E-02	246203.1	4070130.3	93.2	0.00	1.70	0.85	NO		NO
L0008414	0	0.61728E-02	246199.5	4070130.3	93.3	0.00	1.70	0.85	NO		NO
L0008415	0	0.61728E-02	246195.8	4070130.2	93.5	0.00	1.70	0.85	NO		NO
L0008416	0	0.61728E-02	246192.2	4070130.2	93.6	0.00	1.70	0.85	NO		NO
L0008417	0	0.61728E-02	246188.5	4070130.2	93.7	0.00	1.70	0.85	NO		NO
L0008418	0	0.61728E-02	246184.8	4070130.1	93.8	0.00	1.70	0.85	NO		NO
L0008419	0	0.61728E-02	246181.2	4070130.1	94.0	0.00	1.70	0.85	NO		NO
L0008420	0	0.61728E-02	246177.5	4070130.1	93.8	0.00	1.70	0.85	NO		NO
L0008421	0	0.61728E-02	246173.9	4070130.0	93.6	0.00	1.70	0.85	NO		NO
L0008422	0	0.61728E-02	246170.2	4070130.0	93.3	0.00	1.70	0.85	NO		NO
L0008423	0	0.61728E-02	246166.6	4070130.0	93.1	0.00	1.70	0.85	NO		NO
L0008424	0	0.61728E-02	246162.9	4070129.9	92.8	0.00	1.70	0.85	NO		NO
L0008425	0	0.61728E-02	246159.2	4070129.9	92.6	0.00	1.70	0.85	NO		NO
L0008426	0	0.61728E-02	246155.6	4070129.9	92.4	0.00	1.70	0.85	NO		NO
L0008427	0	0.61728E-02	246151.9	4070129.8	92.1	0.00	1.70	0.85	NO		NO
L0008428	0	0.61728E-02	246148.3	4070129.8	92.0	0.00	1.70	0.85	NO		NO
L0008429	0	0.61728E-02	246144.6	4070129.8	92.0	0.00	1.70	0.85	NO		NO
L0008430	0	0.61728E-02	246141.0	4070129.7	92.0	0.00	1.70	0.85	NO		NO
L0008431	0	0.61728E-02	246137.3	4070129.7	92.0	0.00	1.70	0.85	NO		NO
L0008432	0	0.61728E-02	246133.6	4070129.7	92.0	0.00	1.70	0.85	NO		NO
L0008433	0	0.61728E-02	246130.0	4070129.6	92.0	0.00	1.70	0.85	NO		NO
L0008434	0	0.61728E-02	246126.3	4070129.6	92.0	0.00	1.70	0.85	NO		NO
L0008435	0	0.61728E-02	246122.7	4070129.6	92.0	0.00	1.70	0.85	NO		NO
L0008436	0	0.61728E-02	246119.0	4070129.5	92.0	0.00	1.70	0.85	NO		NO
L0008437	0	0.61728E-02	246115.4	4070129.5	92.1	0.00	1.70	0.85	NO		NO
L0008438	0	0.61728E-02	246111.7	4070129.5	92.2	0.00	1.70	0.85	NO		NO
L0008439	0	0.61728E-02	246108.0	4070129.4	92.4	0.00	1.70	0.85	NO		NO
L0008440	0	0.61728E-02	246104.4	4070129.4	92.5	0.00	1.70	0.85	NO		NO
L0008441	0	0.61728E-02	246100.7	4070129.4	92.6	0.00	1.70	0.85	NO		NO
L0008442	0	0.61728E-02	246097.1	4070129.3	92.7	0.00	1.70	0.85	NO		NO
L0008443	0	0.61728E-02	246093.4	4070129.3	92.9	0.00	1.70	0.85	NO		NO
L0008444	0	0.61728E-02	246089.8	4070129.3	93.0	0.00	1.70	0.85	NO		NO
L0008445	0	0.61728E-02	246086.1	4070129.2	92.8	0.00	1.70	0.85	NO		NO
L0008446	0	0.61728E-02	246082.4	4070129.2	92.7	0.00	1.70	0.85	NO		NO
L0008447	0	0.61728E-02	246078.8	4070129.2	92.6	0.00	1.70	0.85	NO		NO
L0008448	0	0.61728E-02	246075.1	4070129.1	92.5	0.00	1.70	0.85	NO		NO
L0008449	0	0.61728E-02	246071.5	4070129.1	92.3	0.00	1.70	0.85	NO		NO
L0008450	0	0.61728E-02	246067.8	4070129.1	92.2	0.00	1.70	0.85	NO		NO
L0008451	0	0.61728E-02	246064.2	4070129.0	92.1	0.00	1.70	0.85	NO		NO
L0008452	0	0.61728E-02	246060.5	4070129.0	92.0	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008453	0	0.61728E-02	246056.8	4070129.0	91.9	0.00	1.70	0.85	NO		NO
L0008454	0	0.61728E-02	246053.2	4070128.9	91.7	0.00	1.70	0.85	NO		NO
L0008455	0	0.61728E-02	246049.5	4070128.9	91.6	0.00	1.70	0.85	NO		NO
L0008456	0	0.61728E-02	246045.9	4070128.9	91.5	0.00	1.70	0.85	NO		NO
L0008457	0	0.61728E-02	246042.2	4070128.8	91.4	0.00	1.70	0.85	NO		NO
L0008458	0	0.61728E-02	246038.6	4070128.7	91.2	0.00	1.70	0.85	NO		NO
L0008459	0	0.61728E-02	246038.5	4070125.1	91.1	0.00	1.70	0.85	NO		NO
L0008460	0	0.61728E-02	246038.3	4070121.4	91.0	0.00	1.70	0.85	NO		NO
L0008461	0	0.61728E-02	246038.2	4070117.8	90.9	0.00	1.70	0.85	NO		NO
L0008462	0	0.61728E-02	246038.0	4070114.1	90.7	0.00	1.70	0.85	NO		NO
L0008463	0	0.61728E-02	246037.9	4070110.5	90.6	0.00	1.70	0.85	NO		NO
L0008464	0	0.61728E-02	246037.8	4070106.8	90.5	0.00	1.70	0.85	NO		NO
L0008465	0	0.61728E-02	246037.6	4070103.2	90.4	0.00	1.70	0.85	NO		NO
L0008466	0	0.61728E-02	246037.5	4070099.5	90.2	0.00	1.70	0.85	NO		NO
L0008467	0	0.61728E-02	246037.3	4070095.8	90.1	0.00	1.70	0.85	NO		NO
L0008468	0	0.61728E-02	246037.2	4070092.2	90.0	0.00	1.70	0.85	NO		NO
L0008469	0	0.61728E-02	246037.1	4070088.5	89.8	0.00	1.70	0.85	NO		NO
L0008470	0	0.61728E-02	246036.9	4070084.9	89.7	0.00	1.70	0.85	NO		NO
L0008471	0	0.61728E-02	246036.8	4070081.2	89.6	0.00	1.70	0.85	NO		NO
L0008472	0	0.61728E-02	246036.6	4070077.6	89.5	0.00	1.70	0.85	NO		NO
L0008473	0	0.61728E-02	246036.5	4070073.9	89.3	0.00	1.70	0.85	NO		NO
L0008474	0	0.61728E-02	246036.4	4070070.3	89.2	0.00	1.70	0.85	NO		NO
L0008475	0	0.61728E-02	246036.2	4070066.6	89.3	0.00	1.70	0.85	NO		NO
L0008476	0	0.61728E-02	246036.1	4070063.0	89.4	0.00	1.70	0.85	NO		NO
L0008477	0	0.61728E-02	246035.9	4070059.3	89.5	0.00	1.70	0.85	NO		NO
L0008478	0	0.61728E-02	246035.8	4070055.6	89.6	0.00	1.70	0.85	NO		NO
L0008479	0	0.61728E-02	246035.7	4070052.0	89.7	0.00	1.70	0.85	NO		NO
L0008480	0	0.61728E-02	246035.5	4070048.3	89.8	0.00	1.70	0.85	NO		NO
L0008481	0	0.61728E-02	246035.4	4070044.7	89.9	0.00	1.70	0.85	NO		NO
L0008482	0	0.61728E-02	246035.2	4070041.0	90.0	0.00	1.70	0.85	NO		NO
L0008483	0	0.61728E-02	246035.1	4070037.4	90.1	0.00	1.70	0.85	NO		NO
L0008484	0	0.61728E-02	246035.0	4070033.7	90.2	0.00	1.70	0.85	NO		NO
L0008485	0	0.61728E-02	246034.8	4070030.1	90.3	0.00	1.70	0.85	NO		NO
L0008486	0	0.61728E-02	246034.7	4070026.4	90.5	0.00	1.70	0.85	NO		NO
L0008487	0	0.61728E-02	246034.5	4070022.7	90.6	0.00	1.70	0.85	NO		NO
L0008488	0	0.61728E-02	246034.4	4070019.1	90.7	0.00	1.70	0.85	NO		NO
L0008489	0	0.61728E-02	246034.3	4070015.4	90.8	0.00	1.70	0.85	NO		NO
L0008490	0	0.61728E-02	246034.1	4070011.8	90.9	0.00	1.70	0.85	NO		NO
L0008491	0	0.61728E-02	246034.0	4070008.1	91.0	0.00	1.70	0.85	NO		NO
L0008492	0	0.61728E-02	246033.8	4070004.5	91.0	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008493	0	0.61728E-02	246033.7	4070000.8	91.0	0.00	1.70	0.85	NO		NO
L0008494	0	0.61728E-02	246033.6	4069997.2	91.0	0.00	1.70	0.85	NO		NO
L0008495	0	0.61728E-02	246033.4	4069993.5	90.9	0.00	1.70	0.85	NO		NO
L0008496	0	0.61728E-02	246033.3	4069989.9	90.9	0.00	1.70	0.85	NO		NO
L0008497	0	0.61728E-02	246033.1	4069986.2	90.9	0.00	1.70	0.85	NO		NO
L0008498	0	0.61728E-02	246033.0	4069982.5	90.9	0.00	1.70	0.85	NO		NO
L0008499	0	0.61728E-02	246032.9	4069978.9	90.8	0.00	1.70	0.85	NO		NO
L0008500	0	0.61728E-02	246032.7	4069975.2	90.6	0.00	1.70	0.85	NO		NO
L0008501	0	0.61728E-02	246032.6	4069971.6	90.4	0.00	1.70	0.85	NO		NO
L0008502	0	0.61728E-02	246032.4	4069967.9	90.1	0.00	1.70	0.85	NO		NO
L0008503	0	0.61728E-02	246032.3	4069964.3	89.9	0.00	1.70	0.85	NO		NO
L0008504	0	0.61728E-02	246032.2	4069960.6	89.7	0.00	1.70	0.85	NO		NO
L0008505	0	0.61728E-02	246032.0	4069957.0	89.5	0.00	1.70	0.85	NO		NO
L0008506	0	0.61728E-02	246031.9	4069953.3	89.2	0.00	1.70	0.85	NO		NO
L0008507	0	0.61728E-02	246031.8	4069949.6	89.0	0.00	1.70	0.85	NO		NO
L0008508	0	0.61728E-02	246031.6	4069946.0	88.9	0.00	1.70	0.85	NO		NO
L0008509	0	0.61728E-02	246031.5	4069942.3	88.7	0.00	1.70	0.85	NO		NO
L0008510	0	0.61728E-02	246031.3	4069938.7	88.6	0.00	1.70	0.85	NO		NO
L0008511	0	0.61728E-02	246031.2	4069935.0	88.5	0.00	1.70	0.85	NO		NO
L0008512	0	0.61728E-02	246031.1	4069931.4	88.4	0.00	1.70	0.85	NO		NO
L0008513	0	0.61728E-02	246030.9	4069927.7	88.3	0.00	1.70	0.85	NO		NO
L0008514	0	0.61728E-02	246030.8	4069924.1	88.1	0.00	1.70	0.85	NO		NO
L0008515	0	0.61728E-02	246030.6	4069920.4	88.0	0.00	1.70	0.85	NO		NO
L0008516	0	0.61728E-02	246030.5	4069916.8	87.8	0.00	1.70	0.85	NO		NO
L0008517	0	0.61728E-02	246030.4	4069913.1	87.5	0.00	1.70	0.85	NO		NO
L0008518	0	0.61728E-02	246030.2	4069909.4	87.3	0.00	1.70	0.85	NO		NO
L0008519	0	0.61728E-02	246030.1	4069905.8	87.0	0.00	1.70	0.85	NO		NO
L0008520	0	0.61728E-02	246029.9	4069902.1	86.8	0.00	1.70	0.85	NO		NO
L0008521	0	0.61728E-02	246029.8	4069898.5	86.6	0.00	1.70	0.85	NO		NO
L0008522	0	0.61728E-02	246029.7	4069894.8	86.3	0.00	1.70	0.85	NO		NO
L0008523	0	0.61728E-02	246029.5	4069891.2	86.1	0.00	1.70	0.85	NO		NO
L0008524	0	0.61728E-02	246029.4	4069887.5	85.9	0.00	1.70	0.85	NO		NO
L0008525	0	0.61728E-02	246029.2	4069883.9	85.8	0.00	1.70	0.85	NO		NO
L0008526	0	0.61728E-02	246029.1	4069880.2	85.7	0.00	1.70	0.85	NO		NO
L0008527	0	0.61728E-02	246029.0	4069876.6	85.6	0.00	1.70	0.85	NO		NO
L0008528	0	0.61728E-02	246028.8	4069872.9	85.5	0.00	1.70	0.85	NO		NO
L0008529	0	0.61728E-02	246028.7	4069869.2	85.3	0.00	1.70	0.85	NO		NO
L0008530	0	0.61728E-02	246028.5	4069865.6	85.2	0.00	1.70	0.85	NO		NO
L0008531	0	0.61728E-02	246028.4	4069861.9	85.1	0.00	1.70	0.85	NO		NO
L0008532	0	0.61728E-02	246028.3	4069858.3	85.2	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008533	0	0.61728E-02	246028.1	4069854.6	85.4	0.00	1.70	0.85	NO		NO
L0008534	0	0.61728E-02	246028.0	4069851.0	85.6	0.00	1.70	0.85	NO		NO
L0008535	0	0.61728E-02	246027.8	4069847.3	85.9	0.00	1.70	0.85	NO		NO
L0008536	0	0.61728E-02	246027.7	4069843.7	86.1	0.00	1.70	0.85	NO		NO
L0008537	0	0.61728E-02	246027.6	4069840.0	86.4	0.00	1.70	0.85	NO		NO
L0008538	0	0.61728E-02	246027.4	4069836.3	86.6	0.00	1.70	0.85	NO		NO
L0008539	0	0.61728E-02	246027.3	4069832.7	86.8	0.00	1.70	0.85	NO		NO
L0008540	0	0.61728E-02	246027.1	4069829.0	87.0	0.00	1.70	0.85	NO		NO
L0008541	0	0.61728E-02	246027.0	4069825.4	87.0	0.00	1.70	0.85	NO		NO
L0008542	0	0.61728E-02	246026.9	4069821.7	87.0	0.00	1.70	0.85	NO		NO
L0008543	0	0.61728E-02	246026.7	4069818.1	87.0	0.00	1.70	0.85	NO		NO
L0008544	0	0.61728E-02	246026.6	4069814.4	87.1	0.00	1.70	0.85	NO		NO
L0008545	0	0.61728E-02	246026.4	4069810.8	87.1	0.00	1.70	0.85	NO		NO
L0008546	0	0.61728E-02	246026.3	4069807.1	87.1	0.00	1.70	0.85	NO		NO
L0008547	0	0.61728E-02	246026.2	4069803.5	87.1	0.00	1.70	0.85	NO		NO
L0008548	0	0.61728E-02	246026.0	4069799.8	87.1	0.00	1.70	0.85	NO		NO
L0008549	0	0.61728E-02	246025.9	4069796.1	87.3	0.00	1.70	0.85	NO		NO
L0008550	0	0.61728E-02	246025.7	4069792.5	87.4	0.00	1.70	0.85	NO		NO
L0008551	0	0.61728E-02	246025.6	4069788.8	87.5	0.00	1.70	0.85	NO		NO
L0008552	0	0.61728E-02	246025.5	4069785.2	87.6	0.00	1.70	0.85	NO		NO
L0008553	0	0.61728E-02	246025.3	4069781.5	87.8	0.00	1.70	0.85	NO		NO
L0008554	0	0.61728E-02	246025.2	4069777.9	87.9	0.00	1.70	0.85	NO		NO
L0008555	0	0.61728E-02	246025.0	4069774.2	88.0	0.00	1.70	0.85	NO		NO
L0008556	0	0.61728E-02	246024.9	4069770.6	88.1	0.00	1.70	0.85	NO		NO
L0008557	0	0.61728E-02	246024.8	4069766.9	88.2	0.00	1.70	0.85	NO		NO
L0008558	0	0.61728E-02	246024.6	4069763.2	88.2	0.00	1.70	0.85	NO		NO
L0008559	0	0.61728E-02	246024.5	4069759.6	88.2	0.00	1.70	0.85	NO		NO
L0008560	0	0.61728E-02	246024.3	4069755.9	88.3	0.00	1.70	0.85	NO		NO
L0008561	0	0.61728E-02	246024.2	4069752.3	88.3	0.00	1.70	0.85	NO		NO
L0008562	0	0.61728E-02	246024.1	4069748.6	88.3	0.00	1.70	0.85	NO		NO
L0008563	0	0.61728E-02	246023.9	4069745.0	88.4	0.00	1.70	0.85	NO		NO
L0008564	0	0.61728E-02	246023.8	4069741.3	88.4	0.00	1.70	0.85	NO		NO
L0008565	0	0.61728E-02	246023.6	4069737.7	88.4	0.00	1.70	0.85	NO		NO
L0008566	0	0.61728E-02	246023.5	4069734.0	88.3	0.00	1.70	0.85	NO		NO
L0008567	0	0.61728E-02	246023.4	4069730.4	88.3	0.00	1.70	0.85	NO		NO
L0008568	0	0.61728E-02	246023.2	4069726.7	88.2	0.00	1.70	0.85	NO		NO
L0008589	0	0.62112E-02	246040.8	4070137.3	91.3	0.00	1.70	0.85	NO		NO
L0008590	0	0.62112E-02	246041.0	4070141.0	91.2	0.00	1.70	0.85	NO		NO
L0008591	0	0.62112E-02	246041.1	4070144.6	91.2	0.00	1.70	0.85	NO		NO
L0008592	0	0.62112E-02	246041.3	4070148.3	91.1	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008593	0	0.62112E-02	246041.5	4070152.0	91.1	0.00	1.70	0.85	NO		NO
L0008594	0	0.62112E-02	246041.6	4070155.6	91.1	0.00	1.70	0.85	NO		NO
L0008595	0	0.62112E-02	246041.8	4070159.3	91.0	0.00	1.70	0.85	NO		NO
L0008596	0	0.62112E-02	246041.9	4070162.9	90.8	0.00	1.70	0.85	NO		NO
L0008597	0	0.62112E-02	246042.1	4070166.6	90.6	0.00	1.70	0.85	NO		NO
L0008598	0	0.62112E-02	246042.3	4070170.2	90.5	0.00	1.70	0.85	NO		NO
L0008599	0	0.62112E-02	246042.4	4070173.9	90.3	0.00	1.70	0.85	NO		NO
L0008600	0	0.62112E-02	246042.6	4070177.5	90.1	0.00	1.70	0.85	NO		NO
L0008601	0	0.62112E-02	246042.8	4070181.2	89.9	0.00	1.70	0.85	NO		NO
L0008602	0	0.62112E-02	246042.9	4070184.8	89.7	0.00	1.70	0.85	NO		NO
L0008603	0	0.62112E-02	246043.1	4070188.5	89.5	0.00	1.70	0.85	NO		NO
L0008604	0	0.62112E-02	246043.3	4070192.1	89.4	0.00	1.70	0.85	NO		NO
L0008605	0	0.62112E-02	246043.4	4070195.8	89.4	0.00	1.70	0.85	NO		NO
L0008606	0	0.62112E-02	246043.6	4070199.5	89.3	0.00	1.70	0.85	NO		NO
L0008607	0	0.62112E-02	246043.7	4070203.1	89.3	0.00	1.70	0.85	NO		NO
L0008608	0	0.62112E-02	246043.9	4070206.8	89.2	0.00	1.70	0.85	NO		NO
L0008609	0	0.62112E-02	246044.1	4070210.4	89.1	0.00	1.70	0.85	NO		NO
L0008610	0	0.62112E-02	246044.2	4070214.1	89.1	0.00	1.70	0.85	NO		NO
L0008611	0	0.62112E-02	246044.4	4070217.7	89.0	0.00	1.70	0.85	NO		NO
L0008612	0	0.62112E-02	246044.6	4070221.4	89.0	0.00	1.70	0.85	NO		NO
L0008613	0	0.62112E-02	246044.7	4070225.0	89.0	0.00	1.70	0.85	NO		NO
L0008614	0	0.62112E-02	246044.9	4070228.7	89.0	0.00	1.70	0.85	NO		NO
L0008615	0	0.62112E-02	246045.0	4070232.3	89.0	0.00	1.70	0.85	NO		NO
L0008616	0	0.62112E-02	246045.2	4070236.0	89.0	0.00	1.70	0.85	NO		NO
L0008617	0	0.62112E-02	246045.4	4070239.6	89.0	0.00	1.70	0.85	NO		NO
L0008618	0	0.62112E-02	246045.5	4070243.3	89.0	0.00	1.70	0.85	NO		NO
L0008619	0	0.62112E-02	246045.7	4070247.0	89.0	0.00	1.70	0.85	NO		NO
L0008620	0	0.62112E-02	246045.9	4070250.6	89.0	0.00	1.70	0.85	NO		NO
L0008621	0	0.62112E-02	246046.0	4070254.3	89.1	0.00	1.70	0.85	NO		NO
L0008622	0	0.62112E-02	246046.2	4070257.9	89.1	0.00	1.70	0.85	NO		NO
L0008623	0	0.62112E-02	246046.4	4070261.6	89.2	0.00	1.70	0.85	NO		NO
L0008624	0	0.62112E-02	246046.5	4070265.2	89.2	0.00	1.70	0.85	NO		NO
L0008625	0	0.62112E-02	246046.7	4070268.9	89.3	0.00	1.70	0.85	NO		NO
L0008626	0	0.62112E-02	246046.8	4070272.5	89.3	0.00	1.70	0.85	NO		NO
L0008627	0	0.62112E-02	246047.0	4070276.2	89.4	0.00	1.70	0.85	NO		NO
L0008628	0	0.62112E-02	246047.2	4070279.8	89.4	0.00	1.70	0.85	NO		NO
L0008629	0	0.62112E-02	246047.3	4070283.5	89.5	0.00	1.70	0.85	NO		NO
L0008630	0	0.62112E-02	246047.5	4070287.1	89.6	0.00	1.70	0.85	NO		NO
L0008631	0	0.62112E-02	246047.7	4070290.8	89.8	0.00	1.70	0.85	NO		NO
L0008632	0	0.62112E-02	246047.8	4070294.5	89.9	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008633	0	0.62112E-02	246048.0	4070298.1	90.0	0.00	1.70	0.85	NO		NO
L0008634	0	0.62112E-02	246048.2	4070301.8	90.1	0.00	1.70	0.85	NO		NO
L0008635	0	0.62112E-02	246048.3	4070305.4	90.2	0.00	1.70	0.85	NO		NO
L0008636	0	0.62112E-02	246048.5	4070309.1	90.3	0.00	1.70	0.85	NO		NO
L0008637	0	0.62112E-02	246048.6	4070312.7	90.4	0.00	1.70	0.85	NO		NO
L0008638	0	0.62112E-02	246048.8	4070316.4	90.4	0.00	1.70	0.85	NO		NO
L0008639	0	0.62112E-02	246049.0	4070320.0	90.5	0.00	1.70	0.85	NO		NO
L0008640	0	0.62112E-02	246049.1	4070323.7	90.5	0.00	1.70	0.85	NO		NO
L0008641	0	0.62112E-02	246049.3	4070327.3	90.5	0.00	1.70	0.85	NO		NO
L0008642	0	0.62112E-02	246049.5	4070331.0	90.6	0.00	1.70	0.85	NO		NO
L0008643	0	0.62112E-02	246049.6	4070334.6	90.6	0.00	1.70	0.85	NO		NO
L0008644	0	0.62112E-02	246049.8	4070338.3	90.6	0.00	1.70	0.85	NO		NO
L0008645	0	0.62112E-02	246050.0	4070342.0	90.6	0.00	1.70	0.85	NO		NO
L0008646	0	0.62112E-02	246050.1	4070345.6	90.5	0.00	1.70	0.85	NO		NO
L0008647	0	0.62112E-02	246050.3	4070349.3	90.5	0.00	1.70	0.85	NO		NO
L0008648	0	0.62112E-02	246050.4	4070352.9	90.4	0.00	1.70	0.85	NO		NO
L0008649	0	0.62112E-02	246050.6	4070356.6	90.3	0.00	1.70	0.85	NO		NO
L0008650	0	0.62112E-02	246050.8	4070360.2	90.2	0.00	1.70	0.85	NO		NO
L0008651	0	0.62112E-02	246050.9	4070363.9	90.1	0.00	1.70	0.85	NO		NO
L0008652	0	0.62112E-02	246051.1	4070367.5	90.1	0.00	1.70	0.85	NO		NO
L0008653	0	0.62112E-02	246051.3	4070371.2	89.9	0.00	1.70	0.85	NO		NO
L0008654	0	0.62112E-02	246051.4	4070374.8	89.7	0.00	1.70	0.85	NO		NO
L0008655	0	0.62112E-02	246051.6	4070378.5	89.5	0.00	1.70	0.85	NO		NO
L0008656	0	0.62112E-02	246051.8	4070382.2	89.3	0.00	1.70	0.85	NO		NO
L0008657	0	0.62112E-02	246051.9	4070385.8	89.1	0.00	1.70	0.85	NO		NO
L0008658	0	0.62112E-02	246052.1	4070389.5	88.9	0.00	1.70	0.85	NO		NO
L0008659	0	0.62112E-02	246052.2	4070393.1	88.7	0.00	1.70	0.85	NO		NO
L0008660	0	0.62112E-02	246052.4	4070396.8	88.4	0.00	1.70	0.85	NO		NO
L0008661	0	0.62112E-02	246052.6	4070400.4	88.2	0.00	1.70	0.85	NO		NO
L0008662	0	0.62112E-02	246052.7	4070404.1	88.1	0.00	1.70	0.85	NO		NO
L0008663	0	0.62112E-02	246052.9	4070407.7	88.0	0.00	1.70	0.85	NO		NO
L0008664	0	0.62112E-02	246053.1	4070411.4	87.8	0.00	1.70	0.85	NO		NO
L0008665	0	0.62112E-02	246053.2	4070415.0	87.7	0.00	1.70	0.85	NO		NO
L0008666	0	0.62112E-02	246053.4	4070418.7	87.6	0.00	1.70	0.85	NO		NO
L0008667	0	0.62112E-02	246053.6	4070422.3	87.5	0.00	1.70	0.85	NO		NO
L0008668	0	0.62112E-02	246053.7	4070426.0	87.3	0.00	1.70	0.85	NO		NO
L0008669	0	0.62112E-02	246053.9	4070429.7	87.2	0.00	1.70	0.85	NO		NO
L0008670	0	0.62112E-02	246054.0	4070433.3	87.2	0.00	1.70	0.85	NO		NO
L0008671	0	0.62112E-02	246054.2	4070437.0	87.2	0.00	1.70	0.85	NO		NO
L0008672	0	0.62112E-02	246054.4	4070440.6	87.2	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008673	0	0.62112E-02	246054.5	4070444.3	87.2	0.00	1.70	0.85	NO		NO
L0008674	0	0.62112E-02	246054.7	4070447.9	87.2	0.00	1.70	0.85	NO		NO
L0008675	0	0.62112E-02	246054.9	4070451.6	87.2	0.00	1.70	0.85	NO		NO
L0008676	0	0.62112E-02	246055.0	4070455.2	87.2	0.00	1.70	0.85	NO		NO
L0008677	0	0.62112E-02	246055.2	4070458.9	87.2	0.00	1.70	0.85	NO		NO
L0008678	0	0.62112E-02	246055.4	4070462.5	87.2	0.00	1.70	0.85	NO		NO
L0008679	0	0.62112E-02	246055.5	4070466.2	87.3	0.00	1.70	0.85	NO		NO
L0008680	0	0.62112E-02	246055.7	4070469.8	87.4	0.00	1.70	0.85	NO		NO
L0008681	0	0.62112E-02	246055.8	4070473.5	87.5	0.00	1.70	0.85	NO		NO
L0008682	0	0.62112E-02	246056.0	4070477.2	87.6	0.00	1.70	0.85	NO		NO
L0008683	0	0.62112E-02	246056.2	4070480.8	87.7	0.00	1.70	0.85	NO		NO
L0008684	0	0.62112E-02	246056.3	4070484.5	87.8	0.00	1.70	0.85	NO		NO
L0008685	0	0.62112E-02	246056.5	4070488.1	87.9	0.00	1.70	0.85	NO		NO
L0008686	0	0.62112E-02	246056.7	4070491.8	88.0	0.00	1.70	0.85	NO		NO
L0008687	0	0.62112E-02	246056.8	4070495.4	88.0	0.00	1.70	0.85	NO		NO
L0008688	0	0.62112E-02	246057.0	4070499.1	88.0	0.00	1.70	0.85	NO		NO
L0008689	0	0.62112E-02	246057.2	4070502.7	88.0	0.00	1.70	0.85	NO		NO
L0008690	0	0.62112E-02	246057.3	4070506.4	88.0	0.00	1.70	0.85	NO		NO
L0008691	0	0.62112E-02	246057.5	4070510.0	88.0	0.00	1.70	0.85	NO		NO
L0008692	0	0.62112E-02	246057.6	4070513.7	88.0	0.00	1.70	0.85	NO		NO
L0008693	0	0.62112E-02	246057.8	4070517.3	88.0	0.00	1.70	0.85	NO		NO
L0008694	0	0.62112E-02	246058.0	4070521.0	88.1	0.00	1.70	0.85	NO		NO
L0008695	0	0.62112E-02	246058.1	4070524.7	88.3	0.00	1.70	0.85	NO		NO
L0008696	0	0.62112E-02	246058.3	4070528.3	88.5	0.00	1.70	0.85	NO		NO
L0008697	0	0.62112E-02	246058.5	4070532.0	88.8	0.00	1.70	0.85	NO		NO
L0008698	0	0.62112E-02	246058.6	4070535.6	89.0	0.00	1.70	0.85	NO		NO
L0008699	0	0.62112E-02	246058.8	4070539.3	89.2	0.00	1.70	0.85	NO		NO
L0008700	0	0.62112E-02	246059.0	4070542.9	89.5	0.00	1.70	0.85	NO		NO
L0008701	0	0.62112E-02	246059.1	4070546.6	89.7	0.00	1.70	0.85	NO		NO
L0008702	0	0.62112E-02	246059.3	4070550.2	90.0	0.00	1.70	0.85	NO		NO
L0008703	0	0.62112E-02	246059.4	4070553.9	90.1	0.00	1.70	0.85	NO		NO
L0008704	0	0.62112E-02	246059.6	4070557.5	90.2	0.00	1.70	0.85	NO		NO
L0008705	0	0.62112E-02	246059.8	4070561.2	90.4	0.00	1.70	0.85	NO		NO
L0008706	0	0.62112E-02	246059.9	4070564.8	90.5	0.00	1.70	0.85	NO		NO
L0008707	0	0.62112E-02	246060.1	4070568.5	90.6	0.00	1.70	0.85	NO		NO
L0008708	0	0.62112E-02	246060.3	4070572.2	90.7	0.00	1.70	0.85	NO		NO
L0008709	0	0.62112E-02	246060.4	4070575.8	90.8	0.00	1.70	0.85	NO		NO
L0008710	0	0.62112E-02	246060.6	4070579.5	91.0	0.00	1.70	0.85	NO		NO
L0008711	0	0.62112E-02	246060.8	4070583.1	90.9	0.00	1.70	0.85	NO		NO
L0008712	0	0.62112E-02	246060.9	4070586.8	90.8	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0008713	0	0.62112E-02	246061.1	4070590.4	90.6	0.00	1.70	0.85	NO		NO
L0008714	0	0.62112E-02	246061.2	4070594.1	90.5	0.00	1.70	0.85	NO		NO
L0008715	0	0.62112E-02	246061.4	4070597.7	90.4	0.00	1.70	0.85	NO		NO
L0008716	0	0.62112E-02	246061.6	4070601.4	90.3	0.00	1.70	0.85	NO		NO
L0008717	0	0.62112E-02	246061.7	4070605.0	90.2	0.00	1.70	0.85	NO		NO
L0008718	0	0.62112E-02	246061.9	4070608.7	90.0	0.00	1.70	0.85	NO		NO
L0008719	0	0.62112E-02	246062.1	4070612.3	89.9	0.00	1.70	0.85	NO		NO
L0008720	0	0.62112E-02	246062.2	4070616.0	89.8	0.00	1.70	0.85	NO		NO
L0008721	0	0.62112E-02	246062.4	4070619.7	89.7	0.00	1.70	0.85	NO		NO
L0008722	0	0.62112E-02	246062.5	4070623.3	89.6	0.00	1.70	0.85	NO		NO
L0008723	0	0.62112E-02	246062.7	4070627.0	89.4	0.00	1.70	0.85	NO		NO
L0008724	0	0.62112E-02	246062.9	4070630.6	89.3	0.00	1.70	0.85	NO		NO
L0008725	0	0.62112E-02	246063.0	4070634.3	89.2	0.00	1.70	0.85	NO		NO
L0008726	0	0.62112E-02	246063.2	4070637.9	89.1	0.00	1.70	0.85	NO		NO
L0008727	0	0.62112E-02	246063.4	4070641.6	89.0	0.00	1.70	0.85	NO		NO
L0008728	0	0.62112E-02	246063.5	4070645.2	89.2	0.00	1.70	0.85	NO		NO
L0008729	0	0.62112E-02	246063.7	4070648.9	89.3	0.00	1.70	0.85	NO		NO
L0008730	0	0.62112E-02	246063.9	4070652.5	89.4	0.00	1.70	0.85	NO		NO
L0008731	0	0.62112E-02	246064.0	4070656.2	89.5	0.00	1.70	0.85	NO		NO
L0008732	0	0.62112E-02	246064.2	4070659.9	89.7	0.00	1.70	0.85	NO		NO
L0008733	0	0.62112E-02	246064.3	4070663.5	89.8	0.00	1.70	0.85	NO		NO
L0008734	0	0.62112E-02	246064.5	4070667.2	89.9	0.00	1.70	0.85	NO		NO
L0008735	0	0.62112E-02	246064.7	4070670.8	90.0	0.00	1.70	0.85	NO		NO
L0008736	0	0.62112E-02	246064.8	4070674.5	90.0	0.00	1.70	0.85	NO		NO
L0008737	0	0.62112E-02	246065.0	4070678.1	90.0	0.00	1.70	0.85	NO		NO
L0008738	0	0.62112E-02	246065.2	4070681.8	90.1	0.00	1.70	0.85	NO		NO
L0008739	0	0.62112E-02	246065.3	4070685.4	90.1	0.00	1.70	0.85	NO		NO
L0008740	0	0.62112E-02	246065.5	4070689.1	90.1	0.00	1.70	0.85	NO		NO
L0008741	0	0.62112E-02	246065.7	4070692.7	90.1	0.00	1.70	0.85	NO		NO
L0008742	0	0.62112E-02	246065.8	4070696.4	90.2	0.00	1.70	0.85	NO		NO
L0008743	0	0.62112E-02	246066.0	4070700.0	90.2	0.00	1.70	0.85	NO		NO
L0008744	0	0.62112E-02	246066.1	4070703.7	89.9	0.00	1.70	0.85	NO		NO
L0008745	0	0.62112E-02	246066.3	4070707.4	89.7	0.00	1.70	0.85	NO		NO
L0008746	0	0.62112E-02	246066.5	4070711.0	89.4	0.00	1.70	0.85	NO		NO
L0008747	0	0.62112E-02	246066.6	4070714.7	89.1	0.00	1.70	0.85	NO		NO
L0008748	0	0.62112E-02	246066.8	4070718.3	88.9	0.00	1.70	0.85	NO		NO
L0008749	0	0.62112E-02	246067.0	4070722.0	88.6	0.00	1.70	0.85	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
DW2	L0007547 , L0007548 , L0007549 , L0007550 , L0007551 , L0007552 , L0007553 , L0007554 ,
	L0007555 , L0007556 , L0007557 , L0007558 , L0007559 , L0007560 , L0007561 , L0007562 ,
	L0007563 , L0007564 , L0007565 , L0007566 , L0007567 , L0007568 , L0007569 , L0007570 ,
	L0007571 , L0007572 , L0007573 , L0007574 , L0007575 , L0007576 , L0007577 , L0007578 ,
	L0007579 , L0007580 , L0007581 , L0007582 , L0007583 , L0007584 , L0007585 , L0007586 ,
	L0007587 , L0007588 , L0007589 , L0007590 , L0007591 , L0007592 , L0007593 , L0007594 ,
	L0007595 , L0007596 , L0007597 , L0007598 , L0007599 , L0007600 , L0007601 , L0007602 ,
	L0007603 , L0007604 ,
DW3CAR	L0008589 , L0008590 , L0008591 , L0008592 , L0008593 , L0008594 , L0008595 , L0008596 ,
	L0008597 , L0008598 , L0008599 , L0008600 , L0008601 , L0008602 , L0008603 , L0008604 ,
	L0008605 , L0008606 , L0008607 , L0008608 , L0008609 , L0008610 , L0008611 , L0008612 ,
	L0008613 , L0008614 , L0008615 , L0008616 , L0008617 , L0008618 , L0008619 , L0008620 ,
	L0008621 , L0008622 , L0008623 , L0008624 , L0008625 , L0008626 , L0008627 , L0008628 ,
	L0008629 , L0008630 , L0008631 , L0008632 , L0008633 , L0008634 , L0008635 , L0008636 ,
	L0008637 , L0008638 , L0008639 , L0008640 , L0008641 , L0008642 , L0008643 , L0008644 ,
	L0008645 , L0008646 , L0008647 , L0008648 , L0008649 , L0008650 , L0008651 , L0008652 ,
	L0008653 , L0008654 , L0008655 , L0008656 , L0008657 , L0008658 , L0008659 , L0008660 ,
	L0008661 , L0008662 , L0008663 , L0008664 , L0008665 , L0008666 , L0008667 , L0008668 ,
	L0008669 , L0008670 , L0008671 , L0008672 , L0008673 , L0008674 , L0008675 , L0008676 ,
	L0008677 , L0008678 , L0008679 , L0008680 , L0008681 , L0008682 , L0008683 , L0008684 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0008685 , L0008686 , L0008687 , L0008688 , L0008689 , L0008690 , L0008691 , L0008692 ,
	L0008693 , L0008694 , L0008695 , L0008696 , L0008697 , L0008698 , L0008699 , L0008700 ,
	L0008701 , L0008702 , L0008703 , L0008704 , L0008705 , L0008706 , L0008707 , L0008708 ,
	L0008709 , L0008710 , L0008711 , L0008712 , L0008713 , L0008714 , L0008715 , L0008716 ,
	L0008717 , L0008718 , L0008719 , L0008720 , L0008721 , L0008722 , L0008723 , L0008724 ,
	L0008725 , L0008726 , L0008727 , L0008728 , L0008729 , L0008730 , L0008731 , L0008732 ,
	L0008733 , L0008734 , L0008735 , L0008736 , L0008737 , L0008738 , L0008739 , L0008740 ,
	L0008741 , L0008742 , L0008743 , L0008744 , L0008745 , L0008746 , L0008747 , L0008748 ,
	L0008749 ,
DW4CAR	L0008407 , L0008408 , L0008409 , L0008410 , L0008411 , L0008412 , L0008413 , L0008414 ,
	L0008415 , L0008416 , L0008417 , L0008418 , L0008419 , L0008420 , L0008421 , L0008422 ,
	L0008423 , L0008424 , L0008425 , L0008426 , L0008427 , L0008428 , L0008429 , L0008430 ,
	L0008431 , L0008432 , L0008433 , L0008434 , L0008435 , L0008436 , L0008437 , L0008438 ,
	L0008439 , L0008440 , L0008441 , L0008442 , L0008443 , L0008444 , L0008445 , L0008446 ,
	L0008447 , L0008448 , L0008449 , L0008450 , L0008451 , L0008452 , L0008453 , L0008454 ,
	L0008455 , L0008456 , L0008457 , L0008458 , L0008459 , L0008460 , L0008461 , L0008462 ,
	L0008463 , L0008464 , L0008465 , L0008466 , L0008467 , L0008468 , L0008469 , L0008470 ,
	L0008471 , L0008472 , L0008473 , L0008474 , L0008475 , L0008476 , L0008477 , L0008478 ,
	L0008479 , L0008480 , L0008481 , L0008482 , L0008483 , L0008484 , L0008485 , L0008486 ,
	L0008487 , L0008488 , L0008489 , L0008490 , L0008491 , L0008492 , L0008493 , L0008494 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0008495 , L0008496 , L0008497 , L0008498 , L0008499 , L0008500 , L0008501 , L0008502 ,
	L0008503 , L0008504 , L0008505 , L0008506 , L0008507 , L0008508 , L0008509 , L0008510 ,
	L0008511 , L0008512 , L0008513 , L0008514 , L0008515 , L0008516 , L0008517 , L0008518 ,
	L0008519 , L0008520 , L0008521 , L0008522 , L0008523 , L0008524 , L0008525 , L0008526 ,
	L0008527 , L0008528 , L0008529 , L0008530 , L0008531 , L0008532 , L0008533 , L0008534 ,
	L0008535 , L0008536 , L0008537 , L0008538 , L0008539 , L0008540 , L0008541 , L0008542 ,
	L0008543 , L0008544 , L0008545 , L0008546 , L0008547 , L0008548 , L0008549 , L0008550 ,
	L0008551 , L0008552 , L0008553 , L0008554 , L0008555 , L0008556 , L0008557 , L0008558 ,
	L0008559 , L0008560 , L0008561 , L0008562 , L0008563 , L0008564 , L0008565 , L0008566 ,
	L0008567 , L0008568 ,
DW5CAR	L0008101 , L0008102 , L0008103 , L0008104 , L0008105 , L0008106 , L0008107 , L0008108 ,
	L0008109 , L0008110 , L0008111 , L0008112 , L0008113 , L0008114 , L0008115 , L0008116 ,
	L0008117 , L0008118 , L0008119 , L0008120 , L0008121 , L0008122 , L0008123 , L0008124 ,
	L0008125 , L0008126 , L0008127 , L0008128 , L0008129 , L0008130 , L0008131 , L0008132 ,
	L0008133 , L0008134 , L0008135 , L0008136 , L0008137 , L0008138 , L0008139 , L0008140 ,
	L0008141 , L0008142 , L0008143 , L0008144 , L0008145 , L0008146 , L0008147 , L0008148 ,
	L0008149 , L0008150 , L0008151 , L0008152 , L0008153 , L0008154 , L0008155 , L0008156 ,
	L0008157 , L0008158 , L0008159 , L0008160 , L0008161 , L0008162 , L0008163 , L0008164 ,
	L0008165 , L0008166 , L0008167 , L0008168 , L0008169 , L0008170 , L0008171 , L0008172 ,
	L0008173 , L0008174 , L0008175 , L0008176 , L0008177 , L0008178 , L0008179 , L0008180 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
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	L0008189 , L0008190 , L0008191 , L0008192 , L0008193 , L0008194 , L0008195 , L0008196 ,
	L0008197 , L0008198 , L0008199 , L0008200 , L0008201 , L0008202 , L0008203 , L0008204 ,
	L0008205 , L0008206 , L0008207 , L0008208 , L0008209 , L0008210 , L0008211 , L0008212 ,
	L0008213 , L0008214 , L0008215 , L0008216 , L0008217 , L0008218 , L0008219 , L0008220 ,
	L0008221 , L0008222 , L0008223 , L0008224 , L0008225 , L0008226 , L0008227 , L0008228 ,
	L0008229 , L0008230 , L0008231 , L0008232 , L0008233 , L0008234 , L0008235 , L0008236 ,
	L0008237 , L0008238 , L0008239 , L0008240 , L0008241 , L0008242 , L0008243 , L0008244 ,
	L0008245 , L0008246 , L0008247 , L0008248 , L0008249 , L0008250 , L0008251 , L0008252 ,
	L0008253 , L0008254 , L0008255 , L0008256 , L0008257 , L0008258 , L0008259 , L0008260 ,
	L0008261 , L0008262 , L0008263 , L0008264 , L0008265 , L0008266 , L0008267 , L0008268 ,
	L0008269 , L0008270 , L0008271 , L0008272 , L0008273 , L0008274 , L0008275 , L0008276 ,
	L0008277 , L0008278 , L0008279 , L0008280 , L0008281 , L0008282 , L0008283 , L0008284 ,
	L0008285 , L0008286 , L0008287 , L0008288 , L0008289 , L0008290 , L0008291 , L0008292 ,
	L0008293 , L0008294 , L0008295 , L0008296 , L0008297 , L0008298 , L0008299 , L0008300 ,
	L0008301 , L0008302 , L0008303 , L0008304 , L0008305 , L0008306 , L0008307 , L0008308 ,
	L0008309 , L0008310 , L0008311 , L0008312 , L0008313 , L0008314 , L0008315 , L0008316 ,
	L0008317 , L0008318 , L0008319 , L0008320 , L0008321 , L0008322 , L0008323 , L0008324 ,
	L0008325 , L0008326 , L0008327 , L0008328 , L0008329 , L0008330 , L0008331 , L0008332 ,
	L0008333 , L0008334 , L0008335 , L0008336 , L0008337 , L0008338 , L0008339 , L0008340 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0008341 , L0008342 , L0008343 , L0008344 , L0008345 , L0008346 ,
DW6	L0007146 , L0007147 , L0007148 , L0007149 , L0007150 , L0007151 , L0007152 , L0007153 ,
	L0007154 , L0007155 , L0007156 , L0007157 , L0007158 , L0007159 , L0007160 , L0007161 ,
	L0007162 , L0007163 , L0007164 , L0007165 , L0007166 , L0007167 , L0007168 , L0007169 ,
	L0007170 , L0007171 , L0007172 , L0007173 , L0007174 , L0007175 , L0007176 , L0007177 ,
	L0007178 , L0007179 , L0007180 , L0007181 , L0007182 , L0007183 , L0007184 , L0007185 ,
	L0007186 , L0007187 , L0007188 , L0007189 , L0007190 , L0007191 , L0007192 , L0007193 ,
	L0007194 , L0007195 , L0007196 , L0007197 , L0007198 , L0007199 , L0007200 , L0007201 ,
	L0007202 , L0007203 , L0007204 , L0007205 , L0007206 , L0007207 , L0007208 , L0007209 ,
	L0007210 , L0007211 , L0007212 , L0007213 , L0007214 , L0007215 , L0007216 , L0007217 ,
	L0007218 , L0007219 , L0007220 , L0007221 , L0007222 , L0007223 , L0007224 , L0007225 ,
	L0007226 , L0007227 , L0007228 , L0007229 , L0007230 , L0007231 , L0007232 , L0007233 ,
	L0007234 , L0007235 , L0007236 , L0007237 , L0007238 , L0007239 , L0007240 , L0007241 ,
	L0007242 , L0007243 ,
DW6_CAR	L0007810 , L0007811 , L0007812 , L0007813 , L0007814 , L0007815 , L0007816 , L0007817 ,
	L0007818 , L0007819 , L0007820 , L0007821 , L0007822 , L0007823 , L0007824 , L0007825 ,
	L0007826 , L0007827 , L0007828 , L0007829 , L0007830 , L0007831 , L0007832 , L0007833 ,
	L0007834 , L0007835 , L0007836 , L0007837 , L0007838 , L0007839 , L0007840 , L0007841 ,
	L0007842 , L0007843 , L0007844 , L0007845 , L0007846 , L0007847 , L0007848 , L0007849 ,
	L0007850 , L0007851 , L0007852 , L0007853 , L0007854 , L0007855 , L0007856 , L0007857 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0007858 , L0007859 , L0007860 , L0007861 , L0007862 , L0007863 , L0007864 , L0007865 ,
	L0007866 , L0007867 , L0007868 , L0007869 , L0007870 , L0007871 , L0007872 , L0007873 ,
	L0007874 , L0007875 , L0007876 , L0007877 , L0007878 , L0007879 , L0007880 , L0007881 ,
	L0007882 , L0007883 , L0007884 , L0007885 , L0007886 , L0007887 , L0007888 , L0007889 ,
	L0007890 , L0007891 , L0007892 , L0007893 , L0007894 , L0007895 , L0007896 , L0007897 ,
	L0007898 , L0007899 , L0007900 , L0007901 , L0007902 , L0007903 , L0007904 , L0007905 ,
	L0007906 , L0007907 , L0007908 , L0007909 , L0007910 , L0007911 , L0007912 , L0007913 ,
	L0007914 , L0007915 , L0007916 , L0007917 , L0007918 , L0007919 , L0007920 , L0007921 ,
	L0007922 , L0007923 , L0007924 , L0007925 , L0007926 , L0007927 , L0007928 , L0007929 ,
	L0007930 , L0007931 , L0007932 , L0007933 , L0007934 , L0007935 , L0007936 , L0007937 ,
	L0007938 , L0007939 , L0007940 , L0007941 , L0007942 , L0007943 , L0007944 , L0007945 ,
	L0007946 , L0007947 , L0007948 , L0007949 , L0007950 , L0007951 ,
DW7	L0007314 , L0007315 , L0007316 , L0007317 , L0007318 , L0007319 , L0007320 , L0007321 ,
	L0007322 , L0007323 , L0007324 , L0007325 , L0007326 , L0007327 , L0007328 , L0007329 ,
	L0007330 , L0007331 , L0007332 , L0007333 , L0007334 , L0007335 , L0007336 , L0007337 ,
	L0007338 , L0007339 , L0007340 , L0007341 , L0007342 , L0007343 , L0007344 , L0007345 ,
	L0007346 , L0007347 , L0007348 , L0007349 , L0007350 , L0007351 , L0007352 , L0007353 ,
	L0007354 , L0007355 , L0007356 , L0007357 , L0007358 , L0007359 , L0007360 , L0007361 ,
	L0007362 , L0007363 , L0007364 , L0007365 , L0007366 , L0007367 , L0007368 , L0007369 ,
	L0007370 , L0007371 , L0007372 , L0007373 , L0007374 , L0007375 , L0007376 , L0007377 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0007378 , L0007379 , L0007380 , L0007381 , L0007382 , L0007383 , L0007384 , L0007385 ,
	L0007386 , L0007387 , L0007388 , L0007389 , L0007390 ,
DW7CAR	L0007952 , L0007953 , L0007954 , L0007955 , L0007956 , L0007957 , L0007958 , L0007959 ,
	L0007960 , L0007961 , L0007962 , L0007963 , L0007964 , L0007965 , L0007966 , L0007967 ,
	L0007968 , L0007969 , L0007970 , L0007971 , L0007972 , L0007973 , L0007974 , L0007975 ,
	L0007976 , L0007977 , L0007978 , L0007979 , L0007980 , L0007981 , L0007982 , L0007983 ,
	L0007984 , L0007985 , L0007986 , L0007987 , L0007988 , L0007989 , L0007990 , L0007991 ,
	L0007992 , L0007993 , L0007994 , L0007995 , L0007996 , L0007997 , L0007998 , L0007999 ,
	L0008000 , L0008001 , L0008002 , L0008003 , L0008004 , L0008005 , L0008006 , L0008007 ,
	L0008008 , L0008009 , L0008010 , L0008011 , L0008012 , L0008013 , L0008014 , L0008015 ,
	L0008016 , L0008017 , L0008018 , L0008019 , L0008020 , L0008021 , L0008022 , L0008023 ,
	L0008024 , L0008025 , L0008026 , L0008027 , L0008028 , L0008029 , L0008030 , L0008031 ,
	L0008032 , L0008033 , L0008034 , L0008035 , L0008036 , L0008037 , L0008038 , L0008039 ,
	L0008040 , L0008041 , L0008042 , L0008043 , L0008044 , L0008045 , L0008046 , L0008047 ,
	L0008048 , L0008049 , L0008050 , L0008051 , L0008052 , L0008053 , L0008054 , L0008055 ,
	L0008056 , L0008057 , L0008058 , L0008059 , L0008060 , L0008061 , L0008062 , L0008063 ,
	L0008064 , L0008065 , L0008066 , L0008067 , L0008068 , L0008069 , L0008070 , L0008071 ,
	L0008072 , L0008073 , L0008074 , L0008075 , L0008076 , L0008077 , L0008078 , L0008079 ,
	L0008080 , L0008081 , L0008082 , L0008083 , L0008084 , L0008085 , L0008086 , L0008087 ,
	L0008088 , L0008089 , L0008090 , L0008091 , L0008092 , L0008093 , L0008094 , L0008095 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
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HUGHES1	L0007251 , L0007252 , L0007253 , L0007254 , L0007255 , L0007256 , L0007257 , L0007258 ,
	L0007259 , L0007260 , L0007261 , L0007262 , L0007263 , L0007264 , L0007265 , L0007266 ,
	L0007267 , L0007268 , L0007269 , L0007270 , L0007271 , L0007272 , L0007273 , L0007274 ,
	L0007275 , L0007276 , L0007277 , L0007278 , L0007279 , L0007280 , L0007281 , L0007282 ,
	L0007283 , L0007284 , L0007285 , L0007286 , L0007287 , L0007288 , L0007289 , L0007290 ,
	L0007291 , L0007292 , L0007293 , L0007294 , L0007295 , L0007296 , L0007297 , L0007298 ,
	L0007299 , L0007300 , L0007301 , L0007302 , L0007303 , L0007304 , L0007305 , L0007306 ,
	L0007307 , L0007308 , L0007309 , L0007310 , L0007311 , L0007312 , L0007313 ,
HUGHES2	L0007391 , L0007392 , L0007393 , L0007394 , L0007395 , L0007396 , L0007397 , L0007398 ,
	L0007399 , L0007400 ,
HUGHES3	L0007469 , L0007470 , L0007471 , L0007472 , L0007473 , L0007474 , L0007475 , L0007476 ,
	L0007477 , L0007478 , L0007479 , L0007480 , L0007481 , L0007482 , L0007483 , L0007484 ,
	L0007485 , L0007486 , L0007487 , L0007488 , L0007489 , L0007490 , L0007491 , L0007492 ,
	L0007493 , L0007494 , L0007495 , L0007496 , L0007497 , L0007498 , L0007499 , L0007500 ,
	L0007501 , L0007502 , L0007503 , L0007504 , L0007505 , L0007506 , L0007507 , L0007508 ,
	L0007509 , L0007510 , L0007511 , L0007512 , L0007513 , L0007514 , L0007515 , L0007516 ,
	L0007517 , L0007518 , L0007519 , L0007520 , L0007521 , L0007522 , L0007523 , L0007524 ,
	L0007525 , L0007526 , L0007527 , L0007528 , L0007529 , L0007530 , L0007531 , L0007532 ,
	L0007533 , L0007534 , L0007535 , L0007536 , L0007537 , L0007538 , L0007539 , L0007540 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0007541 , L0007542 , L0007543 , L0007544 , L0007545 , L0007546 ,
MARKS1	L0007605 , L0007606 , L0007607 , L0007608 , L0007609 , L0007610 , L0007611 , L0007612 ,
	L0007613 , L0007614 , L0007615 , L0007616 , L0007617 , L0007618 , L0007619 , L0007620 ,
	L0007621 , L0007622 , L0007623 , L0007624 , L0007625 , L0007626 , L0007627 , L0007628 ,
	L0007629 , L0007630 , L0007631 , L0007632 , L0007633 , L0007634 , L0007635 , L0007636 ,
	L0007637 , L0007638 , L0007639 , L0007640 , L0007641 , L0007642 , L0007643 , L0007644 ,
	L0007645 , L0007646 , L0007647 , L0007648 , L0007649 , L0007650 , L0007651 , L0007652 ,
	L0007653 , L0007654 , L0007655 , L0007656 , L0007657 , L0007658 , L0007659 , L0007660 ,
	L0007661 , L0007662 , L0007663 , L0007664 , L0007665 , L0007666 , L0007667 , L0007668 ,
	L0007669 , L0007670 , L0007671 , L0007672 , L0007673 , L0007674 , L0007675 , L0007676 ,
	L0007677 , L0007678 , L0007679 , L0007680 , L0007681 , L0007682 ,
MARKS2	L0007744 , L0007745 , L0007746 , L0007747 , L0007748 , L0007749 , L0007750 , L0007751 ,
	L0007752 , L0007753 , L0007754 , L0007755 , L0007756 , L0007757 , L0007758 , L0007759 ,
	L0007760 , L0007761 , L0007762 , L0007763 , L0007764 , L0007765 , L0007766 , L0007767 ,
	L0007768 , L0007769 , L0007770 , L0007771 , L0007772 , L0007773 , L0007774 , L0007775 ,
	L0007776 , L0007777 , L0007778 , L0007779 , L0007780 , L0007781 , L0007782 , L0007783 ,
	L0007784 , L0007785 , L0007786 , L0007787 , L0007788 , L0007789 , L0007790 , L0007791 ,
	L0007792 , L0007793 , L0007794 , L0007795 , L0007796 , L0007797 , L0007798 , L0007799 ,
	L0007800 , L0007801 , L0007802 , L0007803 , L0007804 , L0007805 , L0007806 , L0007807 ,
	L0007808 , L0007809 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
NIELSEN	L0007401 , L0007402 , L0007403 , L0007404 , L0007405 , L0007406 , L0007407 , L0007408 ,
	L0007409 , L0007410 , L0007411 , L0007412 , L0007413 , L0007414 , L0007415 , L0007416 ,
	L0007417 , L0007418 , L0007419 , L0007420 , L0007421 , L0007422 , L0007423 , L0007424 ,
	L0007425 , L0007426 , L0007427 , L0007428 , L0007429 , L0007430 , L0007431 , L0007432 ,
	L0007433 , L0007434 , L0007435 , L0007436 , L0007437 , L0007438 , L0007439 , L0007440 ,
	L0007441 , L0007442 , L0007443 , L0007444 , L0007445 , L0007446 , L0007447 , L0007448 ,
	L0007449 , L0007450 , L0007451 , L0007452 , L0007453 , L0007454 , L0007455 , L0007456 ,
	L0007457 , L0007458 , L0007459 , L0007460 , L0007461 , L0007462 , L0007463 , L0007464 ,
	L0007465 , L0007466 , L0007467 , L0007468 ,
NIELSEN2	L0007683 , L0007684 , L0007685 , L0007686 , L0007687 , L0007688 , L0007689 , L0007690 ,
	L0007691 , L0007692 , L0007693 , L0007694 , L0007695 , L0007696 , L0007697 , L0007698 ,
	L0007699 , L0007700 , L0007701 , L0007702 , L0007703 , L0007704 , L0007705 , L0007706 ,
	L0007707 , L0007708 , L0007709 , L0007710 , L0007711 , L0007712 , L0007713 , L0007714 ,
	L0007715 , L0007716 , L0007717 , L0007718 , L0007719 , L0007720 , L0007721 , L0007722 ,
	L0007723 , L0007724 , L0007725 , L0007726 , L0007727 , L0007728 , L0007729 , L0007730 ,
	L0007731 , L0007732 , L0007733 , L0007734 , L0007735 , L0007736 , L0007737 , L0007738 ,
	L0007739 , L0007740 , L0007741 , L0007742 , L0007743 ,
STCK1	STCK1 ,
STCK10	STCK10 ,
STCK11	STCK11 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
STCK12	STCK12 ,
STCK13	STCK13 ,
STCK14	STCK14 ,
STCK15	STCK15 ,
STCK16	STCK16 ,
STCK17	STCK17 ,
STCK18	STCK18 ,
STCK19	STCK19 ,
STCK2	STCK2 ,
STCK20	STCK20 ,
STCK21	STCK21 ,
STCK22	STCK22 ,
STCK23	STCK23 ,
STCK24	STCK24 ,
STCK25	STCK25 ,
STCK26	STCK26 ,
STCK27	STCK27 ,
STCK28	STCK28 ,
STCK29	STCK29 ,
STCK3	STCK3 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
STCK30	STCK30 ,
STCK4	STCK4 ,
STCK5	STCK5 ,
STCK6	STCK6 ,
STCK7	STCK7 ,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	292.3,	135.7,	-8.3,	-83.6,	2	18.3,	296.0,	179.3,	-16.7,	-72.3,
3	18.3,	290.8,	217.6,	-24.5,	-58.8,	4	18.3,	276.8,	249.2,	-31.6,	-43.5,
5	18.3,	254.3,	273.2,	-37.8,	-26.8,	6	18.3,	224.1,	288.9,	-42.7,	-9.4,
7	18.3,	187.1,	295.9,	-46.4,	8.4,	8	18.3,	144.4,	293.9,	-48.7,	25.8,
9	18.3,	97.3,	282.9,	-49.5,	42.5,	10	18.3,	135.7,	292.3,	-62.5,	59.5,
11	18.3,	179.3,	296.0,	-75.7,	73.0,	12	18.3,	217.6,	290.8,	-86.6,	84.3,
13	18.3,	249.2,	276.8,	-94.9,	93.0,	14	18.3,	273.2,	254.3,	-100.3,	98.8,
15	18.3,	288.9,	224.1,	-102.7,	101.7,	16	18.3,	295.9,	187.1,	-101.9,	101.5,
17	18.3,	293.9,	144.4,	-98.0,	98.2,	18	18.3,	282.9,	97.3,	-91.2,	92.0,
19	18.3,	292.3,	135.7,	-127.3,	83.6,	20	18.3,	296.0,	179.3,	-162.7,	72.3,
21	18.3,	290.8,	217.6,	-193.0,	58.8,	22	18.3,	276.8,	249.2,	-217.6,	43.5,
23	18.3,	254.3,	273.2,	-235.5,	26.8,	24	18.3,	224.1,	288.9,	-246.2,	9.4,
25	18.3,	187.1,	295.9,	-249.5,	-8.4,	26	18.3,	144.4,	293.9,	-245.2,	-25.8,
27	18.3,	97.3,	282.9,	-233.4,	-42.5,	28	18.3,	135.7,	292.3,	-229.8,	-59.5,
29	18.3,	179.3,	296.0,	-220.3,	-73.0,	30	18.3,	217.6,	290.8,	-204.2,	-84.3,
31	18.3,	249.2,	276.8,	-181.8,	-93.0,	32	18.3,	273.2,	254.3,	-154.0,	-98.8,
33	18.3,	288.9,	224.1,	-121.4,	-101.7,	34	18.3,	295.9,	187.1,	-85.2,	-101.5,
35	18.3,	293.9,	144.4,	-46.4,	-98.2,	36	18.3,	282.9,	97.3,	-6.1,	-92.0,

SOURCE ID: STCK2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	292.3,	135.7,	-11.9,	-57.7,	2	18.3,	296.0,	179.3,	-24.7,	-47.4,
3	18.3,	290.8,	217.6,	-36.8,	-35.6,	4	18.3,	276.8,	249.2,	-47.7,	-22.8,
5	18.3,	254.3,	273.2,	-57.1,	-9.3,	6	18.3,	224.1,	288.9,	-64.9,	4.5,
7	18.3,	187.1,	295.9,	-70.6,	18.2,	8	18.3,	144.4,	293.9,	-74.3,	31.3,
9	18.3,	97.3,	282.9,	-75.6,	43.5,	10	18.3,	135.7,	292.3,	-88.4,	55.9,
11	18.3,	179.3,	296.0,	-100.6,	65.0,	12	18.3,	217.6,	290.8,	-109.8,	72.0,
13	18.3,	249.2,	276.8,	-115.6,	76.9,	14	18.3,	273.2,	254.3,	-117.9,	79.5,
15	18.3,	288.9,	224.1,	-116.6,	79.6,	16	18.3,	295.9,	187.1,	-111.8,	77.3,
17	18.3,	293.9,	144.4,	-103.5,	72.7,	18	18.3,	282.9,	97.3,	-92.2,	65.8,
19	18.3,	292.3,	135.7,	-123.8,	57.7,	20	18.3,	296.0,	179.3,	-154.6,	47.4,
21	18.3,	290.8,	217.6,	-180.8,	35.6,	22	18.3,	276.8,	249.2,	-201.5,	22.8,
23	18.3,	254.3,	273.2,	-216.1,	9.3,	24	18.3,	224.1,	288.9,	-224.1,	-4.5,
25	18.3,	187.1,	295.9,	-225.2,	-18.2,	26	18.3,	144.4,	293.9,	-219.6,	-31.3,
27	18.3,	97.3,	282.9,	-207.3,	-43.5,	28	18.3,	135.7,	292.3,	-203.9,	-55.9,
29	18.3,	114.1,	147.0,	-234.4,	31.8,	30	18.3,	129.6,	149.9,	-238.9,	3.5,
31	18.3,	141.2,	148.2,	-236.2,	-24.9,	32	18.3,	148.4,	141.9,	-226.2,	-52.6,
33	18.3,	151.2,	131.4,	-209.5,	-78.6,	34	18.3,	295.9,	187.1,	-75.3,	-77.3,
35	18.3,	293.9,	144.4,	-40.9,	-72.7,	36	18.3,	282.9,	97.3,	-5.2,	-65.8,

SOURCE ID: STCK3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	292.3,	135.7,	-17.0,	-26.9,	2	18.3,	296.0,	179.3,	-35.1,	-18.0,
3	18.3,	290.8,	217.6,	-52.1,	-8.5,	4	18.3,	276.8,	249.2,	-67.5,	1.3,
5	18.3,	254.3,	273.2,	-80.8,	11.0,	6	18.3,	224.1,	288.9,	-91.8,	20.4,
7	18.3,	187.1,	295.9,	-99.9,	29.2,	8	18.3,	144.4,	293.9,	-105.0,	37.0,
9	18.3,	97.3,	282.9,	-106.8,	43.8,	10	18.3,	135.7,	292.3,	-119.2,	50.8,
11	18.3,	179.3,	296.0,	-130.0,	54.6,	12	18.3,	217.6,	290.8,	-136.9,	56.7,
13	18.3,	249.2,	276.8,	-139.7,	57.1,	14	18.3,	273.2,	254.3,	-138.2,	55.8,
15	18.3,	288.9,	224.1,	-132.4,	52.7,	16	18.3,	295.9,	187.1,	-122.7,	48.1,

17	18.3,	293.9,	144.4,	-109.2,	42.0,	18	18.3,	282.9,	97.3,	-92.5,	34.6,
19	18.3,	292.3,	135.7,	-118.6,	26.9,	20	18.3,	296.0,	179.3,	-144.2,	18.0,
21	18.3,	290.8,	217.6,	-165.5,	8.5,	22	18.3,	276.8,	249.2,	-181.7,	-1.3,
23	18.3,	254.3,	273.2,	-192.4,	-11.0,	24	18.3,	224.1,	288.9,	-197.2,	-20.4,
25	18.3,	187.1,	295.9,	-196.0,	-29.2,	26	18.3,	144.4,	293.9,	-188.9,	-37.0,
27	18.3,	97.3,	282.9,	-176.1,	-43.8,	28	18.3,	135.7,	292.3,	-173.1,	-50.8,
29	18.3,	114.1,	147.0,	-205.0,	42.2,	30	18.3,	129.6,	149.9,	-211.8,	18.8,
31	18.3,	141.2,	148.2,	-212.1,	-5.1,	32	18.3,	148.4,	141.9,	-206.0,	-28.9,
33	18.3,	151.2,	131.4,	-193.6,	-51.7,	34	18.3,	149.3,	116.9,	-175.3,	-73.0,
35	18.3,	293.9,	144.4,	-35.1,	-42.0,	36	18.3,	282.9,	97.3,	-4.9,	-34.6,

SOURCE ID: STCK4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	292.3,	135.7,	-22.5,	5.9,	2	18.3,	296.0,	179.3,	-46.2,	13.4,
3	18.3,	290.8,	217.6,	-68.5,	20.5,	4	18.3,	276.8,	249.2,	-88.7,	27.0,
5	18.3,	254.3,	273.2,	-106.2,	32.6,	6	18.3,	224.1,	288.9,	-120.4,	37.3,
7	18.3,	187.1,	295.9,	-131.1,	40.8,	8	18.3,	144.4,	293.9,	-137.7,	43.1,
9	18.3,	97.3,	282.9,	-140.1,	44.1,	10	18.3,	135.7,	292.3,	-152.0,	45.3,
11	18.3,	114.1,	147.0,	26.6,	-53.3,	12	18.3,	129.6,	149.9,	32.9,	-35.2,
13	18.3,	249.2,	276.8,	-165.4,	35.9,	14	18.3,	273.2,	254.3,	-159.8,	30.4,
15	18.3,	288.9,	224.1,	-149.3,	24.0,	16	18.3,	295.9,	187.1,	-134.4,	16.9,
17	18.3,	293.9,	144.4,	-115.3,	9.2,	18	18.3,	282.9,	97.3,	-92.8,	1.3,
19	18.3,	292.3,	135.7,	-113.1,	-5.9,	20	18.3,	296.0,	179.3,	-133.1,	-13.4,
21	18.3,	290.8,	217.6,	-149.1,	-20.5,	22	18.3,	276.8,	249.2,	-160.5,	-27.0,
23	18.3,	254.3,	273.2,	-167.0,	-32.6,	24	18.3,	224.1,	288.9,	-168.5,	-37.3,
25	18.3,	187.1,	295.9,	-164.9,	-40.8,	26	18.3,	144.4,	293.9,	-156.2,	-43.1,
27	18.3,	97.3,	282.9,	-142.8,	-44.1,	28	18.3,	135.7,	292.3,	-140.2,	-45.3,
29	18.3,	114.1,	147.0,	-173.6,	53.3,	30	18.3,	129.6,	149.9,	-182.8,	35.2,
31	18.3,	141.2,	148.2,	-186.4,	16.1,	32	18.3,	148.4,	141.9,	-184.3,	-3.5,
33	18.3,	151.2,	131.4,	-176.7,	-23.1,	34	18.3,	149.3,	116.9,	-163.7,	-41.9,
35	18.3,	142.9,	98.8,	-145.7,	-59.4,	36	18.3,	132.2,	77.8,	-123.3,	-75.1,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK5

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-122.3,	-57.6,	2	18.3,	147.0,	114.1,	-120.8,	-69.7,
3	18.3,	149.9,	129.6,	-115.6,	-79.8,	4	18.3,	276.8,	249.2,	-108.8,	51.9,
5	18.3,	254.3,	273.2,	-130.4,	53.7,	6	18.3,	224.1,	288.9,	-147.9,	53.9,
7	18.3,	187.1,	295.9,	-161.0,	52.4,	8	18.3,	144.4,	293.9,	-169.2,	49.3,
9	18.3,	97.3,	282.9,	-172.2,	44.7,	10	18.3,	135.7,	292.3,	-183.8,	40.3,
11	18.3,	114.1,	147.0,	-3.8,	-63.7,	12	18.3,	129.6,	149.9,	4.8,	-50.8,
13	18.3,	141.2,	148.2,	13.3,	-36.3,	14	18.3,	148.4,	141.9,	21.3,	-20.7,
15	18.3,	151.2,	131.4,	28.7,	-4.5,	16	18.3,	149.3,	116.9,	35.2,	11.9,
17	18.3,	293.9,	144.4,	-121.5,	-22.3,	18	18.3,	282.9,	97.3,	-93.3,	-30.8,
19	18.3,	139.7,	95.2,	27.1,	57.6,	20	18.3,	147.0,	114.1,	6.6,	69.7,
21	18.3,	149.9,	129.6,	-14.1,	79.8,	22	18.3,	276.8,	249.2,	-140.3,	-51.9,
23	18.3,	254.3,	273.2,	-142.8,	-53.7,	24	18.3,	224.1,	288.9,	-141.0,	-53.9,
25	18.3,	187.1,	295.9,	-134.9,	-52.4,	26	18.3,	144.4,	293.9,	-124.7,	-49.3,
27	18.3,	97.3,	282.9,	-110.7,	-44.7,	28	18.3,	135.7,	292.3,	-108.5,	-40.3,
29	18.3,	114.1,	147.0,	-143.2,	63.7,	30	18.3,	129.6,	149.9,	-154.7,	50.8,
31	18.3,	141.2,	148.2,	-161.4,	36.3,	32	18.3,	148.4,	141.9,	-163.2,	20.7,
33	18.3,	151.2,	131.4,	-160.1,	4.5,	34	18.3,	149.3,	116.9,	-152.1,	-11.9,
35	18.3,	142.9,	98.8,	-139.5,	-27.9,	36	18.3,	132.2,	77.8,	-122.7,	-43.0,

SOURCE ID: STCK6

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-127.1,	-28.6,	2	18.3,	147.0,	114.1,	-130.6,	-42.0,
3	18.3,	149.9,	129.6,	-130.0,	-54.1,	4	18.3,	148.2,	141.2,	-125.5,	-64.6,
5	18.3,	141.9,	148.4,	-117.2,	-73.1,	6	18.3,	224.1,	288.9,	-173.3,	68.8,
7	18.3,	187.1,	295.9,	-188.6,	62.7,	8	18.3,	144.4,	293.9,	-198.1,	54.7,
9	18.3,	97.3,	282.9,	-201.7,	45.0,	10	18.3,	135.7,	292.3,	-212.8,	35.5,
11	18.3,	179.3,	296.0,	-219.5,	23.3,	12	18.3,	129.6,	149.9,	-20.8,	-65.2,
13	18.3,	141.2,	148.2,	-9.5,	-54.9,	14	18.3,	148.4,	141.9,	2.2,	-43.0,
15	18.3,	151.2,	131.4,	13.7,	-29.8,	16	18.3,	149.3,	116.9,	24.9,	-15.6,
17	18.3,	142.9,	98.8,	35.3,	-1.0,	18	18.3,	282.9,	97.3,	-93.6,	-60.2,
19	18.3,	139.7,	95.2,	31.9,	28.6,	20	18.3,	147.0,	114.1,	16.4,	42.0,
21	18.3,	149.9,	129.6,	0.4,	54.1,	22	18.3,	148.2,	141.2,	-15.7,	64.6,
23	18.3,	141.9,	148.4,	-31.2,	73.1,	24	18.3,	224.1,	288.9,	-115.7,	-68.8,
25	18.3,	187.1,	295.9,	-107.3,	-62.7,	26	18.3,	144.4,	293.9,	-95.8,	-54.7,
27	18.3,	97.3,	282.9,	-81.3,	-45.0,	28	18.3,	135.7,	292.3,	-79.5,	-35.5,
29	18.3,	179.3,	296.0,	-76.5,	-23.3,	30	18.3,	129.6,	149.9,	-129.1,	65.2,
31	18.3,	141.2,	148.2,	-138.7,	54.9,	32	18.3,	148.4,	141.9,	-144.1,	43.0,
33	18.3,	151.2,	131.4,	-145.2,	29.8,	34	18.3,	149.3,	116.9,	-141.8,	15.6,
35	18.3,	142.9,	98.8,	-134.1,	1.0,	36	18.3,	132.2,	77.8,	-122.4,	-13.6,

SOURCE ID: STCK7

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-133.0,	3.0,	2	18.3,	147.0,	114.1,	-141.8,	-11.9,
3	18.3,	149.9,	129.6,	-146.3,	-26.5,	4	18.3,	148.2,	141.2,	-146.4,	-40.2,
5	18.3,	141.9,	148.4,	-142.0,	-52.7,	6	18.3,	131.4,	151.2,	-133.3,	-63.7,
7	18.3,	187.1,	295.9,	-218.8,	73.4,	8	18.3,	144.4,	293.9,	-229.8,	60.0,
9	18.3,	97.3,	282.9,	-233.8,	44.7,	10	18.3,	135.7,	292.3,	-244.3,	29.6,
11	18.3,	179.3,	296.0,	-249.6,	12.0,	12	18.3,	217.6,	290.8,	-247.3,	-6.0,
13	18.3,	141.2,	148.2,	-33.9,	-75.8,	14	18.3,	148.4,	141.9,	-18.2,	-67.8,
15	18.3,	151.2,	131.4,	-2.0,	-57.7,	16	18.3,	149.3,	116.9,	14.2,	-45.9,

17	18.3,	142.9,	98.8,	30.0,	-32.7,	18	18.3,	282.9,	97.3,	-93.3,	-92.3,
19	18.3,	292.3,	135.7,	-97.5,	-98.2,	20	18.3,	147.0,	114.1,	27.7,	11.9,
21	18.3,	149.9,	129.6,	16.7,	26.5,	22	18.3,	148.2,	141.2,	5.2,	40.2,
23	18.3,	141.9,	148.4,	-6.4,	52.7,	24	18.3,	131.4,	151.2,	-17.9,	63.7,
25	18.3,	187.1,	295.9,	-77.1,	-73.4,	26	18.3,	144.4,	293.9,	-64.1,	-60.0,
27	18.3,	97.3,	282.9,	-49.2,	-44.7,	28	18.3,	135.7,	292.3,	-47.9,	-29.6,
29	18.3,	179.3,	296.0,	-46.4,	-12.0,	30	18.3,	217.6,	290.8,	-43.5,	6.0,
31	18.3,	141.2,	148.2,	-114.3,	75.8,	32	18.3,	148.4,	141.9,	-123.7,	67.8,
33	18.3,	151.2,	131.4,	-129.4,	57.7,	34	18.3,	149.3,	116.9,	-131.1,	45.9,
35	18.3,	142.9,	98.8,	-128.8,	32.7,	36	18.3,	132.2,	77.8,	-122.7,	18.5,

SOURCE ID: STCK10

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-77.1,	-30.9,	2	18.3,	147.0,	114.1,	-80.9,	-35.6,
3	18.3,	149.9,	129.6,	-82.2,	-39.2,	4	18.3,	148.2,	141.2,	-81.1,	-41.7,
5	18.3,	141.9,	148.4,	-77.4,	-42.8,	6	18.3,	131.4,	151.2,	-71.4,	-42.7,
7	18.3,	116.9,	149.3,	-63.3,	-41.2,	8	18.3,	98.8,	142.9,	-53.2,	-38.5,
9	18.3,	77.8,	132.2,	-41.5,	-34.7,	10	18.3,	95.2,	139.7,	-38.9,	-29.6,
11	18.3,	114.1,	147.0,	-37.9,	-23.9,	12	18.3,	129.6,	149.9,	-35.7,	-17.4,
13	18.3,	141.2,	148.2,	-32.4,	-10.5,	14	18.3,	148.4,	141.9,	-28.1,	-3.2,
15	18.3,	151.2,	131.4,	-23.0,	4.1,	16	18.3,	149.3,	116.9,	-17.2,	11.4,
17	18.3,	142.9,	98.8,	-10.9,	18.3,	18	18.3,	132.2,	77.8,	-4.2,	24.6,
19	18.3,	139.7,	95.2,	-18.1,	30.9,	20	18.3,	147.0,	114.1,	-33.2,	35.6,
21	18.3,	149.9,	129.6,	-47.4,	39.2,	22	18.3,	148.2,	141.2,	-60.1,	41.7,
23	18.3,	141.9,	148.4,	-71.0,	42.8,	24	18.3,	131.4,	151.2,	-79.7,	42.7,
25	18.3,	116.9,	149.3,	-86.1,	41.2,	26	18.3,	98.8,	142.9,	-89.8,	38.5,
27	18.3,	77.8,	132.2,	-90.7,	34.7,	28	18.3,	95.2,	139.7,	-100.8,	29.6,
29	18.3,	114.1,	147.0,	-109.1,	23.9,	30	18.3,	129.6,	149.9,	-114.2,	17.4,
31	18.3,	141.2,	148.2,	-115.7,	10.5,	32	18.3,	148.4,	141.9,	-113.8,	3.2,
33	18.3,	151.2,	131.4,	-108.4,	-4.1,	34	18.3,	149.3,	116.9,	-99.7,	-11.4,
35	18.3,	142.9,	98.8,	-88.0,	-18.3,	36	18.3,	132.2,	77.8,	-73.6,	-24.6,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK11

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-81.6,	-5.8,	2	18.3,	147.0,	114.1,	-89.7,	-11.6,
3	18.3,	149.9,	129.6,	-95.0,	-17.1,	4	18.3,	148.2,	141.2,	-97.5,	-22.1,
5	18.3,	141.9,	148.4,	-97.0,	-26.4,	6	18.3,	131.4,	151.2,	-93.6,	-29.9,
7	18.3,	116.9,	149.3,	-87.3,	-32.5,	8	18.3,	98.8,	142.9,	-78.4,	-34.1,
9	18.3,	77.8,	132.2,	-67.0,	-34.7,	10	18.3,	95.2,	139.7,	-64.1,	-34.0,
11	18.3,	114.1,	147.0,	-61.9,	-32.6,	12	18.3,	129.6,	149.9,	-57.8,	-30.2,
13	18.3,	141.2,	148.2,	-52.0,	-26.9,	14	18.3,	148.4,	141.9,	-44.6,	-22.8,
15	18.3,	151.2,	131.4,	-35.8,	-18.0,	16	18.3,	149.3,	116.9,	-25.9,	-12.6,
17	18.3,	142.9,	98.8,	-15.3,	-6.9,	18	18.3,	132.2,	77.8,	-4.2,	-0.9,
19	18.3,	139.7,	95.2,	-13.6,	5.8,	20	18.3,	147.0,	114.1,	-24.5,	11.6,
21	18.3,	149.9,	129.6,	-34.6,	17.1,	22	18.3,	148.2,	141.2,	-43.7,	22.1,
23	18.3,	141.9,	148.4,	-51.4,	26.4,	24	18.3,	131.4,	151.2,	-57.6,	29.9,
25	18.3,	116.9,	149.3,	-62.0,	32.5,	26	18.3,	98.8,	142.9,	-64.6,	34.1,
27	18.3,	77.8,	132.2,	-65.2,	34.7,	28	18.3,	95.2,	139.7,	-75.6,	34.0,
29	18.3,	114.1,	147.0,	-85.1,	32.6,	30	18.3,	129.6,	149.9,	-92.0,	30.2,
31	18.3,	141.2,	148.2,	-96.2,	26.9,	32	18.3,	148.4,	141.9,	-97.4,	22.8,
33	18.3,	151.2,	131.4,	-95.6,	18.0,	34	18.3,	149.3,	116.9,	-91.0,	12.6,
35	18.3,	142.9,	98.8,	-83.5,	6.9,	36	18.3,	132.2,	77.8,	-73.6,	0.9,

SOURCE ID: STCK12

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	139.7,	95.2,	-85.5,	18.3,	2	18.3,	147.0,	114.1,	-97.7,	11.4,
3	18.3,	149.9,	129.6,	-107.0,	4.1,	4	18.3,	148.2,	141.2,	-112.9,	-3.2,
5	18.3,	141.9,	148.4,	-115.5,	-10.5,	6	18.3,	131.4,	151.2,	-114.5,	-17.5,
7	18.3,	116.9,	149.3,	-110.1,	-23.9,	8	18.3,	98.8,	142.9,	-102.3,	-29.6,
9	18.3,	77.8,	132.2,	-91.4,	-34.4,	10	18.3,	95.2,	139.7,	-88.1,	-37.9,
11	18.3,	114.1,	147.0,	-84.9,	-40.6,	12	18.3,	129.6,	149.9,	-79.1,	-42.1,
13	18.3,	141.2,	148.2,	-70.8,	-42.3,	14	18.3,	148.4,	141.9,	-60.5,	-41.3,
15	18.3,	151.2,	131.4,	-48.2,	-38.9,	16	18.3,	149.3,	116.9,	-34.6,	-35.4,
17	18.3,	142.9,	98.8,	-19.8,	-30.8,	18	18.3,	132.2,	77.8,	-4.5,	-25.3,
19	18.3,	139.7,	95.2,	-9.7,	-18.3,	20	18.3,	147.0,	114.1,	-16.4,	-11.4,
21	18.3,	149.9,	129.6,	-22.7,	-4.1,	22	18.3,	148.2,	141.2,	-28.2,	3.2,
23	18.3,	141.9,	148.4,	-32.9,	10.5,	24	18.3,	131.4,	151.2,	-36.6,	17.5,
25	18.3,	116.9,	149.3,	-39.2,	23.9,	26	18.3,	98.8,	142.9,	-40.6,	29.6,
27	18.3,	77.8,	132.2,	-40.8,	34.4,	28	18.3,	95.2,	139.7,	-51.6,	37.9,
29	18.3,	114.1,	147.0,	-62.1,	40.6,	30	18.3,	129.6,	149.9,	-70.8,	42.1,
31	18.3,	141.2,	148.2,	-77.3,	42.3,	32	18.3,	148.4,	141.9,	-81.5,	41.3,
33	18.3,	151.2,	131.4,	-83.2,	38.9,	34	18.3,	149.3,	116.9,	-82.3,	35.4,
35	18.3,	142.9,	98.8,	-79.0,	30.8,	36	18.3,	132.2,	77.8,	-73.3,	25.3,

SOURCE ID: STCK13

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-149.9,	-133.3,	2	18.3,	378.7,	252.8,	-152.8,	-140.4,
3	18.3,	375.9,	298.6,	-151.0,	-143.2,	4	18.3,	361.8,	335.3,	-144.6,	-141.7,
5	18.3,	336.6,	361.9,	-133.9,	-135.9,	6	18.3,	301.2,	377.5,	-119.0,	-125.9,
7	18.3,	256.7,	381.6,	-100.6,	-112.1,	8	18.3,	204.3,	374.1,	-79.1,	-94.9,
9	18.3,	145.8,	355.2,	-55.2,	-74.8,	10	18.3,	199.3,	369.9,	-51.6,	-50.3,
11	18.3,	252.8,	378.7,	-48.9,	-26.4,	12	18.3,	298.6,	375.9,	-44.7,	-1.7,
13	18.3,	335.3,	361.8,	-39.2,	23.1,	14	18.3,	361.9,	336.6,	-32.4,	47.1,
15	18.3,	377.5,	301.2,	-24.7,	69.7,	16	18.3,	381.6,	256.7,	-16.2,	90.2,

17	18.3,	374.1,	204.3,	-7.3,	107.9,	18	18.3,	355.2,	145.8,	1.9,	122.4,
19	18.3,	369.9,	199.3,	-49.4,	133.3,	20	18.3,	378.7,	252.8,	-100.0,	140.4,
21	18.3,	375.9,	298.6,	-147.6,	143.2,	22	18.3,	361.8,	335.3,	-190.7,	141.7,
23	18.3,	336.6,	361.9,	-228.1,	135.9,	24	18.3,	301.2,	377.5,	-258.4,	125.9,
25	18.3,	256.7,	381.6,	-281.0,	112.1,	26	18.3,	204.3,	374.1,	-295.0,	94.9,
27	18.3,	145.8,	355.2,	-300.0,	74.8,	28	18.3,	199.3,	369.9,	-318.3,	50.3,
29	18.3,	252.8,	378.7,	-329.8,	26.4,	30	18.3,	298.6,	375.9,	-331.2,	1.7,
31	18.3,	335.3,	361.8,	-322.6,	-23.1,	32	18.3,	361.9,	336.6,	-304.2,	-47.1,
33	18.3,	377.5,	301.2,	-276.5,	-69.7,	34	18.3,	381.6,	256.7,	-240.4,	-90.2,
35	18.3,	374.1,	204.3,	-197.1,	-107.9,	36	18.3,	355.2,	145.8,	-147.7,	-122.4,

SOURCE ID: STCK14

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-154.7,	-103.7,	2	18.3,	378.7,	252.8,	-162.6,	-112.1,
3	18.3,	375.9,	298.6,	-165.6,	-117.0,	4	18.3,	361.8,	335.3,	-163.6,	-118.4,
5	18.3,	336.6,	361.9,	-156.6,	-116.2,	6	18.3,	301.2,	377.5,	-144.8,	-110.5,
7	18.3,	256.7,	381.6,	-128.7,	-101.4,	8	18.3,	204.3,	374.1,	-108.6,	-89.3,
9	18.3,	145.8,	355.2,	-85.2,	-74.4,	10	18.3,	199.3,	369.9,	-81.3,	-55.1,
11	18.3,	252.8,	378.7,	-77.3,	-36.2,	12	18.3,	298.6,	375.9,	-70.9,	-16.3,
13	18.3,	335.3,	361.8,	-62.4,	4.1,	14	18.3,	361.9,	336.6,	-52.0,	24.4,
15	18.3,	377.5,	301.2,	-40.1,	43.9,	16	18.3,	381.6,	256.7,	-26.9,	62.1,
17	18.3,	374.1,	204.3,	-12.9,	78.4,	18	18.3,	355.2,	145.8,	1.5,	92.4,
19	18.3,	369.9,	199.3,	-44.6,	103.7,	20	18.3,	378.7,	252.8,	-90.1,	112.1,
21	18.3,	375.9,	298.6,	-133.0,	117.0,	22	18.3,	361.8,	335.3,	-171.7,	118.4,
23	18.3,	336.6,	361.9,	-205.3,	116.2,	24	18.3,	301.2,	377.5,	-232.6,	110.5,
25	18.3,	256.7,	381.6,	-252.9,	101.4,	26	18.3,	204.3,	374.1,	-265.5,	89.3,
27	18.3,	145.8,	355.2,	-270.0,	74.4,	28	18.3,	199.3,	369.9,	-288.7,	55.1,
29	18.3,	252.8,	378.7,	-301.4,	36.2,	30	18.3,	298.6,	375.9,	-305.0,	16.3,
31	18.3,	335.3,	361.8,	-299.3,	-4.1,	32	18.3,	361.9,	336.6,	-284.5,	-24.4,
33	18.3,	377.5,	301.2,	-261.1,	-43.9,	34	18.3,	381.6,	256.7,	-229.8,	-62.1,
35	18.3,	374.1,	204.3,	-191.4,	-78.4,	36	18.3,	355.2,	145.8,	-147.3,	-92.4,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK15

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-159.2,	-73.2,	2	18.3,	378.7,	252.8,	-172.4,	-82.8,
3	18.3,	375.9,	298.6,	-180.4,	-89.9,	4	18.3,	361.8,	335.3,	-182.8,	-94.3,
5	18.3,	336.6,	361.9,	-179.7,	-95.8,	6	18.3,	301.2,	377.5,	-171.2,	-94.4,
7	18.3,	256.7,	381.6,	-157.4,	-90.1,	8	18.3,	204.3,	374.1,	-138.8,	-83.1,
9	18.3,	145.8,	355.2,	-116.1,	-73.6,	10	18.3,	199.3,	369.9,	-111.8,	-59.6,
11	18.3,	252.8,	378.7,	-106.6,	-46.0,	12	18.3,	298.6,	375.9,	-98.1,	-31.1,
13	18.3,	335.3,	361.8,	-86.6,	-15.1,	14	18.3,	361.9,	336.6,	-72.5,	1.2,
15	18.3,	377.5,	301.2,	-56.2,	17.6,	16	18.3,	381.6,	256.7,	-38.2,	33.4,
17	18.3,	374.1,	204.3,	-19.1,	48.2,	18	18.3,	355.2,	145.8,	0.7,	61.5,
19	18.3,	369.9,	199.3,	-40.0,	73.2,	20	18.3,	378.7,	252.8,	-80.3,	82.8,
21	18.3,	375.9,	298.6,	-118.2,	89.9,	22	18.3,	361.8,	335.3,	-152.5,	94.3,
23	18.3,	336.6,	361.9,	-182.2,	95.8,	24	18.3,	301.2,	377.5,	-206.3,	94.4,
25	18.3,	256.7,	381.6,	-224.2,	90.1,	26	18.3,	204.3,	374.1,	-235.2,	83.1,
27	18.3,	145.8,	355.2,	-239.1,	73.6,	28	18.3,	199.3,	369.9,	-258.1,	59.6,
29	18.3,	252.8,	378.7,	-272.1,	46.0,	30	18.3,	298.6,	375.9,	-277.9,	31.1,
31	18.3,	335.3,	361.8,	-275.2,	15.1,	32	18.3,	361.9,	336.6,	-264.1,	-1.2,
33	18.3,	377.5,	301.2,	-245.0,	-17.6,	34	18.3,	381.6,	256.7,	-218.4,	-33.4,
35	18.3,	374.1,	204.3,	-185.3,	-48.2,	36	18.3,	355.2,	145.8,	-146.5,	-61.5,

SOURCE ID: STCK16

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-164.8,	-42.0,	2	18.3,	378.7,	252.8,	-183.3,	-53.0,
3	18.3,	375.9,	298.6,	-196.2,	-62.5,	4	18.3,	361.8,	335.3,	-203.2,	-70.0,
5	18.3,	336.6,	361.9,	-204.0,	-75.4,	6	18.3,	301.2,	377.5,	-198.6,	-78.5,
7	18.3,	256.7,	381.6,	-187.2,	-79.3,	8	18.3,	204.3,	374.1,	-170.0,	-77.6,
9	18.3,	145.8,	355.2,	-147.8,	-73.6,	10	18.3,	199.3,	369.9,	-143.0,	-65.1,
11	18.3,	252.8,	378.7,	-136.3,	-56.9,	12	18.3,	298.6,	375.9,	-125.5,	-46.9,
13	18.3,	335.3,	361.8,	-110.9,	-35.5,	14	18.3,	361.9,	336.6,	-92.9,	-23.0,
15	18.3,	377.5,	301.2,	-72.0,	-9.8,	16	18.3,	381.6,	256.7,	-49.0,	3.6,
17	18.3,	374.1,	204.3,	-24.6,	17.0,	18	18.3,	355.2,	145.8,	0.7,	29.9,
19	18.3,	369.9,	199.3,	-34.5,	42.0,	20	18.3,	378.7,	252.8,	-69.5,	53.0,
21	18.3,	375.9,	298.6,	-102.4,	62.5,	22	18.3,	361.8,	335.3,	-132.2,	70.0,
23	18.3,	336.6,	361.9,	-157.9,	75.4,	24	18.3,	301.2,	377.5,	-178.9,	78.5,
25	18.3,	256.7,	381.6,	-194.4,	79.3,	26	18.3,	204.3,	374.1,	-204.0,	77.6,
27	18.3,	145.8,	355.2,	-207.5,	73.6,	28	18.3,	199.3,	369.9,	-226.9,	65.1,
29	18.3,	252.8,	378.7,	-242.4,	56.9,	30	18.3,	298.6,	375.9,	-250.4,	46.9,
31	18.3,	335.3,	361.8,	-250.9,	35.5,	32	18.3,	361.9,	336.6,	-243.7,	23.0,
33	18.3,	377.5,	301.2,	-229.2,	9.8,	34	18.3,	381.6,	256.7,	-207.6,	-3.6,
35	18.3,	374.1,	204.3,	-179.8,	-17.0,	36	18.3,	355.2,	145.8,	-146.5,	-29.9,

SOURCE ID: STCK17

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-169.4,	-11.1,	2	18.3,	378.7,	252.8,	-193.2,	-23.4,
3	18.3,	375.9,	298.6,	-211.1,	-35.0,	4	18.3,	361.8,	335.3,	-222.6,	-45.5,
5	18.3,	336.6,	361.9,	-227.4,	-54.7,	6	18.3,	301.2,	377.5,	-225.2,	-62.2,
7	18.3,	256.7,	381.6,	-216.2,	-67.8,	8	18.3,	204.3,	374.1,	-200.7,	-71.4,
9	18.3,	145.8,	355.2,	-179.0,	-72.8,	10	18.3,	199.3,	369.9,	-173.9,	-69.7,
11	18.3,	252.8,	378.7,	-166.0,	-66.8,	12	18.3,	298.6,	375.9,	-153.0,	-61.8,
13	18.3,	335.3,	361.8,	-135.4,	-54.9,	14	18.3,	361.9,	336.6,	-113.6,	-46.4,
15	18.3,	377.5,	301.2,	-88.4,	-36.5,	16	18.3,	381.6,	256.7,	-60.5,	-25.5,

17	18.3,	374.1,	204.3,	-30.8,	-13.6,	18	18.3,	355.2,	145.8,	-0.1,	-1.4,
19	18.3,	369.9,	199.3,	-29.9,	11.1,	20	18.3,	378.7,	252.8,	-59.6,	23.4,
21	18.3,	375.9,	298.6,	-87.5,	35.0,	22	18.3,	361.8,	335.3,	-112.7,	45.5,
23	18.3,	336.6,	361.9,	-134.5,	54.7,	24	18.3,	301.2,	377.5,	-152.2,	62.2,
25	18.3,	256.7,	381.6,	-165.3,	67.8,	26	18.3,	204.3,	374.1,	-173.4,	71.4,
27	18.3,	145.8,	355.2,	-176.2,	72.8,	28	18.3,	199.3,	369.9,	-196.0,	69.7,
29	18.3,	252.8,	378.7,	-212.7,	66.8,	30	18.3,	298.6,	375.9,	-223.0,	61.8,
31	18.3,	335.3,	361.8,	-226.4,	54.9,	32	18.3,	361.9,	336.6,	-223.0,	46.4,
33	18.3,	377.5,	301.2,	-212.8,	36.5,	34	18.3,	381.6,	256.7,	-196.1,	25.5,
35	18.3,	374.1,	204.3,	-173.5,	13.6,	36	18.3,	355.2,	145.8,	-145.6,	1.4,

SOURCE ID: STCK18

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-174.9,	20.2,	2	18.3,	378.7,	252.8,	-204.0,	6.4,
3	18.3,	375.9,	298.6,	-226.9,	-7.5,	4	18.3,	361.8,	335.3,	-243.0,	-21.3,
5	18.3,	336.6,	361.9,	-251.7,	-34.3,	6	18.3,	301.2,	377.5,	-252.7,	-46.4,
7	18.3,	256.7,	381.6,	-246.0,	-57.0,	8	18.3,	204.3,	374.1,	-231.9,	-65.9,
9	18.3,	145.8,	355.2,	-210.7,	-72.8,	10	18.3,	199.3,	369.9,	-205.1,	-75.2,
11	18.3,	252.8,	378.7,	-195.7,	-77.6,	12	18.3,	298.6,	375.9,	-180.4,	-77.6,
13	18.3,	335.3,	361.8,	-159.6,	-75.3,	14	18.3,	361.9,	336.6,	-134.0,	-70.7,
15	18.3,	377.5,	301.2,	-104.2,	-63.9,	16	18.3,	381.6,	256.7,	-71.3,	-55.2,
17	18.3,	374.1,	204.3,	-36.3,	-44.8,	18	18.3,	355.2,	145.8,	-0.1,	-33.1,
19	18.3,	369.9,	199.3,	-24.4,	-20.2,	20	18.3,	378.7,	252.8,	-48.8,	-6.4,
21	18.3,	375.9,	298.6,	-71.6,	7.5,	22	18.3,	361.8,	335.3,	-92.3,	21.3,
23	18.3,	336.6,	361.9,	-110.2,	34.3,	24	18.3,	301.2,	377.5,	-124.8,	46.4,
25	18.3,	256.7,	381.6,	-135.6,	57.0,	26	18.3,	204.3,	374.1,	-142.2,	65.9,
27	18.3,	145.8,	355.2,	-144.5,	72.8,	28	18.3,	199.3,	369.9,	-164.8,	75.2,
29	18.3,	252.8,	378.7,	-182.9,	77.6,	30	18.3,	298.6,	375.9,	-195.5,	77.6,
31	18.3,	335.3,	361.8,	-202.1,	75.3,	32	18.3,	361.9,	336.6,	-202.6,	70.7,
33	18.3,	377.5,	301.2,	-197.0,	63.9,	34	18.3,	381.6,	256.7,	-185.3,	55.2,
35	18.3,	374.1,	204.3,	-168.0,	44.8,	36	18.3,	355.2,	145.8,	-145.6,	33.1,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK19

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-179.3,	49.9,	2	18.3,	378.7,	252.8,	-213.5,	34.9,
3	18.3,	375.9,	298.6,	-241.2,	18.9,	4	18.3,	361.8,	335.3,	-261.7,	2.3,
5	18.3,	336.6,	361.9,	-274.1,	-14.4,	6	18.3,	301.2,	377.5,	-278.3,	-30.6,
7	18.3,	256.7,	381.6,	-273.9,	-45.9,	8	18.3,	204.3,	374.1,	-261.3,	-59.8,
9	18.3,	145.8,	355.2,	-240.7,	-71.9,	10	18.3,	199.3,	369.9,	-234.8,	-79.6,
11	18.3,	252.8,	378.7,	-224.2,	-87.1,	12	18.3,	298.6,	375.9,	-206.8,	-92.0,
13	18.3,	335.3,	361.8,	-183.2,	-94.0,	14	18.3,	361.9,	336.6,	-153.9,	-93.2,
15	18.3,	377.5,	301.2,	-120.0,	-89.5,	16	18.3,	381.6,	256.7,	-82.4,	-83.2,
17	18.3,	374.1,	204.3,	-42.3,	-74.3,	18	18.3,	355.2,	145.8,	-1.0,	-63.1,
19	18.3,	369.9,	199.3,	-20.0,	-49.9,	20	18.3,	378.7,	252.8,	-39.3,	-34.9,
21	18.3,	375.9,	298.6,	-57.3,	-18.9,	22	18.3,	361.8,	335.3,	-73.7,	-2.3,
23	18.3,	336.6,	361.9,	-87.8,	14.4,	24	18.3,	301.2,	377.5,	-99.2,	30.6,
25	18.3,	256.7,	381.6,	-107.6,	45.9,	26	18.3,	204.3,	374.1,	-112.8,	59.8,
27	18.3,	145.8,	355.2,	-114.5,	71.9,	28	18.3,	199.3,	369.9,	-135.1,	79.6,
29	18.3,	252.8,	378.7,	-154.4,	87.1,	30	18.3,	298.6,	375.9,	-169.1,	92.0,
31	18.3,	335.3,	361.8,	-178.6,	94.0,	32	18.3,	361.9,	336.6,	-182.7,	93.2,
33	18.3,	377.5,	301.2,	-181.2,	89.5,	34	18.3,	381.6,	256.7,	-174.3,	83.2,
35	18.3,	374.1,	204.3,	-162.0,	74.3,	36	18.3,	355.2,	145.8,	-144.8,	63.1,

SOURCE ID: STCK20

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-185.4,	82.2,	2	18.3,	378.7,	252.8,	-225.1,	65.7,
3	18.3,	375.9,	298.6,	-258.1,	47.2,	4	18.3,	361.8,	335.3,	-283.1,	27.2,
5	18.3,	336.6,	361.9,	-299.6,	6.4,	6	18.3,	301.2,	377.5,	-307.0,	-14.5,
7	18.3,	256.7,	381.6,	-305.0,	-35.1,	8	18.3,	204.3,	374.1,	-293.8,	-54.5,
9	18.3,	145.8,	355.2,	-273.6,	-72.3,	10	18.3,	199.3,	369.9,	-267.2,	-85.8,
11	18.3,	252.8,	378.7,	-255.0,	-98.8,	12	18.3,	298.6,	375.9,	-235.1,	-108.8,
13	18.3,	335.3,	361.8,	-208.1,	-115.5,	14	18.3,	361.9,	336.6,	-174.7,	-118.6,
15	18.3,	377.5,	301.2,	-136.1,	-118.2,	16	18.3,	381.6,	256.7,	-93.3,	-114.2,
17	18.3,	374.1,	204.3,	-47.6,	-106.8,	18	18.3,	355.2,	145.8,	-0.5,	-96.0,
19	18.3,	369.9,	199.3,	-13.9,	-82.2,	20	18.3,	378.7,	252.8,	-27.6,	-65.7,
21	18.3,	375.9,	298.6,	-40.5,	-47.2,	22	18.3,	361.8,	335.3,	-52.2,	-27.2,
23	18.3,	336.6,	361.9,	-62.3,	-6.4,	24	18.3,	301.2,	377.5,	-70.5,	14.5,
25	18.3,	256.7,	381.6,	-76.5,	35.1,	26	18.3,	204.3,	374.1,	-80.3,	54.5,
27	18.3,	145.8,	355.2,	-81.6,	72.3,	28	18.3,	199.3,	369.9,	-102.8,	85.8,
29	18.3,	252.8,	378.7,	-123.7,	98.8,	30	18.3,	298.6,	375.9,	-140.8,	108.8,
31	18.3,	335.3,	361.8,	-153.7,	115.5,	32	18.3,	361.9,	336.6,	-161.9,	118.6,
33	18.3,	377.5,	301.2,	-165.1,	118.2,	34	18.3,	381.6,	256.7,	-163.4,	114.2,
35	18.3,	374.1,	204.3,	-156.7,	106.8,	36	18.3,	355.2,	145.8,	-145.2,	96.0,

SOURCE ID: STCK21

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-189.9,	110.2,	2	18.3,	378.7,	252.8,	-234.5,	92.5,
3	18.3,	375.9,	298.6,	-271.9,	72.0,	4	18.3,	361.8,	335.3,	-301.1,	49.2,
5	18.3,	336.6,	361.9,	-321.1,	25.0,	6	18.3,	301.2,	377.5,	-331.3,	0.0,
7	18.3,	256.7,	381.6,	-331.5,	-25.0,	8	18.3,	204.3,	374.1,	-321.7,	-49.2,
9	18.3,	145.8,	355.2,	-302.0,	-71.9,	10	18.3,	199.3,	369.9,	-295.2,	-90.3,
11	18.3,	252.8,	378.7,	-281.8,	-108.1,	12	18.3,	298.6,	375.9,	-259.9,	-122.6,
13	18.3,	335.3,	361.8,	-230.1,	-133.4,	14	18.3,	361.9,	336.6,	-193.3,	-140.1,
15	18.3,	377.5,	301.2,	-150.6,	-142.6,	16	18.3,	381.6,	256.7,	-103.3,	-140.8,

17	18.3,	374.1,	204.3,	-53.0,	-134.6,	18	18.3,	355.2,	145.8,	-1.0,	-124.4,
19	18.3,	369.9,	199.3,	-9.4,	-110.2,	20	18.3,	378.7,	252.8,	-18.3,	-92.5,
21	18.3,	375.9,	298.6,	-26.7,	-72.0,	22	18.3,	361.8,	335.3,	-34.3,	-49.2,
23	18.3,	336.6,	361.9,	-40.8,	-25.0,	24	18.3,	301.2,	377.5,	-46.1,	-0.0,
25	18.3,	256.7,	381.6,	-50.0,	25.0,	26	18.3,	204.3,	374.1,	-52.4,	49.2,
27	18.3,	145.8,	355.2,	-53.2,	71.9,	28	18.3,	199.3,	369.9,	-74.7,	90.3,
29	18.3,	252.8,	378.7,	-96.8,	108.1,	30	18.3,	298.6,	375.9,	-116.0,	122.6,
31	18.3,	335.3,	361.8,	-131.7,	133.4,	32	18.3,	361.9,	336.6,	-143.3,	140.1,
33	18.3,	377.5,	301.2,	-150.6,	142.6,	34	18.3,	381.6,	256.7,	-153.3,	140.8,
35	18.3,	374.1,	204.3,	-151.4,	134.6,	36	18.3,	355.2,	145.8,	-144.8,	124.4,

SOURCE ID: STCK22

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-48.0,	139.2,	2	18.3,	378.7,	252.8,	-99.7,	145.7,
3	18.3,	375.9,	298.6,	-148.4,	147.7,	4	18.3,	361.8,	335.3,	-192.6,	145.3,
5	18.3,	336.6,	361.9,	-231.0,	138.4,	6	18.3,	301.2,	377.5,	-262.3,	127.4,
7	18.3,	256.7,	381.6,	-285.6,	112.4,	8	18.3,	204.3,	374.1,	-300.3,	94.1,
9	18.3,	145.8,	355.2,	-305.9,	72.9,	10	18.3,	199.3,	369.9,	-324.2,	51.7,
11	18.3,	252.8,	378.7,	-335.0,	26.7,	12	18.3,	298.6,	375.9,	-335.7,	0.9,
13	18.3,	335.3,	361.8,	-326.2,	-24.9,	14	18.3,	361.9,	336.6,	-306.7,	-50.0,
15	18.3,	377.5,	301.2,	-278.0,	-73.5,	16	18.3,	381.6,	256.7,	-240.8,	-94.9,
17	18.3,	374.1,	204.3,	-196.2,	-113.3,	18	18.3,	355.2,	145.8,	-145.8,	-128.3,
19	18.3,	369.9,	199.3,	-151.3,	-139.2,	20	18.3,	378.7,	252.8,	-153.1,	-145.7,
21	18.3,	375.9,	298.6,	-150.2,	-147.7,	22	18.3,	361.8,	335.3,	-142.7,	-145.3,
23	18.3,	336.6,	361.9,	-131.0,	-138.4,	24	18.3,	301.2,	377.5,	-115.2,	-127.4,
25	18.3,	256.7,	381.6,	-95.9,	-112.4,	26	18.3,	204.3,	374.1,	-73.7,	-94.1,
27	18.3,	145.8,	355.2,	-49.3,	-72.9,	28	18.3,	199.3,	369.9,	-45.8,	-51.7,
29	18.3,	252.8,	378.7,	-43.7,	-26.7,	30	18.3,	298.6,	375.9,	-40.3,	-0.9,
31	18.3,	335.3,	361.8,	-35.6,	24.9,	32	18.3,	361.9,	336.6,	-29.9,	50.0,
33	18.3,	377.5,	301.2,	-23.2,	73.5,	34	18.3,	381.6,	256.7,	-15.9,	94.9,
35	18.3,	374.1,	204.3,	-8.1,	113.3,	36	18.3,	355.2,	145.8,	0.0,	128.3,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK23

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-42.9,	110.4,	2	18.3,	378.7,	252.8,	-89.7,	118.2,
3	18.3,	375.9,	298.6,	-133.8,	122.4,	4	18.3,	361.8,	335.3,	-173.8,	122.9,
5	18.3,	336.6,	361.9,	-208.6,	119.6,	6	18.3,	301.2,	377.5,	-237.0,	112.8,
7	18.3,	256.7,	381.6,	-258.2,	102.5,	8	18.3,	204.3,	374.1,	-271.6,	89.0,
9	18.3,	145.8,	355.2,	-276.7,	72.9,	10	18.3,	199.3,	369.9,	-295.4,	56.7,
11	18.3,	252.8,	378.7,	-307.6,	36.7,	12	18.3,	298.6,	375.9,	-310.4,	15.5,
13	18.3,	335.3,	361.8,	-303.8,	-6.2,	14	18.3,	361.9,	336.6,	-287.9,	-27.6,
15	18.3,	377.5,	301.2,	-263.4,	-48.3,	16	18.3,	381.6,	256.7,	-230.8,	-67.4,
17	18.3,	374.1,	204.3,	-191.2,	-84.5,	18	18.3,	355.2,	145.8,	-145.8,	-99.1,
19	18.3,	369.9,	199.3,	-156.4,	-110.4,	20	18.3,	378.7,	252.8,	-163.1,	-118.2,
21	18.3,	375.9,	298.6,	-164.8,	-122.4,	22	18.3,	361.8,	335.3,	-161.5,	-122.9,
23	18.3,	336.6,	361.9,	-153.3,	-119.6,	24	18.3,	301.2,	377.5,	-140.5,	-112.8,
25	18.3,	256.7,	381.6,	-123.4,	-102.5,	26	18.3,	204.3,	374.1,	-102.5,	-89.0,
27	18.3,	145.8,	355.2,	-78.5,	-72.9,	28	18.3,	199.3,	369.9,	-74.5,	-56.7,
29	18.3,	252.8,	378.7,	-71.1,	-36.7,	30	18.3,	298.6,	375.9,	-65.5,	-15.5,
31	18.3,	335.3,	361.8,	-58.0,	6.2,	32	18.3,	361.9,	336.6,	-48.6,	27.6,
33	18.3,	377.5,	301.2,	-37.8,	48.3,	34	18.3,	381.6,	256.7,	-25.9,	67.4,
35	18.3,	374.1,	204.3,	-13.1,	84.5,	36	18.3,	355.2,	145.8,	0.0,	99.1,

SOURCE ID: STCK24

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-38.1,	81.2,	2	18.3,	378.7,	252.8,	-80.0,	90.2,
3	18.3,	375.9,	298.6,	-119.4,	96.6,	4	18.3,	361.8,	335.3,	-155.1,	100.0,
5	18.3,	336.6,	361.9,	-186.2,	100.3,	6	18.3,	301.2,	377.5,	-211.6,	97.6,
7	18.3,	256.7,	381.6,	-230.5,	91.9,	8	18.3,	204.3,	374.1,	-242.5,	83.5,
9	18.3,	145.8,	355.2,	-247.1,	72.5,	10	18.3,	199.3,	369.9,	-266.2,	61.5,
11	18.3,	252.8,	378.7,	-279.6,	46.4,	12	18.3,	298.6,	375.9,	-284.5,	29.9,
13	18.3,	335.3,	361.8,	-280.8,	12.6,	14	18.3,	361.9,	336.6,	-268.6,	-5.2,
15	18.3,	377.5,	301.2,	-248.2,	-22.8,	16	18.3,	381.6,	256.7,	-220.3,	-39.7,
17	18.3,	374.1,	204.3,	-185.6,	-55.4,	18	18.3,	355.2,	145.8,	-145.4,	-69.5,
19	18.3,	369.9,	199.3,	-161.1,	-81.2,	20	18.3,	378.7,	252.8,	-172.8,	-90.2,
21	18.3,	375.9,	298.6,	-179.2,	-96.6,	22	18.3,	361.8,	335.3,	-180.2,	-100.0,
23	18.3,	336.6,	361.9,	-175.7,	-100.3,	24	18.3,	301.2,	377.5,	-165.9,	-97.6,
25	18.3,	256.7,	381.6,	-151.1,	-91.9,	26	18.3,	204.3,	374.1,	-131.6,	-83.5,
27	18.3,	145.8,	355.2,	-108.1,	-72.5,	28	18.3,	199.3,	369.9,	-103.8,	-61.5,
29	18.3,	252.8,	378.7,	-99.1,	-46.4,	30	18.3,	298.6,	375.9,	-91.4,	-29.9,
31	18.3,	335.3,	361.8,	-80.9,	-12.6,	32	18.3,	361.9,	336.6,	-68.0,	5.2,
33	18.3,	377.5,	301.2,	-53.0,	22.8,	34	18.3,	381.6,	256.7,	-36.4,	39.7,
35	18.3,	374.1,	204.3,	-18.7,	55.4,	36	18.3,	355.2,	145.8,	-0.4,	69.5,

SOURCE ID: STCK25

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-32.1,	49.2,	2	18.3,	378.7,	252.8,	-68.5,	59.8,
3	18.3,	375.9,	298.6,	-102.8,	68.6,	4	18.3,	361.8,	335.3,	-133.9,	75.3,
5	18.3,	336.6,	361.9,	-161.0,	79.7,	6	18.3,	301.2,	377.5,	-183.2,	81.7,
7	18.3,	256.7,	381.6,	-199.8,	81.2,	8	18.3,	204.3,	374.1,	-210.4,	78.2,
9	18.3,	145.8,	355.2,	-214.6,	72.9,	10	18.3,	199.3,	369.9,	-234.2,	67.5,
11	18.3,	252.8,	378.7,	-249.2,	57.9,	12	18.3,	298.6,	375.9,	-256.6,	46.5,
13	18.3,	335.3,	361.8,	-256.2,	33.8,	14	18.3,	361.9,	336.6,	-248.0,	19.9,
15	18.3,	377.5,	301.2,	-232.3,	5.5,	16	18.3,	381.6,	256.7,	-209.5,	-9.1,

17	18.3,	374.1,	204.3,	-180.4,	-23.4,	18	18.3,	355.2,	145.8,	-145.8,	-37.0,
19	18.3,	369.9,	199.3,	-167.2,	-49.2,	20	18.3,	378.7,	252.8,	-184.3,	-59.8,
21	18.3,	375.9,	298.6,	-195.8,	-68.6,	22	18.3,	361.8,	335.3,	-201.4,	-75.3,
23	18.3,	336.6,	361.9,	-200.9,	-79.7,	24	18.3,	301.2,	377.5,	-194.3,	-81.7,
25	18.3,	256.7,	381.6,	-181.7,	-81.2,	26	18.3,	204.3,	374.1,	-163.7,	-78.2,
27	18.3,	145.8,	355.2,	-140.6,	-72.9,	28	18.3,	199.3,	369.9,	-135.7,	-67.5,
29	18.3,	252.8,	378.7,	-129.5,	-57.9,	30	18.3,	298.6,	375.9,	-119.3,	-46.5,
31	18.3,	335.3,	361.8,	-105.6,	-33.8,	32	18.3,	361.9,	336.6,	-88.6,	-19.9,
33	18.3,	377.5,	301.2,	-68.9,	-5.5,	34	18.3,	381.6,	256.7,	-47.1,	9.1,
35	18.3,	374.1,	204.3,	-23.9,	23.4,	36	18.3,	355.2,	145.8,	0.0,	37.0,

SOURCE ID: STCK26

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-28.0,	19.1,	2	18.3,	378.7,	252.8,	-59.2,	30.8,
3	18.3,	375.9,	298.6,	-88.6,	41.6,	4	18.3,	361.8,	335.3,	-115.3,	51.2,
5	18.3,	336.6,	361.9,	-138.5,	59.2,	6	18.3,	301.2,	377.5,	-157.5,	65.4,
7	18.3,	256.7,	381.6,	-171.7,	69.6,	8	18.3,	204.3,	374.1,	-180.6,	71.7,
9	18.3,	145.8,	355.2,	-184.1,	71.7,	10	18.3,	199.3,	369.9,	-204.0,	71.6,
11	18.3,	252.8,	378.7,	-220.2,	67.2,	12	18.3,	298.6,	375.9,	-229.6,	60.7,
13	18.3,	335.3,	361.8,	-232.1,	52.4,	14	18.3,	361.9,	336.6,	-227.5,	42.5,
15	18.3,	377.5,	301.2,	-216.0,	31.3,	16	18.3,	381.6,	256.7,	-198.0,	19.1,
17	18.3,	374.1,	204.3,	-173.9,	6.4,	18	18.3,	355.2,	145.8,	-144.5,	-6.5,
19	18.3,	369.9,	199.3,	-171.2,	-19.1,	20	18.3,	378.7,	252.8,	-193.6,	-30.8,
21	18.3,	375.9,	298.6,	-210.0,	-41.6,	22	18.3,	361.8,	335.3,	-220.1,	-51.2,
23	18.3,	336.6,	361.9,	-223.4,	-59.2,	24	18.3,	301.2,	377.5,	-220.0,	-65.4,
25	18.3,	256.7,	381.6,	-209.9,	-69.6,	26	18.3,	204.3,	374.1,	-193.4,	-71.7,
27	18.3,	145.8,	355.2,	-171.1,	-71.7,	28	18.3,	199.3,	369.9,	-165.9,	-71.6,
29	18.3,	252.8,	378.7,	-158.5,	-67.2,	30	18.3,	298.6,	375.9,	-146.3,	-60.7,
31	18.3,	335.3,	361.8,	-129.7,	-52.4,	32	18.3,	361.9,	336.6,	-109.1,	-42.5,
33	18.3,	377.5,	301.2,	-85.2,	-31.3,	34	18.3,	381.6,	256.7,	-58.7,	-19.1,
35	18.3,	374.1,	204.3,	-30.4,	-6.4,	36	18.3,	355.2,	145.8,	-1.2,	6.5,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK27

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-23.3,	-12.7,	2	18.3,	378.7,	252.8,	-49.0,	0.4,
3	18.3,	375.9,	298.6,	-73.3,	13.4,	4	18.3,	361.8,	335.3,	-95.3,	26.1,
5	18.3,	336.6,	361.9,	-114.4,	37.9,	6	18.3,	301.2,	377.5,	-130.1,	48.7,
7	18.3,	256.7,	381.6,	-141.8,	57.9,	8	18.3,	204.3,	374.1,	-149.2,	65.3,
9	18.3,	145.8,	355.2,	-152.0,	70.8,	10	18.3,	199.3,	369.9,	-172.3,	76.4,
11	18.3,	252.8,	378.7,	-189.7,	77.4,	12	18.3,	298.6,	375.9,	-201.4,	76.0,
13	18.3,	335.3,	361.8,	-207.0,	72.4,	14	18.3,	361.9,	336.6,	-206.2,	66.5,
15	18.3,	377.5,	301.2,	-199.3,	58.7,	16	18.3,	381.6,	256.7,	-186.2,	49.0,
17	18.3,	374.1,	204.3,	-167.5,	37.9,	18	18.3,	355.2,	145.8,	-143.7,	25.6,
19	18.3,	369.9,	199.3,	-176.0,	12.7,	20	18.3,	378.7,	252.8,	-203.8,	-0.4,
21	18.3,	375.9,	298.6,	-225.3,	-13.4,	22	18.3,	361.8,	335.3,	-240.1,	-26.1,
23	18.3,	336.6,	361.9,	-247.5,	-37.9,	24	18.3,	301.2,	377.5,	-247.4,	-48.7,
25	18.3,	256.7,	381.6,	-239.8,	-57.9,	26	18.3,	204.3,	374.1,	-224.9,	-65.3,
27	18.3,	145.8,	355.2,	-203.2,	-70.8,	28	18.3,	199.3,	369.9,	-197.7,	-76.4,
29	18.3,	252.8,	378.7,	-189.0,	-77.4,	30	18.3,	298.6,	375.9,	-174.5,	-76.0,
31	18.3,	335.3,	361.8,	-154.8,	-72.4,	32	18.3,	361.9,	336.6,	-130.4,	-66.5,
33	18.3,	377.5,	301.2,	-102.0,	-58.7,	34	18.3,	381.6,	256.7,	-70.5,	-49.0,
35	18.3,	374.1,	204.3,	-36.8,	-37.9,	36	18.3,	355.2,	145.8,	-2.0,	-25.6,

SOURCE ID: STCK28

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-18.5,	-41.9,	2	18.3,	378.7,	252.8,	-39.3,	-27.6,
3	18.3,	375.9,	298.6,	-58.8,	-12.4,	4	18.3,	361.8,	335.3,	-76.6,	3.1,
5	18.3,	336.6,	361.9,	-92.0,	18.6,	6	18.3,	301.2,	377.5,	-104.6,	33.5,
7	18.3,	256.7,	381.6,	-114.1,	47.4,	8	18.3,	204.3,	374.1,	-120.1,	59.8,
9	18.3,	145.8,	355.2,	-122.4,	70.4,	10	18.3,	199.3,	369.9,	-143.0,	81.1,
11	18.3,	252.8,	378.7,	-161.8,	87.1,	12	18.3,	298.6,	375.9,	-175.6,	90.5,
13	18.3,	335.3,	361.8,	-184.0,	91.1,	14	18.3,	361.9,	336.6,	-186.9,	89.0,
15	18.3,	377.5,	301.2,	-184.1,	84.1,	16	18.3,	381.6,	256.7,	-175.7,	76.7,
17	18.3,	374.1,	204.3,	-162.0,	67.0,	18	18.3,	355.2,	145.8,	-143.3,	55.2,
19	18.3,	369.9,	199.3,	-180.7,	41.9,	20	18.3,	378.7,	252.8,	-213.5,	27.6,
21	18.3,	375.9,	298.6,	-239.8,	12.4,	22	18.3,	361.8,	335.3,	-258.8,	-3.1,
23	18.3,	336.6,	361.9,	-269.9,	-18.6,	24	18.3,	301.2,	377.5,	-272.8,	-33.5,
25	18.3,	256.7,	381.6,	-267.5,	-47.4,	26	18.3,	204.3,	374.1,	-254.0,	-59.8,
27	18.3,	145.8,	355.2,	-232.8,	-70.4,	28	18.3,	199.3,	369.9,	-226.9,	-81.1,
29	18.3,	252.8,	378.7,	-216.9,	-87.1,	30	18.3,	298.6,	375.9,	-200.4,	-90.5,
31	18.3,	335.3,	361.8,	-177.7,	-91.1,	32	18.3,	361.9,	336.6,	-149.7,	-89.0,
33	18.3,	377.5,	301.2,	-117.1,	-84.1,	34	18.3,	381.6,	256.7,	-81.0,	-76.7,
35	18.3,	374.1,	204.3,	-42.3,	-67.0,	36	18.3,	355.2,	145.8,	-2.5,	-55.2,

SOURCE ID: STCK29

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-13.0,	-73.1,	2	18.3,	378.7,	252.8,	-28.4,	-57.3,
3	18.3,	375.9,	298.6,	-43.0,	-39.8,	4	18.3,	361.8,	335.3,	-56.2,	-21.1,
5	18.3,	336.6,	361.9,	-67.7,	-1.8,	6	18.3,	301.2,	377.5,	-77.2,	17.7,
7	18.3,	256.7,	381.6,	-84.3,	36.5,	8	18.3,	204.3,	374.1,	-88.9,	54.3,
9	18.3,	145.8,	355.2,	-90.7,	70.4,	10	18.3,	199.3,	369.9,	-111.8,	86.6,
11	18.3,	252.8,	378.7,	-132.0,	97.9,	12	18.3,	298.6,	375.9,	-148.1,	106.3,
13	18.3,	335.3,	361.8,	-159.8,	111.5,	14	18.3,	361.9,	336.6,	-166.5,	113.2,
15	18.3,	377.5,	301.2,	-168.3,	111.5,	16	18.3,	381.6,	256.7,	-164.9,	106.5,

17	18.3,	374.1,	204.3,	-156.5,	98.1,	18	18.3,	355.2,	145.8,	-143.3,	86.9,
19	18.3,	369.9,	199.3,	-186.2,	73.1,	20	18.3,	378.7,	252.8,	-224.3,	57.3,
21	18.3,	375.9,	298.6,	-255.6,	39.8,	22	18.3,	361.8,	335.3,	-279.1,	21.1,
23	18.3,	336.6,	361.9,	-294.2,	1.8,	24	18.3,	301.2,	377.5,	-300.3,	-17.7,
25	18.3,	256.7,	381.6,	-297.2,	-36.5,	26	18.3,	204.3,	374.1,	-285.2,	-54.3,
27	18.3,	145.8,	355.2,	-264.5,	-70.4,	28	18.3,	199.3,	369.9,	-258.1,	-86.6,
29	18.3,	252.8,	378.7,	-246.7,	-97.9,	30	18.3,	298.6,	375.9,	-227.8,	-106.3,
31	18.3,	335.3,	361.8,	-202.0,	-111.5,	32	18.3,	361.9,	336.6,	-170.1,	-113.2,
33	18.3,	377.5,	301.2,	-133.0,	-111.5,	34	18.3,	381.6,	256.7,	-91.8,	-106.5,
35	18.3,	374.1,	204.3,	-47.8,	-98.1,	36	18.3,	355.2,	145.8,	-2.5,	-86.9,

SOURCE ID: STCK30

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	369.9,	199.3,	-8.2,	-102.8,	2	18.3,	378.7,	252.8,	-18.6,	-85.7,
3	18.3,	375.9,	298.6,	-28.3,	-66.0,	4	18.3,	361.8,	335.3,	-37.2,	-44.4,
5	18.3,	336.6,	361.9,	-45.0,	-21.4,	6	18.3,	301.2,	377.5,	-51.4,	2.3,
7	18.3,	256.7,	381.6,	-56.2,	25.9,	8	18.3,	204.3,	374.1,	-59.4,	48.7,
9	18.3,	145.8,	355.2,	-60.7,	70.0,	10	18.3,	199.3,	369.9,	-82.2,	91.4,
11	18.3,	252.8,	378.7,	-103.6,	107.8,	12	18.3,	298.6,	375.9,	-121.9,	121.0,
13	18.3,	335.3,	361.8,	-136.5,	130.5,	14	18.3,	361.9,	336.6,	-146.9,	136.0,
15	18.3,	377.5,	301.2,	-152.9,	137.3,	16	18.3,	381.6,	256.7,	-154.2,	134.5,
17	18.3,	374.1,	204.3,	-150.8,	127.6,	18	18.3,	355.2,	145.8,	-142.9,	116.9,
19	18.3,	369.9,	199.3,	-191.0,	102.8,	20	18.3,	378.7,	252.8,	-234.2,	85.7,
21	18.3,	375.9,	298.6,	-270.3,	66.0,	22	18.3,	361.8,	335.3,	-298.1,	44.4,
23	18.3,	336.6,	361.9,	-316.9,	21.4,	24	18.3,	301.2,	377.5,	-326.1,	-2.3,
25	18.3,	256.7,	381.6,	-325.3,	-25.9,	26	18.3,	204.3,	374.1,	-314.7,	-48.7,
27	18.3,	145.8,	355.2,	-294.5,	-70.0,	28	18.3,	199.3,	369.9,	-287.7,	-91.4,
29	18.3,	252.8,	378.7,	-275.1,	-107.8,	30	18.3,	298.6,	375.9,	-254.0,	-121.0,
31	18.3,	335.3,	361.8,	-225.3,	-130.5,	32	18.3,	361.9,	336.6,	-189.7,	-136.0,
33	18.3,	377.5,	301.2,	-148.3,	-137.3,	34	18.3,	381.6,	256.7,	-102.5,	-134.5,
35	18.3,	374.1,	204.3,	-53.5,	-127.6,	36	18.3,	355.2,	145.8,	-2.9,	-116.9,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(	246795.1,	4069935.0,	91.0,	91.0,	0.0);	(246568.9,	4070024.2,	90.5,	90.5,	0.0);
(	246614.9,	4070070.3,	88.5,	88.5,	0.0);	(246568.9,	4069976.8,	89.0,	89.0,	0.0);
(	246713.2,	4069883.2,	91.0,	91.0,	0.0);	(246688.5,	4069880.8,	91.2,	91.2,	0.0);
(	246648.2,	4069884.6,	89.5,	89.5,	0.0);	(246624.4,	4069876.1,	88.4,	88.4,	0.0);
(	246629.6,	4069894.6,	89.0,	89.0,	0.0);	(246845.9,	4069793.6,	87.5,	87.5,	0.0);
(	246839.2,	4069776.9,	88.0,	88.0,	0.0);	(246796.1,	4069809.0,	89.2,	89.2,	0.0);
(	246792.1,	4069788.4,	89.8,	89.8,	0.0);	(246748.6,	4069788.7,	89.6,	89.6,	0.0);
(	246738.6,	4069788.0,	89.2,	89.2,	0.0);	(246793.6,	4069767.9,	90.1,	90.1,	0.0);
(	246792.8,	4069727.3,	91.0,	91.0,	0.0);	(246790.2,	4069744.3,	90.9,	90.9,	0.0);
(	246793.0,	4069759.5,	90.3,	90.3,	0.0);	(246856.1,	4069721.0,	88.8,	88.8,	0.0);
(	246851.4,	4069752.0,	88.1,	88.1,	0.0);	(246855.5,	4069732.7,	88.6,	88.6,	0.0);
(	246784.2,	4069647.6,	89.0,	89.0,	0.0);	(246785.0,	4069667.3,	89.6,	89.6,	0.0);
(	246785.1,	4069689.1,	90.3,	90.3,	0.0);	(246545.0,	4069856.6,	90.7,	90.7,	0.0);
(	246544.5,	4069847.5,	90.7,	90.7,	0.0);	(246546.4,	4069834.2,	90.6,	90.6,	0.0);
(	246543.6,	4069826.2,	90.8,	90.8,	0.0);	(246540.7,	4069803.4,	91.0,	91.0,	0.0);
(	246526.0,	4069857.5,	91.4,	91.4,	0.0);	(246525.5,	4069847.1,	91.3,	91.3,	0.0);
(	246524.1,	4069838.5,	91.1,	91.1,	0.0);	(246523.6,	4069826.6,	91.0,	91.0,	0.0);
(	246293.3,	4070103.1,	91.9,	91.9,	0.0);	(246270.0,	4070096.6,	91.8,	91.8,	0.0);
(	246257.6,	4070096.1,	91.4,	91.4,	0.0);	(246246.5,	4070096.1,	91.1,	91.1,	0.0);
(	246346.9,	4070078.5,	89.0,	89.0,	0.0);	(246344.7,	4070073.1,	88.7,	88.7,	0.0);
(	246336.9,	4070099.5,	90.7,	90.7,	0.0);	(246302.9,	4070951.4,	88.1,	88.1,	0.0);
(	246397.1,	4070950.4,	90.0,	90.0,	0.0);	(246565.5,	4070954.8,	90.1,	90.1,	0.0);
(	246549.9,	4070941.0,	90.7,	90.7,	0.0);	(246519.3,	4070942.7,	91.0,	91.0,	0.0);
(	246200.5,	4070942.0,	86.4,	86.4,	0.0);	(246179.1,	4070942.7,	87.1,	87.1,	0.0);
(	246220.7,	4070942.5,	86.5,	86.5,	0.0);					

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

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1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
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NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\fresno-93193\Fresno_18-22.SFC Met Version: 21112
Profile file: ..\fresno-93193\Fresno_18-22.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 93193 Upper air station no.: 23230
Name: FRESNO/AIR_TERMINAL Name: OAKLAND/WSO_AP
Year: 2018 Year: 2018

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
18	01	01	1	01	-6.0	0.108	-9.000	-9.000	-999.	85.	18.7	0.17	1.06	1.00	1.20	347.	10.0	280.9	2.0
18	01	01	1	02	-2.0	0.062	-9.000	-9.000	-999.	38.	10.9	0.02	1.06	1.00	0.91	174.	10.0	279.2	2.0
18	01	01	1	03	-3.4	0.076	-9.000	-9.000	-999.	50.	11.8	0.03	1.06	1.00	1.20	265.	10.0	279.2	2.0
18	01	01	1	04	-5.1	0.095	-9.000	-9.000	-999.	71.	15.2	0.06	1.06	1.00	1.35	316.	10.0	278.1	2.0
18	01	01	1	05	-8.8	0.123	-9.000	-9.000	-999.	104.	19.1	0.04	1.06	1.00	1.87	96.	10.0	277.0	2.0
18	01	01	1	06	-2.6	0.067	-9.000	-9.000	-999.	43.	10.7	0.02	1.06	1.00	1.08	177.	10.0	277.5	2.0
18	01	01	1	07	-3.7	0.078	-9.000	-9.000	-999.	52.	11.5	0.02	1.06	1.00	1.33	181.	10.0	277.5	2.0
18	01	01	1	08	-15.2	0.167	-9.000	-9.000	-999.	164.	30.7	0.06	1.06	0.65	2.32	76.	10.0	276.4	2.0
18	01	01	1	09	-3.5	0.149	-9.000	-9.000	-999.	139.	86.8	0.04	1.06	0.36	2.15	109.	10.0	278.1	2.0
18	01	01	1	10	56.2	0.204	0.651	0.006	177.	221.	-13.6	0.04	1.06	0.26	2.37	134.	10.0	281.4	2.0
18	01	01	1	11	92.0	0.233	1.067	0.016	477.	270.	-12.4	0.04	1.06	0.22	2.62	105.	10.0	283.1	2.0
18	01	01	1	12	116.8	0.202	1.234	0.018	581.	219.	-6.4	0.04	1.06	0.21	2.11	102.	10.0	285.9	2.0
18	01	01	1	13	112.5	0.144	1.280	0.019	673.	132.	-2.4	0.02	1.06	0.21	1.55	183.	10.0	287.5	2.0
18	01	01	1	14	84.0	0.122	1.190	0.019	723.	103.	-2.0	0.02	1.06	0.22	1.28	200.	10.0	289.2	2.0
18	01	01	1	15	57.9	0.161	1.059	0.019	738.	155.	-6.5	0.03	1.06	0.26	1.81	262.	10.0	290.4	2.0
18	01	01	1	16	16.8	0.124	0.702	0.019	742.	105.	-10.3	0.03	1.06	0.35	1.47	259.	10.0	289.9	2.0
18	01	01	1	17	-2.5	0.068	-9.000	-9.000	-999.	44.	11.3	0.02	1.06	0.62	1.14	297.	10.0	287.5	2.0
18	01	01	1	18	-7.4	0.111	-9.000	-9.000	-999.	89.	16.9	0.03	1.06	1.00	1.84	239.	10.0	286.4	2.0
18	01	01	1	19	-4.0	0.085	-9.000	-9.000	-999.	60.	13.8	0.06	1.06	1.00	1.21	83.	10.0	284.9	2.0
18	01	01	1	20	-10.4	0.137	-9.000	-9.000	-999.	122.	22.3	0.06	1.06	1.00	1.93	76.	10.0	283.8	2.0
18	01	01	1	21	-4.7	0.090	-9.000	-9.000	-999.	65.	14.0	0.04	1.06	1.00	1.38	109.	10.0	283.1	2.0
18	01	01	1	22	-4.1	0.084	-9.000	-9.000	-999.	58.	13.0	0.04	1.06	1.00	1.30	127.	10.0	281.4	2.0
18	01	01	1	23	-11.7	0.145	-9.000	-9.000	-999.	133.	23.6	0.06	1.06	1.00	2.04	70.	10.0	280.9	2.0
18	01	01	1	24	-3.4	0.079	-9.000	-9.000	-999.	54.	13.0	0.06	1.06	1.00	1.09	80.	10.0	281.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
18	01	01	01	10.0	1	347.	1.20	281.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
DW2	1ST HIGHEST VALUE IS	45.37635 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	44.01546 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	3RD HIGHEST VALUE IS	41.88107 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	41.05305 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	5TH HIGHEST VALUE IS	40.34965 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	6TH HIGHEST VALUE IS	36.26838 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	34.60211 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	20.05689 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	17.20718 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	16.57659 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
DW3CAR	1ST HIGHEST VALUE IS	20.85766 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	2ND HIGHEST VALUE IS	19.92969 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	3RD HIGHEST VALUE IS	18.99017 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	17.61434 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	5TH HIGHEST VALUE IS	15.20656 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	14.34837 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	14.31848 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	7.65474 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	7.45911 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.79076 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
DW4CAR	1ST HIGHEST VALUE IS	83.19613 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	2ND HIGHEST VALUE IS	67.26611 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	3RD HIGHEST VALUE IS	50.89224 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	29.19899 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	5TH HIGHEST VALUE IS	17.46298 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	6TH HIGHEST VALUE IS	16.39829 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	15.46956 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	8TH HIGHEST VALUE IS	9.17382 AT (246523.63, 4069826.65, 91.00, 91.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	9.08579 AT (246524.10, 4069838.53, 91.15, 91.15, 0.00)	DC	
	10TH HIGHEST VALUE IS	8.97639 AT (246525.53, 4069847.08, 91.27, 91.27, 0.00)	DC	
DW5CAR	1ST HIGHEST VALUE IS	122.59457 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	74.54132 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	3RD HIGHEST VALUE IS	66.26020 AT (246845.86, 4069793.56, 87.46, 87.46, 0.00)	DC	
	4TH HIGHEST VALUE IS	49.32286 AT (246839.24, 4069776.90, 88.04, 88.04, 0.00)	DC	
	5TH HIGHEST VALUE IS	44.71805 AT (246796.07, 4069808.96, 89.17, 89.17, 0.00)	DC	
	6TH HIGHEST VALUE IS	41.41389 AT (246851.42, 4069752.00, 88.07, 88.07, 0.00)	DC	
	7TH HIGHEST VALUE IS	41.11147 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	8TH HIGHEST VALUE IS	36.04963 AT (246792.13, 4069788.36, 89.75, 89.75, 0.00)	DC	
	9TH HIGHEST VALUE IS	35.73620 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	10TH HIGHEST VALUE IS	33.97090 AT (246855.54, 4069732.66, 88.60, 88.60, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
DW6	1ST HIGHEST VALUE IS	19.23798 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
	2ND HIGHEST VALUE IS	15.58344 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	3RD HIGHEST VALUE IS	15.30961 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	4TH HIGHEST VALUE IS	14.89468 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	5TH HIGHEST VALUE IS	13.51226 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	
	6TH HIGHEST VALUE IS	13.15748 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	7TH HIGHEST VALUE IS	12.99726 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	12.87719 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	9TH HIGHEST VALUE IS	12.34038 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	10TH HIGHEST VALUE IS	10.67206 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
DW6_CAR	1ST HIGHEST VALUE IS	6.42168 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
	2ND HIGHEST VALUE IS	5.34549 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	3RD HIGHEST VALUE IS	5.07698 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	4TH HIGHEST VALUE IS	5.01942 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	4.96186 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	6TH HIGHEST VALUE IS	4.90575 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	7TH HIGHEST VALUE IS	4.81533 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	
	8TH HIGHEST VALUE IS	4.72229 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	9TH HIGHEST VALUE IS	4.64531 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	10TH HIGHEST VALUE IS	4.55561 AT	(246549.86,	4070941.04,	90.67,	90.67,	0.00)	DC	
DW7	1ST HIGHEST VALUE IS	62.85215 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
	2ND HIGHEST VALUE IS	41.63830 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	3RD HIGHEST VALUE IS	37.63931 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	4TH HIGHEST VALUE IS	33.59572 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	5TH HIGHEST VALUE IS	33.13528 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	30.75808 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	7TH HIGHEST VALUE IS	28.16345 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	
	8TH HIGHEST VALUE IS	26.39760 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	9TH HIGHEST VALUE IS	24.96818 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	10TH HIGHEST VALUE IS	23.73261 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
DW7CAR	1ST HIGHEST VALUE IS	21.23833 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
	2ND HIGHEST VALUE IS	15.14201 AT	(246795.08,	4069935.05,	91.00,	91.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	15.01474 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	4TH HIGHEST VALUE IS	12.10146 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	9.63918 AT	(246713.24,	4069883.19,	91.05,	91.05,	0.00)	DC	
	6TH HIGHEST VALUE IS	9.18788 AT	(246688.54,	4069880.82,	91.24,	91.24,	0.00)	DC	
	7TH HIGHEST VALUE IS	9.05538 AT	(246629.65,	4069894.59,	88.99,	88.99,	0.00)	DC	
	8TH HIGHEST VALUE IS	8.86072 AT	(246648.17,	4069884.62,	89.53,	89.53,	0.00)	DC	
	9TH HIGHEST VALUE IS	8.21633 AT	(246624.43,	4069876.07,	88.44,	88.44,	0.00)	DC	
	10TH HIGHEST VALUE IS	8.16724 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE	NETWORK GRID-ID
HUGHES1	1ST HIGHEST VALUE IS	5.42376	(246549.86,	4070941.04,	90.67,	90.67, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.37259	(246519.33,	4070942.66,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	5.00971	(246565.53,	4070954.82,	90.15,	90.15, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.81578	(246397.11,	4070950.37,	90.00,	90.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.32507	(246302.90,	4070951.41,	88.10,	88.10, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.24678	(246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.07059	(246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	8TH HIGHEST VALUE IS	3.99713	(246220.67,	4070942.50,	86.49,	86.49, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.98235	(246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.90895	(246200.46,	4070942.04,	86.43,	86.43, 0.00)	DC	
HUGHES2	1ST HIGHEST VALUE IS	34.69344	(246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	21.11837	(246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	16.38188	(246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	15.02127	(246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	12.10523	(246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	11.95396	(246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	7TH HIGHEST VALUE IS	11.72952	(246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	8TH HIGHEST VALUE IS	10.10319	(246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	9TH HIGHEST VALUE IS	9.58388	(246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	10TH HIGHEST VALUE IS	9.56676	(246629.65,	4069894.59,	88.99,	88.99, 0.00)	DC	
HUGHES3	1ST HIGHEST VALUE IS	194.72679	(246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	110.28778	(246845.86,	4069793.56,	87.46,	87.46, 0.00)	DC	
	3RD HIGHEST VALUE IS	80.73361	(246839.24,	4069776.90,	88.04,	88.04, 0.00)	DC	
	4TH HIGHEST VALUE IS	71.28775	(246796.07,	4069808.96,	89.17,	89.17, 0.00)	DC	
	5TH HIGHEST VALUE IS	67.21861	(246851.42,	4069752.00,	88.07,	88.07, 0.00)	DC	
	6TH HIGHEST VALUE IS	56.56313	(246792.13,	4069788.36,	89.75,	89.75, 0.00)	DC	
	7TH HIGHEST VALUE IS	54.22703	(246855.54,	4069732.66,	88.60,	88.60, 0.00)	DC	
	8TH HIGHEST VALUE IS	49.84781	(246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	9TH HIGHEST VALUE IS	47.66767	(246793.56,	4069767.94,	90.07,	90.07, 0.00)	DC	
	10TH HIGHEST VALUE IS	46.84032	(246856.07,	4069721.01,	88.76,	88.76, 0.00)	DC	
MARKS1	1ST HIGHEST VALUE IS	15.64382	(246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	2ND HIGHEST VALUE IS	15.51734	(246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	3RD HIGHEST VALUE IS	15.34826	(246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	15.27800	(246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	5TH HIGHEST VALUE IS	14.07374	(246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	12.92375	(246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	12.72567	(246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	7.71913	(246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	7.23879	(246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	7.19742	(246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	

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*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE	NETWORK GRID-ID
MARKS2	1ST HIGHEST VALUE IS	9.18688	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	2ND HIGHEST VALUE IS	8.55830	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	3RD HIGHEST VALUE IS	7.90744	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	6.82918	246523.63,	4069826.65,	91.00,	91.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	6.74384	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	6.71836	246540.72,	4069803.38,	90.97,	90.97, 0.00)	DC	
	7TH HIGHEST VALUE IS	6.63511	246524.10,	4069838.53,	91.15,	91.15, 0.00)	DC	
	8TH HIGHEST VALUE IS	6.46264	246525.53,	4069847.08,	91.27,	91.27, 0.00)	DC	
	9TH HIGHEST VALUE IS	6.34690	246543.57,	4069826.18,	90.78,	90.78, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.27796	246526.00,	4069857.53,	91.43,	91.43, 0.00)	DC	
NIELSEN	1ST HIGHEST VALUE IS	18.42800	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	15.46295	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	13.89136	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	11.65674	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	9.88887	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	6TH HIGHEST VALUE IS	9.46065	246688.54,	4069880.82,	91.24,	91.24, 0.00)	DC	
	7TH HIGHEST VALUE IS	9.22320	246629.65,	4069894.59,	88.99,	88.99, 0.00)	DC	
	8TH HIGHEST VALUE IS	9.07879	246648.17,	4069884.62,	89.53,	89.53, 0.00)	DC	
	9TH HIGHEST VALUE IS	8.39501	246624.43,	4069876.07,	88.44,	88.44, 0.00)	DC	
	10TH HIGHEST VALUE IS	7.40997	246796.07,	4069808.96,	89.17,	89.17, 0.00)	DC	
NIELSEN2	1ST HIGHEST VALUE IS	288.20967	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	243.71939	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	3RD HIGHEST VALUE IS	240.99464	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	4TH HIGHEST VALUE IS	239.25567	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	5TH HIGHEST VALUE IS	236.01211	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	133.20150	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	120.05723	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	22.58587	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	21.95370	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	18.05000	246526.00,	4069857.53,	91.43,	91.43, 0.00)	DC	
STCK1	1ST HIGHEST VALUE IS	26.12569	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	24.53198	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	3RD HIGHEST VALUE IS	23.03396	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	4TH HIGHEST VALUE IS	22.46035	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	5TH HIGHEST VALUE IS	20.43977	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	16.76395	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	16.42359	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	7.20229	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	6.83630	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.62951	246526.00,	4069857.53,	91.43,	91.43, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE	NETWORK GRID-ID
STCK10	1ST HIGHEST VALUE IS	48.65735	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	2ND HIGHEST VALUE IS	40.52594	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	36.99762	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	4TH HIGHEST VALUE IS	34.23285	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	5TH HIGHEST VALUE IS	26.91652	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	6TH HIGHEST VALUE IS	25.52197	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	7TH HIGHEST VALUE IS	22.91481	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	8TH HIGHEST VALUE IS	14.58915	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	14.25470	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	10.26600	246629.65,	4069894.59,	88.99,	88.99, 0.00)	DC	
STCK11	1ST HIGHEST VALUE IS	32.16329	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	2ND HIGHEST VALUE IS	27.40533	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	23.54593	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	4TH HIGHEST VALUE IS	23.50508	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	5TH HIGHEST VALUE IS	17.84824	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	6TH HIGHEST VALUE IS	16.82462	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	7TH HIGHEST VALUE IS	16.03572	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	8TH HIGHEST VALUE IS	15.67175	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	14.40483	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	10.07518	246629.65,	4069894.59,	88.99,	88.99, 0.00)	DC	
STCK12	1ST HIGHEST VALUE IS	25.79240	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	2ND HIGHEST VALUE IS	21.05351	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	18.12909	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	4TH HIGHEST VALUE IS	17.61613	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	5TH HIGHEST VALUE IS	17.03174	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	6TH HIGHEST VALUE IS	15.17726	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	7TH HIGHEST VALUE IS	14.86114	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	14.78703	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	9TH HIGHEST VALUE IS	14.73576	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
	10TH HIGHEST VALUE IS	11.43426	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
STCK13	1ST HIGHEST VALUE IS	13.08775	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	10.08621	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	8.17572	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	5.97837	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	5.53927	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	6TH HIGHEST VALUE IS	5.13645	246688.54,	4069880.82,	91.24,	91.24, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.74224	246845.86,	4069793.56,	87.46,	87.46, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.68707	246796.07,	4069808.96,	89.17,	89.17, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.66297	246648.17,	4069884.62,	89.53,	89.53, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.62544	246629.65,	4069894.59,	88.99,	88.99, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE	NETWORK GRID-ID
STCK14	1ST HIGHEST VALUE IS	12.28472 AT	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	8.08282 AT	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	7.72396 AT	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	5.28508 AT	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	5.08591 AT	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.72024 AT	246688.54,	4069880.82,	91.24,	91.24, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.61738 AT	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.47828 AT	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.46049 AT	246845.86,	4069793.56,	87.46,	87.46, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.38279 AT	246796.07,	4069808.96,	89.17,	89.17, 0.00)	DC	
STCK15	1ST HIGHEST VALUE IS	11.15498 AT	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	7.22747 AT	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	6.62965 AT	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.84615 AT	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.69227 AT	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.66596 AT	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.53066 AT	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.32471 AT	246688.54,	4069880.82,	91.24,	91.24, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.26105 AT	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.20840 AT	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
STCK16	1ST HIGHEST VALUE IS	9.48512 AT	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	6.64635 AT	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	5.67631 AT	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.67824 AT	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.49358 AT	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.47053 AT	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.23391 AT	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.21865 AT	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.21601 AT	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.12951 AT	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
STCK17	1ST HIGHEST VALUE IS	8.00335 AT	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	6.07752 AT	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	5.12169 AT	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.67818 AT	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.45240 AT	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.24705 AT	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.17043 AT	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.13716 AT	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.12142 AT	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.08118 AT	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK18	1ST HIGHEST VALUE IS	7.07449 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.47327 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.79947 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.62696 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.37240 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.24094 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.12653 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.09503 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.99817 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.91772 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK19	1ST HIGHEST VALUE IS	6.62276 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	4.93772 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.80910 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.61825 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.32891 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.26836 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.15534 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.05804 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.96023 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.88038 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK2	1ST HIGHEST VALUE IS	28.94827 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	26.33337 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	3RD HIGHEST VALUE IS	24.14297 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	4TH HIGHEST VALUE IS	23.10254 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	5TH HIGHEST VALUE IS	22.37109 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	17.76545 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	17.17984 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	7.67756 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	7.44556 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.54359 AT (246526.00, 4069857.53, 91.43, 91.43, 0.00)	DC	
STCK20	1ST HIGHEST VALUE IS	6.20841 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.13598 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.60612 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.38548 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.29820 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.26629 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.19319 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.00177 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.92742 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.85007 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE	NETWORK GRID-ID
STCK21	1ST HIGHEST VALUE IS	5.57537	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.44776	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.57197	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.33671	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.23578	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.21435	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	7TH HIGHEST VALUE IS	3.99545	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	3.95589	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.86971	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.80770	246246.49,	4070096.12,	91.06,	91.06, 0.00)	DC	
STCK22	1ST HIGHEST VALUE IS	8.32669	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	7.16035	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	6.26051	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	4TH HIGHEST VALUE IS	6.02177	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	5.70077	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	5.56769	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	7TH HIGHEST VALUE IS	5.42536	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	8TH HIGHEST VALUE IS	5.09009	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	5.07616	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.97327	246257.65,	4070096.12,	91.38,	91.38, 0.00)	DC	
STCK23	1ST HIGHEST VALUE IS	9.60305	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	7.97557	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	7.21860	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	4TH HIGHEST VALUE IS	6.16328	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	5.89239	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	5.74690	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	7TH HIGHEST VALUE IS	5.56633	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	5.50240	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	9TH HIGHEST VALUE IS	5.39531	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	10TH HIGHEST VALUE IS	5.13561	246270.04,	4070096.62,	91.77,	91.77, 0.00)	DC	
STCK24	1ST HIGHEST VALUE IS	11.21066	246614.93,	4070070.31,	88.50,	88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	11.14957	246795.08,	4069935.05,	91.00,	91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	9.24793	246568.86,	4070024.24,	90.47,	90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	6.35371	246336.89,	4070099.47,	90.73,	90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	6.14400	246568.86,	4069976.75,	89.00,	89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	6.11952	246346.91,	4070078.52,	89.00,	89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	5.99252	246344.67,	4070073.06,	88.72,	88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	5.75956	246713.24,	4069883.19,	91.05,	91.05, 0.00)	DC	
	9TH HIGHEST VALUE IS	5.64784	246293.35,	4070103.06,	91.92,	91.92, 0.00)	DC	
	10TH HIGHEST VALUE IS	5.42999	246845.86,	4069793.56,	87.46,	87.46, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK25	1ST HIGHEST VALUE IS	18.67112 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	12.67945 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	10.58458 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	6.87984 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	6.71820 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	6.58872 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	6.44572 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	8TH HIGHEST VALUE IS	6.41003 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	9TH HIGHEST VALUE IS	6.04453 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.04009 AT (246845.86, 4069793.56, 87.46, 87.46, 0.00)	DC	
STCK26	1ST HIGHEST VALUE IS	27.50748 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	12.81091 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	11.25599 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	4TH HIGHEST VALUE IS	7.61226 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	7.42402 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	6TH HIGHEST VALUE IS	7.41602 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	7.13185 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	6.90677 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	9TH HIGHEST VALUE IS	6.66835 AT (246688.54, 4069880.82, 91.24, 91.24, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.58607 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
STCK27	1ST HIGHEST VALUE IS	34.09619 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	13.22726 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	12.37508 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	8.73935 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	8.53662 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	8.06019 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	7TH HIGHEST VALUE IS	7.94199 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	7.66813 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	9TH HIGHEST VALUE IS	7.40827 AT (246688.54, 4069880.82, 91.24, 91.24, 0.00)	DC	
	10TH HIGHEST VALUE IS	7.38873 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
STCK28	1ST HIGHEST VALUE IS	28.95357 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	2ND HIGHEST VALUE IS	17.89862 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	3RD HIGHEST VALUE IS	11.71877 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	10.35206 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	9.74826 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	8.93093 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	8.58686 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	8.39815 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	9TH HIGHEST VALUE IS	8.32450 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	10TH HIGHEST VALUE IS	7.84067 AT (246688.54, 4069880.82, 91.24, 91.24, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK29	1ST HIGHEST VALUE IS	21.22711 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	2ND HIGHEST VALUE IS	20.60748 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	3RD HIGHEST VALUE IS	11.95784 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	11.37196 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	5TH HIGHEST VALUE IS	10.85947 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	10.14034 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	9.68833 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	9.61370 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	9TH HIGHEST VALUE IS	8.73394 AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
	10TH HIGHEST VALUE IS	8.54553 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
STCK3	1ST HIGHEST VALUE IS	29.39239 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	2ND HIGHEST VALUE IS	24.54852 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	3RD HIGHEST VALUE IS	23.98121 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	4TH HIGHEST VALUE IS	21.18661 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	5TH HIGHEST VALUE IS	19.61179 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	6TH HIGHEST VALUE IS	18.83359 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	18.08738 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	8.43842 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	8.38836 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	6.65396 AT (246629.65, 4069894.59, 88.99, 88.99, 0.00)	DC	
STCK30	1ST HIGHEST VALUE IS	19.89901 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	2ND HIGHEST VALUE IS	15.14464 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
	3RD HIGHEST VALUE IS	12.99172 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	4TH HIGHEST VALUE IS	12.50999 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	11.32793 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	10.92182 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	7TH HIGHEST VALUE IS	10.76255 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	8TH HIGHEST VALUE IS	10.09775 AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	9.60575 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	10TH HIGHEST VALUE IS	9.09566 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
STCK4	1ST HIGHEST VALUE IS	24.92400 AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
	2ND HIGHEST VALUE IS	23.98999 AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
	3RD HIGHEST VALUE IS	20.02030 AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	18.74804 AT (246344.67, 4070073.06, 88.72, 88.72, 0.00)	DC	
	5TH HIGHEST VALUE IS	17.76958 AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
	6TH HIGHEST VALUE IS	15.79065 AT (246257.65, 4070096.12, 91.38, 91.38, 0.00)	DC	
	7TH HIGHEST VALUE IS	14.33410 AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
	8TH HIGHEST VALUE IS	11.09522 AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	9.78134 AT (246568.86, 4069976.75, 89.00, 89.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	9.00503 AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
STCK5	1ST HIGHEST VALUE IS	30.62017 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	2ND HIGHEST VALUE IS	25.79396 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	22.98129 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	4TH HIGHEST VALUE IS	18.85327 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	5TH HIGHEST VALUE IS	15.38631 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	6TH HIGHEST VALUE IS	15.27661 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	7TH HIGHEST VALUE IS	15.22831 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	
	8TH HIGHEST VALUE IS	14.59321 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	9TH HIGHEST VALUE IS	13.29777 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	10.25759 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
STCK6	1ST HIGHEST VALUE IS	23.07300 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	2ND HIGHEST VALUE IS	19.64564 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	16.63474 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	4TH HIGHEST VALUE IS	15.67078 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	5TH HIGHEST VALUE IS	15.06020 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	6TH HIGHEST VALUE IS	14.51576 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	7TH HIGHEST VALUE IS	13.86757 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	13.85452 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	9TH HIGHEST VALUE IS	13.30509 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	
	10TH HIGHEST VALUE IS	11.26255 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
STCK7	1ST HIGHEST VALUE IS	17.85991 AT	(246336.89,	4070099.47,	90.73,	90.73,	0.00)	DC	
	2ND HIGHEST VALUE IS	15.62229 AT	(246346.91,	4070078.52,	89.00,	89.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	15.18381 AT	(246568.86,	4070024.24,	90.47,	90.47,	0.00)	DC	
	4TH HIGHEST VALUE IS	13.68286 AT	(246344.67,	4070073.06,	88.72,	88.72,	0.00)	DC	
	5TH HIGHEST VALUE IS	12.95872 AT	(246568.86,	4069976.75,	89.00,	89.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	11.76876 AT	(246614.93,	4070070.31,	88.50,	88.50,	0.00)	DC	
	7TH HIGHEST VALUE IS	11.36576 AT	(246246.49,	4070096.12,	91.06,	91.06,	0.00)	DC	
	8TH HIGHEST VALUE IS	11.29420 AT	(246293.35,	4070103.06,	91.92,	91.92,	0.00)	DC	
	9TH HIGHEST VALUE IS	11.21758 AT	(246257.65,	4070096.12,	91.38,	91.38,	0.00)	DC	
	10TH HIGHEST VALUE IS	10.88823 AT	(246270.04,	4070096.62,	91.77,	91.77,	0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
DW2	HIGH 1ST HIGH VALUE IS	550.79894	ON 22122322:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
DW3CAR	HIGH 1ST HIGH VALUE IS	574.21288	ON 19010218:	AT (246179.09, 4070942.73, 87.12, 87.12, 0.00)	DC	
DW4CAR	HIGH 1ST HIGH VALUE IS	1338.00003	ON 21102817:	AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
DW5CAR	HIGH 1ST HIGH VALUE IS	1574.21232	ON 20101801:	AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
DW6	HIGH 1ST HIGH VALUE IS	573.55888	ON 22121607:	AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
DW6_CAR	HIGH 1ST HIGH VALUE IS	489.80327	ON 18012704:	AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
DW7	HIGH 1ST HIGH VALUE IS	935.17848	ON 22120208:	AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
DW7CAR	HIGH 1ST HIGH VALUE IS	648.28070	ON 18013108:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
HUGHES1	HIGH 1ST HIGH VALUE IS	414.22024	ON 20020422:	AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
HUGHES2	HIGH 1ST HIGH VALUE IS	1591.20927	ON 22120208:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
HUGHES3	HIGH 1ST HIGH VALUE IS	2984.86759	ON 20101801:	AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
MARKS1	HIGH 1ST HIGH VALUE IS	694.30970	ON 19010218:	AT (246179.09, 4070942.73, 87.12, 87.12, 0.00)	DC	
MARKS2	HIGH 1ST HIGH VALUE IS	396.23175	ON 19022108:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
NIELSEN	HIGH 1ST HIGH VALUE IS	820.44654	ON 18122702:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
NIELSEN2	HIGH 1ST HIGH VALUE IS	2397.25331	ON 19012217:	AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
STCK1	HIGH 1ST HIGH VALUE IS	442.76158	ON 18012622:	AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
STCK10	HIGH 1ST HIGH VALUE IS	1684.00370	ON 22040206:	AT (246270.04, 4070096.62, 91.77, 91.77, 0.00)	DC	
STCK11	HIGH 1ST HIGH VALUE IS	1206.59157	ON 20112824:	AT (246293.35, 4070103.06, 91.92, 91.92, 0.00)	DC	
STCK12	HIGH 1ST HIGH VALUE IS	1315.53530	ON 22040206:	AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	
STCK13	HIGH 1ST HIGH VALUE IS	505.02750	ON 21101602:	AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
STCK14	HIGH 1ST HIGH VALUE IS	438.23315	ON 22010505:	AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
STCK15	HIGH 1ST HIGH VALUE IS	573.06003	ON 18102721:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK16	HIGH 1ST HIGH VALUE IS	572.25219	ON 18102721:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK17	HIGH 1ST HIGH VALUE IS	518.93096	ON 22040206:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	

STCK18 HIGH 1ST HIGH VALUE IS 465.84241 ON 22100507: AT (246614.93, 4070070.31, 88.50, 88.50, 0.00) DC

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK19	HIGH 1ST HIGH VALUE IS 487.83349	ON 21112101:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK2	HIGH 1ST HIGH VALUE IS 498.69756	ON 21101602:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK20	HIGH 1ST HIGH VALUE IS 483.35842	ON 18122708:	AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
STCK21	HIGH 1ST HIGH VALUE IS 543.60370	ON 22102919:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK22	HIGH 1ST HIGH VALUE IS 623.18406	ON 18102721:	AT (246795.08, 4069935.05, 91.00, 91.00, 0.00)	DC	
STCK23	HIGH 1ST HIGH VALUE IS 601.59293	ON 22040206:	AT (246713.24, 4069883.19, 91.05, 91.05, 0.00)	DC	
STCK24	HIGH 1ST HIGH VALUE IS 616.58148	ON 22010506:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK25	HIGH 1ST HIGH VALUE IS 936.37483	ON 18012203:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK26	HIGH 1ST HIGH VALUE IS 942.77802	ON 22040206:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK27	HIGH 1ST HIGH VALUE IS 1172.30949	ON 18102721:	AT (246614.93, 4070070.31, 88.50, 88.50, 0.00)	DC	
STCK28	HIGH 1ST HIGH VALUE IS 806.64937	ON 22040206:	AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
STCK29	HIGH 1ST HIGH VALUE IS 685.42614	ON 21101602:	AT (246568.86, 4070024.24, 90.47, 90.47, 0.00)	DC	
STCK3	HIGH 1ST HIGH VALUE IS 742.46923	ON 18102721:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK30	HIGH 1ST HIGH VALUE IS 611.81141	ON 20092805:	AT (246346.91, 4070078.52, 89.00, 89.00, 0.00)	DC	
STCK4	HIGH 1ST HIGH VALUE IS 848.94602	ON 22040206:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK5	HIGH 1ST HIGH VALUE IS 904.67892	ON 18092204:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK6	HIGH 1ST HIGH VALUE IS 991.24651	ON 18112004:	AT (246246.49, 4070096.12, 91.06, 91.06, 0.00)	DC	
STCK7	HIGH 1ST HIGH VALUE IS 832.84715	ON 22040206:	AT (246336.89, 4070099.47, 90.73, 90.73, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 20 Warning Message(s)
A Total of 1361 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 750 Calm Hours Identified

A Total of 611 Missing Hours Identified (1.39 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	4699	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	4699	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
OU W565	4780	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4781	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4782	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4783	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4784	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4785	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4786	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4787	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4788	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4789	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4790	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4791	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4792	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4793	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4794	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	4795	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
MX W420	7582	METQA: Wind Speed Out-of-Range. KURDAT =	18111222
MX W420	7588	METQA: Wind Speed Out-of-Range. KURDAT =	18111304

****
*** AERMOD Finishes Successfully ***
****

HARP2 - HRACalc (dated 22118) 1/16/2025 10:18:10 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

HARP2 - HRACalc (dated 22118) 1/16/2025 10:15:46 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/16/2025 10:27:27 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year3_NCAcuteRiskSumByRec.csv
HRA ran successfully

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Sensitive_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/16/2025 9:06:18 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/16/2025 9:11:07 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 17
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/16/2025 9:13:33 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_Const\hra\Worker_Year3_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/18/2025 9:44:17 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS
Tier2 not used.

****

Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Resident_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 1/17/2025 10:04:55 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 40

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 40

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_CancerRisk.csv
Cancer risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_NCChronicRisk.csv
Chronic risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_NCAcuteRisk.csv
Acute risk total by receptor saved to:
D:\LSA\2025\20241963\HARP_OP\hra\Worker_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP Project Summary Report 1/17/2025 10:46:48 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARP
Project Output Directory: D:\LSA\2025\20241963\HARP_OP
HARP Database: NA

POLLUTANT HEALTH INFORMATION
Health Database: D:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH22013
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
75070	Acetaldehyde	0.01		470	140		300
107028	Acrolein			2.5	0.35		0.7
71432	Benzene	0.1		27	3		3
106990	1,3-Butadiene	0.6		660	2		9
100414	Ethyl Benzene	0.0087			2000		
50000	Formaldehyde	0.021		55	9		9
110543	Hexane				7000		
67561	Methanol			28000	4000		
78933	MEK			13000			
91203	Naphthalene	0.12			9		
115071	Propylene				3000		
100425	Styrene			21000	900		
108883	Toluene			5000	420		830
1330207	Xylenes			22000	700		
9901	DieselExhPM	1.1			5		

APPENDIX C

NOISE IMPACT ANALYSIS MEMORANDUM

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: March 11, 2025

TO: Paul Starn, Scannell Properties
Walker Williams, Scannell Properties

FROM: JT Stephens, Principal

SUBJECT: Noise Impact Analysis Memorandum for the 2740 West Nielsen Avenue Office/ Warehouse Addendum Project

LSA has prepared a technical noise impact analysis memorandum for the proposed 2740 West Nielsen Avenue Office/Warehouse Addendum Project (project) in Fresno, Fresno County, California. This technical noise impact analysis memorandum evaluates the potential noise and vibration impacts and noise reduction measures associated with the project. This analysis includes a description of the existing regulatory framework and an assessment of project-related construction and operational noise and vibration emissions. Measures to reduce or eliminate significant impacts are discussed.

PROJECT DESCRIPTION

The currently vacant 48.03-acre project site is located at 2740 West Nielsen (Assessor's Parcel Numbers 458-020-71 and 458-020-72) in the City of Fresno, in Fresno County, California. The project site is bounded to the north by vacant, undeveloped land, to the east by North Hughes Avenue, to the south by West Nielsen Avenue, and to the east by North Marks Avenue. The project location map is shown as Figure 1 (all figures are provided in Attachment A).

The proposed project includes a total of three office/warehouse buildings. Buildings 1 and 3 would remain the same as approved, and the only changes to Building 2 would be the reduction of loading dock doors from 46 dock doors to 17 dock doors. In lieu of Building 4, the proposed project would include an additional parking lot to be used by the tenant of Building 2, which would be approximately 4 acres in size and would consist of approximately 443 parking spaces. The project site plan is shown in Figure 2.

As identified above, future tenants have not been identified. Therefore, this analysis assumes that the proposed project would be operational 24 hours per day, 7 days per week; however, it is possible that future tenants may operate fewer hours than covered in this analysis.

The proposed project would include demolition of the existing asphalt on the project site, which would be collected and hauled off site for disposal. Construction of the proposed project is anticipated to occur in two phases occurring over a total 24-month period starting in the second quarter of 2025 and ending in 2027. The first phase would include the construction of Buildings 2 and 3 and would occur for 12 months. The second phase would include the construction of Building 1 and would occur for 12 months. The proposed project would not require any soil import or export.

Sensitive Receptors and Land Uses in the Project Vicinity

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to noise and vibration. Adjacent parcels consist mostly of residential, light and heavy industrial, cemetery, and vacant, undeveloped uses. The closest sensitive receptors to the proposed project include the single-family residences approximately 110 feet (ft) south of the project site across West Nielsen Avenue.

BACKGROUND

Characteristics of Sound

Noise is usually defined as unwanted sound and consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally related to annoyance, while loudness can affect our ability to hear through hearing damage. Pitch is the number of complete vibrations, or cycles per second, of a wave, resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves, combined with the reception characteristics of the human ear. Sound pressure refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be measured precisely with instruments. The project analysis defines the noise environment of the planning area in terms of sound pressure levels and the project's effect on sensitive land uses.

Measurement of Sound

Sound intensity is measured with the A-weighted decibel scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound, similar to the human ear's de-emphasis of these frequencies. Decibels, unlike linear units (e.g., inches or pounds), are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) is 10 times more intense than 1 dB, 20 dB is 100 times more intense than 1 dB, and 30 dB is 1,000 times more intense than 1 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the sound's loudness. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels generate from a source, and their decibel level decreases as the distance from that source increases. Sound levels dissipate exponentially with distance from their noise sources. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations) the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source sound levels decrease 4.5 dB for each doubling of distance in a relatively flat environment with absorptive vegetation.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noise occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the relaxation and sleeping hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City of Fresno uses the CNEL noise scale for long-term noise impact assessment.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

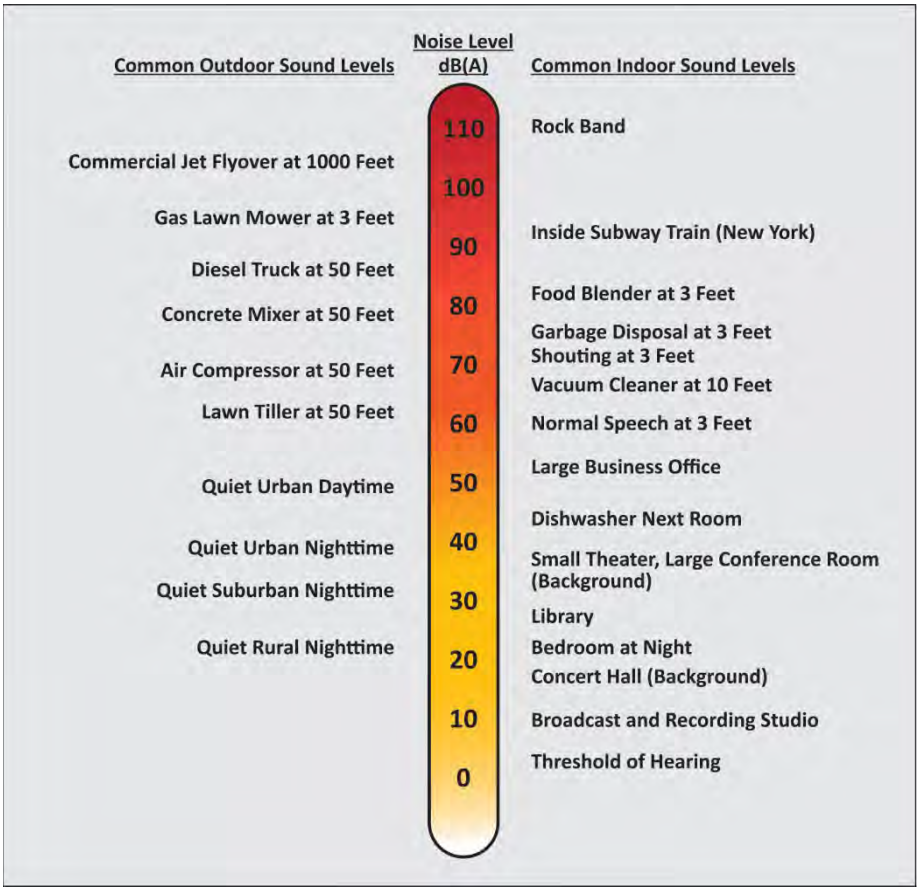
Term	Definitions
Decibel, dB	A unit of sound level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., the number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted unless reported otherwise.)
L_{01}, L_{10}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period, respectively.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time. It is usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurements and Noise Control* (Harris 1991).

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to sound levels higher than 85 dBA. Exposure to high sound levels affects the entire system, with prolonged sound exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of sound exposure above 90 dBA would result in permanent cell damage. When the sound level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of sound is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by a feeling of pain in the ear (i.e., the threshold of pain). A sound level of 160–165 dBA will result in dizziness or a loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less-developed areas.

Table B: Typical A-Weighted Sound Levels



Source: Compiled by LSA (2016).

Fundamentals of Vibration

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but without the effects associated with the shaking of a building there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile-driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 ft from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both construction of the project and the freight train operations could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise.

Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile-driving to cause vibration of sufficient amplitudes to damage nearby buildings. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where "L_v" is the vibration velocity in decibels (VdB), "V" is the RMS velocity amplitude, and "V_{ref}" is the reference velocity amplitude, or 1×10^{-6} inches/second (in/sec) used in the United States. Table C illustrates human response to various vibration levels, as described in the *Federal Transit Administration (FTA) Noise and Vibration Impact Assessment Manual* (FTA Manual) (2018).

Factors that influence ground-borne vibration and noise include:

- **Vibration Source:** Vehicle suspension, wheel types and condition, railroad track/roadway surface, railroad track support system, speed, transit structure, and depth of vibration source.
- **Vibration Path:** Soil type, rock layers, soil layering, depth to water table, and frost depth.
- **Vibration Receiver:** Foundation type, building construction, and acoustical absorption.

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of ground-borne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Table C: Human Response to Different Levels of Ground-Borne Noise and Vibration

Vibration Velocity Level	Noise Level		Human Response
	Low Frequency[1]	Mid Frequency[2]	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound is usually inaudible; mid-frequency sound is excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level unacceptable. Low-frequency noise is acceptable for sleeping areas; mid-frequency noise is annoying in most quiet occupied areas.
85 VdB	45 dBA	60 dBA	Vibration is acceptable only if there are an infrequent number of events per day. Low-frequency noise is unacceptable for sleeping areas; mid-frequency noise is unacceptable even for infrequent events with institutional land uses, such as schools and churches.

Source: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
[1] Approximate noise level when vibration spectrum peak is near 30 Hz.
[2] Approximate noise level when vibration spectrum peak is near 60 Hz.
dBA = A-weighted decibels
FTA = Federal Transit Administration
Hz = Hertz
VdB = vibration velocity decibels

Experience with ground-borne vibration indicates (1) vibration propagation is more efficient in stiff, clay soils than in loose, sandy soils; and (2) shallow rock seems to concentrate the vibration energy close to the surface and can result in ground-borne vibration problems at large distances from a railroad track. Factors such as layering of the soil and the depth to the water table can have significant effects on the propagation of ground-borne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

REGULATORY SETTING

Noise and vibration regulations are addressed through the efforts of various federal, State, and local government agencies. The agencies responsible for regulating noise are discussed below.

Federal Regulations

United States Environmental Protection Agency

In 1972, Congress enacted the United States Noise Control Act. This act authorized the United States Environmental Protection Agency (USEPA) to publish descriptive data on the effects of noise and establish levels of sound "requisite to protect the public welfare with an adequate margin of safety." These levels are separated into health (hearing loss levels) and welfare (annoyance levels). For protection against hearing loss, 96 percent of the population would be protected if sound levels are less than or equal to 70 dBA during a 24-hour period of time. At 55 dBA L_{dn}, 95 percent sentence clarity (intelligibility) may be expected at 11 ft, with no community reaction. However, 1 percent of the population may complain about noise at this level and 17 percent may indicate annoyance. The USEPA cautions that these identified levels are guidelines, not standards (USEPA 1974).

Federal Transit Administration

Vibration standards included in the FTA Manual are used in this analysis for ground-borne vibration impacts on human annoyance, as shown in Table C. The criteria presented in Table D account for the variations in project types, which differ widely among projects.

Table D: Interpretation of Vibration Criteria for Detailed Analysis

Land Use	Max L_v (VdB)[1]	Description of Use
Workshop	90	Vibration that is distinctly felt. Appropriate for workshops and similar areas not as sensitive to vibration.
Office	84	Vibration that can be felt. Appropriate for offices and similar areas not as sensitive to vibration.
Residential Day	78	Vibration that is barely felt. Adequate for computer equipment and low-power optical microscopes (up to 20×).
Residential Night and Operating Rooms	72	Vibration is not felt, but ground-borne noise may be audible inside quiet rooms. Suitable for medium-power microscopes (100×) and other equipment of low sensitivity.

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] As measured in 1/3-Octave bands of frequency over the frequency range 8 to 80 Hertz.
FTA = Federal Transit Administration
LV = velocity in decibels
Max = maximum
VdB = vibration velocity decibels

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. Table E lists the potential vibration building damage criteria associated with construction activities, as suggested in the FTA Manual.

Table E: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate L_V (VdB)[1]
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) re 1 µin/sec.
µin/sec = microinches per second
FTA = Federal Transit Administration
in/sec = inch/inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

FTA Manual guidelines show that for potential annoyance thresholds, a level of up to 78 VdB is acceptable during the daytime hours at residential uses while a level of 87 VdB is appropriate for office uses, and a level of 90 VdB is appropriate for workshop uses. To assess damage potential, a vibration level of up to 102 VdB (equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster) and would not result in any construction vibration

damage. For a non-engineered timber and masonry building, the construction building vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

State Regulations

The State of California has established regulations that help prevent adverse impacts to occupants of buildings near noise sources. Referred to as the *State Noise Insulation Standard*, it requires buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A.

The State has also established land use compatibility guidelines for determining acceptable noise levels for specified land uses.

Local Regulations

The following is a summary of the applicable policies included in the City's General Plan and Municipal Code that are related to noise and applicable to the proposed project.

City of Fresno General Plan

The City's General Plan (2014) includes a set of policies (detailed below) and programs that form a blueprint for the physical development of the City. The following policies related to noise and applicable to the proposed project are presented in the Noise Element of the General Plan. In addition, the Noise Element sets noise standards for transportation and stationary noise sources as shown in Table F and Table G, below.

Table F: Transportation (Non-Aircraft) Noise Sources

Noise-Sensitive Land Use[1]	Outdoor Activity Areas[2]	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq} dB[2]
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

Source: City of Fresno General Plan (City of Fresno 2014).

[1] 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.

[2] As determined for a typical worst-case hour during periods of use.

CNEL = Community Noise Equivalent Level

dB = decibels

L_{dn} = day-night average noise level

Table G: Stationary Noise Sources

	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly Equivalent Sound Level (L_{eq}), dBA	50	45
Maximum Sound Level (L_{max}), dBA	70	60

Source: City of Fresno General Plan (City of Fresno 2014).

[1] The Planning and Development Director, on a case-by-case basis, may designate land uses other than those shown in this table to be noise-sensitive, and may require appropriate noise mitigation measures.

[2] As determined at outdoor activity areas. Where the location of outdoor activity areas is unknown or not applicable, the noise exposure standard shall be applied at the property line of the receiving land use. When ambient noise levels exceed or equal the levels in this table, mitigation shall only be required to limit noise to the ambient plus five dB.

dB = decibels

dBA = A-weighted decibels

- **Policy NS-1-b: Conditionally Acceptable Exterior Noise Exposure Range.** Establish the conditionally acceptable noise exposure level range for residential and other noise sensitive uses to be 65 dB L_{dn} or require appropriate noise reducing mitigation measures as determined by a site-specific acoustical analysis to comply with the desirable and conditionally acceptable exterior noise level and the required interior noise level standards set in Table F.

- **Policy NS-1-c: Generally Unacceptable Exterior Noise Exposure Range.** Establish the exterior noise exposure of greater than 65 dB L_{dn} or CNEL to be generally unacceptable for residential and other noise sensitive uses for noise generated by sources in Policy NS-1-a, and study alternative less noise-sensitive uses for these areas if otherwise appropriate. Require appropriate noise reducing mitigation measures as determined by a site-specific acoustical analysis to comply with the generally desirable or generally acceptable exterior noise level and the required 45 dB interior noise level standards set in Table F as conditions of permit approval.

- **Policy NS-1-g:** Noise mitigation measures which help achieve the noise level targets of this plan include, but are not limited to, the following:

    - Façades with substantial weight and insulation;
    - Installation of sound-rated windows for primary sleeping and activity areas;
    - Installation of sound-rated doors for all exterior entries at primary sleeping and activity areas;
    - Greater building setbacks and exterior barriers;
    - Acoustic baffling of vents for chimneys, attic and gable ends; and
    - Installation of mechanical ventilation systems that provide fresh air under closed window conditions.

The aforementioned measures are not exhaustive and alternative designs may be approved by the City, provided that a qualified Acoustical Consultant submits information demonstrating that the alternative design(s) will achieve and maintain the specific targets for outdoor activity areas and interior spaces.

- **Policy NS-1-i: Mitigation by New Development.** Require an acoustical analysis where new development of industrial, commercial, or other noise generating land uses (including transportation facilities such as roadways, railroads, and airports) may result in noise levels that exceed the noise level exposure criteria established by Tables F and G to determine impacts, and require developers to mitigate these impacts in conformance with Tables F and G as a condition of permit approval through appropriate means. Noise mitigation measures may include:

    - The screening of noise sources such as parking and loading facilities, outdoor activities, and mechanical equipment;
    - Providing increased setbacks for noise sources from adjacent dwellings;
    - Installation of walls and landscaping that serve as noise buffers;
    - Installation of soundproofing materials and double-glazed windows; and
    - Regulating operations, such as hours of operation, including deliveries and trash pickup.

  Alternative acoustical designs that achieve the prescribed noise level reduction may be approved by the City, provided a qualified Acoustical Consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces. As a last resort, developers may propose to construct noise walls along roadways when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility, with no City funding.

- **Policy NS-1-j: Significance Threshold.** Establish, as a threshold of significance for the City's environmental review process, that a significant increase in ambient noise levels is assumed if the project would increase noise levels in the immediate vicinity by 3 dB L_{dn} or CNEL or more above the ambient noise limits established in this General Plan Update.

- **Policy NS-1-m: Transportation Related Noise Impacts.** For projects subject to City approval, require that the project sponsor mitigate noise created by new transportation and transportation-related stationary noise sources, including roadway improvement projects, so that resulting noise levels do not exceed the City’s adopted standards for noise-sensitive land uses.

- **Policy NS-1-o: Sound Wall Guidelines.** Acoustical studies and noise mitigation measures for projects shall specify the heights, materials, and design for sound walls and other noise barriers. Aesthetic considerations shall also be addressed in these studies and mitigation measures such as variable noise barrier heights, a combination of a landscaped berm with wall, and reduced barrier height in combination with increased distance or elevation differences between noise source and noise receptor, with a maximum allowable height of 15 ft. The City will develop guidelines for aesthetic

design measures of sound walls and may commission area wide noise mitigation studies that can serve as templates for acoustical treatment that can be applied to similar situations in the urban area.

City of Fresno Municipal Code

Chapter 10, Article 1 (Noise Regulations), of the Fresno Municipal Code (2022) establishes excessive noise guidelines and exemptions. The following portions of the Municipal Code are applicable to the proposed project.

SEC. 10-102. Definitions. (b) Ambient Noise. "Ambient noise" is the all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. For the purpose of this ordinance, ambient noise level is the level obtained when the noise level is averaged over a period of 15 minutes, without inclusion of the offending noise, at the location and time of day at which a comparison with the offending noise is to be made. Where the ambient noise level is less than that designated in this section, however, the noise level specified in Table H shall be deemed to be the ambient noise level for that location.

Table H: Ambient Noise Levels

District	Time	Sound Level Decibels
Residential	10:00 p.m. to 7:00 a.m.	50
Residential	7:00 p.m. to 10:00 p.m.	55
Residential	7:00 a.m. to 7:00 p.m.	60
Commercial	10:00 p.m. to 7:00 a.m.	60
Commercial	7:00 a.m. to 10:00 p.m.	65
Industrial	anytime	70

Source: City of Fresno Municipal Code, Chapter 10, Article 1 (Noise Regulations) (City of Fresno 2022).

SEC. 10-105. Excessive Noise Prohibited. No person shall make, cause, or suffer or permit to be made or caused upon any premises or upon any public street, alley, or place within the city, any sound or noise which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing or working in the area, unless such noise or sound is specifically authorized by or in accordance with this article. The provisions of this section shall apply to, but shall be limited to, the control, use, and operation of the following noise sources:

(a) Radios, musical instruments, phonographs, television sets, or other machines or devices used for the amplification, production, or reproduction of sound or the human voice.

(b) Animals or fowl creating, generating, or emitting any cry or behavioral sound.

(c) Machinery or equipment, such as fans, pumps, air conditioning units, engines, turbines, compressors, generators, motors or similar devices, equipment, or apparatus.

(d) Construction equipment or work, including the operation, use or employment of pile drivers, hammers, saws, drills, derricks, hoists, or similar construction equipment or tools.

SEC. 10-109. Exceptions. The provisions of this article shall not apply to:

(a) Construction, repair or remodeling work accomplished pursuant to a building, electrical, plumbing, mechanical, or other construction permit issued by the city or other governmental agency, or to site preparation and grading, provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m. on any day except Sunday.

(b) Emergency work.

(c) Any act or acts which are prohibited by any law of the State of California or the United States.

OVERVIEW OF THE EXISTING NOISE ENVIRONMENT

This section describes the existing noise environment in the project site vicinity. Noise monitoring and traffic noise modeling were used to quantify existing and future noise levels at the project site.

In Fresno, vehicle traffic is the primary source of noise. Other significant local noise sources include airport noise, railroad operations, and stationary source noise.

Existing Noise Level Measurements

To assess existing noise levels, LSA conducted two long-term and four short-term noise measurements at the proposed project site. The long-term noise measurements were recorded from September 28 through September 29, 2022. The long-term noise measurements captured data to calculate the hourly L_{eq} and CNEL at each location, which incorporate the nighttime hours. Sources that dominate the existing noise environment include traffic on West Nielsen Avenue and Hughes Avenue, as well as railway activities and nearby aircraft operations. Noise measurement data collected during long-term noise monitoring are summarized in Table I and shown in Figure 3. Noise measurement sheets are provided in Attachment B.

Existing Traffic Noise

The guidelines included in the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values.

Traffic volumes were obtained from the *Traffic Impact Study* (LSA 2024). A specific breakdown of the vehicle percentages based on type and time of day is provided in Attachment C. Table J provides the existing traffic noise levels in the project vicinity. These traffic noise levels are representative of a worst-case scenario that assumes a flat terrain and no shielding between the traffic and the noise contours.

Table I: Long-Term Noise Level Measurements

Location	Daytime Hours Noise Levels[1] (dBA L_{eq})	Evening Hours Noise Levels[2] (dBA L_{eq})	Nighttime Hours Noise Levels[3] (dBA L_{eq})	Average Daily Noise Level (dBA CNEL)	Average Noise Level 7 a.m. to 10 p.m. (dBA L_{eq})	Average Noise Level 10 p.m. to 7 a.m. (dBA L_{eq})
LT-1: West of 2625 W Nielsen Avenue. On a tree, approximately 40 ft away from W Nielsen centerline	61.0-68.3	56.2-61.4	52.0-66.2	67.6	62.3	59.1
LT-2: North of site, near rail tracks, approximately 30 ft from track closest to site.	46.6-66.6	55.8-65.3	50.2-56.4	62.0	56.7	53.3
ST-1[4]: Between second and third tree north of cemetery entrance. Approximately 35 ft from N Hughes Avenue centerline	58.8-66.1	54.0-59.2	49.8-64.0	65.4	60.1	56.9
ST-2[4]: North of Belmont Avenue. Approximately 40 ft away from centerline. By 2560 Belmont Avenue entrance (AAA Welding).	61.6-68.9	56.8-62.0	52.6-66.8	68.2	62.9	59.7
ST-3[4]: West of N Marks Avenue, south of overpass entrance, by power pole. Approximately 50 ft away from Marks Avenue centerline	62.8-70.1	58.0-63.2	53.8-68.0	69.4	64.1	60.9
ST-4[4]: South of Nielsen Avenue, approximately 40 ft away from centerline. East of 2307 W Nielsen Avenue entrance.	61.5-68.8	56.7-61.9	52.5-66.7	68.1	62.8	59.6

Source: Compiled by LSA (October 2022).

[1] Daytime Noise Levels = noise levels during the hours of 7:00 a.m. to 7:00 p.m.

[2] Evening Noise Levels = noise levels during the hours of 7:00 p.m. to 10:00 p.m.

[3] Nighttime Noise Levels = noise levels during the hours of 10:00 p.m. to 7:00 a.m.

[4] Hourly and daily noise levels at short-term noise monitoring locations were estimated by the noise profile of nearby long-term measurements

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet

L_{eq} = equivalent continuous sound level

Table J: Existing Traffic Noise Levels Without Project

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Marks Avenue between Belmont Avenue and Nielsen Avenue	8,472	115	343	1,078	71.3
Marks Avenue between Nielsen Avenue and Ray Johnson Drive	9,006	121	364	1,145	71.5
Marks Avenue between Ray Johnson Drive and SR-180 Westbound Ramps	9,267	124	375	1,178	71.6
Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	9,320	125	377	1,185	71.7
Belmont Avenue between Marks Avenue and Hughes Avenue	4,846	< 50	159	497	68.5
Nielsen Avenue between Marks Avenue and Hughes Avenue	1,520	< 50	< 50	160	63.0
Hughes Avenue between Nielsen Avenue and Belmont Avenue	3,029	< 50	103	312	66.2

Source: Compiled by LSA (January 2025).
Notes: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet
SR- = State Route

Airport Operations

There are currently three airports within the City of Fresno: Fresno Yosemite International Airport, Fresno-Chandler Executive Airport, and Sierra Sky Park Airport. Commercial jet aircraft operations are limited to Fresno Yosemite International Airport. The Air National Guard is also stationed at Fresno Yosemite International Airport and operates military jets and other aircraft. Private and commercial operations with smaller aircraft use Fresno Chandler Downtown Airport, while only small private aircraft use Sierra Sky Park Airport.

The nearest airports to the project site include Fresno Chandler Executive Airport, located 0.8 mile from the project site, the Sierra Sky Airport, 6.7 miles from the project site, and Fresno International Airport, 7.1 miles from the project site. Each of these airports has an Airport Land Use Compatibility Plan (ALUCP) that guides approximate compatible land uses. The City of Fresno General Plan, other City land use plans, and all City land use decisions must be compatible with the adopted ALUCP.

Each ALUCP includes CNEL noise contours based on projected airport and aircraft operations. The project site is not within an ALUCP.

Railroad Operations

The two major rail lines that traverse the city are the Union Pacific Railroad line, which generally runs along State Route (SR-) 99, and the BNSF Railway, which diverges from SR-99 in the southwest and travels through downtown (behind City Hall) to the northwest. The Union Pacific line is generally within a heavy commercial and industrial corridor, although residential uses occur in the vicinity of the line north of Shaw Avenue. The Union Pacific railway line limits its use to only freight traffic. South of downtown, BNSF Railway is bounded by industrial uses, while north of downtown, the railway line runs through a residential area. The BNSF Railway carries both freight and passenger traffic (Amtrak).

The closest railway line to the project site is 315 ft north of the project site.

Stationary Noise Sources

Stationary noise sources can also have an effect on the population, and unlike mobile, transportation-related noise sources, these sources generally have a more permanent and consistent impact on people. These stationary noise sources involve a wide spectrum of uses and activities, including various industrial uses, commercial operations, agricultural production, school playgrounds, high school football games, on-site heating, ventilation, and air conditioning (HVAC) units, generators, lawn maintenance equipment, and swimming pool pumps.

Even with incorporation of the best available noise control technology, noise emanating from industrial uses can be substantial and exceed local noise standards. These noise sources can be continuous and may contain tonal components that may be annoying to nearby receptors. Although industrial uses in Fresno are typically in industrial districts near freeways and commercial uses and away from residences and other sensitive noise receptors, noise sources associated with commercial uses such as automotive repair facilities, recycling centers, and loading docks may occur in the vicinity of residential uses.

IMPACT ANALYSIS

Short-Term Construction Noise Impacts

Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from 1 day to several days, depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment,

similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table K lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor, taken from the Federal Highway Administration (FHWA) *Roadway Construction Noise Model User's Guide* (FHWA 2006).

Table K: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (Federal Highway Administration 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table K, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 ft.

In addition to the reference maximum noise level, the usage factor provided in Table K is used to calculate the hourly noise level impact for each piece of equipment based on the following equation:

$$L_{eq}(equip) = E.L. + 10\log(U.F.) - 20\log\left(\frac{D}{50}\right)$$

where: $L_{eq}(equip)$ = L_{eq} at a receiver resulting from the operation of a single piece of equipment over a specified time period

E.L. = noise emission level of the particular piece of equipment at a reference distance of 50 ft

U.F. = usage factor that accounts for the fraction of time that the equipment is in use over the specified period of time

D = distance from the receiver to the piece of equipment

Each piece of construction equipment operates as an individual point source. Using the following equation, a composite noise level can be calculated when multiple sources of noise operate simultaneously:

Using the equations from the methodology above, the reference information in Table K, and the construction equipment list provided, the composite noise level of the two loudest pieces of equipment for each construction phase was calculated. The project construction composite noise levels at a distance of 50 ft for would range from 74 dBA L_{eq} to 88 dBA L_{eq}, with the highest noise levels occurring during the site preparation and grading phases.

Once composite noise levels are calculated, reference noise levels can then be adjusted for distance using the following equation:

$$Leq\ (at\ distance\ X) = Leq\ (at\ 50\ feet) - 20 * \log_{10}\left(\frac{X}{50}\right)$$

In general, this equation shows that doubling the distance would decrease noise levels by 6 dBA, while halving the distance would increase noise levels by 6 dBA.

To determine the applicable distance, the acoustical average distance is utilized. The acoustical average distance is used to represent noise sources that are mobile or distributed over an area. The average acoustical distance is calculated by multiplying the shortest distance between the receiver and the noise source area by the farthest distance, and then taking the square root of the product.

While construction noise will vary, it is expected that composite noise levels during construction at the nearest off-site sensitive residential use to the south would reach an average noise level of 64 dBA L_{eq} during daytime hours. While construction-related, short-term noise levels have the potential to be higher than quieter daytime ambient noise levels in the project area under existing conditions, the construction noise impacts would be approximately 1.7 dBA greater than the existing average daytime noise level of 64.7 dBA L_{eq} during the allowable hour of construction. When logarithmically combined with the existing average ambient noise level, the total noise level would be 66.2 dBA L_{eq} resulting in an increase of 3.9 dBA L_{eq}. Because the increase would be less than 5 dBA, construction noise would be considered less than significant.

Consistent with the applicable noise provisions of the Fresno Municipal Code, construction work would only take place between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday. No construction work would take place on Sundays.

Nevertheless, to ensure that the project's potential construction-related noise impacts are less than significant, Mitigation Measure NOI-1 requires the project to equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards, which would reduce the potential impacts associated with construction equipment. Additionally, Mitigation Measure NOI-1 requires the project to designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem. These measures would ensure that the project's potential construction-related noise impacts are mitigated to less than significant levels.

Mitigation Measure NOI-1 The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Designate a "disturbance coordinator" at the City of Fresno who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

With implementation of Mitigation Measure NOI-1, the proposed project would result in a less than significant impact associated with the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, State, or federal standards.

Short-Term Construction Vibration Impacts

This construction vibration impact analysis assesses the potential for building damages using vibration levels in PPV (in/sec). This is because vibration levels calculated in RMS are best for characterizing human response to building vibration, while vibration level in PPV is best for characterizing potential for damage.

Table L shows the PPV and VdB values at 25 ft from the construction vibration source. As shown in Table L, bulldozers and other heavy-tracked construction equipment (expected to be used for this project) generate 0.089 PPV in/sec or 87 VdB of ground-borne vibration when measured at 25 ft, based on the FTA Manual. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Table L: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks[2]	**0.076**	**86**
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment Manual (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
[2] Equipment shown in **bold** is expected to be used on site.
µin/sec = microinches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inch/inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

The formulae for vibration transmission are provided below, and Table M, provides a summary of off-site construction vibration levels.

$$L_vdB\ (D) = L_vdB\ (25\ ft) - 30\ Log\ (D/25)$$

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

Table M: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (PPV) at 25 ft[1]	Distance (ft)[2]	Vibration Level (PPV)
Residential Uses (South)	0.089	110	0.010
Industrial Uses (North)		30	0.068
Industrial Uses / Cemetery (East)		120	0.009
Industrial Uses (West)		300	0.002

Source: Compiled by LSA (2022).
[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The reference distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.
ft = foot/feet
in/sec = inch/inches per second
PPV = peak particle velocity

Based on the information provided in Table M, vibration levels are expected to approach 0.068 PPV in/sec at the surrounding structures and would be below the 0.2 PPV in/sec damage threshold.

Based on the information provided in Table N, vibration levels are expected to approach 85 VdB at the closest industrial uses north of the project site and 68 VdB at the closest residential use to the south, which are below the 90 VdB and 78 VdB annoyance thresholds for workshop or industrial types uses and for daytime residential uses, respectively.

Table N: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (VdB) at 25 ft[1]	Distance (ft) [2]	Vibration Level (VdB)
Residential Uses (South)	87	110	68
Industrial Uses (North)		30	85
Industrial Uses / Cemetery (East)		120	67
Industrial Uses (West)		300	55

Source: Compiled by LSA (2022).

[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.

[2] The reference distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses.

ft = foot/feet

VdB = vibration velocity decibels

Because construction activities are regulated by the City's Code of Ordinance that states temporary construction, maintenance, or demolition activities are not allowed between the hours of 7:00 p.m. on one day and 7:00 a.m. of the following day, vibration impacts would not occur during the more sensitive nighttime hours.

Other building structures surrounding the project site are farther away and would experience further reduced vibration. Therefore, no construction vibration impacts would occur. No vibration reduction measures are required.

Long Term Noise Impacts

Traffic Noise Impacts to Off-Site Receivers

The guidelines included in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) were used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. Table O provides the traffic noise levels for the existing with and without project, and opening year with and without project scenarios. These noise levels represent the worst-case scenario, which assumes no shielding is provided between the traffic and the location where the noise contours are drawn.

The without and with project scenario traffic volumes were obtained from the *Traffic Impact Study* (LSA 2024).

Table O: Traffic Noise Levels Without and With Proposed Project

Roadway Segment	Existing		Existing With Project			Near Term		Near Term with Project			Cumulative Year 2046		Cumulative Year 2046 With Project		
	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	Increase from Existing Conditions	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	Increase from Near-Term Conditions	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	ADT	CNEL (dBA) 50 ft from Centerline of Nearest Lane	Increase from Year 2035 Conditions
Marks Avenue between Belmont Avenue and Nielsen Avenue	8,472	71.3	8,746	71.4	0.1	8,626	71.3	8,900	71.5	0.2	8,892	71.5	9,166	71.6	0.1
Marks Avenue between Nielsen Avenue and Ray Johnson Drive	9,006	71.5	10,438	72.2	0.7	9,158	71.6	10,590	72.2	0.6	9,389	71.7	10,821	72.3	0.6
Marks Avenue between Ray Johnson Drive and SR-180 Westbound Ramps	9,267	71.6	10,700	72.3	0.7	9,419	71.7	10,852	72.3	0.6	9,626	71.8	11,059	72.4	0.6
Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	9,320	71.7	10,087	72.0	0.3	9,612	71.8	10,379	72.1	0.3	10,532	72.2	11,299	72.5	0.3
Belmont Avenue between Marks Avenue and Hughes Avenue	4,846	68.5	4,846	68.5	0.0	5,400	68.9	5,400	68.9	0.0	5,455	69.0	5,455	69.0	0.0
Nielsen Avenue between Marks Avenue and Hughes Avenue	1,520	63.0	2,922	65.9	2.9	1,520	63.0	2,922	65.9	2.9	1,596	63.2	2,998	66.0	2.8
Hughes Avenue between Nielsen Avenue and Belmont Avenue	3,029	66.2	3,995	67.4	1.2	3,083	66.3	4,049	67.5	1.2	3,744	67.1	4,710	68.1	1.0

Source: Compiled by LSA (January 2025).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
Shaded cells indicate roadway segments adjacent to the project site.
ADT = average daily traffic
CNEL= Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet
SR = State Route

Table O shows that the increase in project-related traffic noise would be no greater than 2.9 dBA. Noise level increases less than 3.0 dBA are not considered perceptible to most people in an outdoor environment. Because this is also consistent with General Plan Policy NS-1-j: Significance Threshold, which states that an increase of 3 dBA CNEL or more is considered significant, traffic noise impacts from project-related traffic on off-site sensitive receptors would be less than significant, and no mitigation measures are required.

Stationary Operational Noise Impacts to Off-Site Receivers

Noise impacts associated with the long-term operation of the project must comply with the noise standards specified in the City's General Plan and the Municipal Code, as described above. Adjacent off-site land uses would be potentially exposed to stationary-source noise impacts from the proposed HVAC equipment, truck deliveries, and loading and unloading activities. The potential noise impacts to off-site sensitive land uses from the proposed operations are discussed below. To provide a conservative analysis, it is assumed that operations would occur equally during all hours of the day and that half the 157 loading docks would be active at all times. Additionally, the analysis assumed that within any given hour, 48 heavy trucks would maneuver to park near or back into one of the proposed trailer parking stalls. HVAC equipment is expected to run continuously for the duration of a 24-hour period. To determine the future noise impacts from project operations to the noise sensitive uses, the 3-D noise model, SoundPLAN, was used for the evaluation. The model incorporates the site topography as well as the shielding from the proposed buildings on site. The model output, which includes a graphic representation of the operational noise impacts is presented in Attachment D. Results from the model analysis for each of the anticipated stationary sources are summarized below.

Heating, Ventilation, and Air Conditioning Equipment. It is estimated that the project would have four rooftop HVAC units on each of the proposed buildings to provide ventilation to the proposed office and warehouse spaces. The analysis assumes that the HVAC equipment would operate 24 hours per day and would generate sound power levels (SPL) of up to 87 dBA SPL or 72 dBA L_{eq} at 5 ft, based on manufacturer data (Trane).

Truck Deliveries and Truck Loading and Unloading Activities. Noise levels generated by delivery trucks would be similar to noise readings from truck loading and unloading activities, which generate a noise level of 75 dBA L_{eq} at 20 ft based on measurements taken by LSA (*Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center* [LSA 2016]). Delivery trucks would arrive on site and maneuver their trailers so that trailers would be parked within the loading docks. During this process, noise would be associated with the truck engine, air brakes, and back-up alarms while the truck is backing into the dock. These noise sources would occur for a short period of time (less than 5 minutes). After a truck enters the loading dock, the doors would be closed, and the remainder of the truck loading activities would be enclosed and therefore much less perceptible. To present a conservative assessment, the model analysis assumes that unloading activities would occur at half of the 157 docks simultaneously for a period of more than 30 minutes in a given hour. Maximum noise levels that occur during the docking process were measured to be 86 dBA L_{max} at a distance of 20 ft.

Tables P shows the combined hourly noise levels generated by the proposed project at the closest off-site land uses. The project-related hourly noise level impacts would be 57.2 dBA L_{eq} at the outdoor activity area of the residence south of Building 1. When propagated to the outdoor activity area of the residential property south of Building 1, the average daytime noise level is 56.8 dBA L_{eq} and the average nighttime noise level is 53.6 dBA L_{eq}. As specified in the City's Noise Element, if existing ambient noise levels exceed the City's noise standards, a project impact would occur when project-related noise levels cause a 5 dBA or more increase. When compared to existing noise levels, project operations would not create an impact during daytime hours but would generate an increase of greater than 5 dBA during nighttime hours, resulting in a potentially significant impact. Mitigation would be required.

Table P: Hourly Exterior Noise Level Impacts

Receptor	Direction	Existing Daytime Noise Level (dBA L_{eq})	Existing Nighttime Noise Level (dBA L_{eq})	Project Noise Level (dBA L_{eq})	Daytime Noise Level Increase (dBA L_{eq})	Nighttime Noise Level Increase (dBA L_{eq})	Potential Operational Noise Impact? (Daytime / Nighttime)[1]
Residential	South	56.8	53.6	57.7	3.5	5.5	No / Yes

Source: Compiled by LSA (2025).

[1] Because ambient noise levels exceed the City of Fresno's stationary noise criteria, a potential operational noise impact would occur if operational noise would increase ambient noise by 5 dBA or more.

dBA = A-weighted decibels

L_{eq} = equivalent noise level

Table Q shows the modeled maximum exterior noise levels. The maximum noise levels generated would approach 66.5 dBA L_{max} at the surrounding sensitive receptors. This noise level would be below the City's exterior maximum daytime noise standard of 70 dBA L_{max} but would exceed the 60 dBA L_{max} for nighttime hours. Similar to the hourly noise impacts, project operations would not generate a significant impact related to maximum noise levels during daytime hours but would generate a significant impact during nighttime hours. Mitigation would be required.

Table Q: Maximum Exterior Noise Level Impacts

Receptor	Direction	Project Maximum Noise Level (dBA L_{max})	Daytime Maximum Noise Level Standard (dBA L_{max})	Nighttime Maximum Noise Level Standard (dBA L_{max})	Potential Operational Noise Impact? (Daytime / Nighttime)[1]
Residential	South	66.5	70	60	No / Yes

Source: Compiled by LSA (2025).

dBA = A-weighted decibels

L_{max} = maximum noise level

Implementation of Mitigation Measure NOI-2 would reduce potential impacts related to loading dock and delivery noise by prohibiting loading dock activities at the loading dock doors and trailer parking activities south of Building 1 during nighttime hours. Loading dock and parking activities at all other locations would be shielded by the proposed buildings and would not exceed the City's nighttime noise standards.

Mitigation Measure NOI-2 All loading dock activities shall be prohibited at the loading dock doors on the south end of Building 1 during the nighttime hours (10:00 p.m. to 7:00 a.m.) or once operational, the project proponent shall provide documentation to the City of Fresno Planning and Development Department that demonstrates that nighttime loading dock activities would comply with the noise level specifications of the City's Municipal Code.

With implementation of Mitigation Measure NOI-2, the proposed project would result in a less than significant impact associated with the generation of a substantial permanent increase in ambient stationary source noise levels in the vicinity of the project in excess of standards established in the local General Plan or Noise Ordinance, or in other applicable local, State, or federal standards.

Long-Term Vibration Impacts

Once operational, the proposed project would not generate vibration levels related to on-site operations. In addition, vibration levels generated from project-related traffic on the adjacent roadways are unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. Vibration levels generated from project-related traffic on the adjacent roadways would be less than significant, and no mitigation measures are required.

CONCLUSION

Project-related impacts associated with short-term construction vibration, long-term off-site traffic increases, and long-term vibration impacts would be less than significant. The following presents a summary of the potentially significant impacts and associated mitigation measures for short-term construction and long-term operational noise impacts.

Short-term Construction Noise Impacts

As stated above, the closest off-site sensitive receptors may be subject to short-term construction noise reaching 81 dBA L_{max} during construction. However, construction equipment would operate at various locations within the 48.03-acre project site and would only generate maximum noise levels when operations take place closest to the receptor. Nevertheless, to ensure that the project's potential construction-related noise impacts are less than significant, Mitigation Measure NOI-1 requires the project to equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards, which would reduce the potential impacts associated with construction equipment. Additionally, Mitigation Measure NOI-1 requires the project to designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem. These measures would ensure that the project's potential construction-related noise impacts are mitigated to less than significant levels.

Mitigation Measure NOI-1 The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Designate a "disturbance coordinator" at the City who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

With implementation of Mitigation Measure NOI-1, the proposed project would result in a less than significant impact associated with the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local General Plan or Noise Ordinance, or in other applicable local, State, or federal standards.

Long-term Operational Noise Impacts

Noise impacts associated with the long-term operation of the project must comply with the noise standards specified in the City's General Plan and Municipal Code, as described above.

As specified in the City's Noise Element, if existing ambient noise levels exceed the City's noise standards, a project impact would occur when project-related noise levels cause a 5 dBA or more increase. When compared to existing hourly noise levels, project operations would not create an impact during daytime hours, but would generate an increase of greater than 5 dBA during nighttime hours, resulting in a significant impact. Similar to the hourly noise impacts, project operations would not generate a significant maximum noise level impact during daytime hours but would generate a significant impact during nighttime hours.

Implementation of Mitigation Measure NOI-2 would reduce potential impacts related to loading dock and delivery noise by prohibiting loading dock activities at the loading dock doors and trailer parking activities south of Building 1 during the nighttime hours. Loading dock and parking activities at all other locations would be shielded by the proposed buildings and would not exceed the City's nighttime noise standards.

Mitigation Measure NOI-2 All loading dock activities shall be prohibited at the loading dock doors on the south end of Building 1 during the nighttime hours (10:00 p.m. to 7:00 a.m.) or once operational, the project proponent would provide documentation to the City of Fresno Planning and Development Department that demonstrates that nighttime loading dock activities would comply with the noise level specifications of the City's Municipal Code.

With implementation of Mitigation Measure NOI-2, the proposed project would result in a less than significant impact associated with the generation of a substantial permanent increase in ambient stationary source noise levels in the vicinity of the project in excess of standards established in the local General Plan or Noise Ordinance, or in other applicable local, State, or federal standards.

REFERENCES

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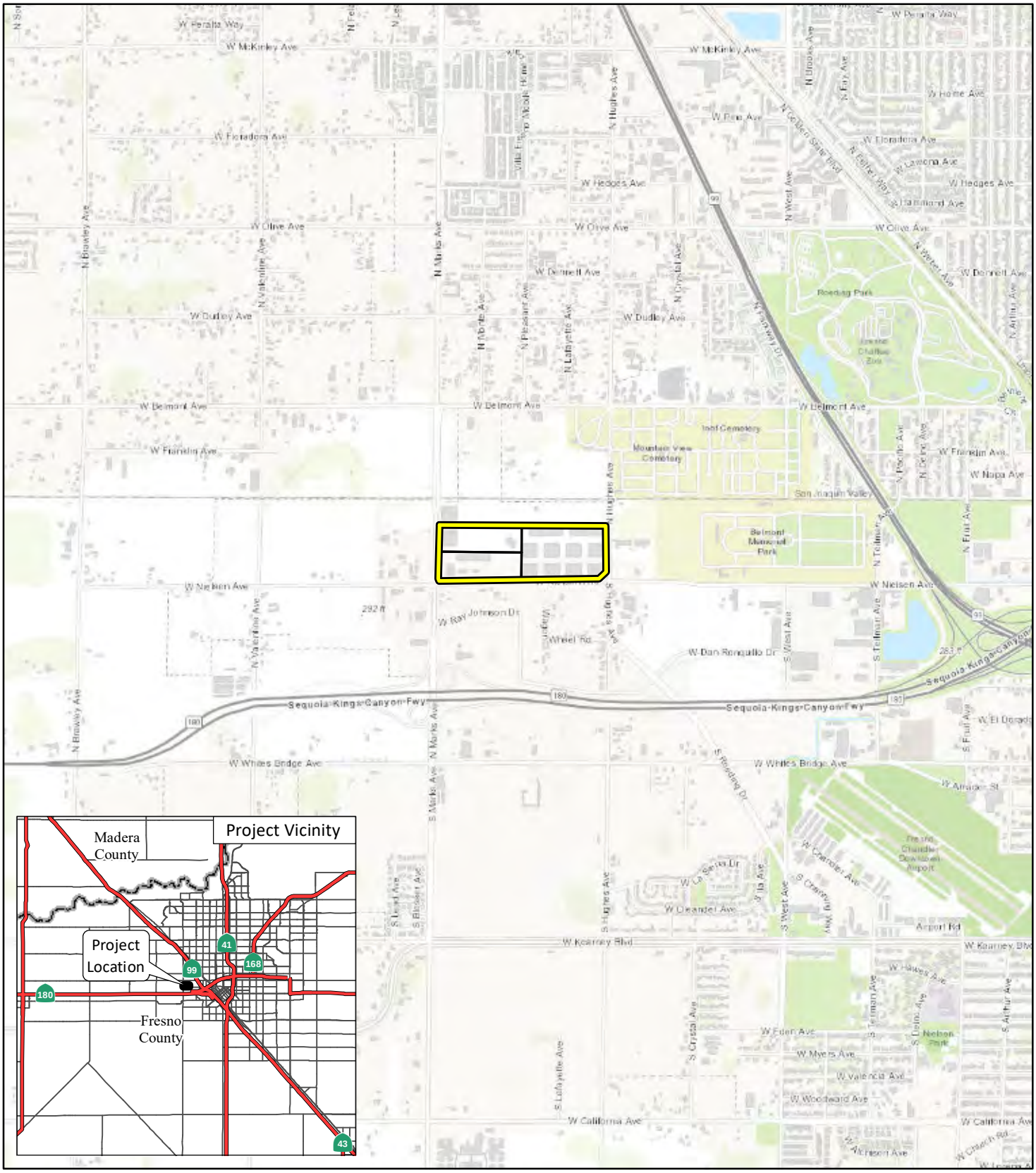
United States Environmental Protection Agency (USEPA). 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*.

Attachments: A: Figures 1–3
B: Noise Measurement Sheets
C: FHWA Traffic Noise Model Printouts
D: SoundPLAN Noise Model Printouts

ATTACHMENT A

FIGURES 1¬–3



LSA

LEGEND

Project Location

Proposed Parcels

FIGURE 1

N

0 1000 2000

FEET

2740 West Nielsen Avenue Office/Warehouse Project

Regional Project Location

SOURCE: Esri Topographic Map (2023)

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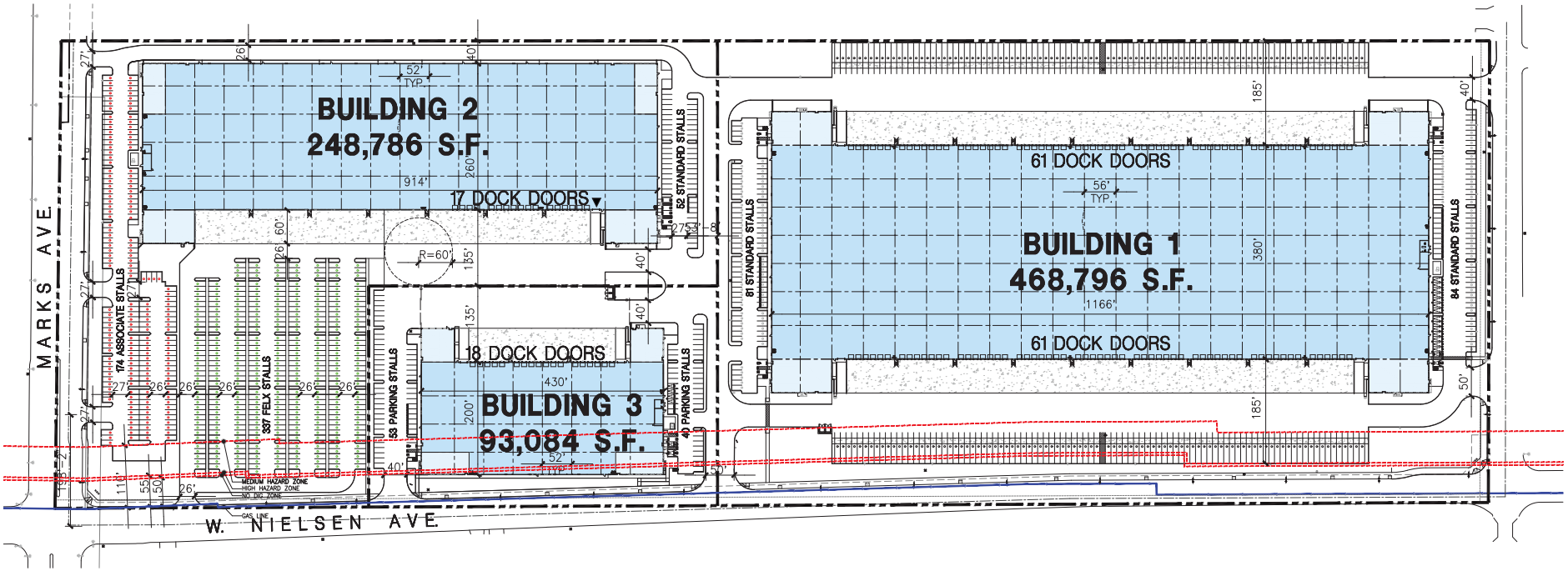

LSA

FIGURE 2

0 160 320

FEET

SOURCE: HPA Architecture, Inc., 2024

I:\2024\20241963\G\Site_Plan.ai (1/6/2025)

2740 West Nielsen Avenue Warehouse

Site Plan

LSA

LEGEND

- Project Site Boundary
- ST-1 - Short-term Noise Monitoring Location
- LT-1 - Long-term Noise Monitoring Location

FIGURE 3

0 500 1000

FEET

SOURCES: Google Earth, 2019

2740 West Nielsen Avenue Warehouse

Noise Monitoring Locations

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ATTACHMENT B

NOISE MEASUREMENT SHEETS

Noise Measurement Survey – 24 HR

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Spark 706RC (SN:903)

Site Number: LT-1 Date: 9/28/2022

Time: From 1:00 p.m. To 1:00 p.m.

Site Location: West of 2625 W Nielsen Avenue. On a tree, approximately 40 ft away from W Nielsen centerline

Primary Noise Sources: Regular traffic noise on W Nielsen Ave.
Occasional aircraft noise
Occasional dog barking

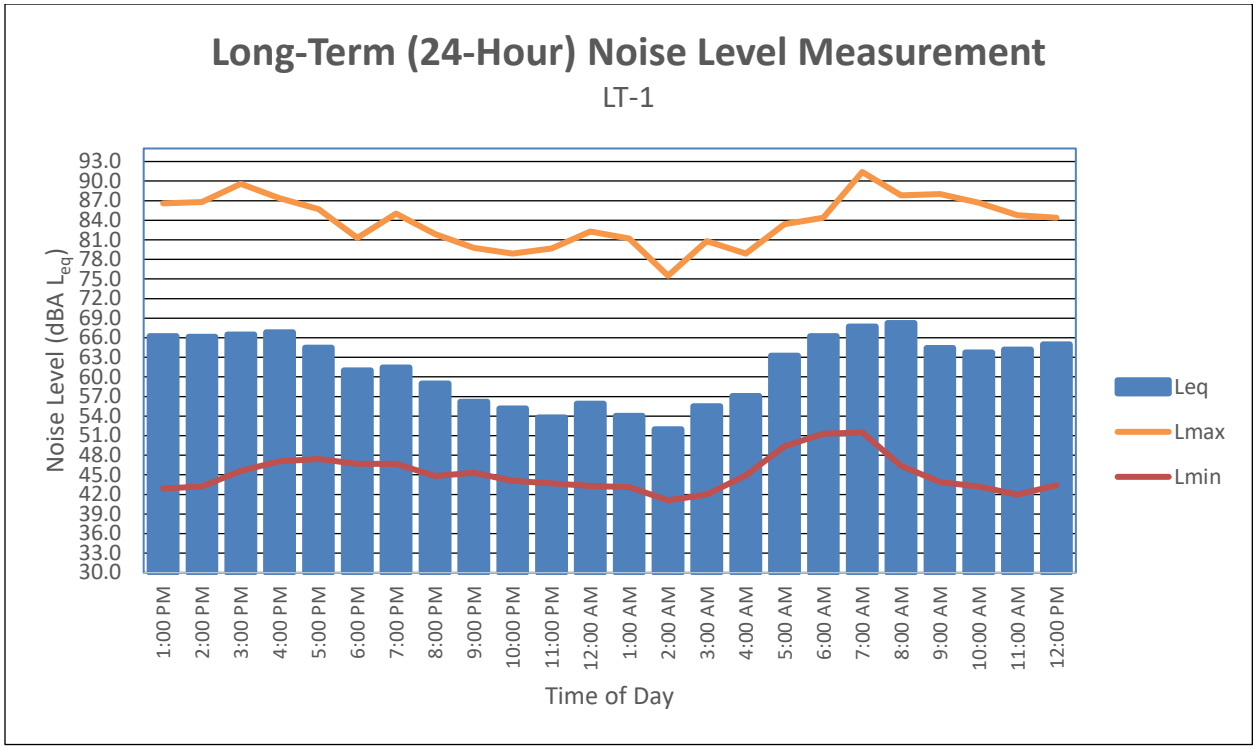
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
1:00 PM	9/28/22	66.3	86.6	42.9
2:00 PM	9/28/22	66.2	86.8	43.2
3:00 PM	9/28/22	66.5	89.6	45.6
4:00 PM	9/28/22	66.8	87.4	47.1
5:00 PM	9/28/22	64.5	85.7	47.4
6:00 PM	9/28/22	61.0	81.3	46.7
7:00 PM	9/28/22	61.4	85.0	46.7
8:00 PM	9/28/22	59.0	81.9	44.8
9:00 PM	9/28/22	56.2	79.8	45.3
10:00 PM	9/28/22	55.2	78.9	44.1
11:00 PM	9/28/22	53.8	79.7	43.7
12:00 AM	9/29/22	55.9	82.3	43.3
1:00 AM	9/29/22	54.0	81.2	43.1
2:00 AM	9/29/22	52.0	75.5	41.1
3:00 AM	9/29/22	55.5	80.8	42.0
4:00 AM	9/29/22	57.1	78.9	44.9
5:00 AM	9/29/22	63.2	83.4	49.4
6:00 AM	9/29/22	66.2	84.4	51.3
7:00 AM	9/29/22	67.7	91.4	51.5
8:00 AM	9/29/22	68.3	87.8	46.4
9:00 AM	9/29/22	64.4	88.0	43.9
10:00 AM	9/29/22	63.7	86.7	43.2
11:00 AM	9/29/22	64.2	84.8	42.0
12:00 PM	9/29/22	65.0	84.4	43.4

Source: Compiled by LSA Associates, Inc. (2022).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level


Long-Term (24-Hour) Noise Level Measurement
LT-1
Noise Level (dBA Leq)
93.0
90.0
87.0
84.0
81.0
78.0
75.0
72.0
69.0
66.0
63.0
60.0
57.0
54.0
51.0
48.0
45.0
42.0
39.0
36.0
33.0
30.0
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
Time of Day
Leq
Lmax
Lmin

Noise Measurement Survey – 24 HR

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Spark 706RC (SN:904)

Site Number: LT-2 Date: 9/28/2022

Time: From 2:00 p.m. To 2:00 p.m.

Site Location: North of site, near rail tracks, approximately 30 feet from track closest to site . On a blue painted pole

Primary Noise Sources: Rail activity (idling, moving into adjacent site)
Occasional aircraft
Faint road traffic

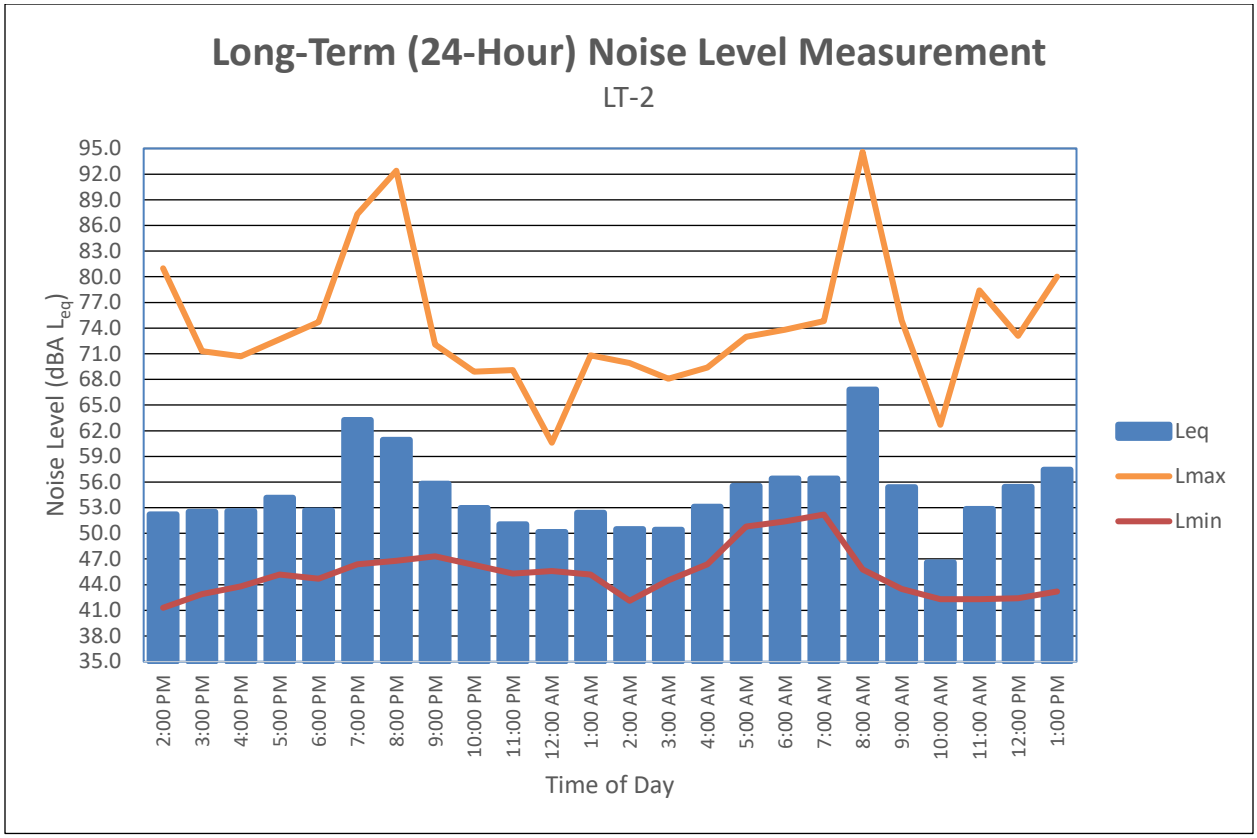
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
2:00 PM	9/28/22	52.2	81.0	41.3
3:00 PM	9/28/22	52.5	71.3	42.9
4:00 PM	9/28/22	52.6	70.7	43.8
5:00 PM	9/28/22	54.2	72.7	45.2
6:00 PM	9/28/22	52.7	74.7	44.7
7:00 PM	9/28/22	63.3	87.3	46.4
8:00 PM	9/28/22	60.9	92.4	46.8
9:00 PM	9/28/22	55.8	72.1	47.3
10:00 PM	9/28/22	53.0	68.9	46.3
11:00 PM	9/28/22	51.1	69.1	45.3
12:00 AM	9/29/22	50.2	60.6	45.6
1:00 AM	9/29/22	52.4	70.8	45.2
2:00 AM	9/29/22	50.5	69.9	42.1
3:00 AM	9/29/22	50.4	68.1	44.5
4:00 AM	9/29/22	53.1	69.4	46.4
5:00 AM	9/29/22	55.5	73.0	50.8
6:00 AM	9/29/22	56.4	73.8	51.4
7:00 AM	9/29/22	56.4	74.8	52.2
8:00 AM	9/29/22	66.8	94.6	45.8
9:00 AM	9/29/22	55.4	74.9	43.5
10:00 AM	9/29/22	46.6	62.7	42.3
11:00 AM	9/29/22	52.8	78.4	42.3
12:00 PM	9/29/22	55.4	73.1	42.4
1:00 PM	9/29/22	57.4	80.0	43.2

Source: Compiled by LSA Associates, Inc. (2022).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level


Long-Term (24-Hour) Noise Level Measurement
LT-2
Noise Level (dBA Leq)
95.0
92.0
89.0
86.0
83.0
80.0
77.0
74.0
71.0
68.0
65.0
62.0
59.0
56.0
53.0
50.0
47.0
44.0
41.0
38.0
35.0
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
Time of Day
Leq
Lmax
Lmin

Noise Measurement Survey

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Larson Davis LxT

Site Number: ST-1 Date: 9/28/2022

Time: From 1:30 p.m. To 1:50 p.m.

Site Location: Between 2nd and 3rd tree north of cemetery entrance. Approximately 35 feet away from N Hughes centerline

Primary Noise Sources: traffic noise on N Hughes Ave
Rail crossing gate at 1:35 pm w/ train passby
Faint operations noise from adjacent site (forklift)

Measurement Results

	dBA
L_{eq}	63.5
L_{max}	77.6
L_{min}	43.1
L_{peak}	95.4
L_2	72.0
L_8	69.0
L_{25}	63.6
L_{50}	57.4
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	3.6
Average Wind Velocity (mph)	2.3
Temperature (F)	92
Relative Humidity (%)	30
Comments:	

Comments: File # 1

Location Photo:

Noise Measurement Survey

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Larson Davis LxT

Site Number: ST-2 Date: 9/28/2022

Time: From 1:56 p.m. To 2:16 p.m.

Site Location: North of Belmont Avenue. Approximately 40 feet away from centerline. By 2560 Belmont avenue entrance (AAA Welding)

Primary Noise Sources: traffic noise on Belmont Avenue
Occasional aircraft

Measurement Results

	dBA
L_{eq}	66.7
L_{max}	80.2
L_{min}	45.6
L_{peak}	98.0
L_2	75.3
L_8	71.9
L_{25}	67.1
L_{50}	60.7
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	3.6
Average Wind Velocity (mph)	2.3
Temperature (F)	92
Relative Humidity (%)	30
Comments:	

Comments: File # 2

Location Photo:

Noise Measurement Survey

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Larson Davis LxT

Site Number: ST-3 Date: 9/28/2022

Time: From 2:25 p.m. To 2:45 p.m.

Site Location: West of N Marks Avenue, south of overpass entrance, by powerline pole. Approximately 50 feet away from Marks Ave. centerline

Primary Noise Sources: traffic noise on Marks
Faint operational noise from adjacent site, trucks leaving/entering site.

Measurement Results

	dBA
L_{eq}	68.9
L_{max}	83.9
L_{min}	43.3
L_{peak}	98.6
L_2	77.2
L_8	73.9
L_{25}	69.0
L_{50}	63.8
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	3.6
Average Wind Velocity (mph)	2.3
Temperature (F)	92
Relative Humidity (%)	30
Comments:	

Comments: File # 3

Location Photo:

Noise Measurement Survey

Project Number: SNN2101
Project Name: 2740 West Nielsen

Test Personnel: Moe Abushanab
Equipment: Larson Davis LxT

Site Number: ST-4 Date: 9/28/2022

Time: From 2:50 p.m. To 3:10 p.m.

Site Location: South of Nielsen Avenue, approximately 40 feet away from centerline. East of 2307 W Nielsen Ave entrance.

Primary Noise Sources: traffic noise on Nielsen
Occasional aircraft

Measurement Results

	dBA
L_{eq}	66.7
L_{max}	80.2
L_{min}	45.6
L_{peak}	98.0
L_2	75.3
L_8	71.9
L_{25}	67.1
L_{50}	60.7
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	3.6
Average Wind Velocity (mph)	2.3
Temperature (F)	92
Relative Humidity (%)	30
Comments:	

Comments: File # 4
Generally quiet without traffic

Location Photo:

ATTACHMENT C

FHWA TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8472 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.26

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
114.9	342.9	1077.5	3405.0

TABLE Existing -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9006 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
121.3	364.2	1145.3	3619.5

TABLE Existing -03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9267 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.65

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
124.4	374.6	1178.5	3724.4

TABLE Existing -04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9320 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
125.0	376.7	1185.2	3745.7

TABLE Existing -05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4846 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	159.1	497.4	1571.0

TABLE Existing -06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	159.5	493.3

TABLE Existing -07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3029 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.22

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	102.6	311.7	981.6

TABLE Existing With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8746 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
118.2	353.8	1112.3	3515.1

TABLE Existing With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10438 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
138.6	421.5	1327.2	4195.0

TABLE Existing With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.27

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
141.8	431.9	1360.5	4300.3

TABLE Existing With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10087 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
134.3	407.4	1282.6	4053.9

TABLE Existing With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4846 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	159.1	497.4	1571.0

TABLE Existing With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2922 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	100.9	301.2	946.5

TABLE Existing With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3995 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	132.9	410.4	1294.4

TABLE Near Term No Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8626 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
116.7	349.0	1097.1	3466.8

TABLE Near Term No Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9158 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
123.1	370.3	1164.6	3680.6

TABLE Near Term No Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9419 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.72

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	126.2	380.7	1197.8	3785.5

TABLE Near Term No Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9612 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
128.6	388.4	1222.3	3863.1

TABLE Near Term No Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5400 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.7	176.8	554.1	1750.4

TABLE Near Term No Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	159.5	493.3

TABLE Near Term No Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3083 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	104.3	317.3	999.1

TABLE Near Term With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
120.0	360.0	1131.9	3577.0

TABLE Near Term With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10590 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.23

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
140.4	427.5	1346.5	4256.1

TABLE Near Term With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10852 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
143.6	438.0	1379.8	4361.3

TABLE Near Term With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10379 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
137.9	419.1	1319.7	4171.3

TABLE Near Term With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5400 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.7	176.8	554.1	1750.4

TABLE Near Term With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2922 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	100.9	301.2	946.5

TABLE Near Term With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Near Term With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4049 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.48

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	134.6	415.9	1311.9

TABLE Cumulative Year 2046 No Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8892 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
119.9	359.6	1130.9	3573.7

TABLE Cumulative Year 2046 No Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9389 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
125.9	379.5	1194.0	3773.5

TABLE Cumulative Year 2046 No Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9626 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
128.7	389.0	1224.1	3868.7

TABLE Cumulative Year 2046 No Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10532 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
139.7	425.2	1339.2	4232.8

TABLE Cumulative Year 2046 No Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5455 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
61.3	178.6	559.7	1768.2

TABLE Cumulative Year 2046 No Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1596 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	62.4	167.1	517.8

TABLE Cumulative Year 2046 No Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 No Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3744 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	125.0	384.7	1213.1

TABLE Cumulative Year 2046 With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Belmont Avenue and Nielsen Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9166 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
123.2	370.6	1165.7	3683.8

TABLE Cumulative Year 2046 With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Nielsen Avenue and Ray Johnson Drive
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10821 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.32

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
143.2	436.8	1375.9	4348.9

TABLE Cumulative Year 2046 With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between Ray Johnson Drive and SR 180 Westbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11059 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
146.2	446.3	1406.1	4444.5

TABLE Cumulative Year 2046 With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Marks Avenue between SR-180 Westbound Ramps and SR-180 Eastbound Ramps
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11299 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 40 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
149.1	455.9	1436.6	4541.0

TABLE Cumulative Year 2046 With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Belmont Avenue between Marks Avenue and Hughes Avenue NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5455 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
61.3	178.6	559.7	1768.2

TABLE Cumulative Year 2046 With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Nielsen Avenue between Marks Avenue and Hughes Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2998 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 35 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	103.2	308.9	971.1

TABLE Cumulative Year 2046 With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/29/2025
ROADWAY SEGMENT: Hughes Avenue between Nielsen Avenue and Belmont Avenue
NOTES: 2740 West Nielsen Warehouse Project - Cumulative Year 2046 With Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4710 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	61.73	8.10	12.14
M-TRUCKS	6.74	0.91	1.37
H-TRUCKS	6.74	0.91	1.37

ACTIVE HALF-WIDTH (FT): 30 SITE CHARACTERISTICS: HARD

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	155.5	483.4	1526.0

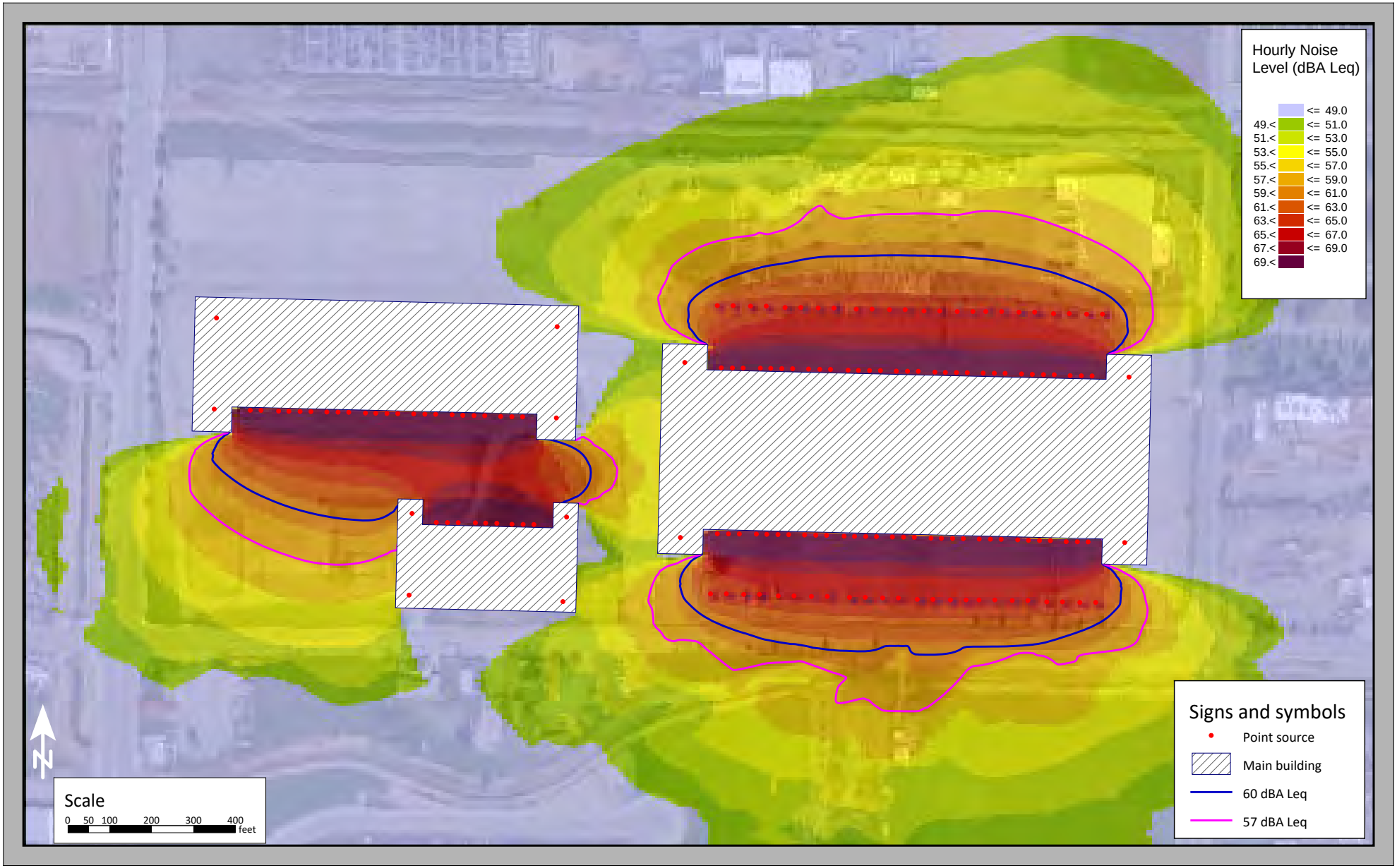
ATTACHMENT D

SOUNDPLAN NOISE MODEL PRINTOUTS

2740 Nielsen Warehouse

Project No. 20241963

Project Operational Noise Levels

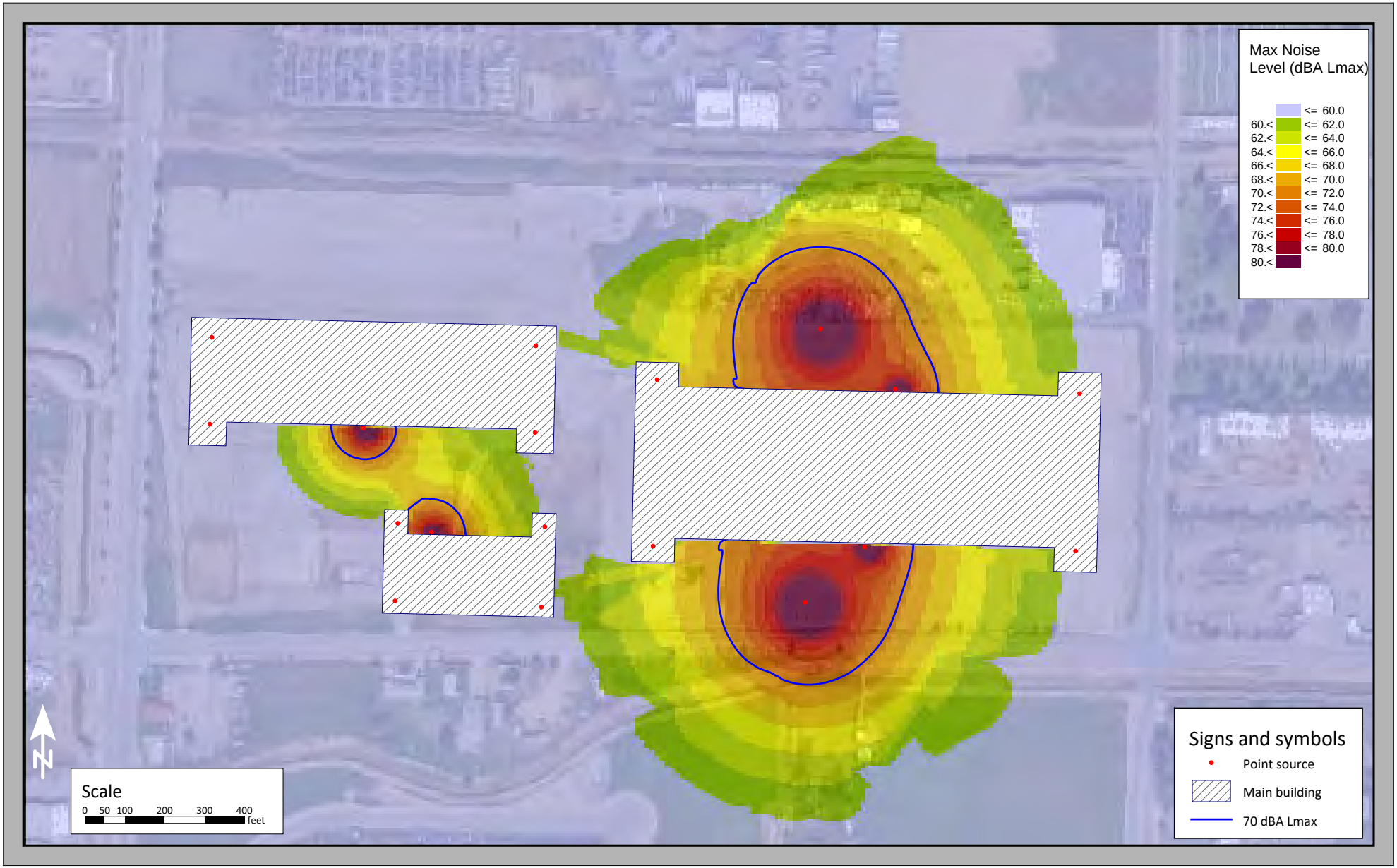


C:\Users\MAbushanab\OneDrive - LSA Associates\Documents\Desktop\SoundPLAN\20241963 - 2740 Nielsen Warehouse\OpsLeq.sgs - last edit 1/30/2025

2740 Nielsen Warehouse

Project No. 20241963

Project Operational Noise Levels - Max



APPENDIX D

TRAFFIC IMPACT STUDY

TRAFFIC IMPACT STUDY

2740 WEST NIELSEN AVENUE WAREHOUSE PROJECT

CITY OF FRESNO

FRESNO COUNTY, CALIFORNIA

This Traffic Impact Analysis has been prepared under the supervision of
Ambarish Mukherjee, P.E.

LSA

January 2025

TRAFFIC IMPACT STUDY

2740 WEST NIELSEN AVENUE WAREHOUSE PROJECT

FRESNO, FRESNO COUNTY, CALIFORNIA

Prepared for:

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January 2025

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LIST OF ABBREVIATIONS AND ACRONYMS

AADT	Annual Average Daily Traffic
ABM	Activity-Based Model
AWSC	All-Way Stop Control
Caltrans	California Department of Transportation
CA-MUTCD	California Manual on Uniform Traffic Control Devices
CEQA	California Environmental Quality Act
City	City of Fresno
COG	(Fresno) Council of Governments
FAX	Fresno Area Express
FDOT	Florida Department of Transportation
GPA	General Plan Amendment
HCM	*Highway Capacity Manual*
HCM 7	*Highway Capacity Manual 7th Edition*
HDM	(Caltrans) *Highway Design Manual*
ITE	Institute of Transportation Engineers
LOS	Level of Service
mph	Miles Per Hour
MVM	Million Vehicle Miles
NCHRP	National Cooperative Highway Research Program
PCE	Passenger Car E
PM	Postmile
SR-180	(State of California) State Route 180
RIRO	Right-In-Right-Out
RMEV	Rate per Million Entering Vehicles
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
SWITRS	Statewide Integrated Traffic Records System
TASAS	Traffic Accident Surveillance and Analysis System
TIMS	Transportation Injury Mapping System
TIS	Traffic Impact Study
TIZ	Traffic Impact Zone
TPA	Transit Priority Area
TWLTL	Two-Way Left-Turn Lane
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

The Traffic Impact Study (TIS) has been prepared to assess the potential circulation impacts associated with the proposed 2740 West Nielsen Avenue Warehouse Project (project) in Fresno, Fresno County. The project site is located on the north side of Nielsen Avenue, between Marks Avenue and Hughes Avenue. The project site is currently vacant. Figure 1-1 illustrates the regional and project location. (Figures and tables are provided at the end of each chapter.)

This report has been prepared in accordance with the City of Fresno (City) *Traffic Impact Study Report Guidelines* (TIS Guidelines), dated February 2, 2009, the *City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds* (adopted on June 25, 2020), the California Department of Transportation (Caltrans), as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIS, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff.

This study examines traffic operations in the vicinity of the proposed project under the following five scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Near Term Plus Project Conditions
- Cumulative Year (2046) without Project Conditions
- Cumulative Year (2046) Plus Project Conditions

Traffic conditions at study intersections were examined for weekday a.m. and p.m. peak-hour conditions. The a.m. peak hour is defined as the one (1) hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one (1) hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Study roadway segments were analyzed using daily volume counts and comparisons were made to the daily service volume standards outlined in the City's TIS Guidelines.

1.1 PROJECT DESCRIPTION

The proposed project consists of three (3) industrial buildings totaling to 810,666 square feet (sf). Figure 1-2 illustrates the conceptual site plan for the proposed project. As illustrated in Figure 1-2, Building 1 and Building 3 will be used as High Cube Fulfillment Center warehouses. Building 2 will be used for general light industrial/warehousing purposes. The project site designation in the City of Fresno Official Zoning Map is IH – Heavy Industrial. As such, the proposed project is consistent with the designated zoning as described by the City.

As illustrated in Figure 1-2, access to the project will be provided via eight (8) driveways as described below:

Driveways on Marks Avenue

- **Project Driveway 1:** This driveway is located near the northwestern corner of the project site and will serve as a full-access driveway. This driveway will only serve passenger vehicles.

- **Project Driveway 2:** This driveway is located on the western perimeter of the project site just south of Project Driveway 1 and will serve as a full-access driveway. This driveway will only serve passenger vehicles.

- **Project Driveway 3:** This driveway is located near the southwestern corner of the project site and will serve as a right-in-right-out (RIRO) driveway. This driveway will only serve passenger vehicles.

Driveways on Nielsen Avenue

- **Project Driveway 4:** This driveway is located near the southwestern corner of the project site and will serve as a RIRO driveway. This driveway will only serve passenger vehicles.

- **Project Driveway 5:** This driveway is located on the southern perimeter of the project site just east of Project Driveway 4 and will serve as a full-access driveway. This driveway will only serve passenger vehicles.

- **Project Driveway 6:** This driveway is located on the southern perimeter of the project site just east of Project Driveway 5 and will serve as a full-access driveway. This driveway will serve both passenger vehicles and trucks.

Driveways on Hughes Avenue

- **Project Driveway 7:** This driveway is located near the northeastern corner of the project site and will serve as a full-access driveway. This driveway will serve both passenger vehicles and trucks.

- **Project Driveway 8:** This driveway is located near the southeastern corner of the project site and will serve as a full-access driveway. This driveway will serve both passenger vehicles and trucks.

Additionally, as part of the project design features, the project will construct sidewalks along the project frontages on Marks Avenue, Nielsen Avenue, and Hughes Avenue.

1.2 STUDY AREA

Based on the City's TIS Guidelines, the study intersections for the TIS were identified on a case-by-case basis for each project. Study intersections and roadway segments considered for the analysis were finalized with discussion with City staff.

1.2.1 Study Intersections

Based on discussion with City staff, intersections analyzed in this study and their jurisdictions are as follows:

1. Marks Avenue/Belmont Avenue (City of Fresno, Fresno County)
2. Marks Avenue/Nielsen Avenue (City of Fresno)
3. Marks Avenue/Ray Johnson Drive (City of Fresno)
4. Marks Avenue/State Route 180 (SR-180) Westbound Ramps (Caltrans)
5. Marks Avenue/SR-180 Eastbound Ramps (Caltrans)
6. Marks Avenue/Whitesbridge Avenue (City of Fresno, Fresno County)
7. Hughes Avenue/Belmont Avenue (City of Fresno, Fresno County)
8. Hughes Avenue/Nielsen Avenue (City of Fresno)

Figure 1-3 illustrates the study area intersections.

1.2.2 Study Roadway Segments

Based on discussion with City staff, roadway segments analyzed in this study are as follows:

Marks Avenue

1. Between Belmont Avenue and Nielsen Avenue
2. Between Nielsen Avenue and Ray Johnson Drive
3. Between Ray Johnson Drive and SR-180 Westbound Ramps
4. Between SR-180 Westbound Ramps and SR-180 Eastbound Ramps

Belmont Avenue

5. Between Marks Avenue and Hughes Avenue

Nielsen Avenue

6. Between Marks Avenue and Hughes Avenue

Hughes Avenue

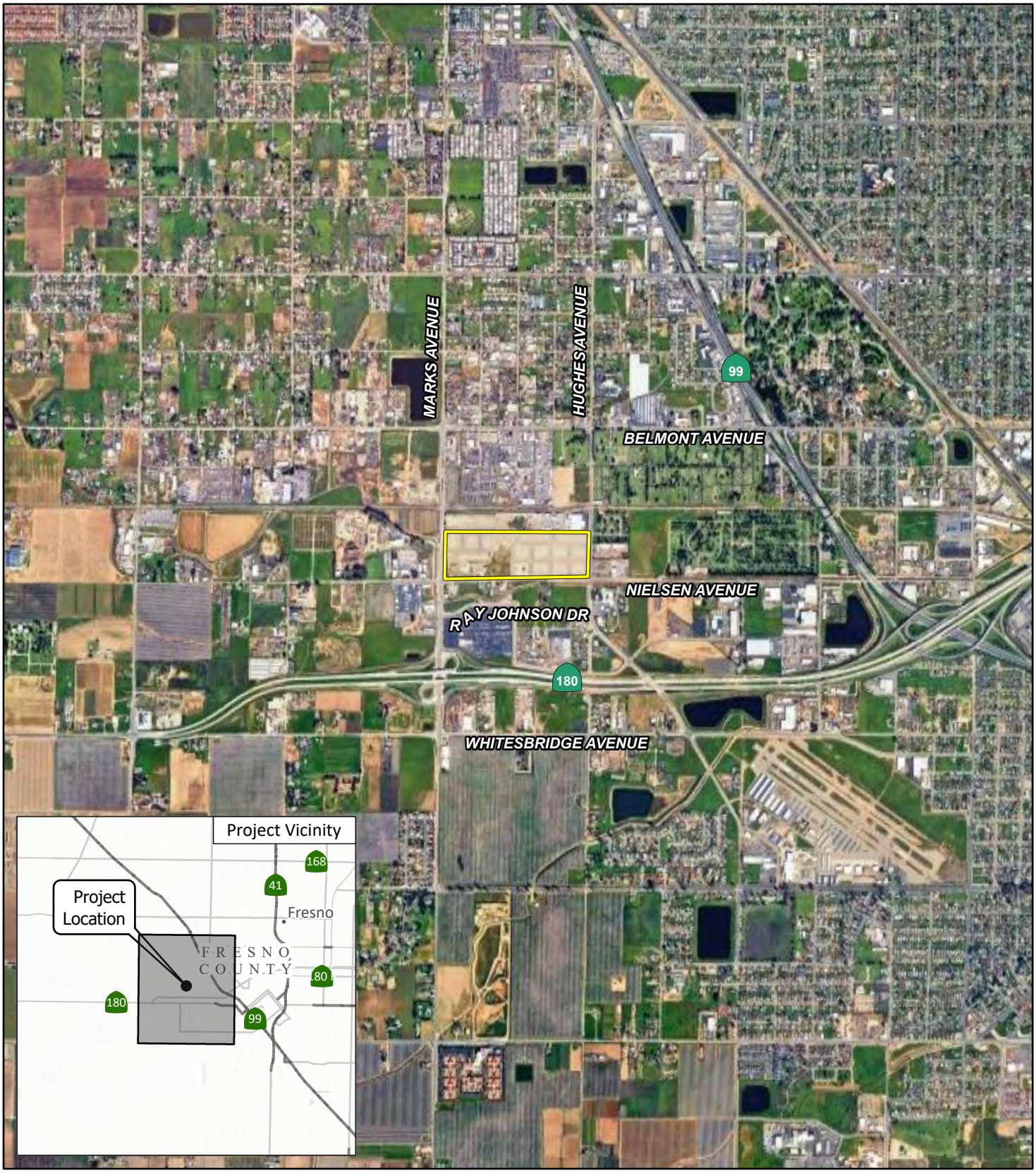
7. Belmont Avenue and Nielsen Avenue

For each roadway segment, the highest volume on any part of the segment (both directions combined) will be considered as the analysis volume for the entire segment as a conservative measure.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location

- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections



LSA

LEGEND

Project Site

FIGURE 1-1

N

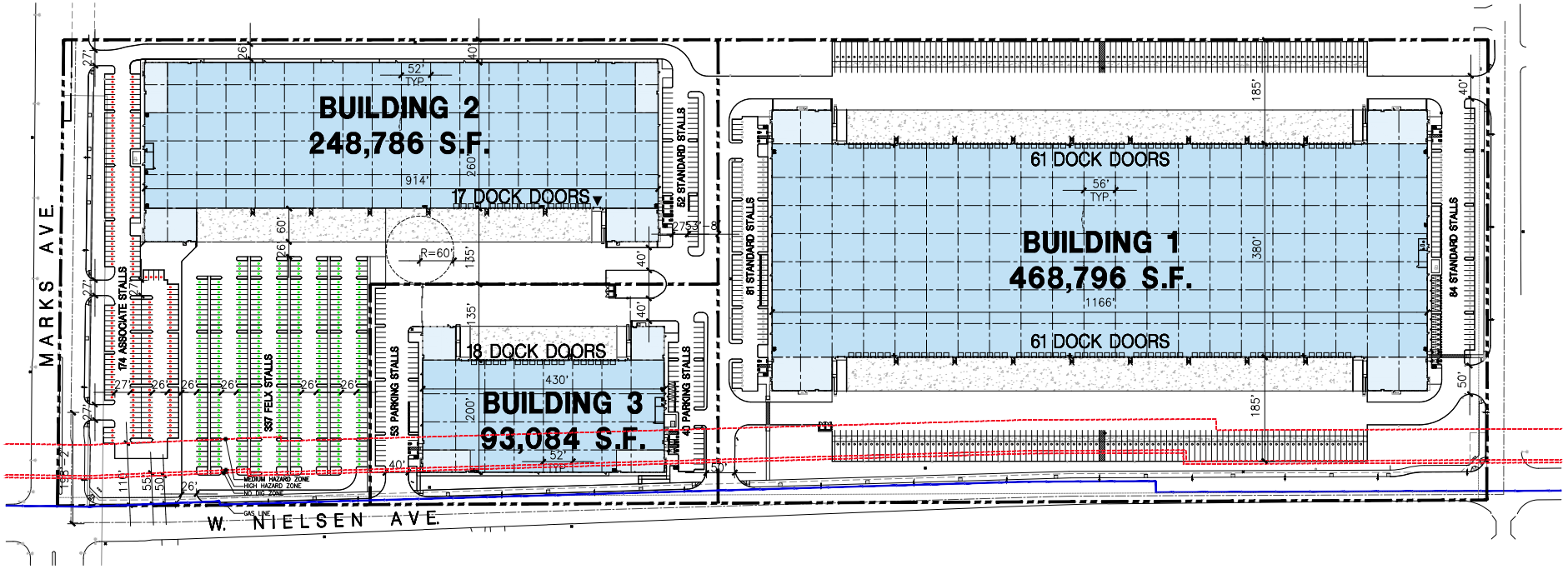
0 1100 2200

FEET

SOURCE: Google Earth Imagery, 2024

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study
Regional and Project Location

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\20241963_2740 Nielsen Ave\20241963_2740 Nielsen Ave.aprx (12/20/2024)



LSA

FIGURE 1-2

N

0 150 300
FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Conceptual Site Plan

SOURCE: HPA Architecture, September 2024

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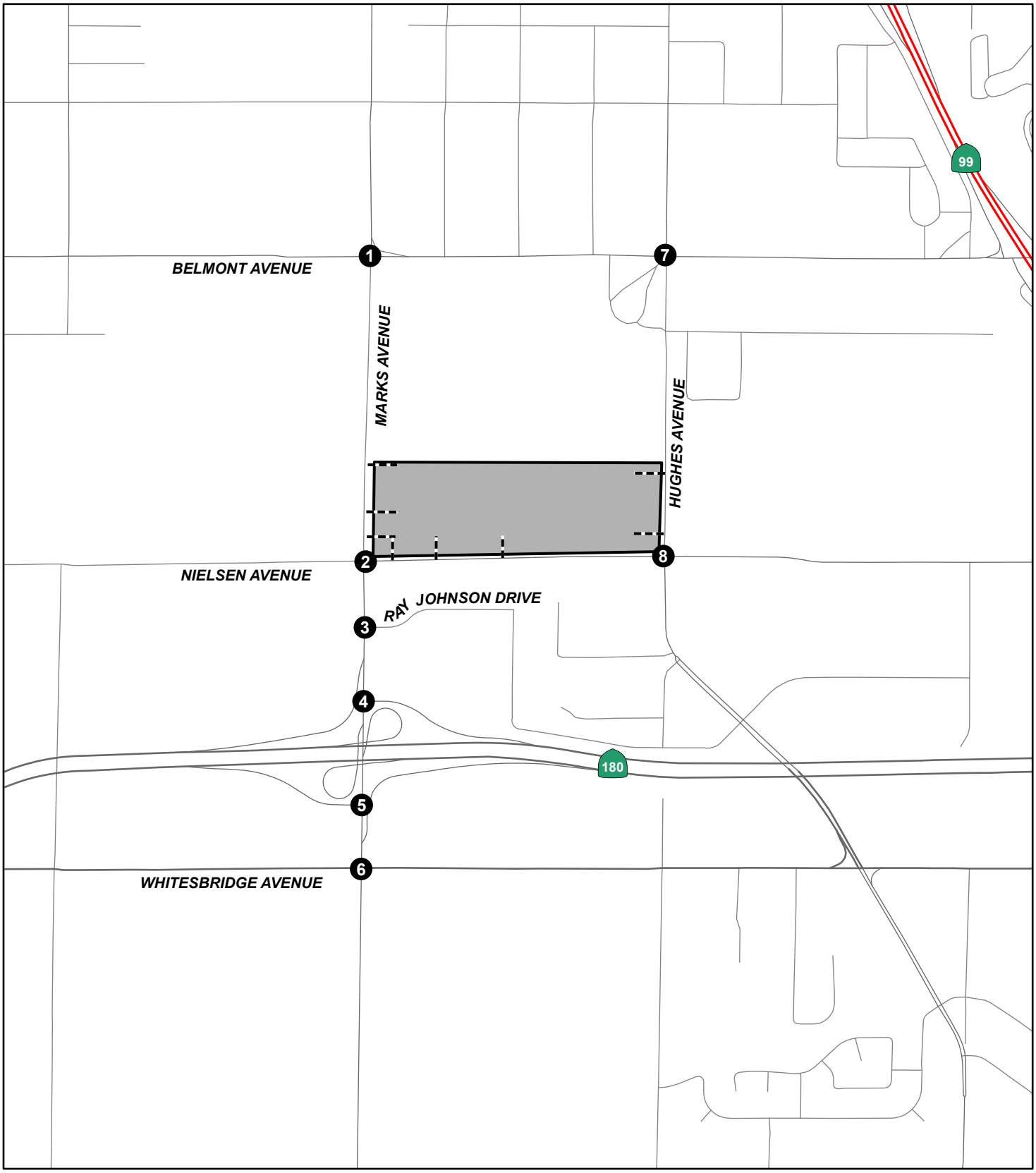


LSA

LEGEND

- Project Site
- Study Intersections
- Project Driveways

N

0 570 1140

FEET

SOURCE: ESRI Streetmap, 2021

FIGURE 1-3

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study
Study Area Intersections

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\20241963_2740 Nielsen Ave\20241963_2740 Nielsen Ave.aprx (12/20/2024)

2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

Level of Service (LOS) can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2.A. A description of LOS for roadway segments is summarized in Table 2.B.

Table 2.C shows the LOS criteria for unsignalized and signalized intersections. For all study area intersections, the *Highway Capacity Manual 7th Edition* (HCM 7) analysis methodologies were used to determine intersection LOS. LOS for all study intersections was calculated using the Synchro 12 software, which utilizes HCM 7 methodologies. It should be noted that there are a few restrictions that prevent delay calculation and LOS determination using the Synchro 12 software. One of these restrictions is the inability to calculate delay through HCM methodologies for any intersection that is controlled by an all-way stop control (AWSC) and has more than three approach lanes for any one leg of the intersection. As such, LOS delay for study intersection 1 (Marks Avenue/Belmont Avenue) was calculated using SimTraffic as the north leg of this intersection has four (4) approach lanes.

The TIS Guidelines recommend using capacity thresholds as described in the State of Florida Department of Transportation (FDOT) *2023 Multimodal Quality/Level of Service Handbook*, dated January 2023, for roadway segment analyses. Table 2.D summarizes the LOS criteria used to evaluate roadway segments based on the FDOT LOS Tables for urbanized areas, which was adapted from the average annual daily traffic (AADT) thresholds for 'C4 – Urban General' as described in the FDOT *2023 Multimodal Quality/Level of Service Handbook*. The daily traffic volumes represent the total vehicles (both directions) traveling on a roadway segment within a 24-hour period.

2.2 LEVEL OF SERVICE PROCEDURES AND STANDARDS

Study intersections and roadway segments analyzed in this report are completely under the jurisdiction of the City of Fresno or bordering between the City of Fresno and Fresno County. However, intersections located at freeway on-ramps and off-ramps are under the jurisdiction of Caltrans.

Per the City of Fresno *Traffic Impact Study Report Guidelines*, updated February 2009, LOS D is considered as the level of service standard for study intersections and roadway segments under near term conditions. The same criterion holds for cumulative year conditions, except for roadway segments that are adopted in the Fresno General Plan (General Plan), dated December 2014, to operate at LOS E or F. The City's TIS Guidelines do not define an LOS standard under Existing Plus Project conditions.

It should be noted that all City of Fresno study intersections and roadway segments are either located within the City of Fresno Traffic Impact Zone (TIZ) III or on the border of TIZ II and TIZ III. Per the General Plan, all intersections and roadway segments within TIZ II should maintain a LOS standard of E or better while those within TIZ III should maintain a LOS standard of D or better. As a conservative measure, a LOS standard of D has been considered for intersections and roadway segments within the City of Fresno for all analysis conditions. The City considers the following operational deficiency criteria for study intersections:

- An operational deficiency is created if the addition of the project traffic results in any one of the following:

  a) Causes the intersection LOS to change from acceptable to unacceptable levels; OR

  b) Causes the intersection LOS to change from an unacceptable LOS (LOS E) to LOS F; OR

  c) Increases the average delay at a study intersection that is already operating at an unacceptable LOS.

The City's TIS Guidelines do not define an operational deficiency criteria for roadway segments. For purposes of this analysis, at intersections under the City of Fresno jurisdiction, an operational deficiency has been considered when the project causes a deficient condition (deterioration from LOS A through D to E or F) or when the project contributes to an existing or forecast deficiency. The project would need to recommend circulation improvements to improve LOS to an acceptable level in the case an operational deficiency caused by the addition of project trips is identified.

Caltrans does not have any operational deficiency criteria for study intersections. As such, for the purposes of this study, LOS D is considered to be the LOS standard for all study intersections under the jurisdiction of Caltrans. Therefore, an operational deficiency occurs when the proposed project causes a deficient condition (deterioration from LOS A through D to E or F) for intersections or when the project contributes to an existing or forecasted deficiency. In such cases, the proposed project needs to identify improvements to improve the intersection LOS to an acceptable level.

2.3 LIST OF CHAPTER 2.0 TABLES

- Table 2.A: Intersection Level of Service Definitions
- Table 2.B: Roadway Segment Level of Service Definitions
- Table 2.C: Level of Service Criteria for Unsignalized and Signalized Intersections
- Table 2.D: Roadway Segment Capacity and Levels of Service

Table 2.A: Intersection Level of Service Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual* (7th Edition)

Table 2.B: Roadway Segment Level of Service Definitions

LOS	Description
A	Describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control Delay at the boundary intersection is minimal. The travel speed exceeds 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
B	Describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary is not significant. The travel speed is between 67% and 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
C	Describes stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
D	Indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
E	Characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
F	Characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is between 30% or less of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

Source: *Highway Capacity Manual* (7th Edition)

Table 2.C: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual* (7th Edition)

Table 2.D: Roadway Segment Capacity and Levels of Service

C4 – Urban General (Average Annual Daily Traffic)				
	Level of Service			
Lanes	B	C	D	E
2	*	11,900	17,600	24,000
4	*	24,400	36,100	40,800
6	*	44,700	56,800	60,400
8	*	52,300	66,900	70,900
C4 – Urban General (Average Annual Daily Traffic) With 10% Adjustment				
	Level of Service			
Lanes	B	C	D	E
2	*	10,710	15,840	21,600
4	*	21,960	32,490	36,720
6	*	40,230	51,120	54,360
8	*	47,070	60,210	63,810

1 FDOT LOS Tables recommends a 10% deduction to capacity adjustment for non-state owned signalized roadway facilities.

2 The FDOT *Multimodal/Level of Service Handbook* does not have capacity thresholds for LOS C for 2-lane roadways under C4-Urban General. Therefore, the roadway capacity for LOS C for 2-lane roadways was extrapolated from the capacity for LOS C for 4-lane roadways.

Source: State of Florida Department of Transportation *2023 Multimodal Quality/Level of Service Handbook, January 2023*.

3.0 CIRCULATION NETWORK SETTINGS

3.1 STUDY AREA CIRCULATION NETWORK

The project study area includes the following major roadways as classified based on the roadway classification provided in the Mobility and Transportation Element of the City's General Plan. Figure 3-1 summarizes the classifications of major roadways within the study area. Following is a brief description of these roadways:

- **Marks Avenue:** Within the study area, Marks Avenue is designated as an Arterial in the City's General Plan. Within the study area, Marks Avenue is a four-lane, divided Arterial with intermittent two-way left turn lanes (TWLTL) and a posted speed limit of 45 miles per hour (mph). There are Class II bike paths along both directions of this segment. There are no provisions for on-street parking along either direction of this segment.
- **Belmont Avenue:** Within the study area, Belmont Avenue is designated as a Collector in the City's General Plan. Within the study area, Belmont Avenue is a four-lane, undivided Collector with a posted speed limit of 40 mph. There are no bicycle facilities along either direction of this segment. There are provisions for on-street parking along both directions of this segment to the west of Pleasant Avenue. There are no provisions for on-street parking along either direction of this segment to the east of Pleasant Avenue.
- **Nielsen Avenue:** Within the study area, Nielsen Avenue is designated as a Collector in the City's General Plan. Within the study area, Nielsen Avenue is a two-lane, divided Collector with a TWLTL and a posted speed limit of 40 mph. There are Class II bike paths along both directions of this segment. There are no provisions for on-street parking along either direction of this segment.
- **Hughes Avenue:** Within the study area, Hughes Avenue is designated as a Collector in the City's General Plan. Within the study area, Hughes Avenue is two-lane, undivided Collector with a posted speed limit of 40 mph. There are no bicycle facilities nor provisions for on-street parking along either direction of this segment.

Figure 3-2 illustrates existing study intersection geometrics and traffic control.

3.2 BICYCLE, PEDESTRIAN, TRANSIT, AND TRUCK FACILITIES

3.2.1 Bicycle Network

The City of Fresno is committed to improving non-motorized travel. Bicycling can be a viable alternative to local work commutes and offers children a healthy way to get to school. To facilitate and encourage bicycle trips among other non-motorized modes of travel, the City has adopted its Active Transportation Plan in 2016 that includes a network of proposed facilities and implementation plan for the future. The *City of Fresno Active Transportation Plan*, adopted December 2016, provides an inventory of all existing bicycle infrastructure improvements to be implemented in the future.

According to the *City of Fresno Active Transportation Plan*, the bikeway network within the City is classified into four categories: Class I – Bike Paths, Class II – Bike Lanes, Class III – Bike Routes, and Class IV – Separated Bikeways. Class I bikeways provide bicycle travel on a paved right-of-way completely separated from any street or highway. Class II bikeways provide a stripped and stenciled lane for one-way travel on a street or highway. Class III bikeways provide shared use with motor vehicle traffic and are identified only by signage. Class IV bikeways are physically separated bikeway facilities distinct from the sidewalks and designated for exclusive bicyclist use.

Currently, Class II bike paths exist on Marks Avenue and Nielsen Avenue within the study area. Proposed Class I bike paths are planned to be added to the north side of Belmont Avenue and the south side of Nielsen Avenue within the study area. Proposed Class II bike paths are planned to be added along both directions of Belmont Avenue and Hughes Avenue within the study area. Figure 3-3 illustrates the existing and proposed bikeway network within the project vicinity.

3.2.2 Pedestrian Network

The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability of the City. Sidewalks are generally provided on both sides of the streets throughout the City. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists and pedestrians in the City. The existence of trails and sidewalks provides accessible facilities, increases safety features, and improves walkability in the City.

Paved sidewalks are intermittently present along either direction of Marks Avenue and Belmont Avenue within the study area. Paved sidewalks are intermittently present along the southbound direction of Hughes Avenue within the study area. Paved sidewalks are absent along either direction of Nielsen Avenue within the study area. Proposed paved sidewalks are planned to be added to both directions of Marks Avenue, Belmont Avenue, Nielsen Avenue, and Hughes Avenue within the study area where paved sidewalks are currently absent. Additionally, the proposed project will be constructing paved sidewalks along the project site frontage along Marks Avenue, Nielsen Avenue, and Hughes Avenue as previously mentioned. Figure 3-4 illustrates the existing and proposed sidewalk network within the project vicinity.

3.2.3 Transit Network

Fresno Area Express (FAX) is the Transportation Service Agency within the City and is responsible for coordinating transit services within its service area. FAX provides services via Route 1/Q (Bus Rapid Transit) as well as 17 other routes throughout the City and four routes for Clovis Transit. There are currently no transit routes present within the study area.

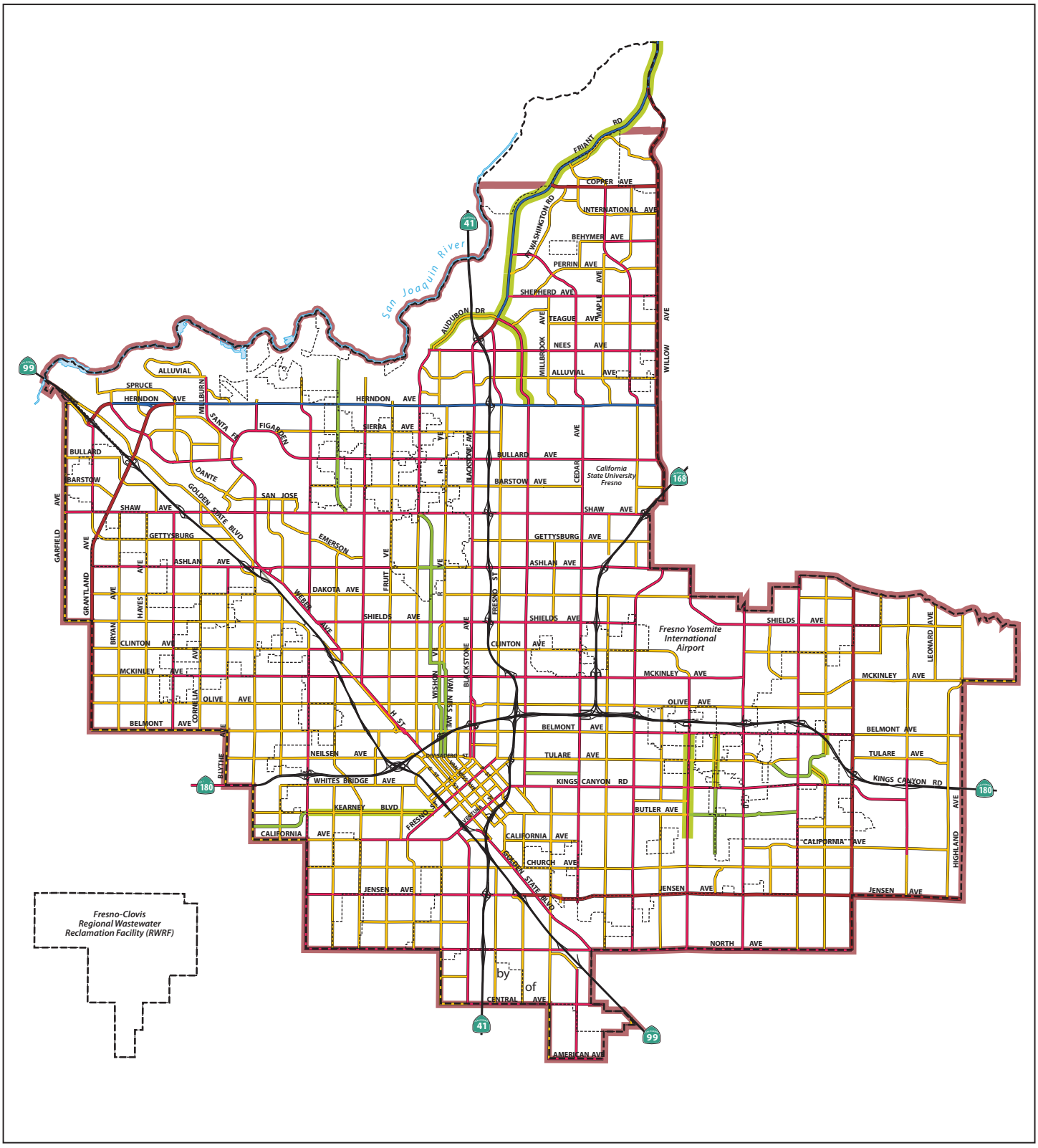
3.2.4 Truck Facilities

The City has defined specific truck routes pursuant to Fresno Municipal Code Section 10-1303 within the City's sphere of influence. Commercial vehicles exceeding 12,000 pounds maximum gross weight are restricted to these designated truck routes. Marks Avenue and Nielsen Avenue are designated as truck routes within the study area. Belmont Avenue, between Marks Avenue and Hughes Avenue, is

planned to be designated as a truck route. Figure 3-5 illustrates the existing and proposed truck routes within the City.

3.3 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: City of Fresno Roadway Classifications
- Figure 3-2: Existing Study Intersection Geometrics and Traffic Control
- Figure 3-3: City of Fresno Existing and Proposed Bikeway Network
- Figure 3-4: City of Fresno Existing and Proposed Sidewalk Network
- Figure 3-5: City of Fresno Existing and Proposed Truck Routes



LSA

LEGEND

Freeway	Scenic Corridors[1]	
On/Off Ramps	Expressway	Planning Area
Expressway	Arterial	Sphere of Influence
Super Arterial	Drive	City Limits
Arterial	Collector	
Collector		

N

0 6,500 13,000

FEET

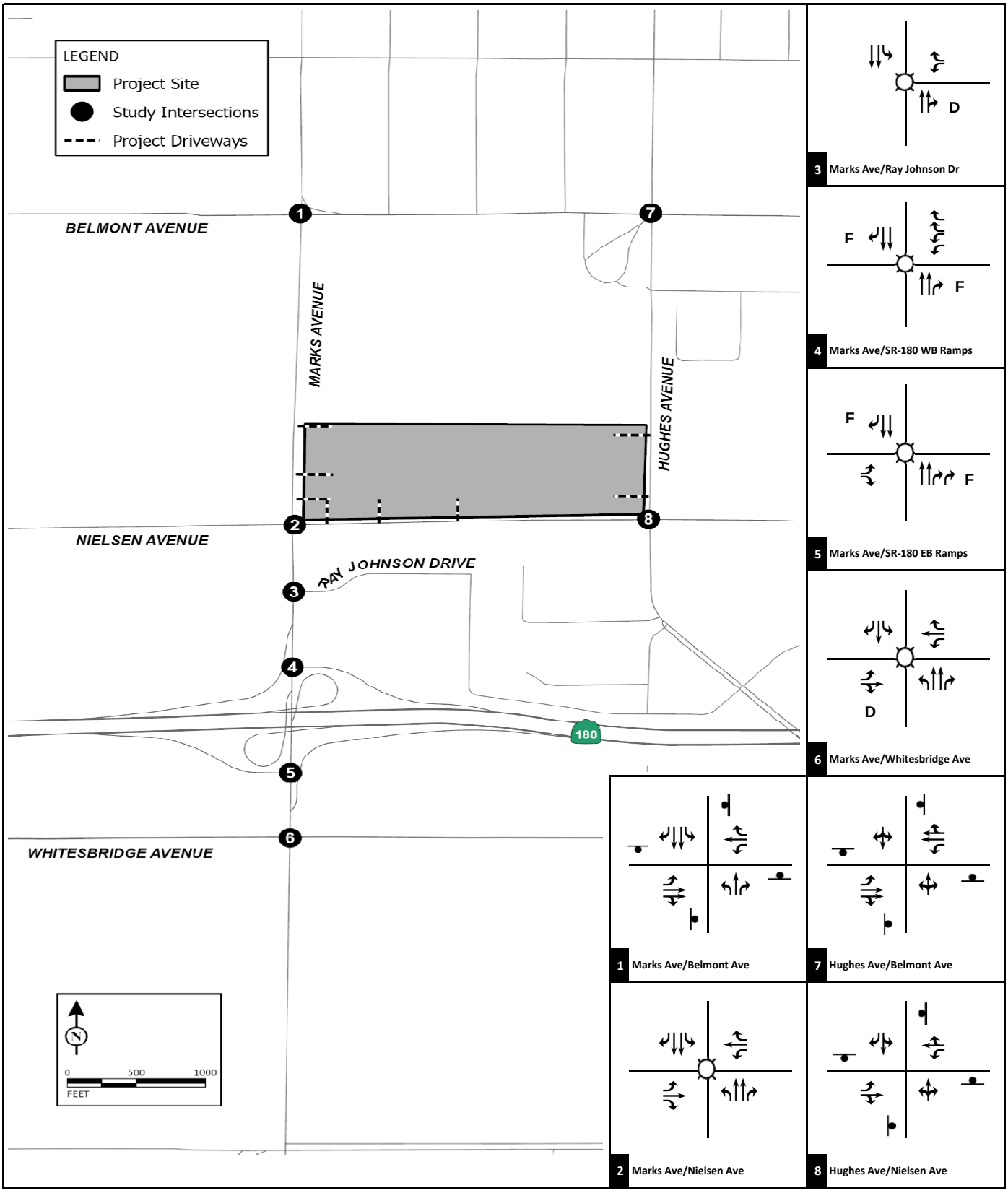
FIGURE 3-1

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

City of Fresno Roadway Classifications

SOURCE: City of Fresno Active Transportation Plan, December 2016

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\Fig3-1_RoadwayClass.ai (12/20/2024)



LSA

FIGURE 3-2

Legend

Signal
Stop Sign
D De-Facto Right Turn
F Free Right Turn

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Existing Study Intersection Geometrics and Traffic Control

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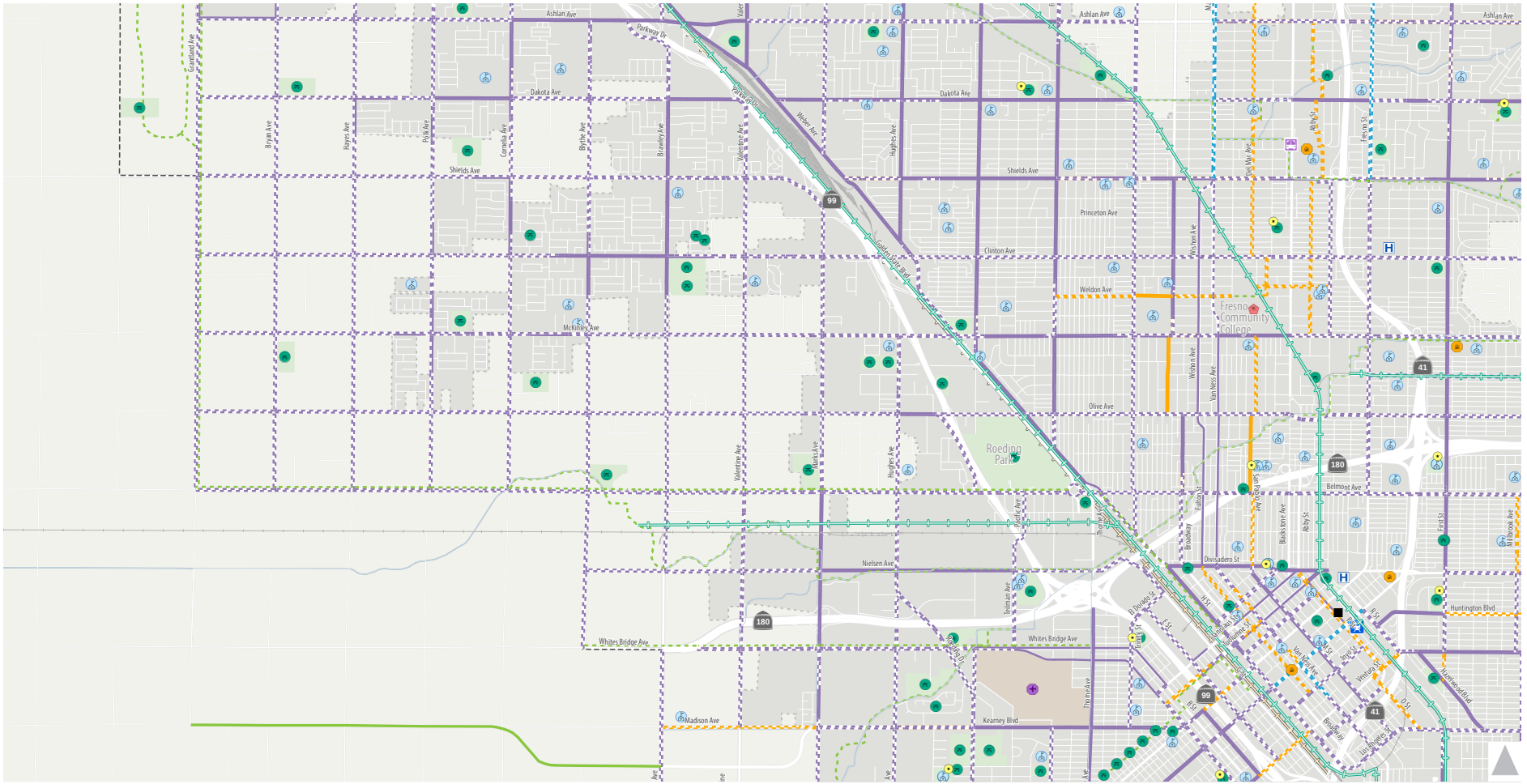

LSA

LEGEND

Existing Bicycle Facilities	Planned Bicycle Facilities
Class I Bike Path	Class I Bike Path
Class II Bike Lane	Class II Bike Lane
Class III Bike Route	Class III Bike Route
	Class IV Separated Bikeways

N

0 2,500 5,000
FEET

FIGURE 3-3

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

City of Fresno Existing and Proposed Bikeway Network

SOURCE: City of Fresno Active Transportation Plan, December 2016

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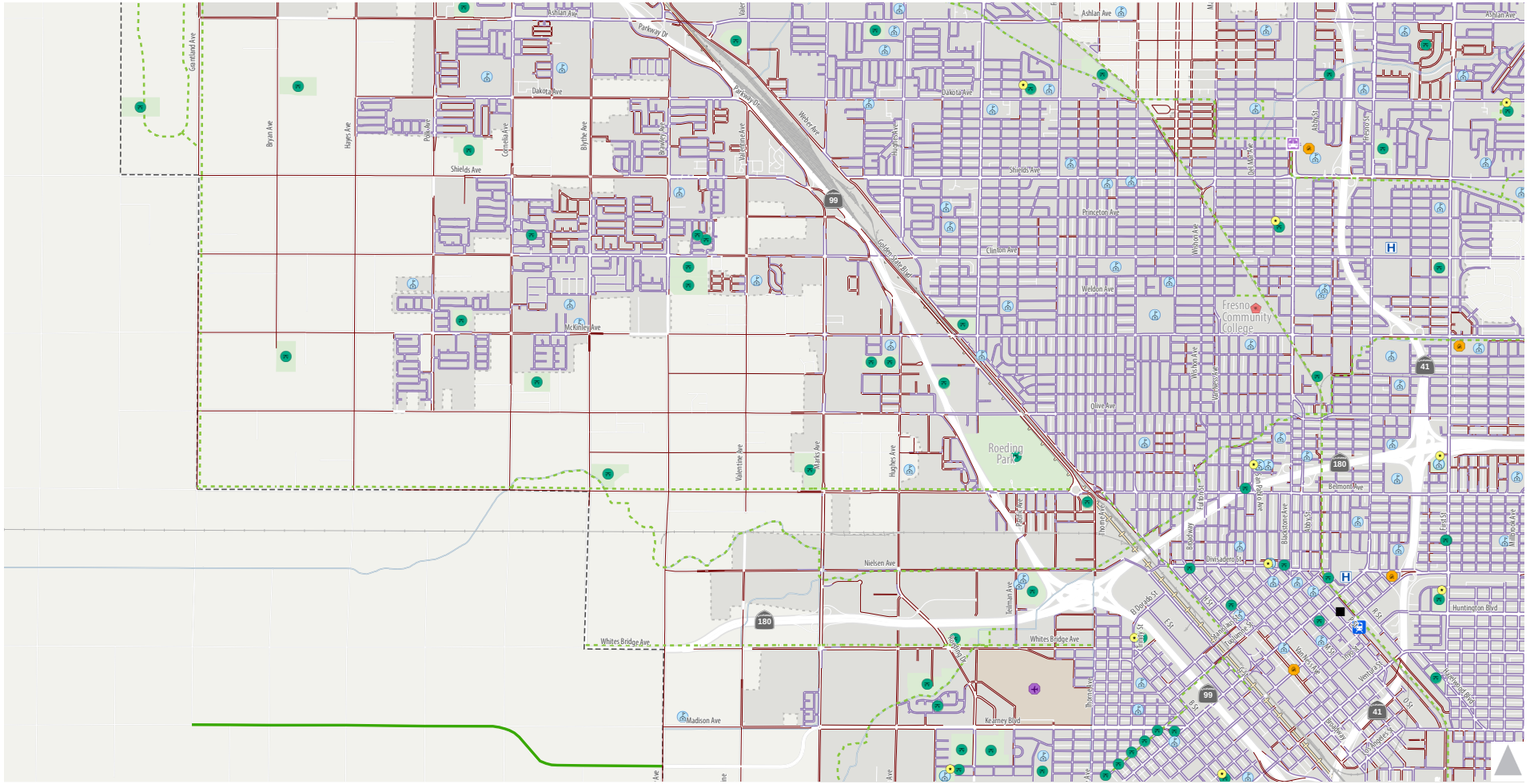


LSA

LEGEND

- Class I Bike Path
- Class I Bike Path
- Existing Sidewalk
- Planned Sidewalks

N

0 2,500 5,000

FEET

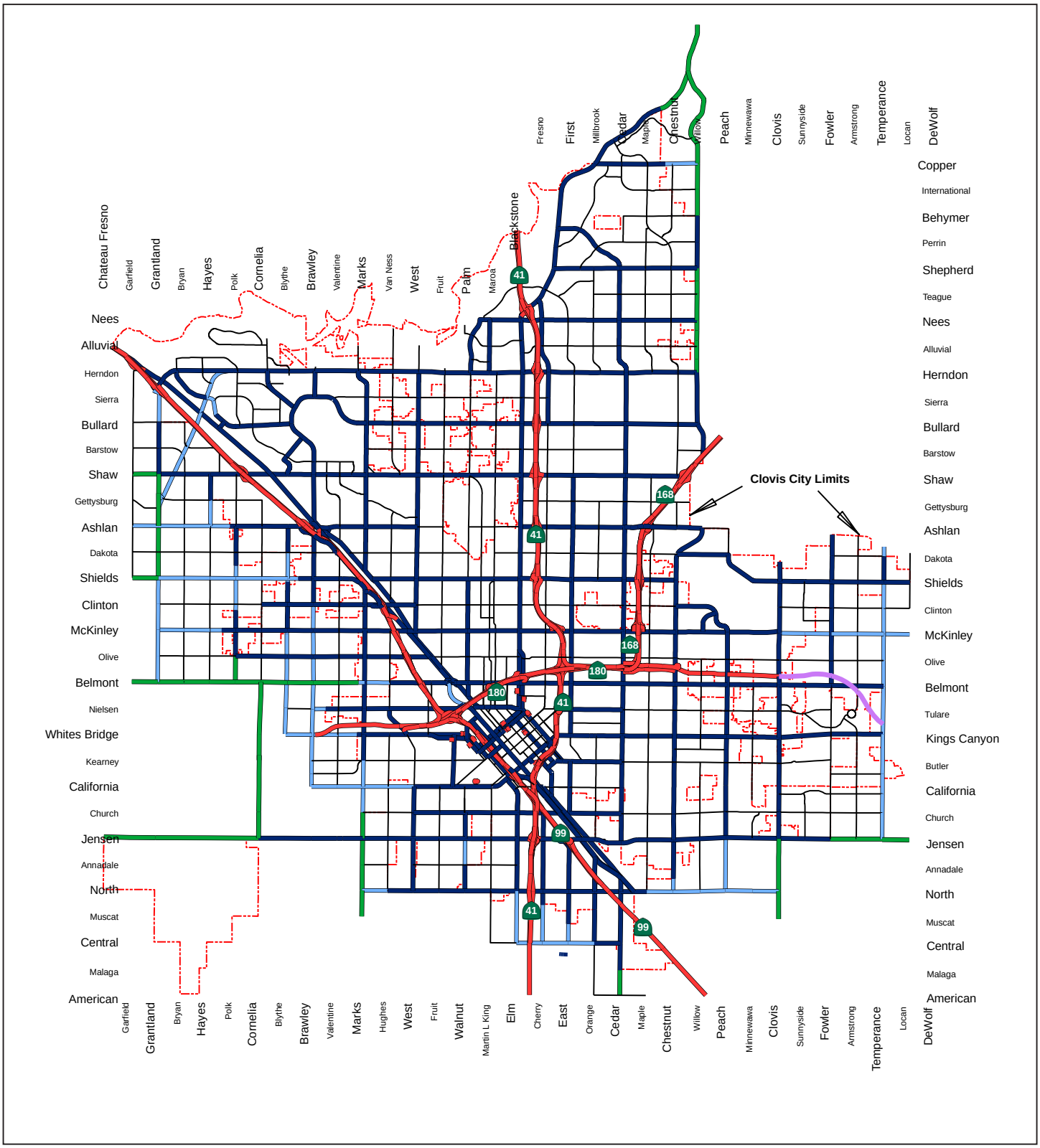
FIGURE 3-4

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

City of Fresno Existing and Proposed Sidewalk Network

SOURCE: City of Fresno Active Transportation Plan, December 2016

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\Fig3-4_Sidewalk.ai (12/20/2024)



LSA

LEGEND

- FREEWAY
- COUNTY PERMIT ROUTE
- EXISTING TRUCK ROUTE
- FUTURE FREEWAY
- MAJOR STREETS
- FUTURE PLANNED TRUCK ROUTE
- CITY LIMITS

N

0 6,500 13,000

FEET

FIGURE 3-5

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

City of Fresno Existing and Proposed Truck Routes

SOURCE: City of Fresno Designated Truck Routes, September 2005

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\Fig3-5_TruckRoutes.ai (12/20/2024)

4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

Traffic volumes for existing conditions were developed using existing count data collected by Counts Unlimited in September 2024 at study intersections and roadway segments. Daily tube counts were collected for roadway segments while a.m. and p.m. peak hour turning movement counts were collected at study intersections.

Vehicle classification counts were collected at all study area intersections excluding the intersections of study intersection 7 (Hughes Avenue/Belmont Avenue) and intersection 8 (Hughes Avenue/Nielsen Avenue). Truck percentages for every approach at these intersections were obtained from the classification counts. Non-classification counts were collected for study intersections 7 and 8. The percentage of trucks at study intersections 7 and 8 was determined based on truck percentages derived from adjacent intersections with classification counts. At these locations, a Passenger Car Equivalent (PCE) factor of 2.0 was applied for 2- and 3- axle trucks and a PCE factor of 3.0 was applied for four (4) or more axle trucks for the purposes of this study.

Figure 4-1 illustrates peak hour traffic volumes at study intersections under existing conditions. Table 4.A shows the daily traffic volumes at roadway segments under existing conditions.

Detailed count sheets are included in Appendix A.

4.2 NEAR TERM WITHOUT PROJECT TRAFFIC VOLUMES

Traffic volumes for near term conditions were developed by adding trips from approved and pending projects in the area to existing traffic volumes. Information concerning approved and pending projects in the vicinity of the proposed project was obtained from City staff and from the adjacent jurisdiction of Fresno County. Figure 4-2 illustrates the approved and pending project locations.

Trip generations for approved and pending projects were either obtained from the respective traffic studies prepared for the projects or developed using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). Table 4.B summarizes the approved and pending projects trip generation. As shown in Table 4.B, the approved and pending projects are expected to generate a total of 11,988 net daily trips, with 1,181 net trips occurring in the a.m. peak hour and 1,322 net trips occurring in the p.m. peak hour.

Approved and pending project trips were assigned to the roadway network based on either the distributions provided in the corresponding traffic studies or their locations in relation to surrounding land uses and regional arterials. Figure 4-3 illustrates the peak hour approved and pending projects trip assignment at study intersections. Figure 4-4 illustrates the peak hour traffic volumes at study intersections under near term without project conditions. Table 4-C shows the peak hour traffic volumes at roadway segments under near term without project conditions.

It should be noted that traffic volumes for this scenario have been developed as an intermediate step to develop traffic volumes for the near term plus project scenario. As such, an LOS analysis was not conducted for this scenario.

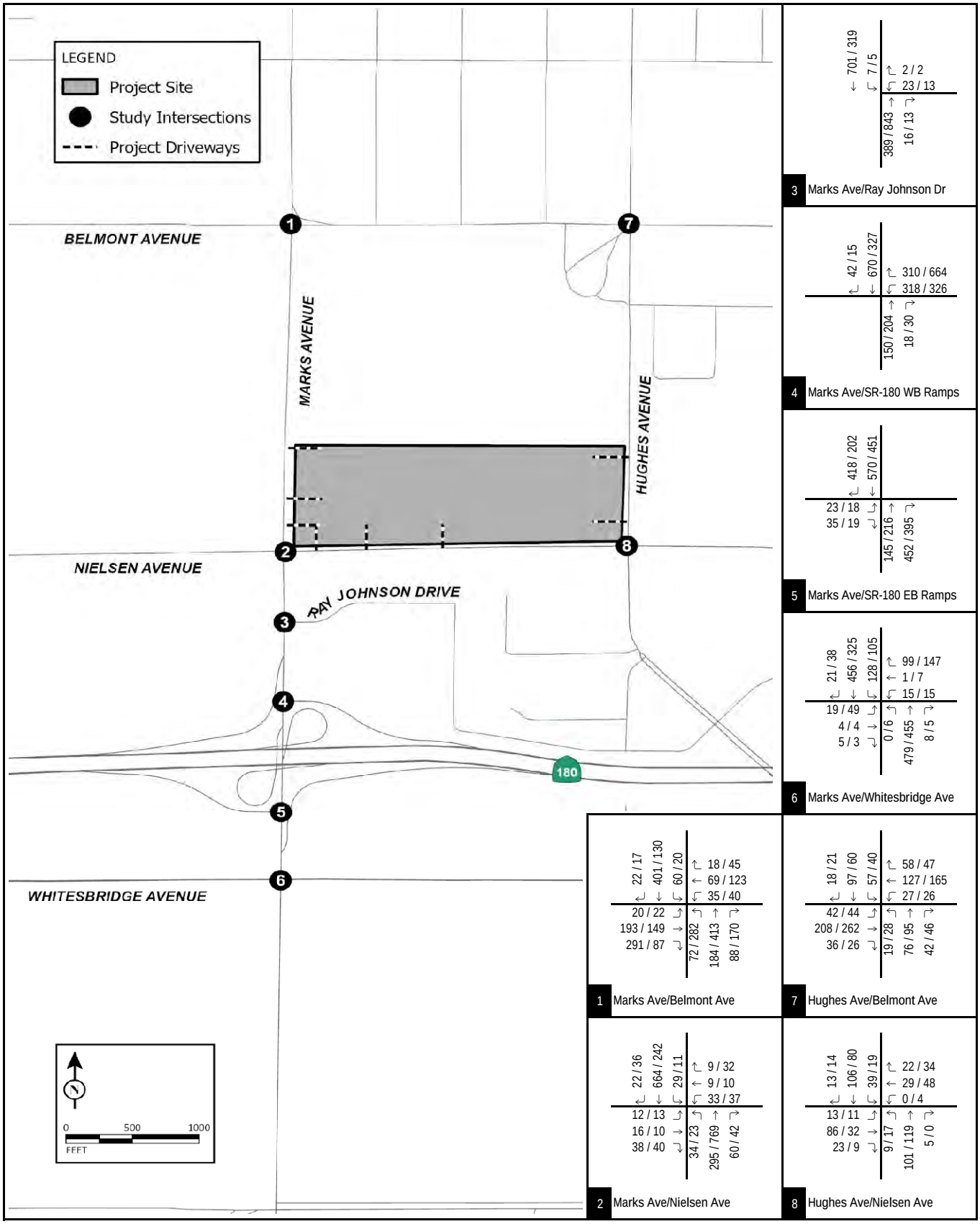
4.3 CUMULATIVE YEAR (2046) WITHOUT PROJECT TRAFFIC VOLUMES

Traffic volumes for cumulative year conditions were developed using the Fresno Council of Governments' (Fresno COG's) Activity-Based Model (ABM). The methodology used to develop cumulative year traffic volumes at all study intersections is consistent with the National Cooperative Highway Research Program (NCHRP) and Fresno COG's procedures for post-processing of modeled traffic volumes. Figure 4-5 illustrates the peak hour traffic volumes at study intersections under cumulative year without project conditions. Table 4.D shows the peak hour traffic volumes at roadway segments under cumulative year without project conditions.

Detailed volume development worksheets are included in Appendix B.

4.4 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Approved and Pending Project Locations
- Figure 4-3: Approved and Pending Projects Trip Assignment
- Figure 4-4: Near Term Without Project Peak Hour Traffic Volumes
- Figure 4-5: Cumulative Year (2046) Without Project Peak Hour Traffic Volumes
- Table 4.A: Existing Roadway Segment Daily Traffic Volumes
- Table 4.B: Approved and Pending Projects Trip Generation
- Table 4.C: Near Term Roadway Segment Daily Traffic Volumes
- Table 4.D: Cumulative Year (2046) Roadway Segment Daily Traffic Volumes



LSA

FIGURE 4-1

XXX / YYY

AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Existing Peak Hour Traffic Volumes

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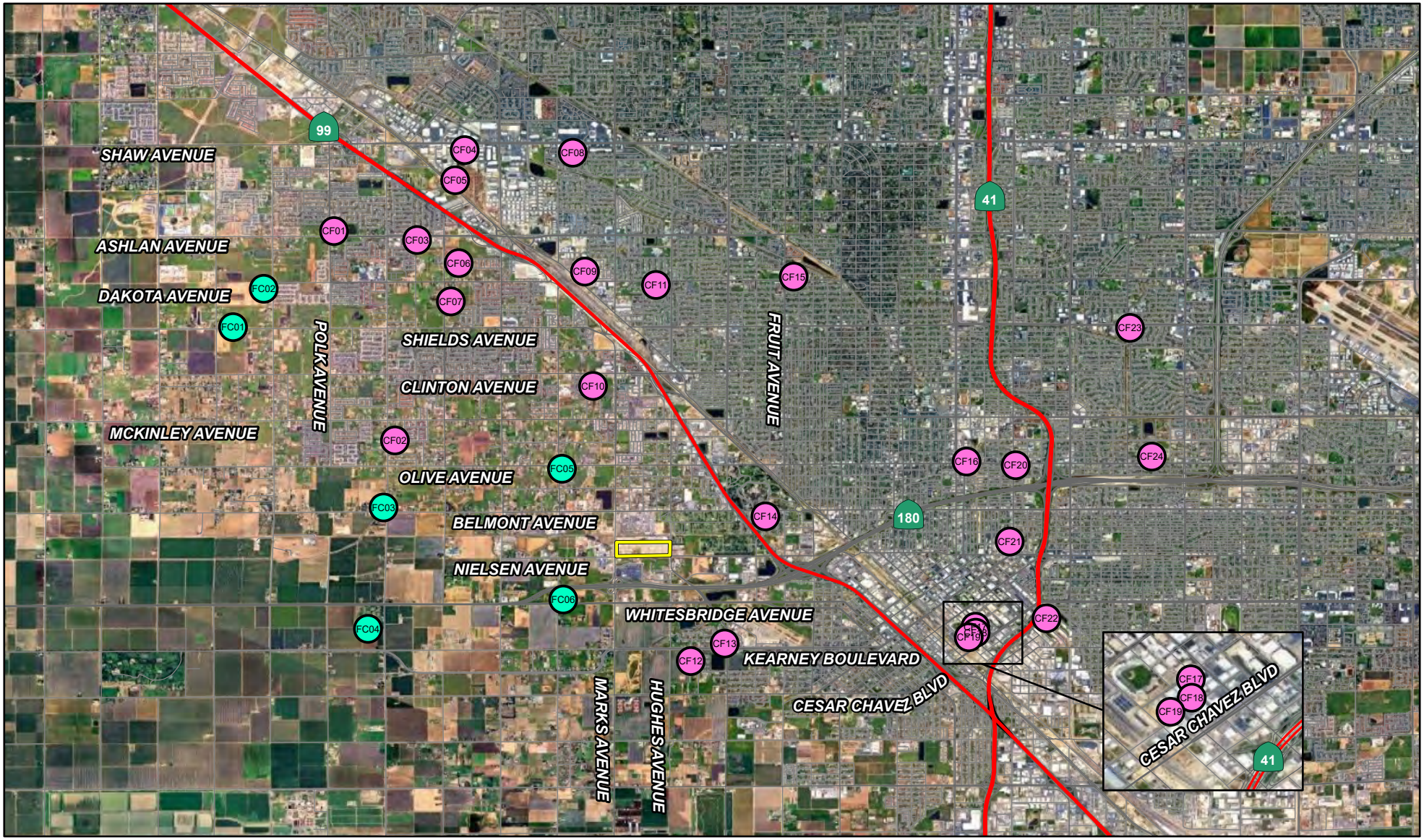

LSA

LEGEND

- Project Site
- City of Fresno
- Fresno County

0 4000 8000
FEET

SOURCE: Google Earth Imagery, 2024

FIGURE 4-2

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study
Approved and Pending Project Locations

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\GIS\report\20241963_2740 Nielsen Ave\20241963_2740 Nielsen Ave.aprx (12/20/2024)

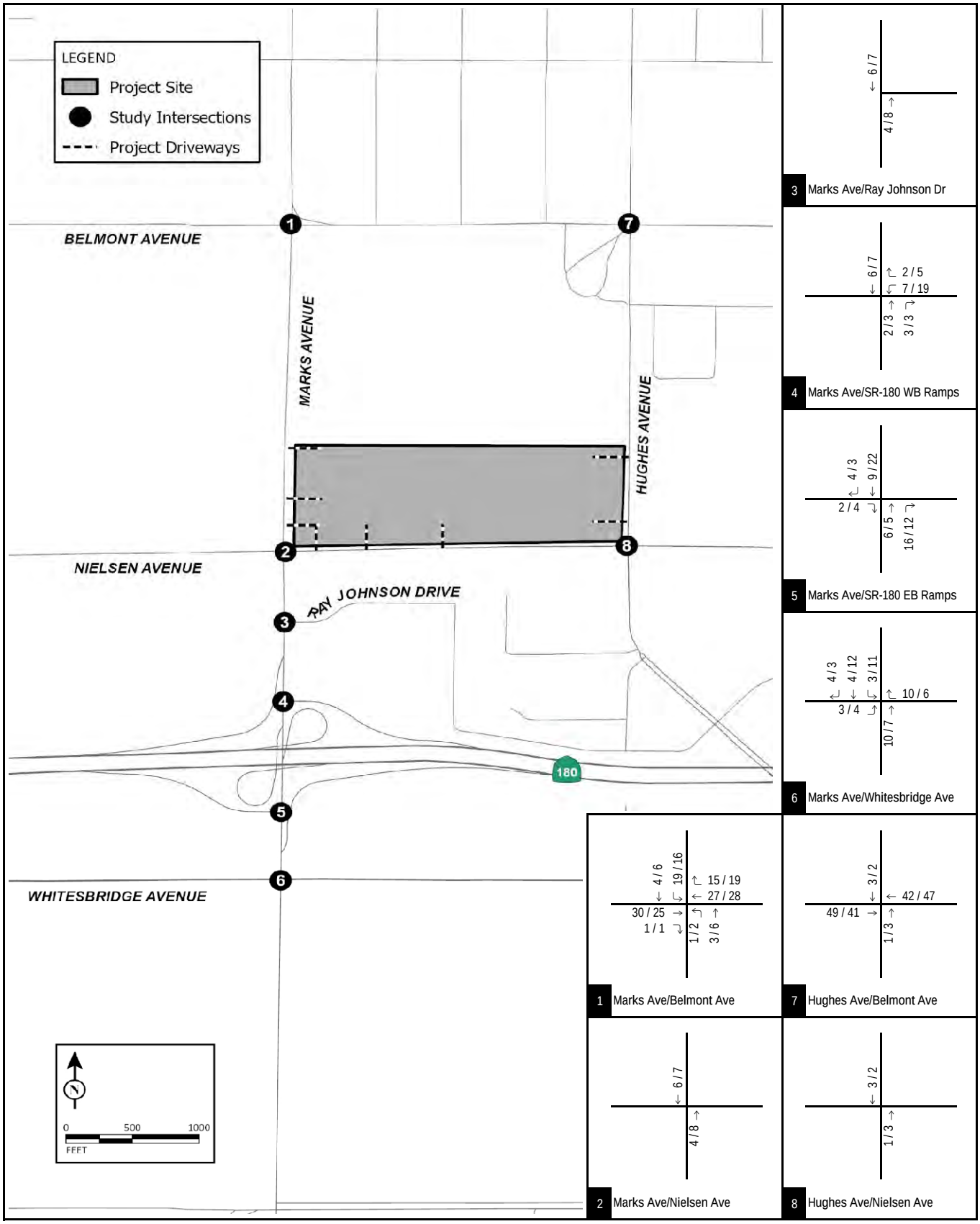

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FIGURE 4-3

XX / YY
AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Approved and Pending Projects Trip Assignment

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\z30_Asgn_CumulProj.xlsx\Figure (12/20/2024)

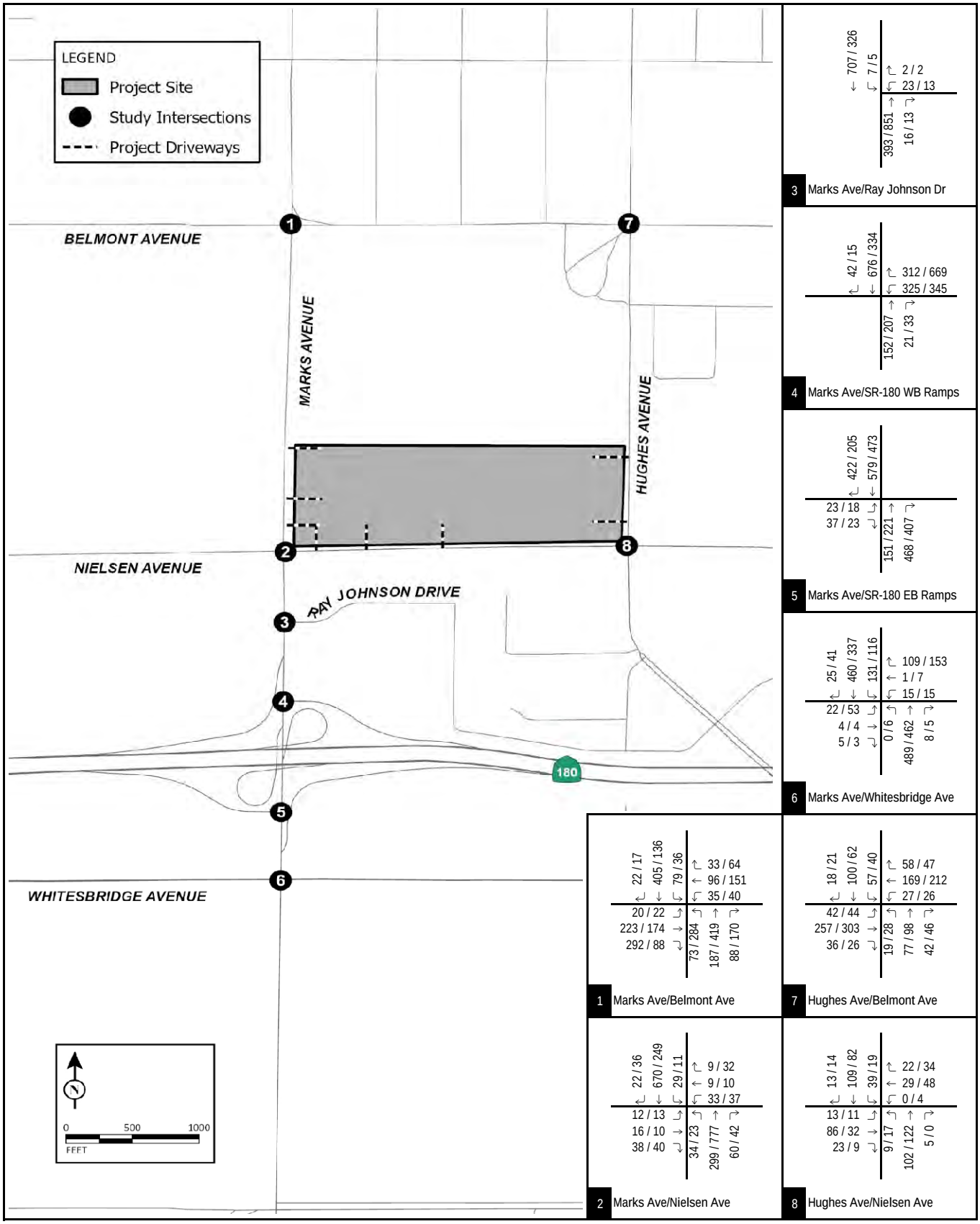

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FIGURE 4-4

XXX / YYY
AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Near Term Without Project Peak Hour Traffic Volumes

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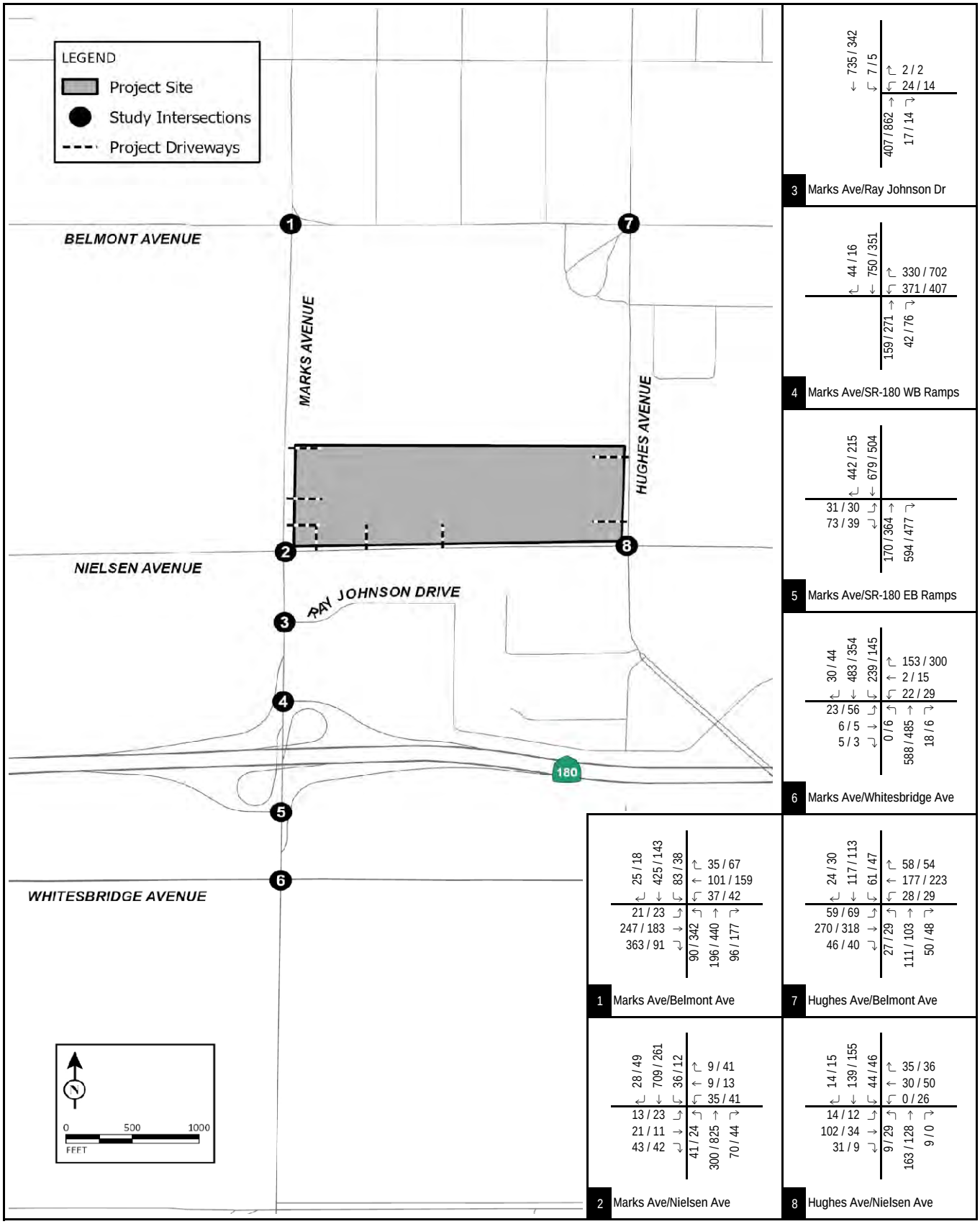

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FIGURE 4-5

XXX / YYY

AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Cumulative Year (2046) Without Project Peak Hour Traffic Volumes

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Table 4.A: Existing Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Existing ADT	Project Trips	Existing Plus Project ADT
Marks Avenue	1	between Belmont Avenue and Nielsen Avenue	8,472	274	8,746
	2	between Nielsen Avenue and Ray Johnson Drive	9,006	1,432	10,438
	3	between Ray Johnson Drive and SR-180 Westbound Ramps	9,267	1,433	10,700
	4	between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	9,320	767	10,087
Belmont Avenue	5	between Marks Avenue and Hughes Avenue	4,846	0	4,846
Nielsen Avenue	6	between Marks Avenue and Hughes Avenue	1,520	1,402	2,922
Hughes Avenue	7	between Belmont Avenue and Nielsen Avenue	3,029	966	3,995

ADT = Average Daily Traffic

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Table 4.B: Approved and Pending Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
CF01 .	**McDonald's and Dutch Bro's Coffee Shop (P23-01667 & P-01668)**									
	5450 W Ashlan Avenue									
	Fast-Food Restaurant with Drive-Through Window	4.409	TSF							
	Trips/Unit[1]			22.75	21.86	44.61	17.18	15.85	33.03	467.48
	Trip Generation			100	96	196	76	70	146	2,061
	Pass-by Trips[2]			(50)	(48)	(98)	(42)	(39)	(80)	(1,082)
	Net New Trips			50	48	98	34	31	66	979
	Coffee/Donut Shop with Drive-Through Window	1.150	TSF							
	Trips/Unit[3]			43.80	42.08	85.88	19.50	19.49	38.99	533.57
	Trip Generation			50	48	98	22	22	44	614
	Pass-by Trips[4]			(25)	(24)	(49)	(12)	(12)	(24)	(322)
	Net New Trips			25	24	49	10	10	20	292
CF02 .	**Pine Villas (P23-01677)**									
	1732 N Cornelia Avenue									
	Single-Family Detached Housing	26	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			5	14	19	15	9	24	245
CF03 .	**P24-03998**									
	4587 W Ashlan Avenue									
	Single-Family Detached Housing	26	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			5	14	19	15	9	24	245
CF04 .	**P24-01852**									
	4744 N El Capitan Avenue									
	General Office Building	20.400	TSF							
	Trips/Unit[6]			1.34	0.18	1.52	0.24	1.20	1.44	10.84
	Trip Generation			27	4	31	5	24	29	221
CF05 .	**Bendel Warehouse Buildings (P23-01534)**									
	4468 N Bendel Avenue									
	Warehousing	28.835	TSF							
	Trips/Unit (Cars)			0.090	0.027	0.117	0.035	0.089	0.124	1.180
	Trips/Unit (2-Axle Trucks)			0.006	0.006	0.012	0.006	0.006	0.012	0.116
	Trips/Unit (3-Axle Trucks)			0.005	0.004	0.009	0.005	0.005	0.010	0.094
	Trips/Unit (4+ Axle Trucks)			0.017	0.015	0.032	0.018	0.016	0.034	0.320
	Trips/Unit (Total)[7]			0.13	0.039	0.170	0.050	0.130	0.180	1.710
	Trip Generation (Cars)			3	0	3	1	3	4	34
	Trip Generation (2-Axle Trucks)			0	0	0	0	0	0	3
	Trip Generation (3-Axle Trucks)			0	0	0	0	0	0	3
	Trip Generation (4+ Axle Trucks)			0	1	1	1	0	1	9
	Truck Trip Generation			0	1	1	1	0	1	15
	Trip Generation (Total)			3	1	4	2	3	5	49
CF06 .	**Blythe Village (P24-03400)**									
	3572 N Blythe Avenue									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit	67	DU							
	Trips/Unit[8]			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			7	20	27	21	13	34	452

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Table 4.B: Approved and Pending Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
CF07 .	**P21-04821**									
	3230 N Blythe Avenue									
	Single-Family Detached Housing	128	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			23	67	90	76	45	121	1,207
CF08 .	**TAT Fresno LLC (P24-02777)**									
	3257 W Shaw Avenue									
	Marijuana Dispensary	7.117	TSF							
	Trips/Unit[9]			5.48	5.06	10.54	9.46	9.46	18.92	211.12
	Trip Generation			39	36	75	67	67	134	1,503
CF09 .	**Car Repair Shop (P24-00873)**									
	3215 W Saginaw Way									
	Automobile Care Center	3.000	TSF							
	Trips/Unit[10]			1.49	0.76	2.25	1.49	1.62	3.11	26.80
	Trip Generation			4	2	6	4	5	9	80
CF10 .	**P24-02863**									
	3119 W Clinton Avenue									
	Single-Family Detached Housing	115	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			21	60	81	68	40	108	1,084
CF11 .	**2317 Dakota Apartments (P24-01360)**									
	2317 W Dakota Avenue									
	Single-Family Attached Housing	12	DU							
	Trips/Unit[11]			0.15	0.33	0.48	0.32	0.25	0.57	7.20
	Trip Generation			2	4	6	4	3	7	86
CF12 .	**Kearney & Crystal (P23-03663)**									
	1604 S Crystal Avenue									
	Single-Family Detached Housing	84	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			15	44	59	50	29	79	792
CF13 .	**P24-01322**									
	1404 W Kearney Boulevard									
	Single-Family Detached Housing	8	DU							
	Trips/Unit[5]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			1	4	5	5	3	8	75
CF14 .	**P23-03784**									
	741 W Belmont Avenue, 719 W Belmont Avenue, 461 N Delno Avenue									
	Charter School (K-12)	480	STU							
	Trips/Unit[12]			0.42	0.41	0.83	0.37	0.36	0.73	2.61
	Trip Generation			202	197	399	178	173	351	1,251
CF15 .	**Dakota Apartments (P24-01988)**									
	342 W Dakota Avenue									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit	14	DU							
	Trips/Unit[8]			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			1	4	5	4	3	7	94

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Table 4.B: Approved and Pending Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
CF16 .	**Nguyen Property (P24-04029)**									
	1220 N Abby Street									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit	4	DU							
	Trips/Unit[8]			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			0	1	1	1	1	2	27
CF17 .	**760 Fulton St The Garage (P24-01472)**									
	760 Fulton Street									
	Small Office Building	4.827	TSF							
	Trips/Unit[13]			1.37	0.30	1.67	0.73	1.43	2.16	14.39
	Trip Generation			7	1	8	4	7	11	69
CF18 .	**Smokin Woods BBQ (P24-01065)**									
	727 Fulton Street									
	Fast Casual Restaurant	1.250	TSF							
	Trips/Unit[14]			0.72	0.71	1.43	6.90	5.65	12.55	97.14
	Trip Generation			1	1	2	9	7	16	121
	Pass-by Trips[15]			0	0	0	(4)	(3)	(7)	(52)
	Net New Trips			1	1	2	5	4	9	69
CF19 .	**Viola Fresno (P24-00696)**									
	721 Broadway Street									
	Marijuana Dispensary	9.714	TSF							
	Trips/Unit[9]			5.48	5.06	10.54	9.46	9.46	18.92	211.12
	Trip Generation			53	49	102	92	92	184	2,051
CF20 .	**Circle D Gas Station (P22-04148)**									
	2520 E Olive Avenue									
	Gasoline/Service Station	4	VFP							
	Trips/Unit[16]			5.14	5.14	10.28	6.96	6.95	13.91	172.01
	Trip Generation			21	21	42	28	28	56	688
	Pass-by Trips[17]			(13)	(13)	(26)	(16)	(16)	(32)	(413)
	Net New Trips			8	8	16	12	12	24	275
CF21 .	**Bob Smittcamp TI (P24-02896)**									
	215 N Fresno Street									
	Research and Development Center	60.000	TSF							
	Trips/Unit[18]			0.84	0.19	1.03	0.16	0.82	0.98	11.08
	Trip Generation			50	11	61	10	49	59	665
CF22 .	**Central Valley Herbery (P23-04210)**									
	920 S Topeka Avenue									
	Marijuana Cultivation and Processing Facility	15.093	TSF							
	Trips/Unit[19]			0.64	0.05	0.69	0.18	0.46	0.64	6.65
	Trip Generation			10	1	11	3	7	10	100

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Table 4.B: Approved and Pending Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
CF23 .	**P23-02877**									
	3152 N Millbrook Avenue									
	Strip Retail Plaza (<40k)	7.800	TSF							
	Trips/Unit[20]			1.42	0.94	2.36	3.30	3.29	6.59	54.45
	Trip Generation			11	7	18	26	26	52	425
	Pass-by Trips[21]			0	0	0	(10)	(10)	(21)	(170)
	Net New Trips			11	7	18	16	16	31	255
	Fast-Food Restaurant with Drive-Through Window	2.200	TSF							
	Trips/Unit[1]			22.75	21.86	44.61	17.18	15.85	33.03	467.48
	Trip Generation			50	48	98	38	35	73	1,028
	Pass-by Trips[2]			(25)	(24)	(49)	(21)	(19)	(40)	(540)
	Net New Trips			25	24	49	17	16	33	488
CF24 .	**1261 Ninth Street Apartments (P23-03676)**									
	1261 N Ninth Street									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit	8	DU							
	Trips/Unit[8]			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			1	2	3	3	2	5	54
FC01 .	**CUP 3751**									
	Approximately 790 feet northeast of the Shields Avenue and Bryan Avenue									
	High Intensity Park	3.300	AC							
	Trip Generation[22]			150	1	151	0	149	149	328
FC02 .	**CUP 3432**									
	Southwest corner of Hayes Avenue and Dakota Avenue									
	High Intensity Park	1.860	AC							
	Trip Generation[23]			0	0	0	40	40	80	400
FC03 .	**CUP 3655**									
	Northwest corner of Cornelia Avenue and Belmont Avenue									
	Fast-Food Restaurant and Gasoline Station	5.452	TSF							
	Trip Generation[24]			62	60	122	67	67	134	1,340
	Pass-by Trips[24]			(32)	(31)	(63)	(36)	(36)	(72)	(720)
	Net New Trips			30	29	59	31	31	62	620
FC04 .	**UCUP 3692**									
	Approximately 1,340 feet northwest of Cornelia Avenue and Madison Avenue									
	Funeral Chapel Facility	1.860	AC							
	Trip Generation[25]			6	0	6	0	6	6	12
FC05 .	**CUP 3636**									
	3375 W Olive Ave									
	Gasoline/Service Station	4	VFP							
	Net Trip Generation[26]			65	64	129	57	56	113	1,290
FC06 .	**UCUP 3749**									
	Northeast corner of Valentine Avenue and Whitesbridge Avenue									
	Solid Waste Processing Facility									
	Trip Generation[27]			4	3	7	3	4	7	70
	Gross Trip Generation (PCE)			**996**	**757**	**1,466**	**826**	**772**	**1,598**	**15,287**
	Pass-By Trips			**(145)**	**(140)**	**(285)**	**(141)**	**(135)**	**(276)**	**(3,299)**
	Total Net Trip Generation (PCE)			**851**	**617**	**1,181**	**685**	**637**	**1,322**	**11,988**

Notes:

DU = Dwelling Units; RM = Rooms; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

[1] Rates from Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition), Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" , Setting/Location - 'General

[2] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 934 - 'Fast-Food Restaurant with Drive-Through Window.' A pass-by rate of 50% was used for the a.m. peak hour and a

[3] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 937 - "Coffee/Donut Shop with Drive-Through Window" , Setting/Location - 'General Urban/Suburban'.

[4] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 937 - 'Coffee/Donut Shop with Drive-Through Window.' A pass-by rate of 50% was used for the a.m. peak hour and a

[5] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 210 - "Single-Family Detached Housing" , Setting/Location - 'General Urban/Suburban'.

[6] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 710 - "General Office Building" , Setting/Location - 'General Urban/Suburban'.

[7] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 150 - "Warehousing" , Setting/Location - 'General Urban/Suburban'.

[8] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 220 - "Multifamily Housing (Low-Rise) Not Close to Rail Transit" , Setting/Location - 'General Urban/Suburban'.

[9] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 882 - "Marijuana Dispensary" , Setting/Location - 'General Urban/Suburban'.

[10] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 942 - "Automobile Care Center" , Setting/Location - 'General Urban/Suburban'.

[11] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 215 - "Single-Family Attached Housing" , Setting/Location - 'General Urban/Suburban'.

[12] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 538 - "Charter School (K-12)" , Setting/Location - 'General Urban/Suburban'.

[13] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 712 - "Small Office Building" , Setting/Location - 'General Urban/Suburban'.

[14] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 930 - "Fast Casual Restaurant" , Setting/Location - 'General Urban/Suburban'.

[15] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 930 - 'Fast Casual Restaurant.' A pass-by rate of 43% was used for the p.m. peak hour. Since daily pass-by rates are not

[16] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 944 - "Gasoline/Service Station" , Setting/Location - 'General Urban/Suburban'.

[17] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 944 - 'Gasoline/Service Station.' A pass-by rate of 63% was used for the a.m. peak hour and a pass-by rate of 57% was

[18] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use - "Research and Development Center" , Setting/Location - 'General Urban/Suburban'.

[19] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 190 - "Marijuana Cultivation and Processing Facility" , Setting/Location - 'General Urban/Suburban'.

[20] Rates from ITE *Trip Generation Manual* (11th Edition), Land Use 822 - "Strip Retail Plaza (<40k)" , Setting/Location - 'General Urban/Suburban'.

[21] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 822 - 'Strip Retail Plaza (<40k).' A pass-by rate of 40% was used for the p.m. peak hour. Since daily pass-by rates are not

[22] Trip generation from Conditional Use Permit (CUP) 3751 *Planning Commission Staff Report* , dated December 2023.

[23] Trip generation from CUP 3432 *Planning Commission Staff Report* , dated April 2017.

[24] Trip generation from CUP 3655 *Planning Commission Staff Report* , dated December 2021.

[25] Trip generation from Unclassified Conditional Use Permit (UCUP) 3692 *Planning Commission Staff Report* , dated August 2022.

[26] Trip generation from CUP 3636 *Planning Commission Staff Report* , dated February 2022.

[27] Trip generation from CUP 3749 *Planning Commission Staff Report* , dated July 2023.

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Table 4.C: Near Term Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Existing ADT	Approved and Pending Projects Trips	Near Term ADT	Project Trips	Near Term Plus Project ADT
Marks Avenue	1	between Belmont Avenue and Nielsen Avenue	8,472	154	8,626	274	8,900
	2	between Nielsen Avenue and Ray Johnson Drive	9,006	152	9,158	1,432	10,590
	3	between Ray Johnson Drive and SR-180 Westbound Ramps	9,267	152	9,419	1,433	10,852
	4	between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	9,320	292	9,612	767	10,379
Belmont Avenue	5	between Marks Avenue and Hughes Avenue	4,846	554	5,400	0	5,400
Nielsen Avenue	6	between Marks Avenue and Hughes Avenue	1,520	0	1,520	1,402	2,922
Hughes Avenue	7	between Belmont Avenue and Nielsen Avenue	3,029	54	3,083	966	4,049

ADT = Average Daily Traffic

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Table 4.D: Cumulative Year (2046) Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Cumulative Year (2046) ADT	Project Trips	Cumulative Year (2046) With Project ADT
Marks Avenue	1	between Belmont Avenue and Nielsen Avenue	8,892	274	9,166
	2	between Nielsen Avenue and Ray Johnson Drive	9,389	1,432	10,821
	3	between Ray Johnson Drive and SR-180 Westbound Ramps	9,626	1,433	11,059
	4	between SR-180 Westbound Ramps and SR-180 Eastbound Ramps	10,532	767	11,299
Belmont Avenue	5	between Marks Avenue and Hughes Avenue	5,455	0	5,455
Nielsen Avenue	6	between Marks Avenue and Hughes Avenue	1,596	1,402	2,998
Hughes Avenue	7	between Belmont Avenue and Nielsen Avenue	3,744	966	4,710

ADT = Average Daily Traffic

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 110 – 'General Light Industrial' and Land Use 155 – 'High-Cube Fulfillment Center Warehouse – Non-Sort' with setting/location as 'General Urban/Suburban'.

Warehouse trips were converted to passenger vehicles and trucks based on South Coast Air Quality Management District (SCAQMD) recommendations. As such, 31 percent of the warehouse trips will be trucks, which includes 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks. The truck trips were converted to PCE trips using a factor of 2.0 for 2-axle and 3-axle trucks, consistent with HCM recommendations. However, as a conservative approach, a PCE factor of 3.0 was used for 4+ axle trucks for the purposes of this study. Table 5.A illustrates the project trip generation.

As shown in Table 5.A, the proposed project is anticipated to generate 1,537 daily passenger vehicle trips, with 185 passenger vehicle trips occurring in the a.m. peak hour and 174 passenger vehicle trips occurring the p.m. peak hour. Furthermore, the proposed project is anticipated to generate 1,802 daily truck PCE trips, with 214 truck PCE trips occurring in the a.m. peak hour and 203 truck PCE trips occurring in the p.m. peak hour. As such, the proposed project is anticipated to generate a total of 3,339 daily PCE trips, with 399 PCE trips occurring during the a.m. peak hour and 377 PCE trips occurring during the p.m. peak hour.

5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

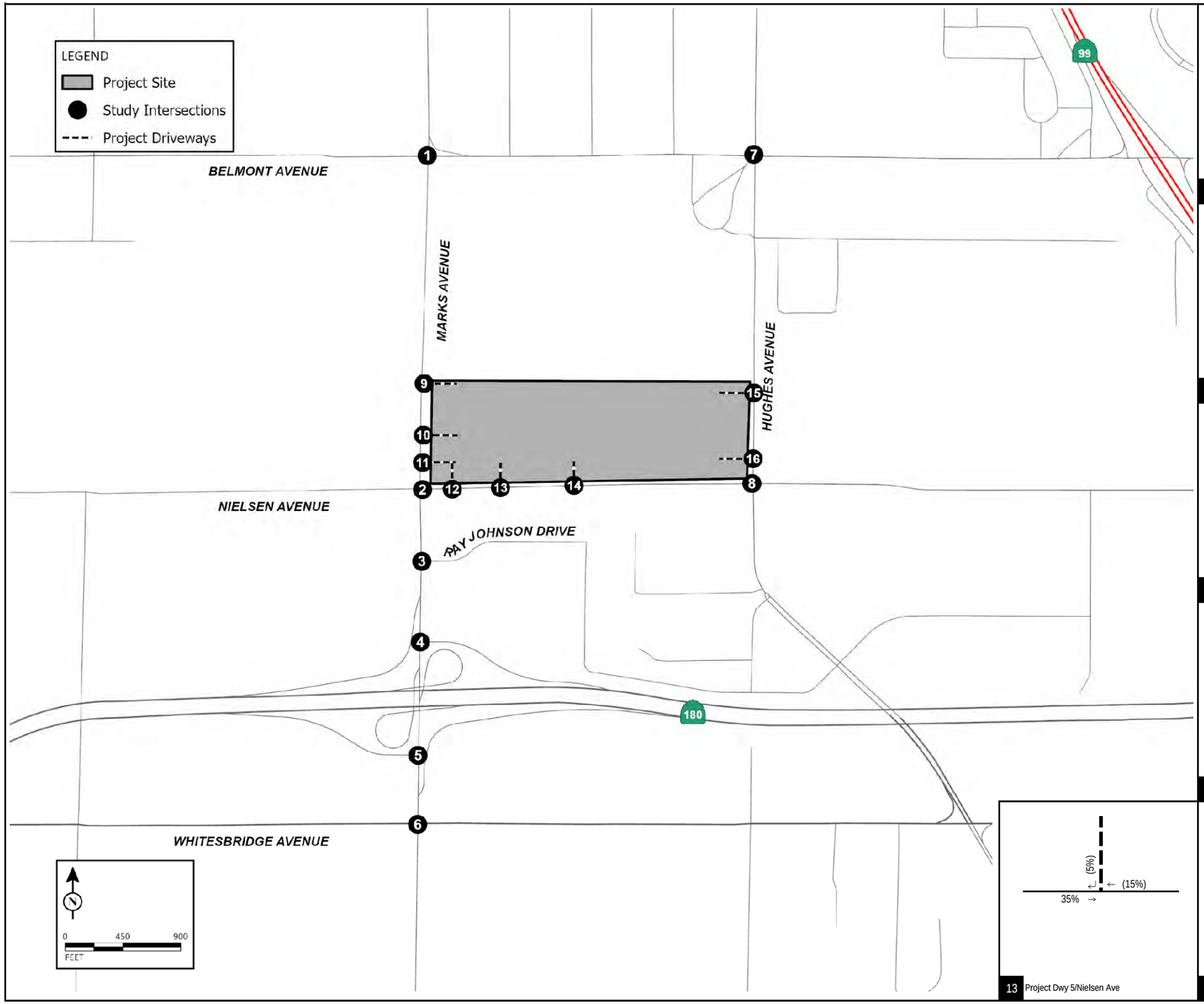
Trip distribution patterns were obtained from select zone model runs of the Fresno COG ABM, which takes into account the location of the proposed project in relation to surrounding land uses and the regional roadway network. Separate select zone trip distributions for passenger car and truck trips were obtained from the Fresno COG ABM. The select zone distribution plots are included in Appendix C. However, the model does not account for driveway location, driveway access configuration, or the internal site circulation pattern. Therefore, the distribution was manually adjusted to reflect the project driveway locations and access patterns. Figures 5-1 and 5-2 illustrate the trip distributions at study intersections for passenger vehicle and truck trips, respectively.

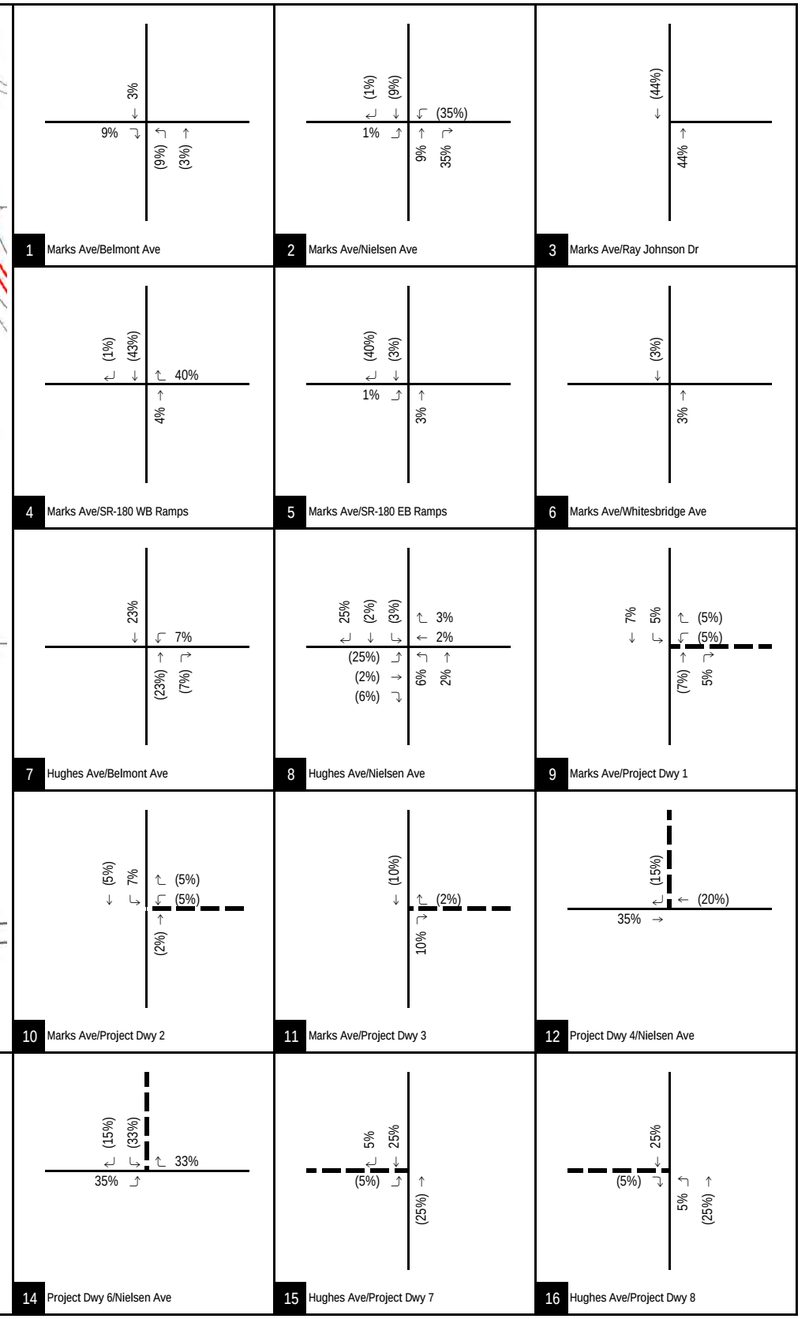
The project trip assignment is the product of the project trip generation and the trip distribution percentages. Figures 5-3 and 5-4 illustrate the trip assignments at study intersections for passenger vehicle and truck trips, respectively. Figure 5-5 illustrates the total net project trip assignment. It should be noted that these figures also include trip distribution and assignment at all the project driveways. These figures help demonstrate the volume development methodology with addition of project traffic under 'plus project' conditions.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution (Passenger Vehicles)
- Figure 5-2: Project Trip Distribution (Trucks)

- Figure 5-3: Project Trip Assignment (Passenger Vehicles)
- Figure 5-4: Project Trip Assignment (Trucks)
- Figure 5-5: Total Net Project Trip Assignment
- Table 5.A: Project Trip Generation





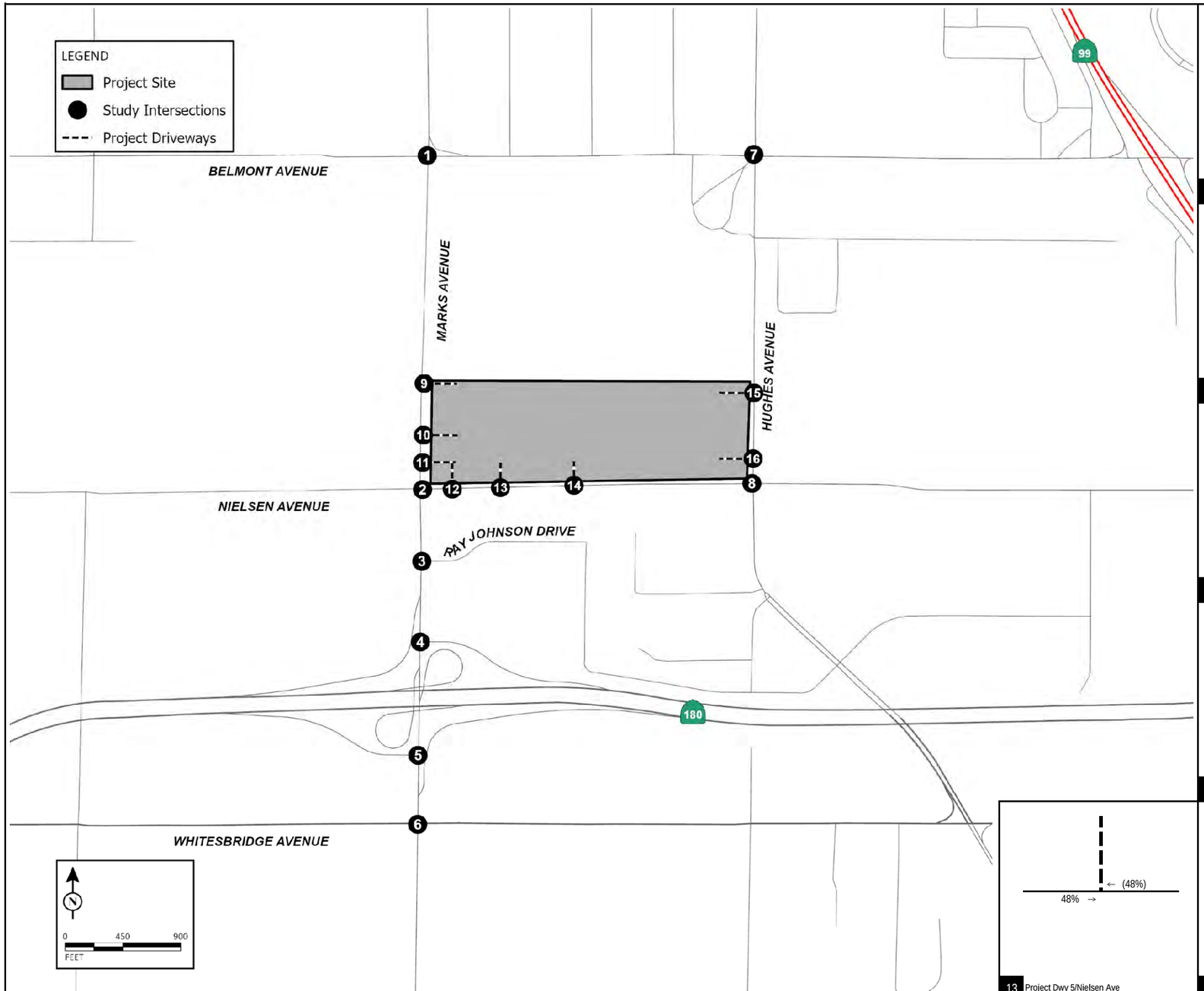
LSA

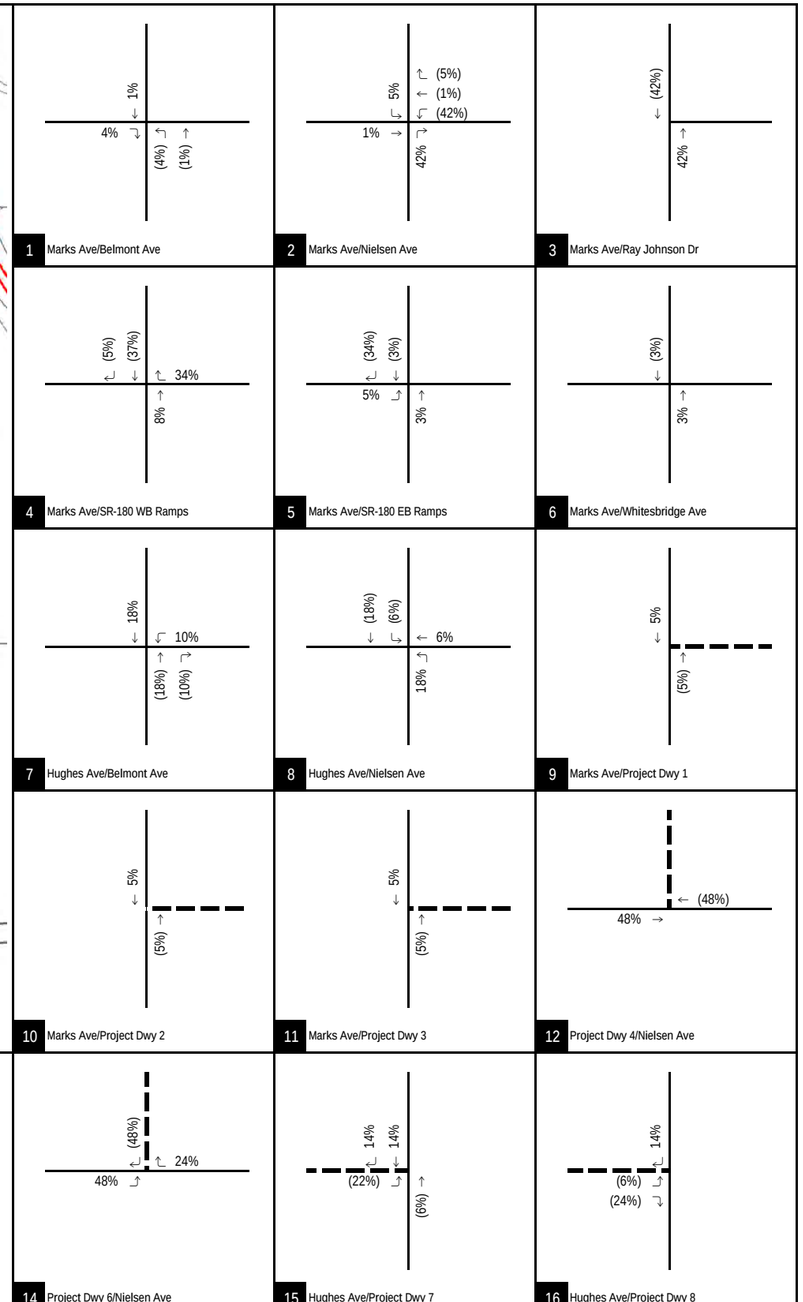
FIGURE 5-1

XX% (YY%)
Inbound (Outbound) Distribution
Project Driveway

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Project Trip Distribution (Passenger Vehicles)





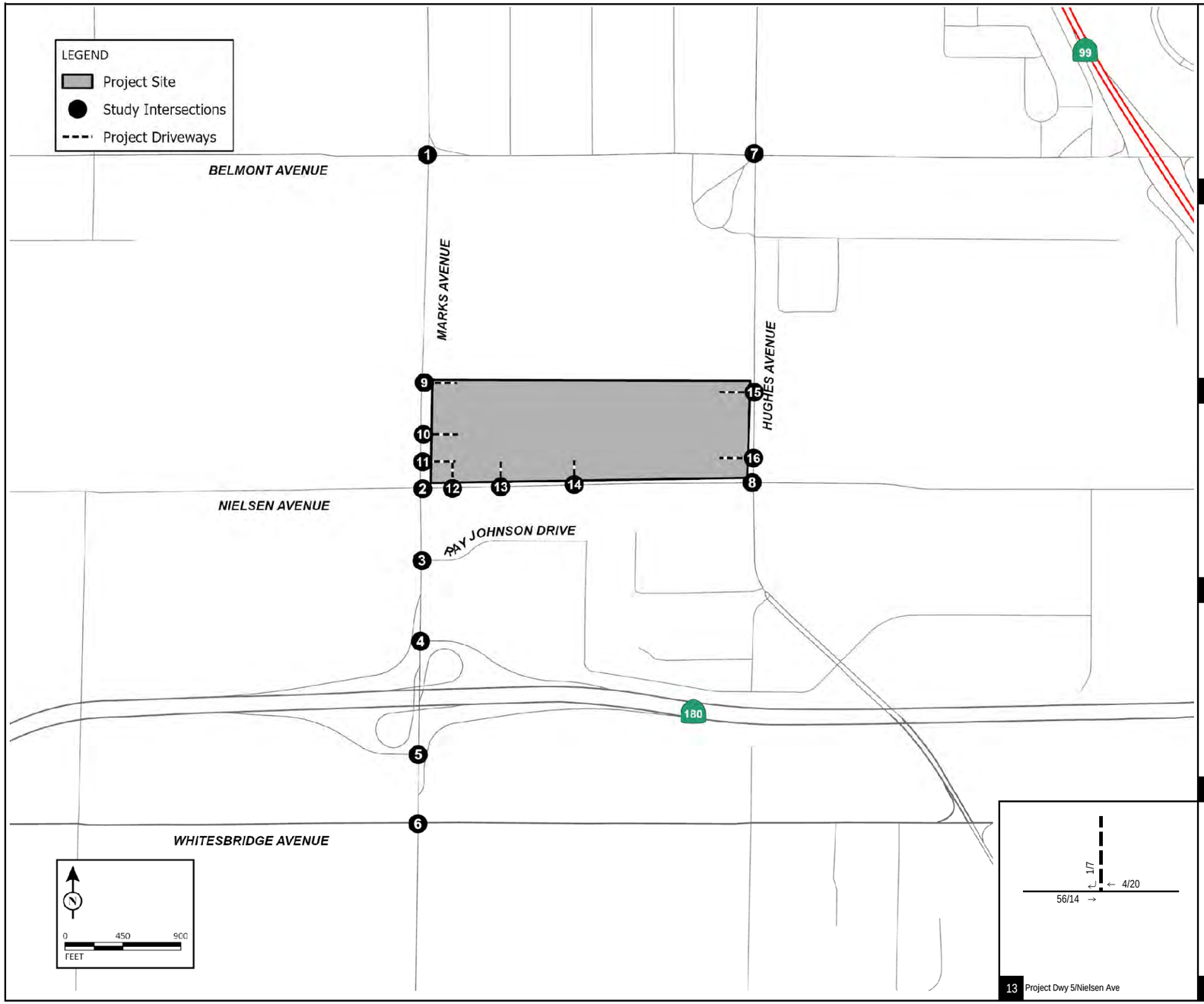
LSA

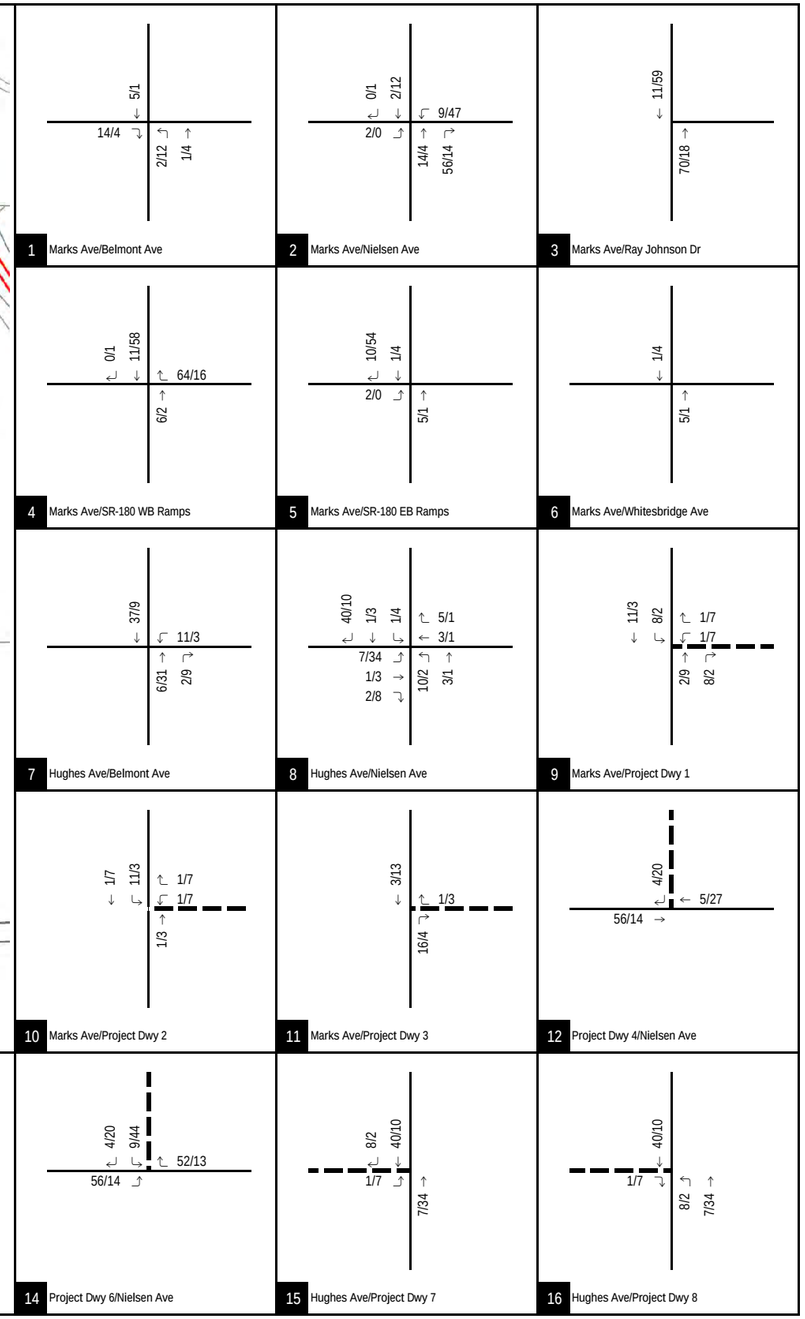
FIGURE 5-2

XX% (YY%)
Inbound (Outbound) Distribution
Project Driveway

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Project Trip Distribution (Trucks)





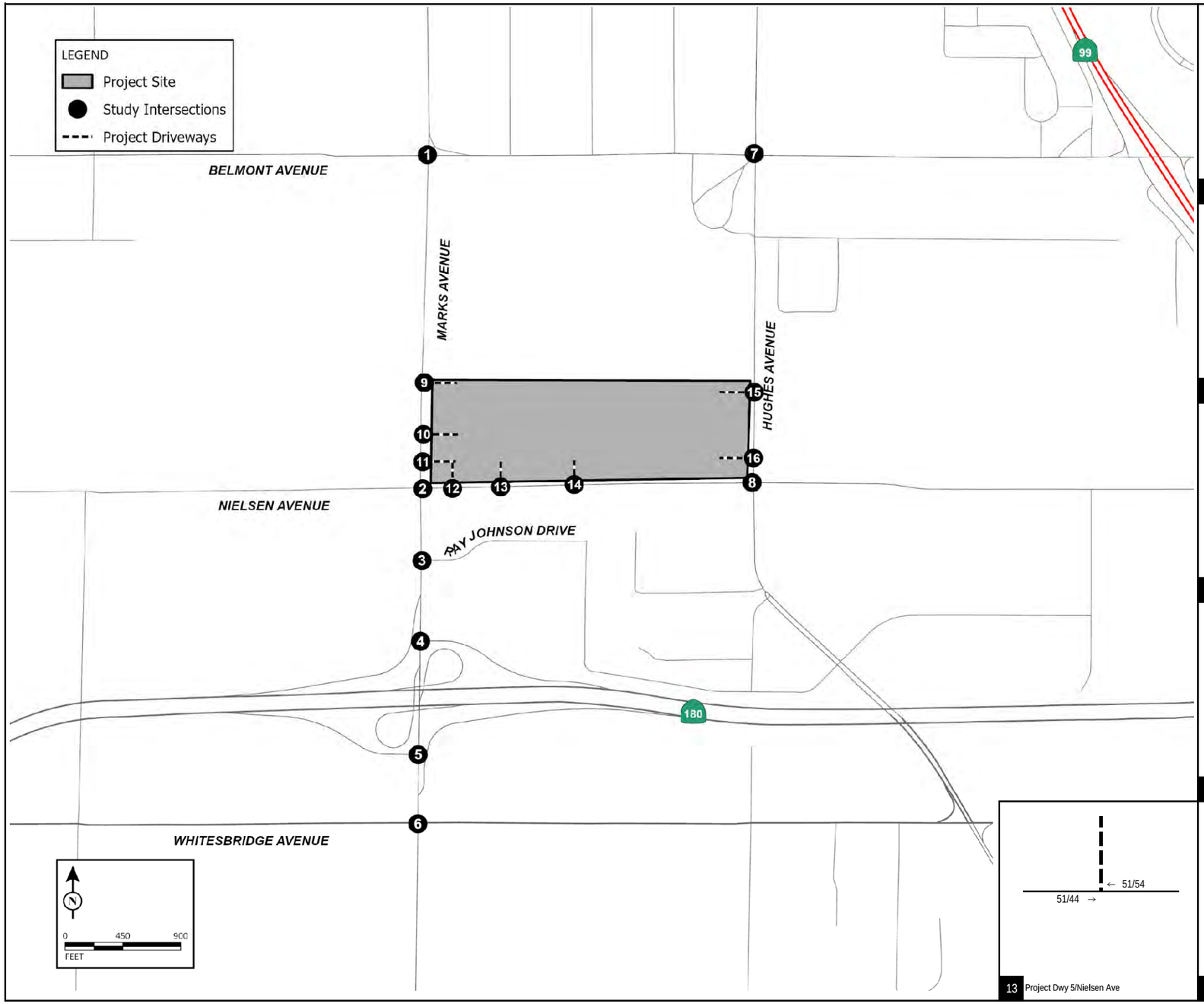
LSA

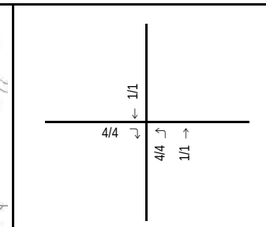
FIGURE 5-3

XX/YY
AM/PM Peak Hour Traffic Volumes
Project Driveway

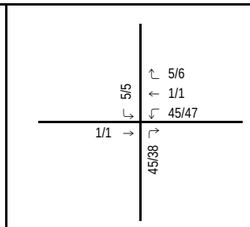
2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Project Trip Assignment (Passenger Vehicles)

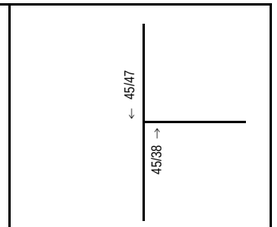




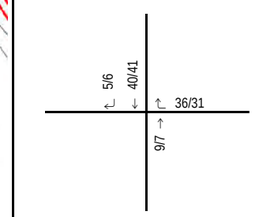
1 Marks Ave/Belmont Ave



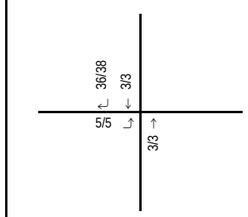
2 Marks Ave/Nielsen Ave



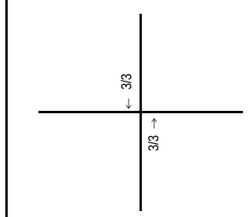
3 Marks Ave/Ray Johnson Dr



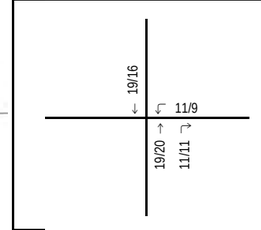
4 Marks Ave/SR-180 WB Ramps



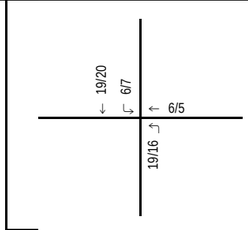
5 Marks Ave/SR-180 EB Ramps



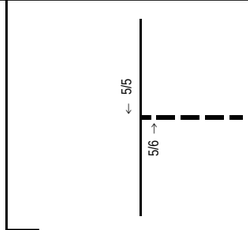
6 Marks Ave/Whitesbridge Ave



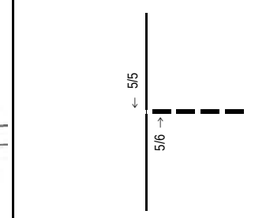
7 Hughes Ave/Belmont Ave



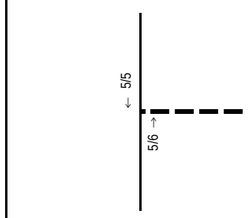
8 Hughes Ave/Nielsen Ave



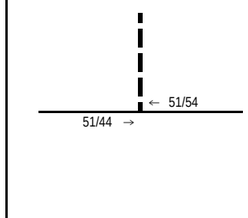
9 Marks Ave/Project Dwy 1



10 Marks Ave/Project Dwy 2

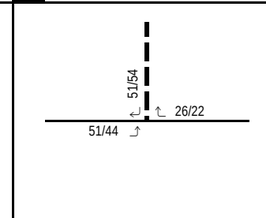


11 Marks Ave/Project Dwy 3

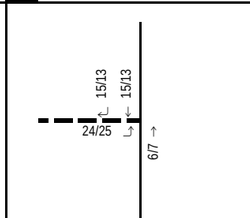


12 Project Dwy 4/Nielsen Ave

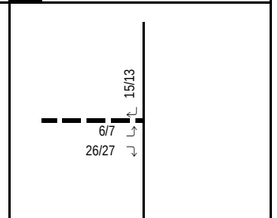
13 Project Dwy 5/Nielsen Ave



14 Project Dwy 6/Nielsen Ave



15 Hughes Ave/Project Dwy 7



16 Hughes Ave/Project Dwy 8

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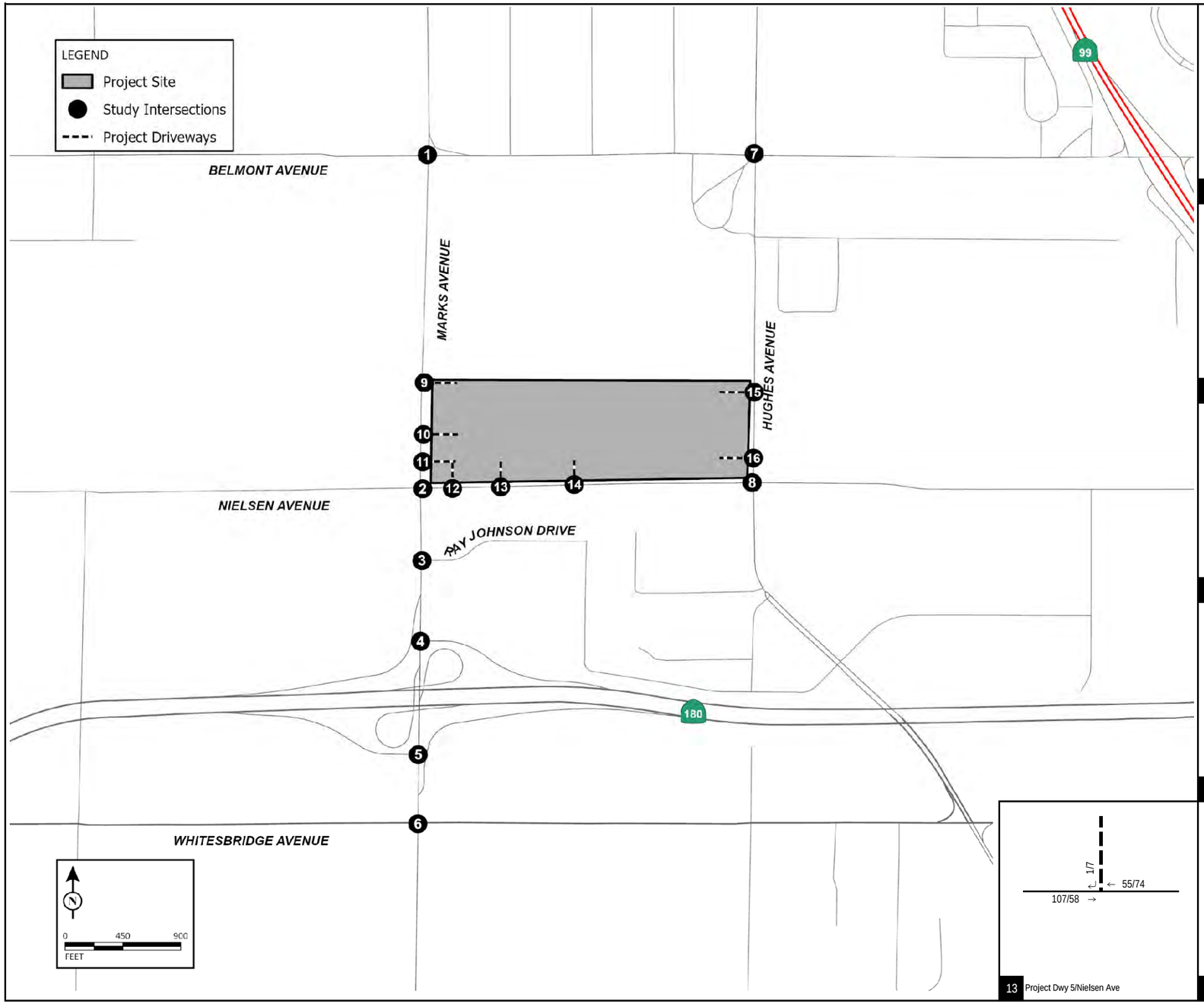
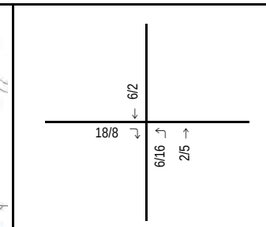
FIGURE 5-4

XX/YY
AM/PM PCE Peak Hour Traffic Volumes
Project Driveway

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Project Trip Assignment (Trucks)





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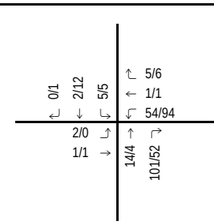

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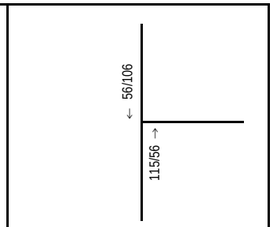
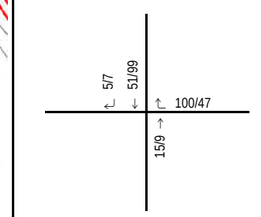
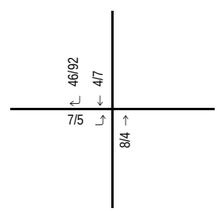


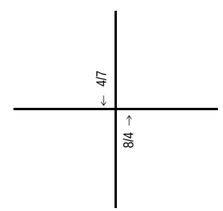
3 Marks Ave/Ray Johnson Dr



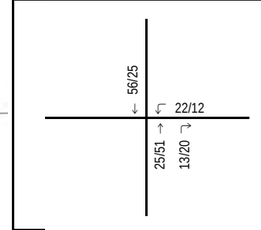
4 Marks Ave/SR-180 WB Ramps



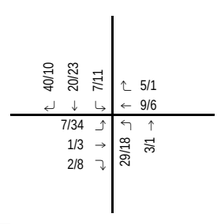
5 Marks Ave/SR-180 EB Ramps



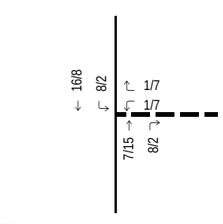
6 Marks Ave/Whitesbridge Ave



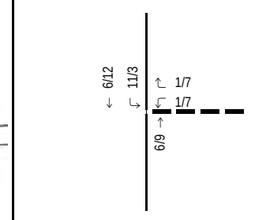
7 Hughes Ave/Belmont Ave



8 Hughes Ave/Nielsen Ave



9 Marks Ave/Project Dwy 1



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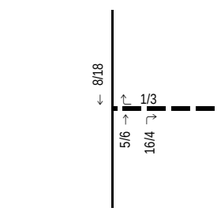
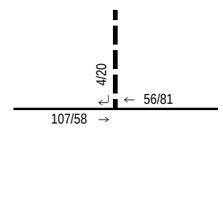
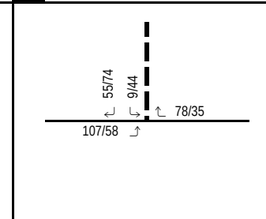


11 Marks Ave/Project Dwy 3

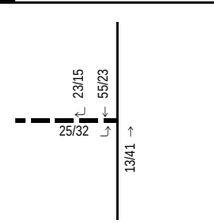


12 Project Dwy 4/Nielsen Ave

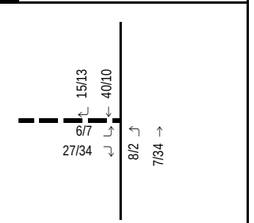
13 Project Dwy 5/Nielsen Ave



14 Project Dwy 6/Nielsen Ave



15 Hughes Ave/Project Dwy 7



16 Hughes Ave/Project Dwy 8

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FIGURE 5-5

XXX/YYY

AM/PM PCE Peak Hour Traffic Volumes

Project Driveway

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Total Net Project Trip Assignment

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Table 5.A: Project Trip Generation
(Using ITE 155 Non-Sort Rates and ITE 110 Light Industrial Rates)

Land Use		Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1									
High-Cube Fulfillment Center- Non-Sort[1,2]	468.796	TSF							
Trips/Unit (Cars)			0.084	0.020	0.104	0.043	0.067	0.110	1.249
Trips/Unit (2-3 Axle Trucks)			0.009	0.009	0.018	0.009	0.011	0.020	0.223
Trips/Unit (4+ Axle Trucks)			0.014	0.014	0.028	0.014	0.016	0.030	0.338
Trips/Unit (Total)			0.120	0.030	0.150	0.060	0.100	0.160	1.810
Trip Generation (Cars)			39	9	48	20	32	52	585
Trip Generation (2-3 Axle Trucks)			4	4	8	4	5	9	104
Trip Generation (4+ Axle Trucks)			7	7	14	6	8	14	159
Trip Generation (Total Trucks)			11	11	22	10	13	23	263
Trip Generation (Total)			50	20	70	30	45	75	848
Trip Generation (Cars)			39	9	48	20	32	52	585
PCE Trip Generation (2-3 Axle Trucks)[3]			8	8	16	8	10	18	208
PCE Trip Generation (4+ Axle Trucks)[3]			21	21	42	18	24	42	477
PCE Trip Generation (Total Trucks)			29	29	58	26	34	60	685
PCE Trip Generation (Total)			68	38	106	46	66	112	1,270
Building 2									
General Light Industrial[4]	248.786	TSF							
Trips/Unit (Cars)			0.449	0.061	0.511	0.063	0.386	0.449	3.360
Trips/Unit (2-3 Axle Trucks)			0.046	0.046	0.091	0.037	0.043	0.080	0.599
Trips/Unit (4+ Axle Trucks)			0.069	0.069	0.138	0.056	0.066	0.122	0.911
Trips/Unit (Total)			0.651	0.089	0.740	0.091	0.559	0.650	4.870
Trip Generation (Cars)			112	15	127	16	96	112	836
Trips/Unit (2-3 Axle Trucks)			11	11	22	9	11	20	149
Trips/Unit (4+ Axle Trucks)			17	17	34	14	16	30	227
Trip Generation (Total Trucks)			28	28	56	23	27	50	376
Trip Generation (Total)			140	43	183	39	123	162	1,212
Trip Generation (Cars)			112	15	127	16	96	112	836
PCE Trip Generation (2-3 Axle Trucks)[3]			22	22	44	18	22	40	298
PCE Trip Generation (4+ Axle Trucks)[3]			51	51	102	42	48	90	681
PCE Trip Generation (Total Trucks)			73	73	146	60	70	130	979
PCE Trip Generation (Total)			185	88	273	76	166	242	1,815

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Building 3								
High-Cube Fulfillment Center- Non-Sort[1,2]	93.084	TSF						
Trips/Unit (Cars)			0.084	0.020	0.104	0.043	0.067	0.110	1.249
Trips/Unit (2-3 Axle Trucks)			0.009	0.009	0.018	0.009	0.011	0.020	0.223
Trips/Unit (4+ Axle Trucks)			0.014	0.014	0.028	0.014	0.016	0.030	0.338
Trips/Unit (Total)			0.120	0.030	0.150	0.060	0.100	0.160	1.810
Trip Generation (Cars)			8	2	10	4	6	10	116
Trip Generation (2-3 Axle Trucks)			1	1	2	1	1	2	21
Trip Generation (4+ Axle Trucks)			1	1	2	1	2	3	32
Trip Generation (Total Trucks)			2	2	4	2	3	5	53
Trip Generation (Total)			10	4	14	6	9	15	169
Trip Generation (Cars)			8	2	10	4	6	10	116
PCE Trip Generation (2-3 Axle Trucks)[3]			2	2	4	2	2	4	42
PCE Trip Generation (4+ Axle Trucks)[3]			3	3	6	3	6	9	96
PCE Trip Generation (Total Trucks)			5	5	10	5	8	13	138
PCE Trip Generation (Total)			13	7	20	9	14	23	254
Trip Generation (Cars)			159	26	185	40	134	174	1,537
Trip Generation (Total Trucks)			41	41	82	35	43	78	692
Total Trip Generation			**200**	**67**	**267**	**75**	**177**	**252**	**2,229**
PCE Trip Generation (Total Trucks)			107	107	214	91	112	203	1,802
PCE Trip Generation (Total)			**266**	**133**	**399**	**131**	**246**	**377**	**3,339**

Note:

PCE = Passenger Car Equivalent; TSF = Thousand Square Feet

[1,2] Rates from Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) supplement Land Use 155 - "High-Cube Fulfilment Center Warehouse- Non-Sort" . The truck mix percentages were obtained from South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, The truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks.

[2] The truck mix percentages were obtained from South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, The truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks.

[3] A Passenger Car Equivalent (PCE) factor 2.0 has been taken for 2-3 axle trucks based on Highway Capacity Manual (HCM) recommendations. Further, as a conservative approach, a PCE factor of 3.0 is taken, for 4+ axle trucks, consistent with latest practices in numerous California jurisdictions.

[4] Rates from ITE Trip Generation Manual (11th Edition) Land Use 110 - "General Light Industrial".

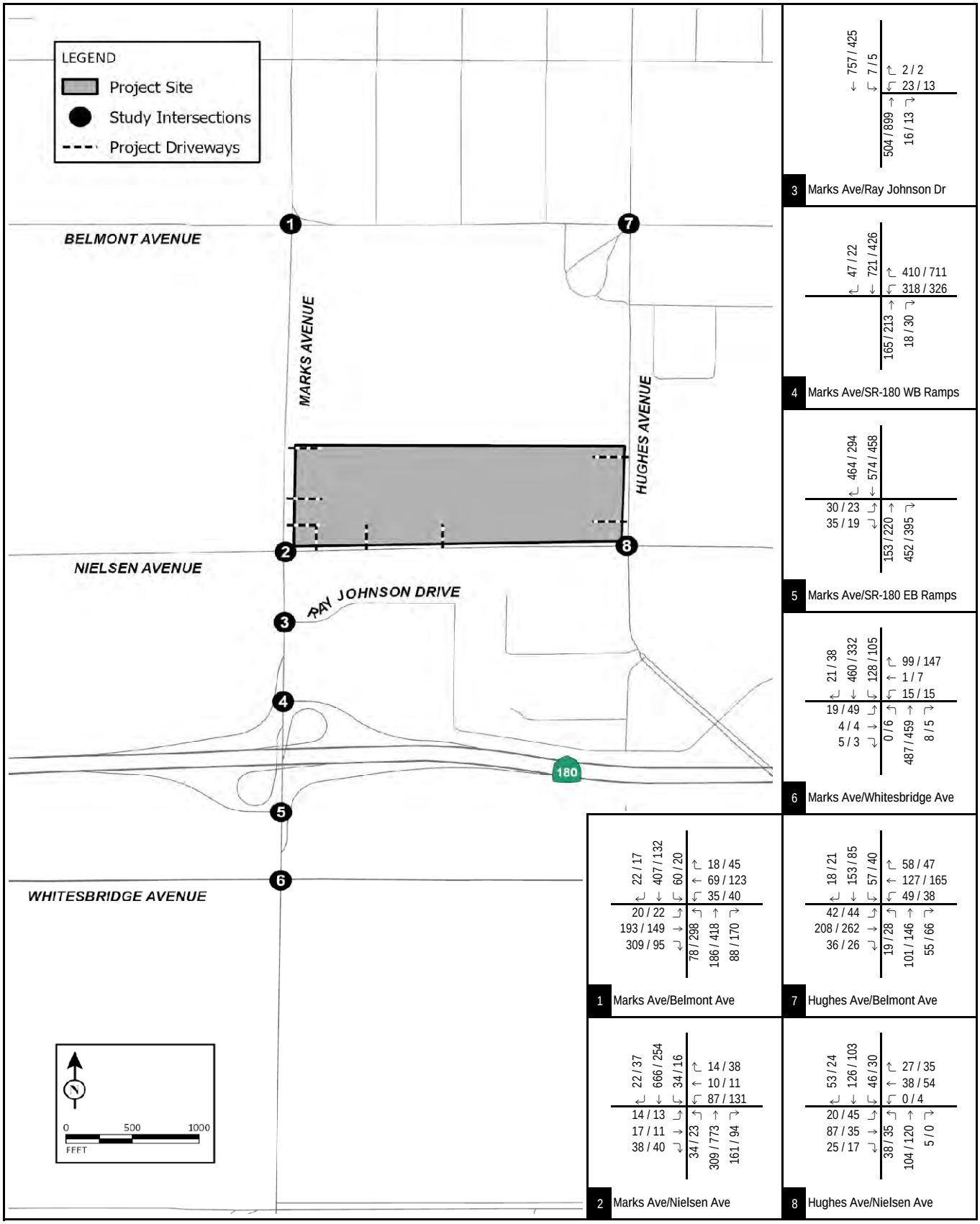
6.0 TRAFFIC VOLUMES FOR PLUS PROJECT SCENARIOS

Existing, near term, and cumulative year plus project traffic volumes were developed by adding project traffic to the traffic for the corresponding 'without project' scenarios. Figures 6-1, 6-2 and 6-3 illustrate the 'plus project' peak hour traffic volumes at study intersections under existing, near term, and cumulative year (2046) conditions, respectively. Previously referenced Tables 4.A, 4.C, and 4.D summarize the 'plus project' daily traffic volumes under existing, near term, and cumulative year (2046) conditions, respectively.

Detailed volume development worksheets are included in Appendix B.

6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing Plus Project Peak Hour Traffic Volumes
- Figure 6-2: Near Term Plus Project Peak Hour Traffic Volumes
- Figure 6-3: Cumulative Year (2046) Plus Project Peak Hour Traffic Volumes



LSA

FIGURE 6-1

XXX / YYY

AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Existing Plus Project Peak Hour Traffic Volumes

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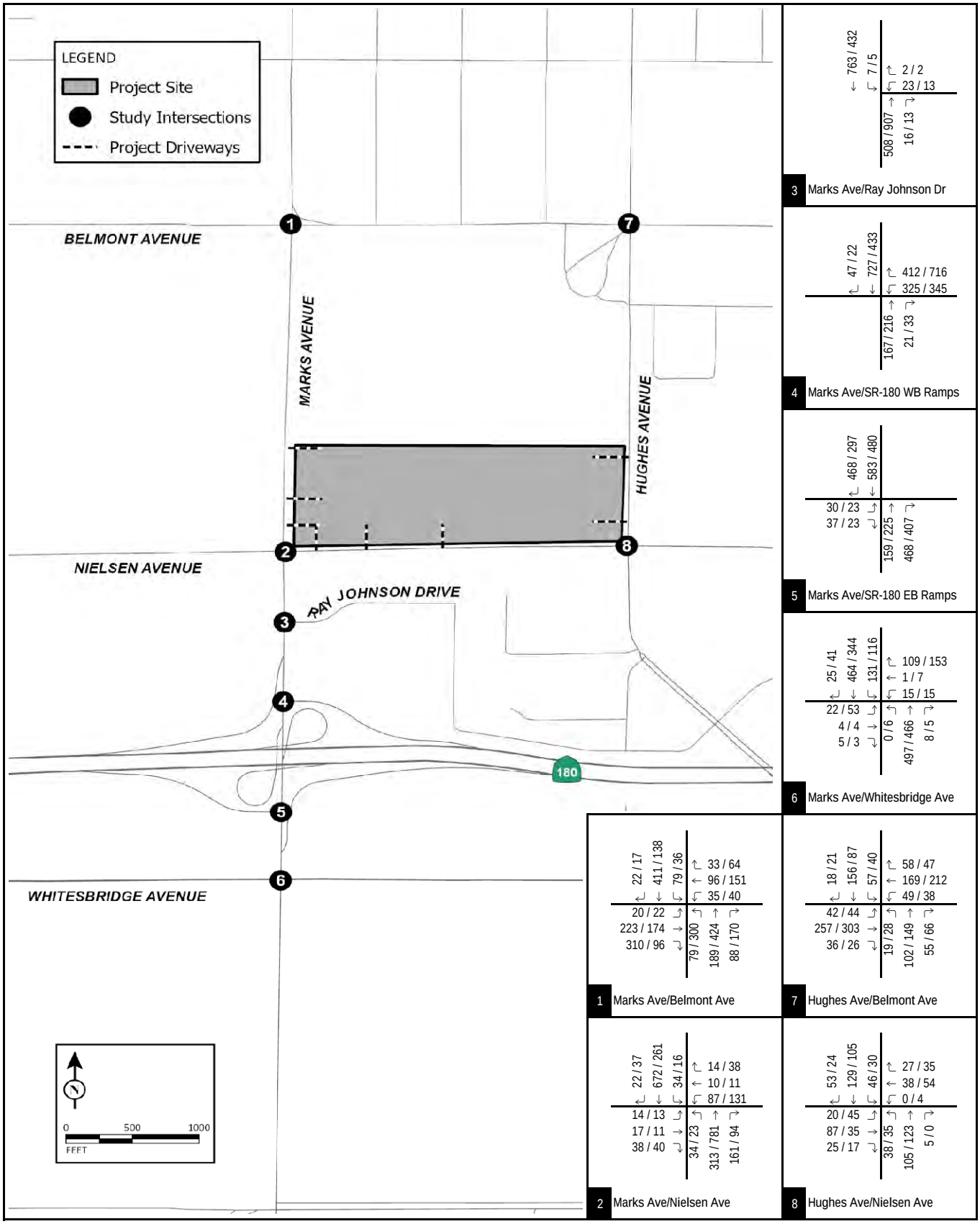


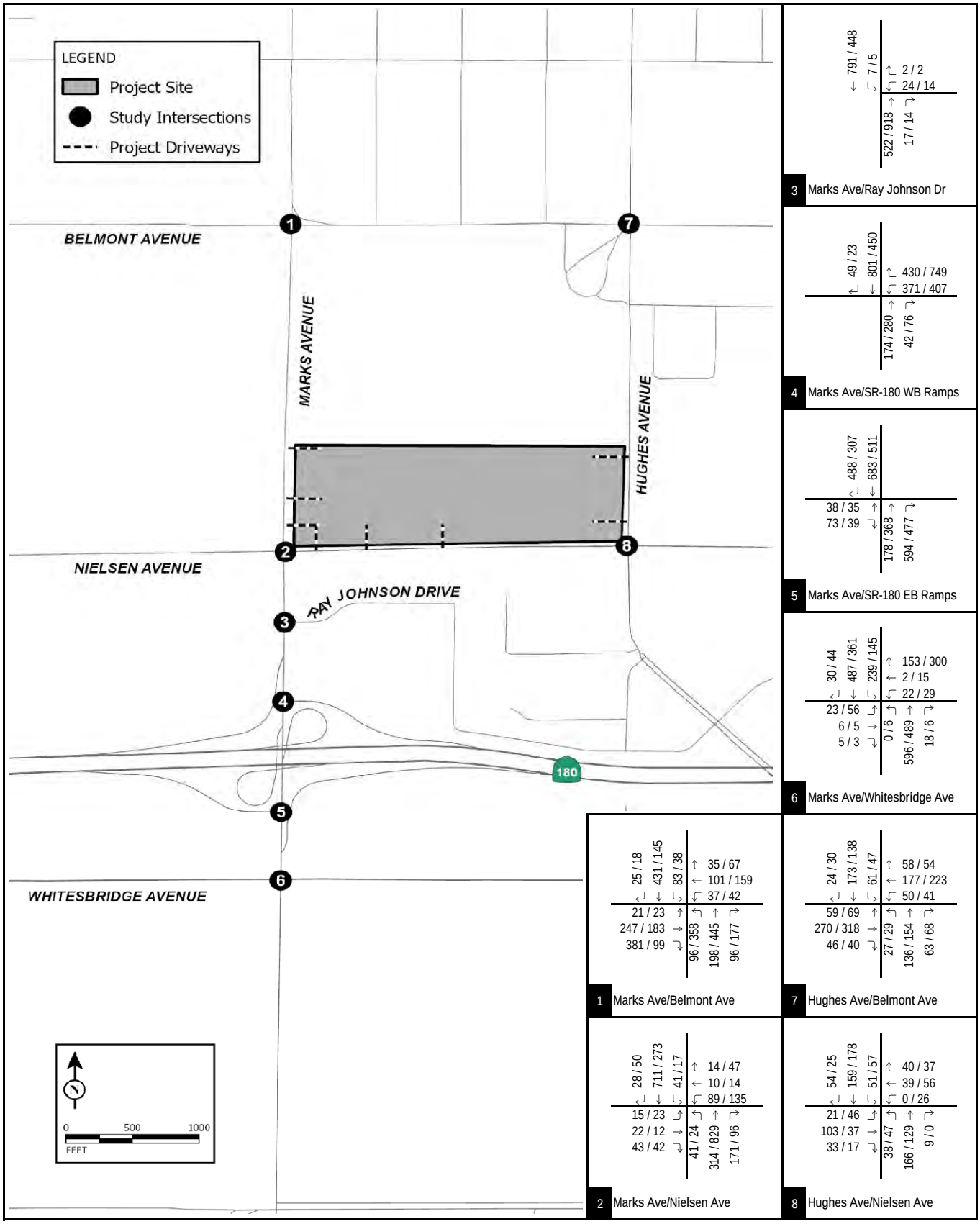
LSA

FIGURE 6-2

XXX / YYY
AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Near Term Plus Project Peak Hour Traffic Volumes



LSA

FIGURE 6-3

XXX / YYY

AM / PM PCE Peak Hour Traffic Volumes

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Cumulative Year (2046) Plus Project Peak Hour Traffic Volumes

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7.0 INTERSECTION LEVELS OF SERVICE

7.1 EXISTING LEVELS OF SERVICE

Previously referenced Figure 3-1 illustrates existing study intersection geometrics and traffic control.

7.1.1 Study Intersections

An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7.A summarizes the results of this analysis and shows that all study intersections are currently operating at a satisfactory LOS under existing conditions.

7.1.2 Roadway Segments

A roadway segment LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7.B summarizes the results of this analysis and shows that all study roadway segments are currently operating at a satisfactory LOS under existing conditions.

7.2 EXISTING PLUS PROJECT LEVELS OF SERVICE

Analysis of the existing plus project scenario is provided to identify direct project-related operational deficiency if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with operational deficiencies only due to the project traffic.

7.2.1 Study Intersections

An intersection LOS analysis was conducted for existing plus project conditions using the methodologies previously discussed. Table 7.A summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under existing plus project conditions.

7.2.2 Roadway Segments

A roadway segment LOS analysis was conducted for existing plus project conditions using the methodologies previously discussed. Table 7.B summarizes the results of this analysis and shows that all study roadway segments are forecast to operate at a satisfactory LOS under existing plus project conditions.

7.3 NEAR TERM PLUS PROJECT LEVELS OF SERVICE

7.3.1 Study Intersections

An intersection LOS analysis was conducted for near-term plus project conditions using the methodologies previously discussed. Table 7.C summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under near term plus project conditions.

7.3.2 Roadway Segments

A roadway segment LOS analysis was conducted for near term plus project conditions using the methodologies previously discussed. Table 7.D summarizes the results of this analysis and shows that all study roadway segments are forecast to operate at a satisfactory LOS under near term plus project conditions.

7.4 CUMULATIVE YEAR (2046) WITHOUT PROJECT LEVELS OF SERVICE

7.4.1 Study Intersections

An intersection LOS analysis was conducted for cumulative year (2046) without project conditions using the methodologies previously discussed. Table 7.E summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under cumulative year (2046) without project conditions.

7.4.2 Roadway Segments

A roadway segment LOS analysis was conducted for cumulative year (2046) without project conditions using the methodologies previously discussed. Table 7.F summarizes the results of this analysis and shows that all study roadway segments are forecast to operate at a satisfactory LOS under cumulative year (2046) without project conditions.

7.5 CUMULATIVE YEAR (2046) PLUS PROJECT LEVELS OF SERVICE

7.5.1 Study Intersections

An intersection LOS analysis was conducted for cumulative year (2046) plus project conditions using the methodologies previously discussed. Table 7.E summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under cumulative year (2046) plus project conditions.

7.5.2 Roadway Segments

A roadway segment LOS analysis was conducted for cumulative year (2046) plus project conditions using the methodologies previously discussed. Table 7.F summarizes the results of this analysis and shows that all study roadway segments are forecast to operate at a satisfactory LOS under cumulative year (2046) plus project conditions.

Detailed intersection level of service worksheets are included in Appendix D.

7.6 LIST OF CHAPTER 7.0 TABLES

- Table 7.A: Existing Intersection Levels of Service
- Table 7.B: Existing Roadway Segment Levels of Service
- Table 7.C: Near Term Intersection Levels of Service
- Table 7.D: Near Term Roadway Segment Levels of Service
- Table 7.E: Cumulative Year (2046) Intersection Levels of Service
- Table 7.F: Cumulative Year (2046) Roadway Segment Levels of Service

LSA

Table 7.A: Existing Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Without Project					Plus Project					Improvement Required?
			Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS	P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS	P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	
1 . Marks Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	11.2	B	15.3	C	AWSC	11.4	B	18.0	C	No
2 . Marks Avenue/Nielsen Avenue	City of Fresno	D	Signal	10.7	B	9.8	A	Signal	11.5	B	11.0	B	No
3 . Marks Avenue/Ray Johnson Drive	City of Fresno	D	Signal	4.4	A	4.4	A	Signal	4.3	A	4.3	A	No
4 . Marks Avenue/SR-180 Westbound Ramps	Caltrans	D	Signal	10.8	B	10.4	B	Signal	11.8	B	10.9	B	No
5 . Marks Avenue/SR-180 Eastbound Ramps	Caltrans	D	Signal	6.7	A	5.9	A	Signal	6.8	A	6.1	A	No
6 . Marks Avenue/Whitesbridge Avenue	City of Fresno/Fresno County	D	Signal	15.5	B	20.0	B	Signal	15.5	B	20.1	C	No
7 . Hughes Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	10.4	B	10.6	B	AWSC	11.6	B	11.9	B	No
8 . Hughes Avenue/Nielsen Avenue	City of Fresno	D	AWSC	9.0	A	8.8	A	AWSC	9.5	A	9.4	A	No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

LSA

Table 7.B: Existing Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Classification[1]	Existing Number of Lanes	Without Project			Plus Project		
				Roadway Capacity[2]	Daily Volume	LOS	Roadway Capacity[2]	Daily Volume	LOS
Segments on Marks Avenue									
1 . between Belmont Avenue and Nielsen Avenue[3]	City of Fresno/Fresno County	Arterial	4	32,490	8,472	C	32,490	8,746	C
2 . between Nielsen Avenue and Ray Johnson Drive[3]	City of Fresno	Arterial	4	32,490	9,006	C	32,490	10,438	C
3 . between Ray Johnson Drive and SR-180 Westbound Ramps[3]	City of Fresno	Arterial	4	32,490	9,267	C	32,490	10,700	C
4 . between SR-180 Westbound Ramps and SR-180 Eastbound Ramps[3]	City of Fresno/Fresno County	Arterial	4	32,490	9,320	C	32,490	10,087	C
Segments on Belmont Avenue									
5 . between Marks Avenue and Hughes Avenue	City of Fresno/Fresno County	Collector	4	36,100	4,846	C	36,100	4,846	C
Segments on Nielsen Avenue									
6 . between Marks Avenue and Hughes Avenue[3] [4]	City of Fresno	Collector	2	15,840	1,520	C	15,840	2,922	C
Segments on Hughes Avenue									
7 . between Belmont Avenue and Nielsen Avenue[4]	City of Fresno/Fresno County	Collector	2	17,600	3,029	C	17,600	3,995	C

Notes:

LOS = Level of Service

* Exceeds LOS Standard

[1] Roadway Classifications have been obtained from Figure MT-1 - 'Major Street Circulation Diagram', *Fresno General Plan* , adopted December 2014.

[2] Roadway segment capacities have been obtained from State of Florida Department of Transportation (FDOT) *Multimodal Quality/Level of Service Handbook* , dated January 2023. Project setting is assumed to be C4-Urban General for raodway segment capacity purposes.

[3] Per the FDOT *Multimodal Quality/Level of Service Handbook* , an adjustment factor of 0.9 made to the capacity of roadway segments that are non-State owned signalized roadways.

[4] The FDOT *Multimodal Quality/Level of Service Handbook* does not have capacity threshold for LOS C for 2-lane roads under C4-Urban General. Therefore, the roadway capacity for LOS C for 2-lane roadways was extrapolated using the capacity for LOS C for 4-lane roadways.

Table 7.C: Near Term Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project					Improvement Required?
			Control	A.M. Peak Hour		P.M. Peak Hour		
				Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Marks Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	14.7	B	18.0	C	No
2 . Marks Avenue/Nielsen Avenue	City of Fresno	D	Signal	11.5	B	11.0	B	No
3 . Marks Avenue/Ray Johnson Drive	City of Fresno	D	Signal	4.3	A	4.3	A	No
4 . Marks Avenue/SR-180 Westbound Ramps	Caltrans	D	Signal	11.9	B	11.0	B	No
5 . Marks Avenue/SR-180 Eastbound Ramps	Caltrans	D	Signal	6.9	A	6.3	A	No
6 . Marks Avenue/Whitesbridge Avenue	City of Fresno/Fresno County	D	Signal	15.9	B	20.6	C	No
7 . Hughes Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	12.3	B	12.7	B	No
8 . Hughes Avenue/Nielsen Avenue	City of Fresno	D	AWSC	9.6	A	9.4	A	No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

LSA

Table 7.D: Near Term Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Classification[1]	Existing Number of Lanes	Plus Project		
				Roadway Capacity[2]	Daily Volume	LOS
Segments on Marks Avenue						
1 . between Belmont Avenue and Nielsen Avenue[3]	City of Fresno/Fresno County	Arterial	4	32,490	8,900	C
2 . between Nielsen Avenue and Ray Johnson Drive[3]	City of Fresno	Arterial	4	32,490	10,590	C
3 . between Ray Johnson Drive and SR-180 Westbound Ramps[3]	City of Fresno	Arterial	4	32,490	10,852	C
4 . between SR-180 Westbound Ramps and SR-180 Eastbound Ramps[3]	City of Fresno/Fresno County	Arterial	4	32,490	10,379	C
Segments on Belmont Avenue						
5 . between Marks Avenue and Hughes Avenue	City of Fresno/Fresno County	Collector	4	36,100	5,400	C
Segments on Nielsen Avenue						
6 . between Marks Avenue and Hughes Avenue[3 4]	City of Fresno	Collector	2	15,840	2,922	C
Segments on Hughes Avenue						
7 . between Belmont Avenue and Nielsen Avenue[4]	City of Fresno/Fresno County	Collector	2	17,600	4,049	C

Notes:

LOS = Level of Service

* Exceeds LOS Standard

[1] Roadway Classifications have been obtained from Figure MT-1 - 'Major Street Circulation Diagram',*Fresno General Plan* , adopted December 2014.

[2] Roadway segment capacities have been obtained from State of Florida Department of Transportation (FDOT)*Multimodal Quality/Level of Service Handbook* , dated January 2023. Project setting is assumed to be C4-Urban General for raodway segment capacity purposes.

[3] Per the FDOT *Multimodal Quality/Level of Service Handbook* , an adjustment factor of 0.9 made to the capacity of roadway segments that are non-State owned signalized roadways.

[4] The FDOT *Multimodal Quality/Level of Service Handbook* does not have capacity threshold for LOS C for 2-lane roads under C4-Urban General. Therefore, the roadway capacity for LOS C for 2-lane roadways was extrapolated using the capacity for LOS C for 4-lane roadways.

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Table 7.E: Cumulative Year (2046) Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Without Project					Plus Project					Improvement Required?
			Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS	P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS	P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	
1 . Marks Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	15.1	C	19.8	C	AWSC	15.5	C	24.1	C	No
2 . Marks Avenue/Nielsen Avenue	City of Fresno	D	Signal	10.9	B	10.2	B	Signal	11.6	B	11.3	B	No
3 . Marks Avenue/Ray Johnson Drive	City of Fresno	D	Signal	4.3	A	4.4	A	Signal	4.3	A	4.3	A	No
4 . Marks Avenue/SR-180 Westbound Ramps	Caltrans	D	Signal	10.9	B	10.6	B	Signal	11.7	B	11.2	B	No
5 . Marks Avenue/SR-180 Eastbound Ramps	Caltrans	D	Signal	7.7	A	6.7	A	Signal	7.8	A	6.9	A	No
6 . Marks Avenue/Whitesbridge Avenue	City of Fresno/Fresno County	D	Signal	18.9	B	25.9	C	Signal	19.0	B	26.0	C	No
7 . Hughes Avenue/Belmont Avenue	City of Fresno/Fresno County	D	AWSC	12.1	B	12.5	B	AWSC	14.2	B	14.6	B	No
8 . Hughes Avenue/Nielsen Avenue	City of Fresno	D	AWSC	9.8	A	9.6	A	AWSC	10.6	B	10.4	B	No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

LSA

Table 7.F: Cumulative Year (2046) Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Classification[1]	Existing Number of Lanes	Without Project			Plus Project		
				Roadway Capacity[2]	Daily Volume	LOS	Roadway Capacity[2]	Daily Volume	LOS
Segments on Marks Avenue									
1 . between Belmont Avenue and Nielsen Avenue[3]	City of Fresno/Fresno County	Arterial	4	32,490	8,892	C	32,490	9,166	C
2 . between Nielsen Avenue and Ray Johnson Drive[3]	City of Fresno	Arterial	4	32,490	9,389	C	32,490	10,821	C
3 . between Ray Johnson Drive and SR-180 Westbound Ramps[3]	City of Fresno	Arterial	4	32,490	9,626	C	32,490	11,059	C
4 . between SR-180 Westbound Ramps and SR-180 Eastbound Ramps[3]	City of Fresno/Fresno County	Arterial	4	32,490	10,532	C	32,490	11,299	C
Segments on Belmont Avenue									
5 . between Marks Avenue and Hughes Avenue	City of Fresno/Fresno County	Collector	4	36,100	5,455	C	36,100	5,455	C
Segments on Nielsen Avenue									
6 . between Marks Avenue and Hughes Avenue[3] [4]	City of Fresno	Collector	2	15,840	1,596	C	15,840	2,998	C
Segments on Hughes Avenue									
7 . between Belmont Avenue and Nielsen Avenue[4]	City of Fresno/Fresno County	Collector	2	17,600	3,744	C	17,600	4,710	C

Notes:

LOS = Level of Service

* Exceeds LOS Standard

[1] Roadway Classifications have been obtained from Figure MT-1 - 'Major Street Circulation Diagram', *Fresno General Plan* , adopted December 2014.

[2] Roadway segment capacities have been obtained from State of Florida Department of Transportation (FDOT) *Multimodal Quality/Level of Service Handbook* , dated January 2023. Project setting is assumed to be C4-Urban General for raodway segment capacity purposes.

[3] Per the FDOT *Multimodal Quality/Level of Service Handbook* , an adjustment factor of 0.9 made to the capacity of roadway segments that are non-State owned signalized roadways.

[4] The FDOT *Multimodal Quality/Level of Service Handbook* does not have capacity threshold for LOS C for 2-lane roads under C4-Urban General. Therefore, the roadway capacity for LOS C for 2-lane roadways was extrapolated using the capacity for LOS C for 4-lane roadways.

8.0 INTERSECTION QUEUING ANALYSIS

Based on discussion with City staff, a queuing analysis was performed at all study intersections for movements with available turn-pockets under each analysis scenario.

Table 8.A, Table 8.B, and Table 8.C list the available turn-pocket storage lengths and summarize the 95th percentile back-of-queue lengths at the study intersections under existing, near term, and cumulative year (2046) conditions, respectively. The queues for signalized intersections have been reported from Synchro, whereas queues at unsignalized intersections were reported from SimTraffic. As shown in Table 8.A and Table 8.B, queue lengths for all turning movements at all study intersections are projected to not exceed the corresponding available turn-pocket storage length under existing and near term conditions.

However, as shown in Table 8.C, queue lengths for the southbound left (SBL) movement at study intersection 6 (Marks Avenue/Whitesbridge Avenue) are forecast to exceed the available turn-pocket storage length in the a.m. peak hour under cumulative year (2046) conditions. Furthermore, queue lengths for the westbound right (WBR) movement at the same intersection are forecast to exceed the available turn-pocket storage length in the p.m. peak hour under cumulative year (2046) conditions. It should be noted that queue lengths for the SBL and WBR movements at study intersection 6 are forecast to exceed the corresponding available turn-pocket storage length under 'without project' conditions. The queue lengths for both of these movements are not forecast to increase with the addition of project trips under 'plus project' conditions. As such, implementation of the project would not contribute to the forecasted queuing deficiency at the SBL and WBR movements at study intersection 6 under cumulative year (2046) conditions. Queue lengths for all turning movements at all other study intersections are projected to not exceed the corresponding available turn-pocket storage length under cumulative year (2046) conditions.

Detailed queuing analysis worksheets are included in Appendix E.

8.1 LIST OF CHAPTER 8.0 TABLES

- Table 8.A: Existing Intersection Queuing Analysis
- Table 8.B: Near Term Intersection Queuing Analysis
- Table 8.C: Cumulative Year (2046) Intersection Queuing Analysis

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Table 8.A: Existing Intersection Queuing Analysis

Intersection	Movement	Existing Storage Length[1] (ft/ln)	Existing			
			Without Project[2]		Plus Project[2]	
			AM	PM	AM	PM
1. Marks Avenue/Belmont Avenue	**NBL**	230	55	120	60	130
AWSC	**SBL**	135	50	35	50	40
	SBR	50	30	25	30	25
	EBL	105	35	40	35	40
	WBR	125	25	30	25	35
2. Marks Avenue/Nielsen Avenue	**NBL**	240	35	30	40	30
Signal	**NBR**	270	15	10	30	30
	SBL	245	35	20	40	25
	SBR	220	0	5	0	5
	EBL	55	20	20	20	20
	EBR	55	10	15	10	10
	WBL	210	35	35	70	95
	WBR	210	0	10	0	10
3. Marks Avenue/Ray Johnson Drive	**SBL**	110	10	10	10	15
Signal	**WBL**	75	20	20	20	20
4. Marks Avenue/SR-180 Westbound Ramps	**NBR**	465	0	0	0	0
Signal	**SBR**	255	0	0	0	0
	WBL	345	65	45	70	50
	WBR	200	25	25	25	30
5. Marks Avenue/SR-180 Eastbound Ramps	**NBR**	255	0	0	0	0
Signal	**SBR**	475	0	0	0	0
	EBR	515	10	5	10	5
6. Marks Avenue/Whitesbridge Avenue	**NBL**	255	0	15	0	15
Signal	**NBR**	125	0	0	0	0
	SBL	165	110	105	110	105
	EBL	345	30	60	30	60
	WBL	350	25	30	25	30
	WBR	65	25	50	25	50
7. Hughes Avenue/Belmont Avenue	**EBL**	145	45	45	45	45
AWSC	**WBL**	160	45	40	50	45
8. Hughes Avenue/Nielsen Avenue	**SBR**	95	25	35	45	40
AWSC	**EBL**	205	25	30	30	35
	WBL	200	0	20	0	20

Notes:

ft/ln = feet per lane

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been taken from Synchro and queues for stop controlled intersections have been taken from SimTraffic.

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Table 8.B: Near Term Intersection Queuing Analysis

Intersection	Movement	Existing Storage Length[1] (ft/ln)	Near Term Plus Project[2] AM	Near Term Plus Project[2] PM
1 . Marks Avenue/Belmont Avenue	**NBL**	230	60	155
AWSC	**SBL**	135	50	50
	SBR	50	30	25
	EBL	105	40	40
	WBR	125	35	35
2 . Marks Avenue/Nielsen Avenue	**NBL**	240	40	30
Signal	**NBR**	270	30	30
	SBL	245	40	25
	SBR	220	0	5
	EBL	55	20	20
	EBR	55	10	10
	WBL	210	70	100
	WBR	210	0	10
3 . Marks Avenue/Ray Johnson Drive	**SBL**	110	10	15
Signal	**WBL**	75	20	20
4 . Marks Avenue/SR-180 Westbound Ramps	**NBR**	465	0	0
Signal	**SBR**	255	0	0
	WBL	345	70	55
	WBR	200	25	30
5 . Marks Avenue/SR-180 Eastbound Ramps	**NBR**	255	0	0
Signal	**SBR**	475	0	0
	EBR	515	10	5
6 . Marks Avenue/Whitesbridge Avenue	**NBL**	255	0	15
Signal	**NBR**	125	0	0
	SBL	165	115	115
	EBL	345	35	65
	WBL	350	25	30
	WBR	65	30	50
7 . Hughes Avenue/Belmont Avenue	**EBL**	145	45	50
AWSC	**WBL**	160	50	45
8 . Hughes Avenue/Nielsen Avenue	**SBR**	95	45	45
AWSC	**EBL**	205	35	35
	WBL	200	0	20

Notes:

ft/ln = feet per lane

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been taken from Synchro and queues for stop controlled intersections have been taken from SimTraffic.

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Table 8.C: Cumulative Year (2046) Existing Intersection Queuing Analysis

Intersection	Movement	Existing Storage Length[1] (ft/ln)	Cumulative			
			Without Project[2]		Plus Project[2]	
			AM	PM	AM	PM
1. Marks Avenue/Belmont Avenue	**NBL**	230	55	185	65	215
AWSC	**SBL**	135	55	45	75	45
	SBR	50	30	25	30	25
	EBL	105	35	50	50	45
	WBR	125	30	40	30	45
2. Marks Avenue/Nielsen Avenue	**NBL**	240	40	30	45	35
Signal	**NBR**	270	20	10	35	30
	SBL	245	35	20	45	25
	SBR	220	5	10	5	10
	EBL	55	20	25	20	30
	EBR	55	15	15	15	15
	WBL	210	35	40	70	105
	WBR	210	0	15	0	15
3. Marks Avenue/Ray Johnson Drive	**SBL**	110	10	10	15	15
Signal	**WBL**	75	20	20	25	20
4. Marks Avenue/SR-180 Westbound Ramps	**NBR**	465	0	0	0	0
Signal	**SBR**	255	0	0	0	0
	WBL	345	75	60	80	65
	WBR	200	25	30	30	35
5. Marks Avenue/SR-180 Eastbound Ramps	**NBR**	255	0	0	0	0
Signal	**SBR**	475	0	0	0	0
	EBR	515	25	10	25	10
6. Marks Avenue/Whitesbridge Avenue	**NBL**	255	0	15	0	15
Signal	**NBR**	125	0	0	0	0
	SBL	165	**230**	140	**230**	140
	EBL	345	35	70	35	70
	WBL	350	35	45	35	45
	WBR	65	55	**70**	55	**70**
7. Hughes Avenue/Belmont Avenue	**EBL**	145	50	50	50	50
AWSC	**WBL**	160	45	45	50	45
8. Hughes Avenue/Nielsen Avenue	**SBR**	95	35	40	45	45
AWSC	**EBL**	205	25	30	35	40
	WBL	200	0	35	0	35

Notes:

ft/ln = feet per lane

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been taken from Synchro and queues for stop controlled intersections have been taken from SimTraffic.

9.0 REQUIREMENT OF CIRCULATION IMPROVEMENTS

As recommended in the City's TIS Guidelines and as detailed in Section 2.2 of this report, the project would need to recommend circulation improvements to improve LOS to an acceptable level in the case an operational deficiency caused by the addition of project trips is identified. An operational deficiency is deemed to occur when the addition of project trips results in any one of the following:

a) Causes the intersection LOS to change from acceptable to unacceptable levels; OR

b) Causes the intersection LOS to change from an unacceptable LOS (LOS E) to LOS F; OR

c) Increases the average delay at a study intersection that is already operating at an unacceptable LOS.

As shown in previously referenced Table 7.A, Table 7.C, and Table 7.E, all study intersections are forecast to operate at satisfactory LOS under existing, near term, and cumulative year (2046) conditions, respectively. Furthermore, as shown in previously referenced Table 7.B, Table 7.D, and Table 7.F, all study roadway segments are forecast to operate at satisfactory LOS under existing, near term, and cumulative year (2046) conditions, respectively. As such, implementation of the proposed project would not create any LOS deficiencies at all study intersections and roadway segments under all analysis scenarios. As such, no circulation improvements are currently being recommended.

A queuing analysis was conducted to determine if any forecasted queue lengths would exceed the available turn-pocket storage lengths at study intersections with implementation of the proposed project. As shown in previously referenced Table 8.A and Table 8.B, forecasted queue lengths for all turning movements at all study intersections do not exceed the corresponding storage lengths under existing and near term conditions.

However, as shown in previously referenced Table 8.C, queue lengths for the SBL movement at study intersection 6 (Marks Avenue/Whitesbridge Avenue) are forecast to exceed the available turn-pocket storage length in the a.m. peak hour under cumulative year (2046) conditions. Furthermore, queue lengths for the WBR movement at the same intersection are forecast to exceed the available turn-pocket storage length in the p.m. peak hour under cumulative year (2046) conditions. It should be noted that queue lengths for the SBL and WBR movements at study intersection 6 are forecast to exceed the corresponding available turn-pocket storage length under 'without project' conditions. The queue lengths for both of these movements are not forecast to increase with the addition of project trips under 'plus project' conditions. As such, implementation of the project would not contribute to the forecasted queuing deficiency at the SBL and WBR movements at study intersection 6 under cumulative year (2046) conditions. Queue lengths for all turning movements at all other study intersections are projected to not exceed the corresponding available turn-pocket storage length under cumulative year (2046) conditions. As such, implementation of the proposed project would not create any queuing deficiencies at all study intersections under all analysis scenarios.

10.0 SITE ACCESS AND CIRCULATION ANALYSIS

As previously illustrated in Figure 1-2, access to the project would be provided via eight (8) project driveways on Marks Avenue, Nielsen Avenue, and Hughes Avenue.

10.1 SIGHT DISTANCE ANALYSIS

A sight distance analysis was conducted at the project driveways along Marks Avenue, Nielsen Avenue, and Hughes Avenue to evaluate safe access in and out of the project site. Sight distance is the length of the visible roadway a driver can see approaching vehicles before their line of sight is blocked by any object. For purposes of this analysis, both the stopping sight distance and corner sight distance have been evaluated. That is because there are the two sight distance lengths that would affect safe maneuver of ingress/egress traffic from the project driveways.

According to the *Caltrans Highway Design Manual* (HDM), dated July 2020, the stopping sight distance is the minimum sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop. The corner sight distance is the minimum sight distance in which a driver at a stop-controlled approach can see oncoming traffic on the major street to safely maneuver onto the roadway.

The stopping sight distance was evaluated on the major arterials abutting the project (i.e., Marks Avenue, Nielsen Avenue, Hughes Avenue). The posted speed limit is 45 mph on Marks Avenue, 40 mph on Nielsen Avenue, and 40 mph on Hughes Avenue adjacent to the project site. As stated in Table 201.1 of the HDM, the minimum stopping sight distance is 360 feet for a design speed of 45 mph and 300 feet for a design speed of 40 mph. Therefore, the minimum stopping sight distance has been considered as 360 feet for project driveways along Marks Avenue and 300 feet for project driveways along both Nielsen Avenue and Hughes Avenue.

As for corner sight distance, Section 405.1 of the HDM states that corner sight distance requirements are not applicable for urban driveways unless signalized. However, as a conservative approach, corner sight distances were also evaluated for the project driveways. The minimum corner sight distance was based on design speed, time gap, and type of vehicles from the minor roads (project driveways) to enter the major roads (Marks Avenue, Nielsen Avenue, and Hughes Avenue). Based on the requirements established in the HDM, it was determined that a minimum corner sight distance of 500 feet and 430 feet would be required at project driveways along Marks Avenue for left- and right-turn passenger car egress maneuvers, respectively. A minimum corner sight distance of 450 feet and 390 feet would be required at project driveways along Nielsen Avenue and Hughes Avenue for left- and right-turn passenger car egress maneuvers, respectively. Furthermore, a minimum corner sight distance of 680 feet and 620 feet would be required at project driveways along Nielsen Avenue and Hughes Avenue for left- and right-turn truck egress maneuvers, respectively.

Since the corner sight distances required at the project driveways would be greater than the stopping sight distances at the corresponding project driveway intersection, sight triangle figures were created using corner sight distances. As a conservative measure, left-turn corner sight

distances were used for both right- and left-turn sight triangles for all project driveways. As illustrated in Figures 10-1 and 10-2, Project Driveway 1 and Project Driveway 2 will provide adequate sight distance for left- and right-turn maneuvers onto Marks Avenue. As illustrated in Figure 10-3, Project Driveway 3 will provide adequate sight distance for right-turn maneuvers onto Marks Avenue. As illustrated in Figure 10-4, Project Driveway 4 will provide adequate sight distance for right-turn maneuvers onto Nielsen Avenue. As illustrated in Figures 10-5 and 10-6, Project Driveway 5 and Project Driveway 6 will provide adequate sight distance for left- and right-turn maneuvers onto Nielsen Avenue. As illustrated in Figures 10-7 and 10-8, Project Driveway 7 and Project Driveway 8 will provide adequate sight distance for left- and right-turn maneuvers onto Hughes Avenue.

10.2 DRIVEWAY SPACING

Previously referenced Figure 1-2 illustrates the project site plan. As shown in Figure 1-2 and as described in Section 1.1, access to the project site will be provided via eight (8) project driveways located on Marks Avenue, Nielsen Avenue, and Hughes Avenue. All project driveway intersections will be stop controlled on the driveway and free-flow on the corresponding street.

Driveways on Marks Avenue

Project Driveway 1: This driveway is located approximately 890 feet south of the nearest intersection (private driveway on the west side of Marks Avenue) and approximately 210 feet north of the nearest intersection (another private driveway on the west side of Marks Avenue). As previously described in Section 1.1, this driveway serves as a full-access driveway and only serves passenger vehicles. Marks Avenue at this location is divided by a TWLTL which allows for safe left-turn egress and ingress movements to and from the project site. As such, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Marks Avenue.

Project Driveway 2: This driveway is located approximately 180 feet south of the nearest intersection (private driveway on the west side of Marks Avenue) and approximately 215 feet north of Project Driveway 3. As previously described in Section 1.1, this driveway serves as a full-access driveway and only serves passenger vehicles. Marks Avenue at this location is divided by a TWLTL which allows for safe left-turn egress and ingress movements to and from the project site. As such, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Marks Avenue.

Project Driveway 3: This driveway is located approximately 215 feet south of Project Driveway 2 and approximately 155 feet north of the intersection of Marks Avenue/Nielsen Avenue. As previously described in Section 1.1, this driveway serves as a RIRO driveway and only serves passenger vehicles. Marks Avenue at this location is divided by a raised median which restricts left-turn egress and ingress movements at this driveway. Therefore, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Marks Avenue.

Driveways on Nielsen Avenue

Project Driveway 4: This driveway is located approximately 160 feet east of the intersection of Marks Avenue/Nielsen Avenue and approximately 375 feet west of Project Driveway 5. As previously described in Section 1.1, this driveway serves as a RIRO driveway and only serves passenger vehicles. Nielsen Avenue at this location is divided by a painted median with double yellow lines that restricts left-turn ingress and egress movements at this driveway. Therefore, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Nielsen Avenue.

Project Driveway 5: This driveway is located approximately 375 feet east of Project Driveway 4 and approximately 280 feet west of the nearest intersection (private driveway located on the south side of Nielsen Avenue). As previously described in Section 1.1, this driveway serves as a full-access driveway and only serves passenger vehicles. Nielsen Avenue at this location is divided by a TWLTL which allows for safe left-turn egress and ingress movements to and from the project site. As such, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Nielsen Avenue.

Project Driveway 6: This driveway is located approximately 280 feet east of the nearest intersection (private driveway located on the south side of Nielsen Avenue) and approximately 670 feet west of the nearest intersection (another private driveway located on the south side of Nielsen Avenue). As previously described in Section 1.1, this driveway serves as a full-access driveway and serves both passenger vehicles and trucks. Nielsen Avenue at this location is divided by a TWLTL which allows for safe left-turn egress and ingress movements to and from the project site. As such, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Nielsen Avenue.

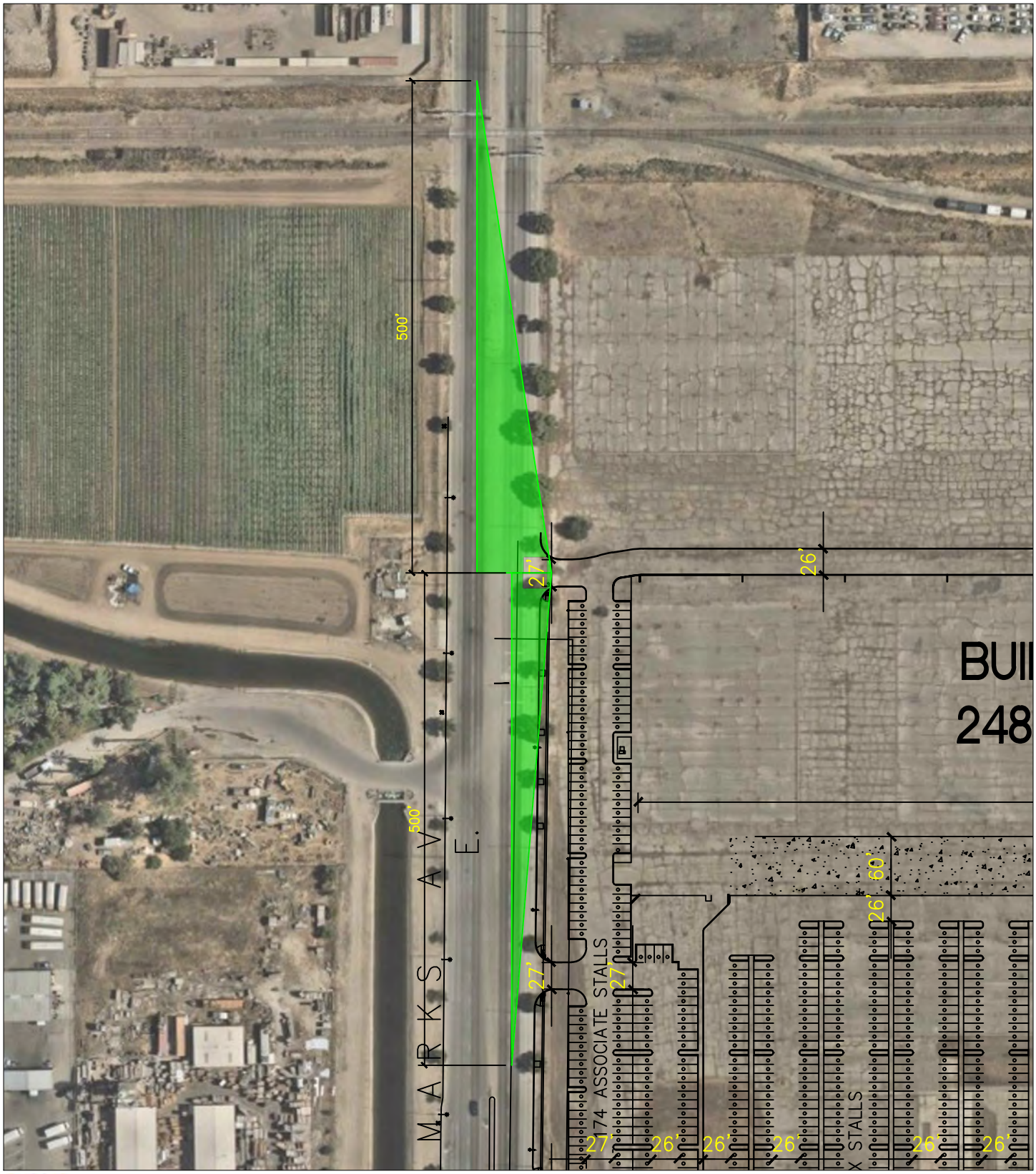
Driveways on Hughes Avenue

Project Driveway 7: This driveway is located less than 50 feet south of the nearest intersection (private driveway located on the east side of Hughes Avenue) and approximately 270 north of the nearest intersection (another private driveway located on the east side of Hughes Avenue). As previously described in Section 1.1, this driveway serves as a full-access driveway and serves both passenger vehicles and trucks. While this driveway does not meet the City's driveway spacing standards, ADT volumes along this segment of Hughes Avenue (study roadway segment 7) is forecast to operate at LOS C under the worst-case scenario of cumulative year (2046) conditions as shown in previously referenced Table 7.F. Subsequently, no operational deficiencies have been identified along this segment. As such, this driveway is not anticipated to interfere with the flow of traffic along Hughes Avenue along this segment.

Project Driveway 8: This driveway is located approximately 210 feet south of the nearest intersection (private driveway on the east side of Hughes Avenue) and approximately 140 feet north of the intersection of Hughes Avenue/Nielsen Avenue. As previously described in Section 1.1, this driveway serves as a full-access driveway and serves both passenger vehicles and trucks. Hughes Avenue at this location is divided by a painted median with a single yellow line which allows for left-turn egress and ingress movements at this driveway. Therefore, this driveway has adequate spacing between adjacent intersections and would cause minimal interference with the flow of traffic on Hughes Avenue.

10.3 LIST OF CHAPTER 10.0 FIGURES

- Figure 10-1: Intersection Sight Distance at Project Driveway 1
- Figure 10-2: Intersection Sight Distance at Project Driveway 2
- Figure 10-3: Intersection Sight Distance at Project Driveway 3
- Figure 10-4: Intersection Sight Distance at Project Driveway 4
- Figure 10-5: Intersection Sight Distance at Project Driveway 5
- Figure 10-6: Intersection Sight Distance at Project Driveway 6
- Figure 10-7: Intersection Sight Distance at Project Driveway 7
- Figure 10-8: Intersection Sight Distance at Project Driveway 8



LSA

LEGEND

Corner Sight Triangle

FIGURE 10-1

0 60 120

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 1

SOURCE: HPA Architecture , September 2024

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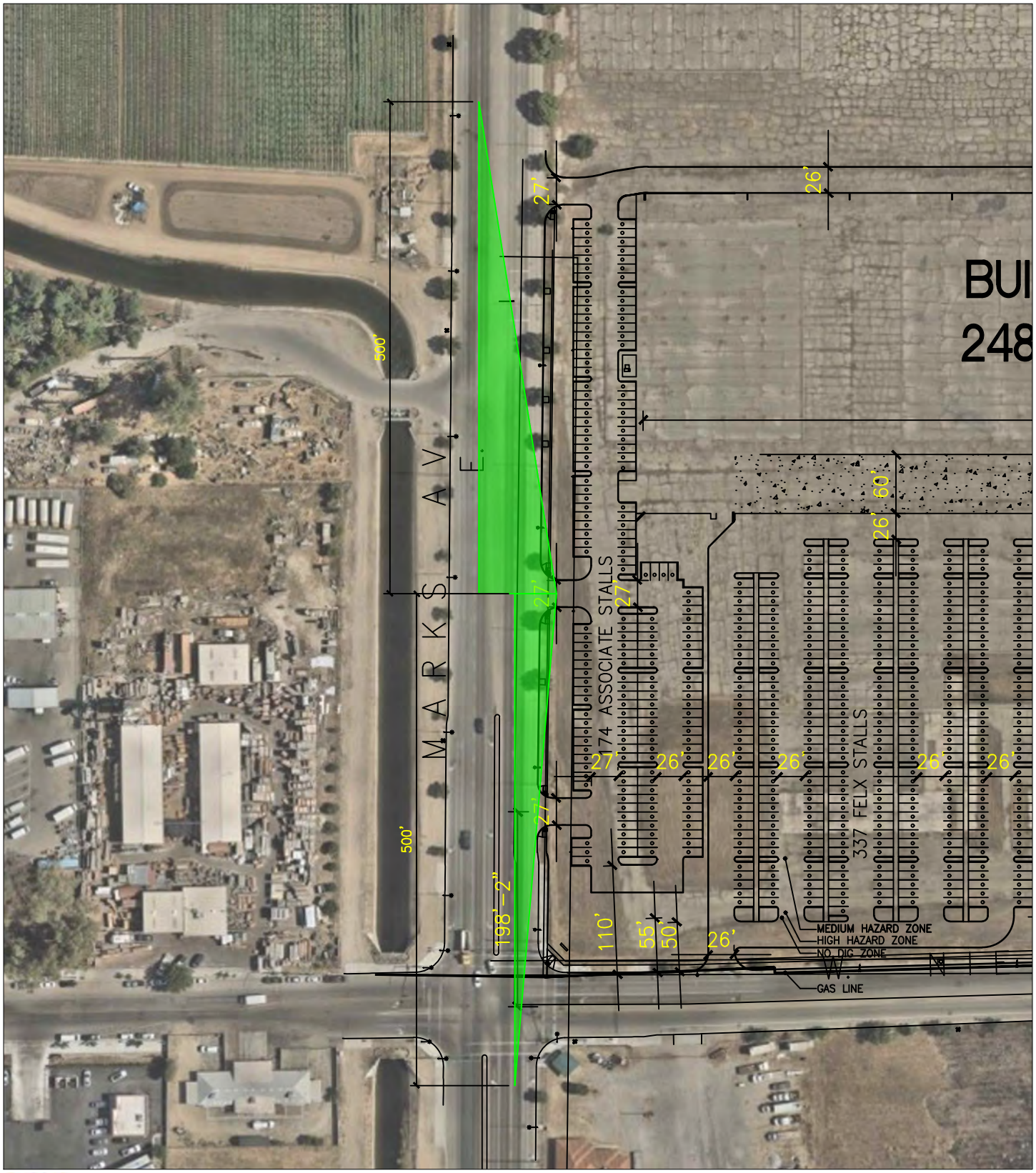

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-2

0 60 120

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 2

SOURCE: HPA Architecture , September 2024

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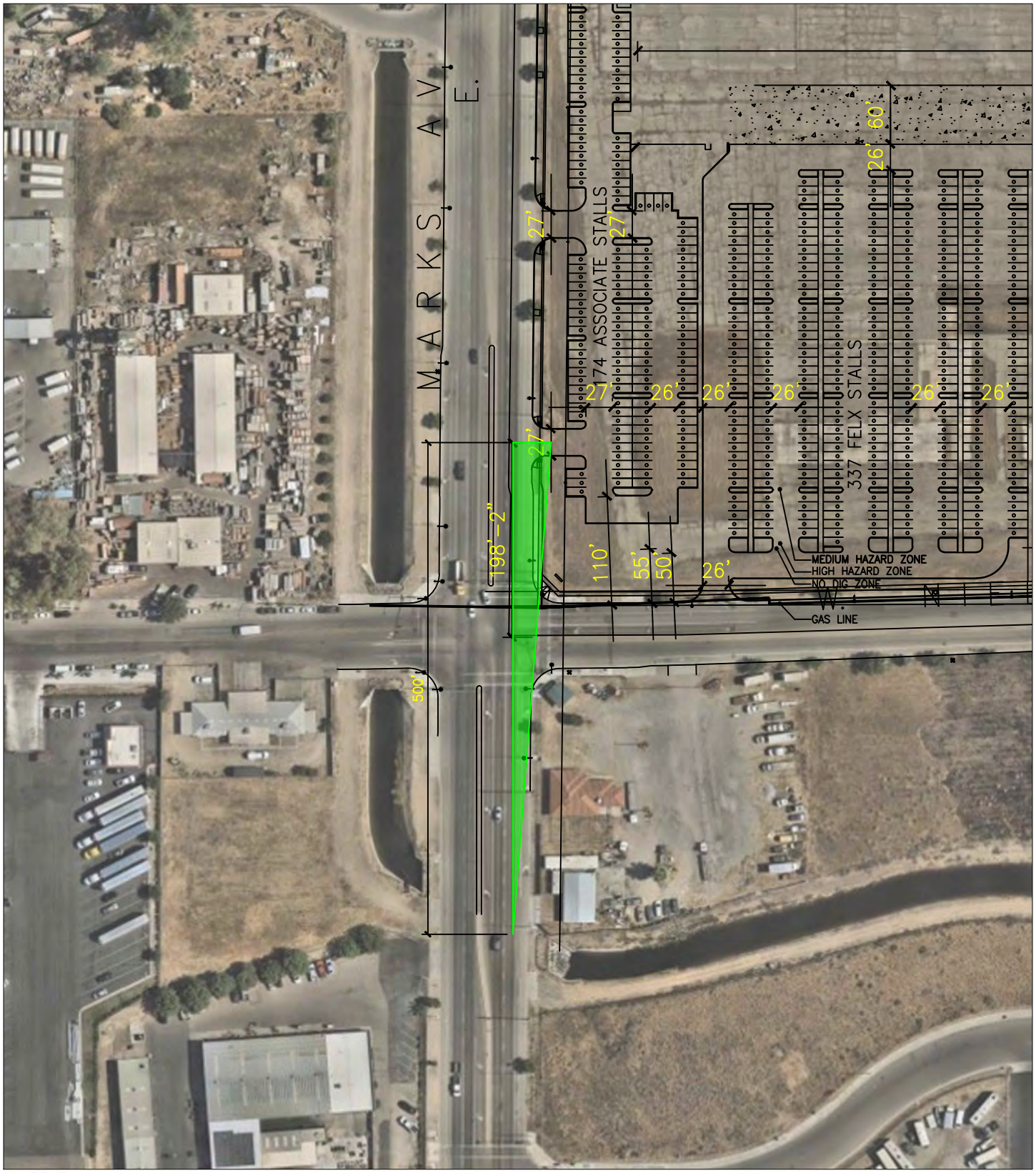

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-3

0 60 120

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 3

SOURCE: HPA Architecture , September 2024

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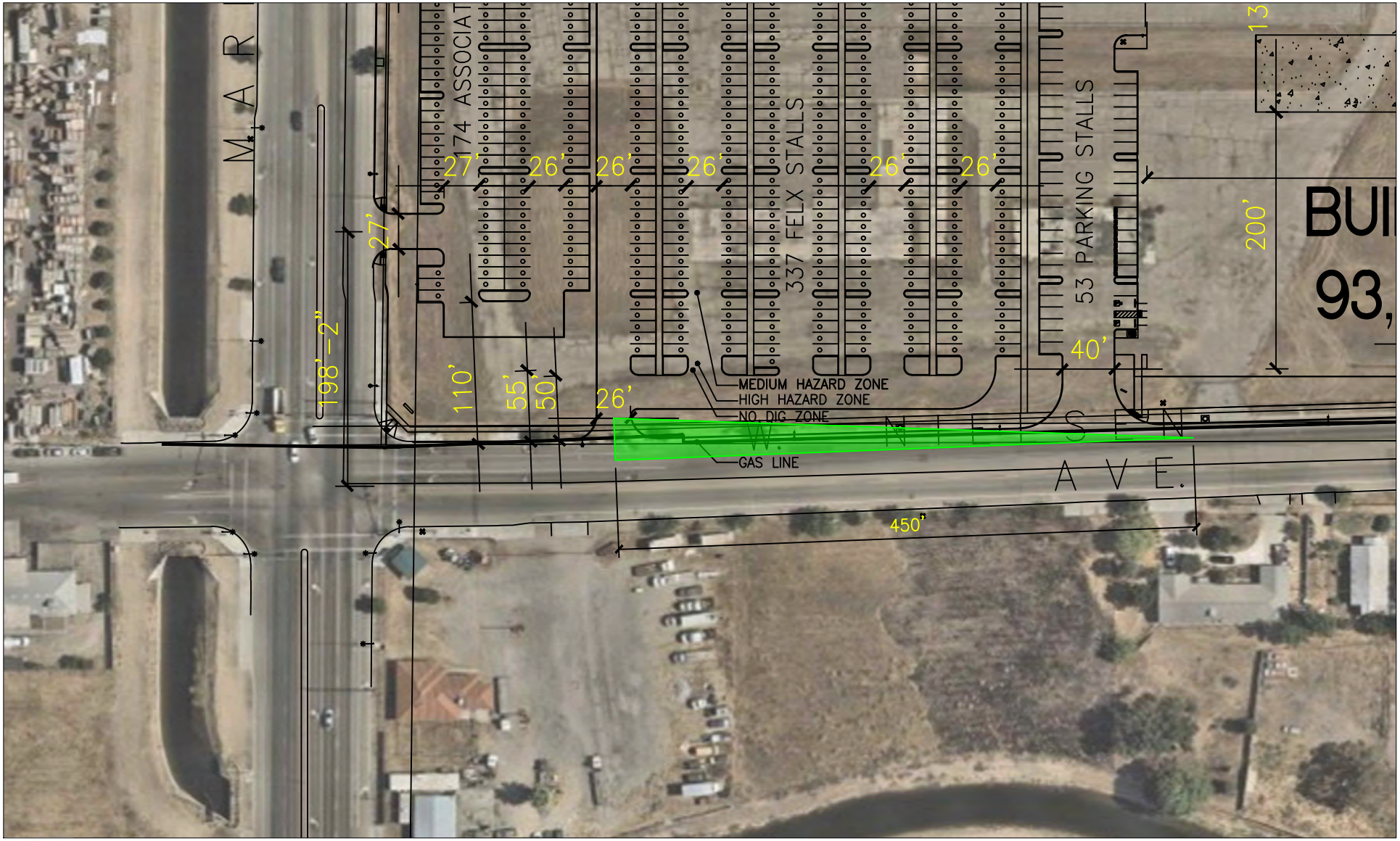

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-4

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 4

0 50 100
FEET

SOURCE: HPA Architecture, September 2024

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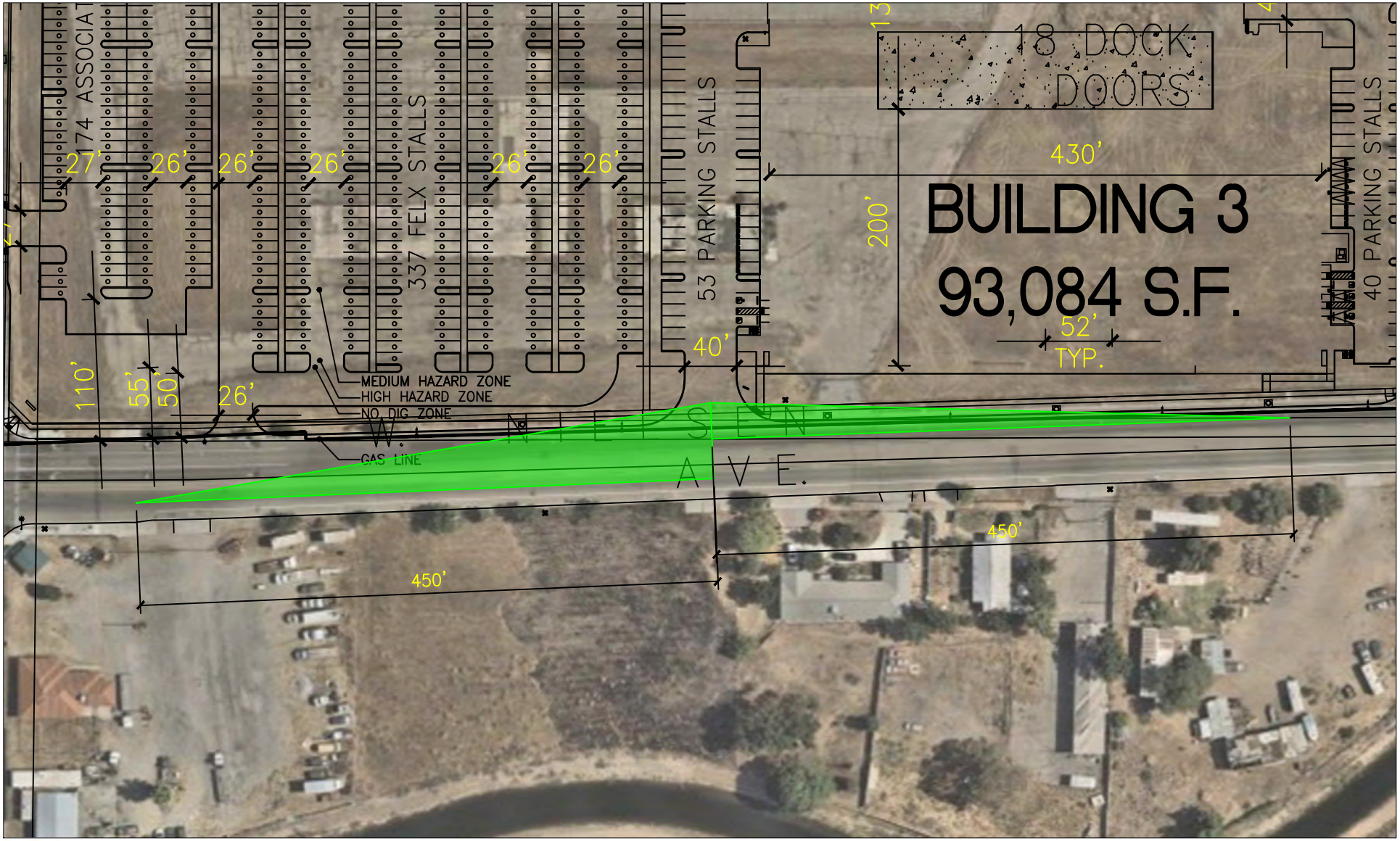

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-5

0 50 100
FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 5

SOURCE: HPA Architecture, September 2024

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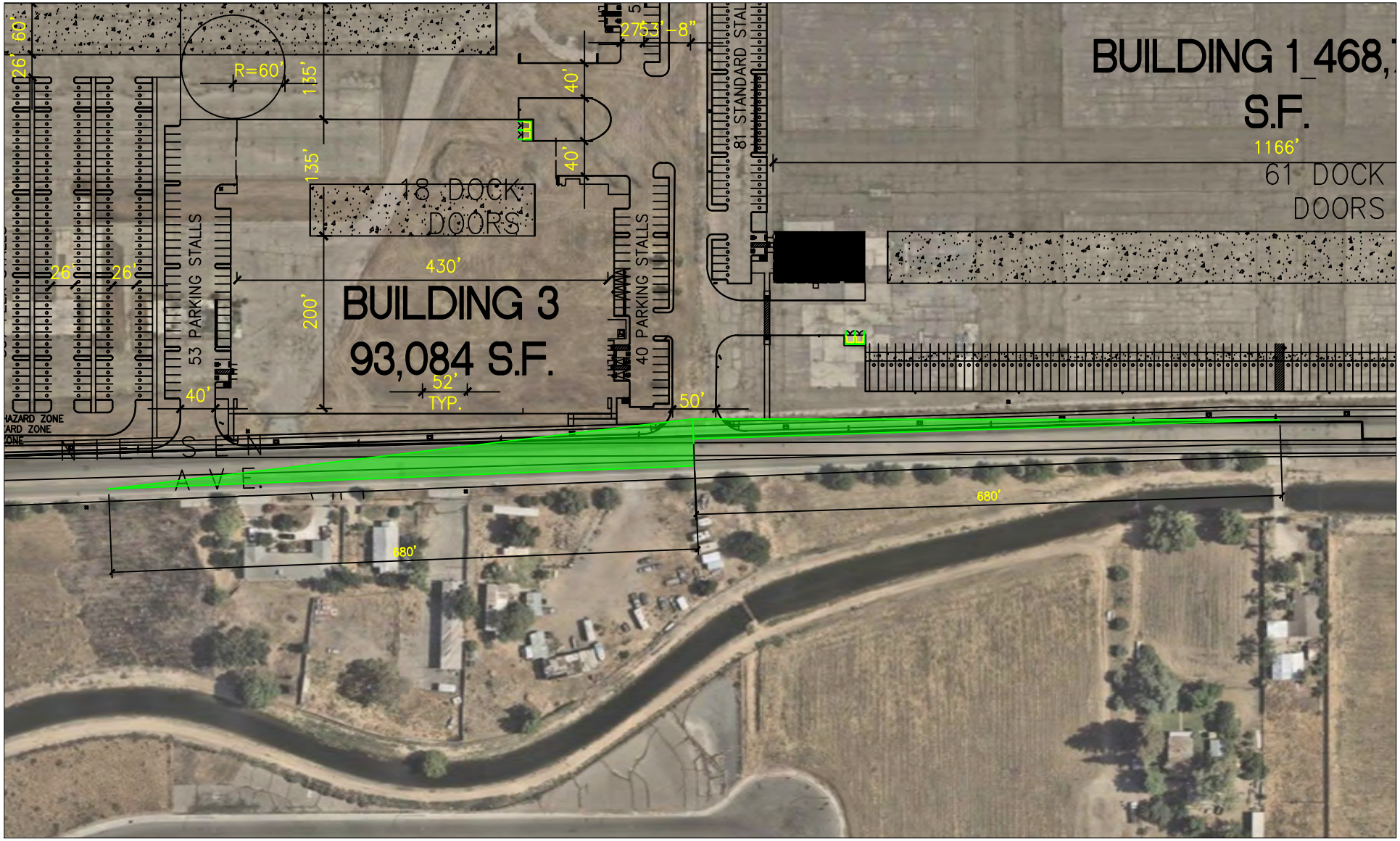

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-6

0 80 160

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 6

SOURCE: HPA Architecture, September 2024

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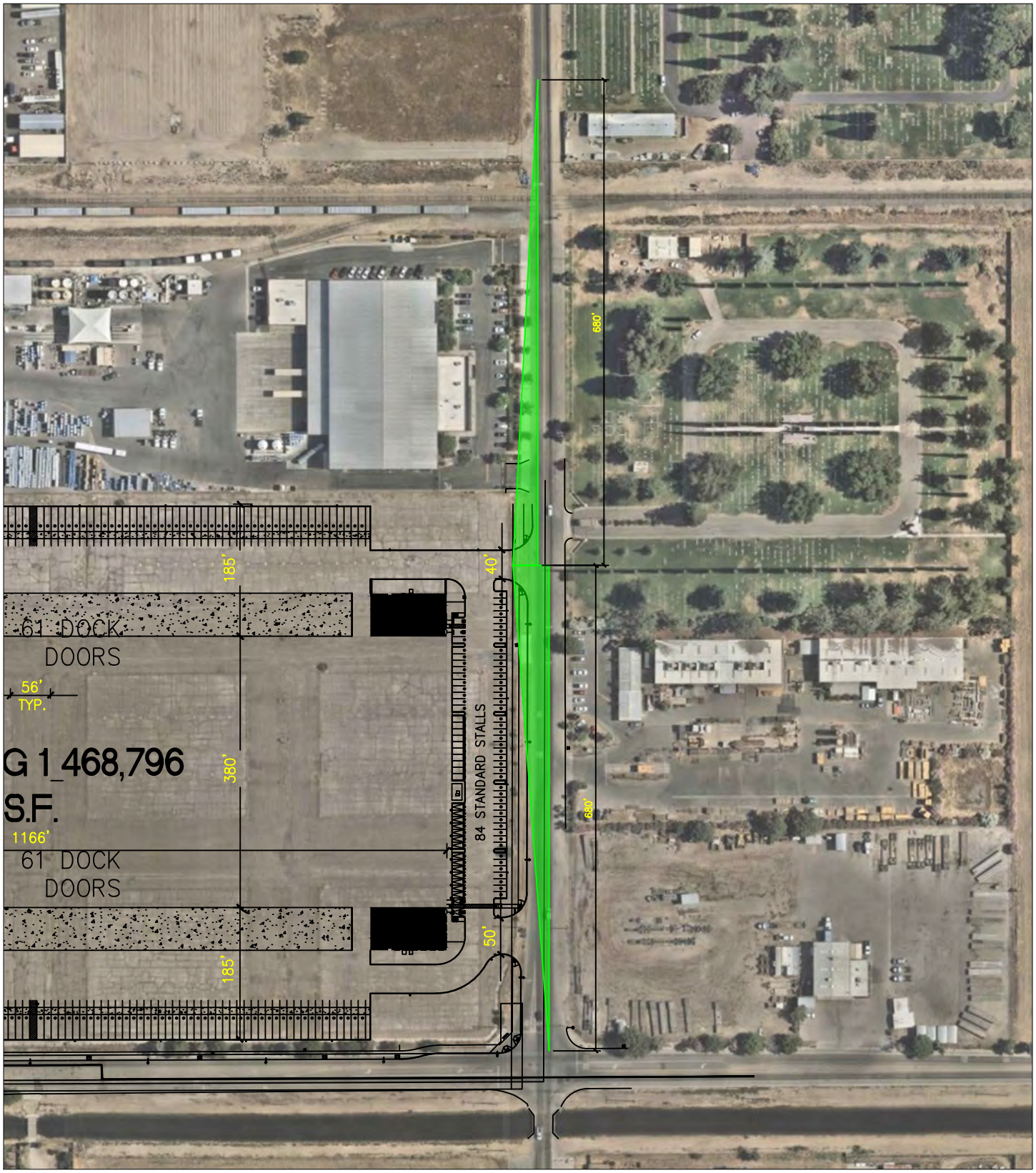

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-7

0 90 180

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 7

SOURCE: HPA Architecture , September 2024

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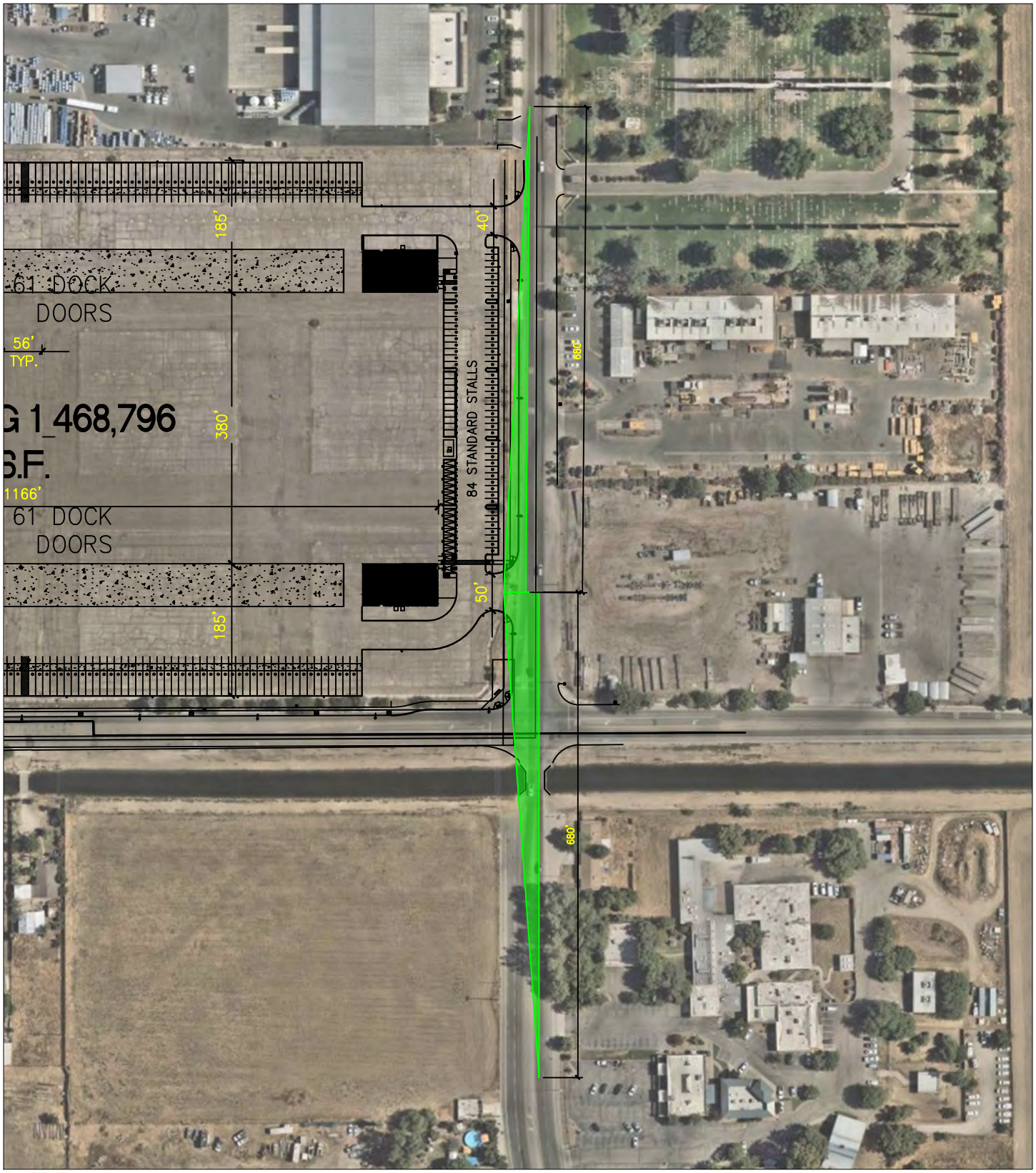

LSA

LEGEND

Corner Sight Triangle

FIGURE 10-8

0 90 180

FEET

2740 West Nielsen Avenue Warehouse Project
Traffic Impact Study

Intersection Sight Distance at Project Driveway 8

SOURCE: HPA Architecture , September 2024

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11.0 SIGNAL WARRANT ANALYSIS

Based on discussion with City staff, signal warrant analysis was conducted at all unsignalized study intersections. Intersection approach volumes for the study intersections was examined to determine whether signalization is warranted per the criteria defined in the California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD). As recommended by City staff, the following three signal warrant analyses were conducted for each of the unsignalized study intersections:

1. Warrant 1: 8 Hour Vehicular Volume
2. Warrant 2: 4 Hour Vehicular Volume
3. Warrant 3: Peak Hour

Specifically, Warrant 1 and Warrant 2 were conducted for all the unsignalized study intersections under existing conditions. Furthermore, Warrant 3 was conducted for all unsignalized study intersections for all analysis scenarios. Following is a brief summary of signal warrant analyses for each of the unsignalized study intersections:

11.1 MARKS AVENUE/BELMONT AVENUE

Based on the traffic volumes for this study intersection, a combination of Condition A and Condition B was evaluated for this intersection. Additionally, since the posted speed limit on Marks Avenue (major street) is 45 mph, the 70% traffic volume condition was used for this analysis. Tables 11.A and 11.B show the Warrant 1 (Eight Hour Vehicular Volume) Condition A and Condition B signal warrant analyses, respectively, for this study intersection under existing conditions. As shown in these tables, this study intersection does not meet either Condition A or Condition B. As such, this study intersection does not meet the signal warrant.

Figure 11-1 illustrates the Warrant 2 (4 Hour Vehicular Volume) for the study intersection under existing conditions. As shown in Figure 11-1, the intersection meets the signal warrant.

Figures 11-2, 11-3, and 11-4 illustrate the Warrant 3 (Peak Hour) signal warrant for this intersection under existing, near term, and cumulative year (2046) conditions, respectively. As shown in these figures, this study intersection meets the signal warrant under all analysis scenarios.

11.2 HUGHES AVENUE/BELMONT AVENUE

Based on the traffic volumes for this study intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 11.C and 11.D show the Warrant 1 (Eight Hour Vehicular Volume) Condition A and Condition B signal warrant analyses, respectively, for this study intersection under existing conditions. As shown in these tables, this study intersection does not meet either Condition A or Condition B. As such, this study intersection does not meet the signal warrant.

Figure 11-5 illustrates the Warrant 2 (4 Hour Vehicular Volume) for this study intersection. As shown in Figure 11-5, this study intersection does not meet the signal warrant.

Figures 11-6, 11-7, and 11-8 illustrate the Warrant 3 (Peak Hour) signal warrant for this study intersection under existing, near term, and cumulative year (2046) conditions, respectively. As shown in these figures, this study intersection does not meet the signal warrant under any analysis scenario.

11.3 HUGHES AVENUE/NIELSEN AVENUE

Based on the traffic volumes for this intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 11-E and 11-F show the Warrant 1 (Eight Hour Vehicular Volume) Condition A, and Condition B signal warrant analyses, respectively, for this study intersection under existing conditions. As shown in these tables, this study intersection does not meet either Condition A or Condition B. As such, this study intersection does not meet the signal warrant.

Figure 11-9 illustrates the Warrant 2 (4 Hour Vehicular Volume) for this study intersection. As shown in Figure 11-9, this study intersection does not meet the signal warrant.

Figures 11-10, 11-11, and 11-12 illustrate the Warrant 3 (Peak Hour) signal warrant for this study intersection under existing, near term, and cumulative year (2046) conditions, respectively. As shown in these figures, this study intersection does not meet the signal warrant under any analysis scenario.

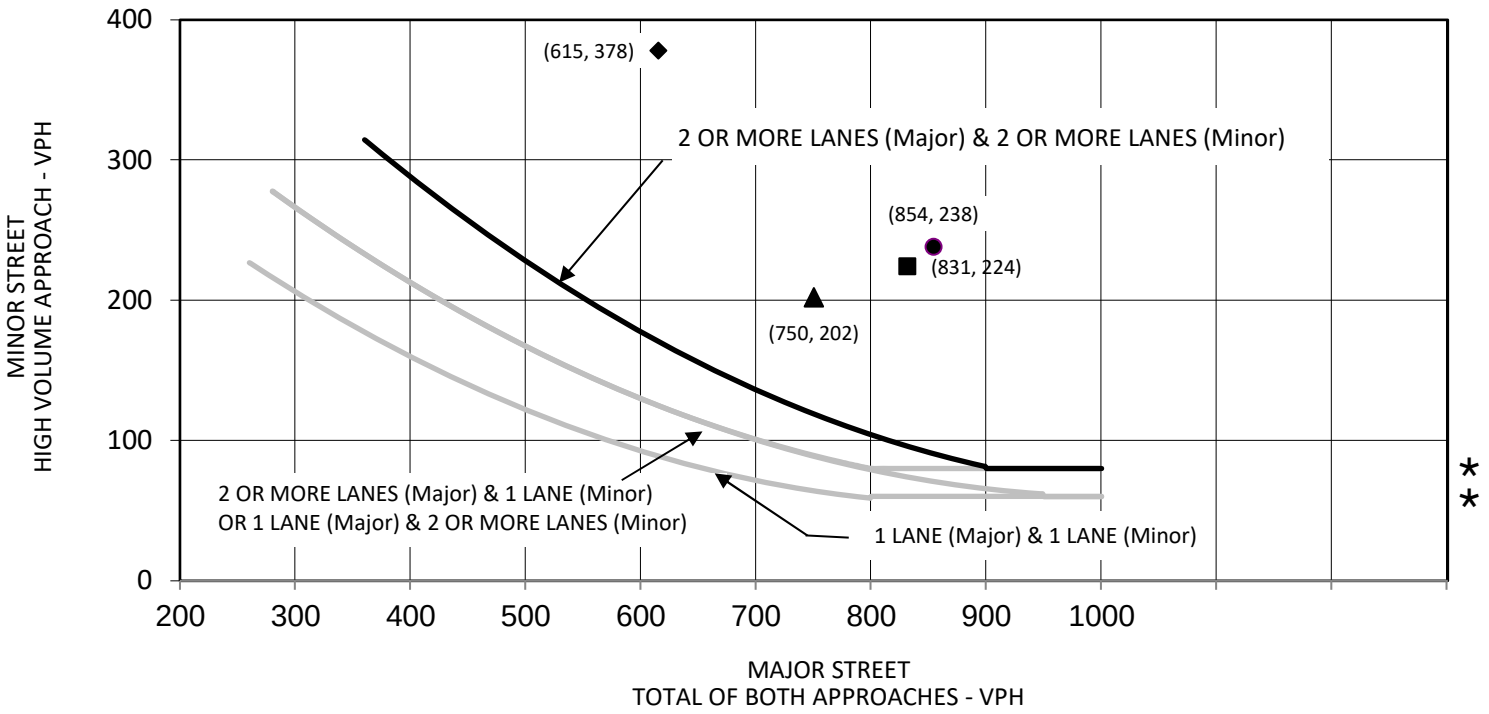
11.4 LIST OF CHAPTER 11.0 FIGURES AND TABLES

- Figure 11-1: Warrant 2: 4 Hour - Marks Avenue/Belmont Avenue – Existing Conditions
- Figure 11-2: Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue – Existing Conditions
- Figure 11-3: Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue – Near Term Plus Project Conditions
- Figure 11-4: Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue - Cumulative Year (2046) Conditions
- Figure 11-5: Warrant 2: 4 Hour - Hughes Avenue/Belmont Avenue
- Figure 11-6: Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Existing Conditions
- Figure 11-7: Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Near Term Plus Project Conditions
- Figure 11-8: Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Cumulative Year (2046) Conditions
- Figure 11-9: Warrant 2: 4 Hour - Hughes Avenue/Nielsen Avenue
- Figure 11-10: Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Existing Conditions
- Figure 11-11: Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Near Term Plus Project Conditions
- Figure 11-12: Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Cumulative Year (2046) Conditions
- Table 11.A: Eight-Hour Warrant Analysis - Condition A (70%) - Marks Avenue/Belmont Avenue
- Table 11.B: Eight-Hour Warrant Analysis - Condition B (70%) - Marks Avenue/Belmont Avenue
- Table 11.C: Eight-Hour Warrant Analysis - Condition A (80%) - Hughes Avenue/Belmont Avenue
- Table 11.D: Eight-Hour Warrant Analysis - Condition B (80%) - Hughes Avenue/Belmont Avenue

- Table 11.E: Eight-Hour Warrant Analysis - Condition A (80%) - Hughes Avenue/Nielsen Avenue
- Table 11.F: Eight-Hour Warrant Analysis - Condition B (80%) - Hughes Avenue/Nielsen Avenue

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 11-1

LSA

● Highest Hour Volumes (17:00-18:00)

▲ Third Highest Hourly Volumes (15:00-16:00)

■ Second Highest Hourly Volumes (16:00-17:00)

◆ Fourth Highest Hourly Volumes (7:00-8:00)

2740 West Nielsen Avenue Warehouse Project

Warrant 2: 4 Hour - Marks Avenue/Belmont Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

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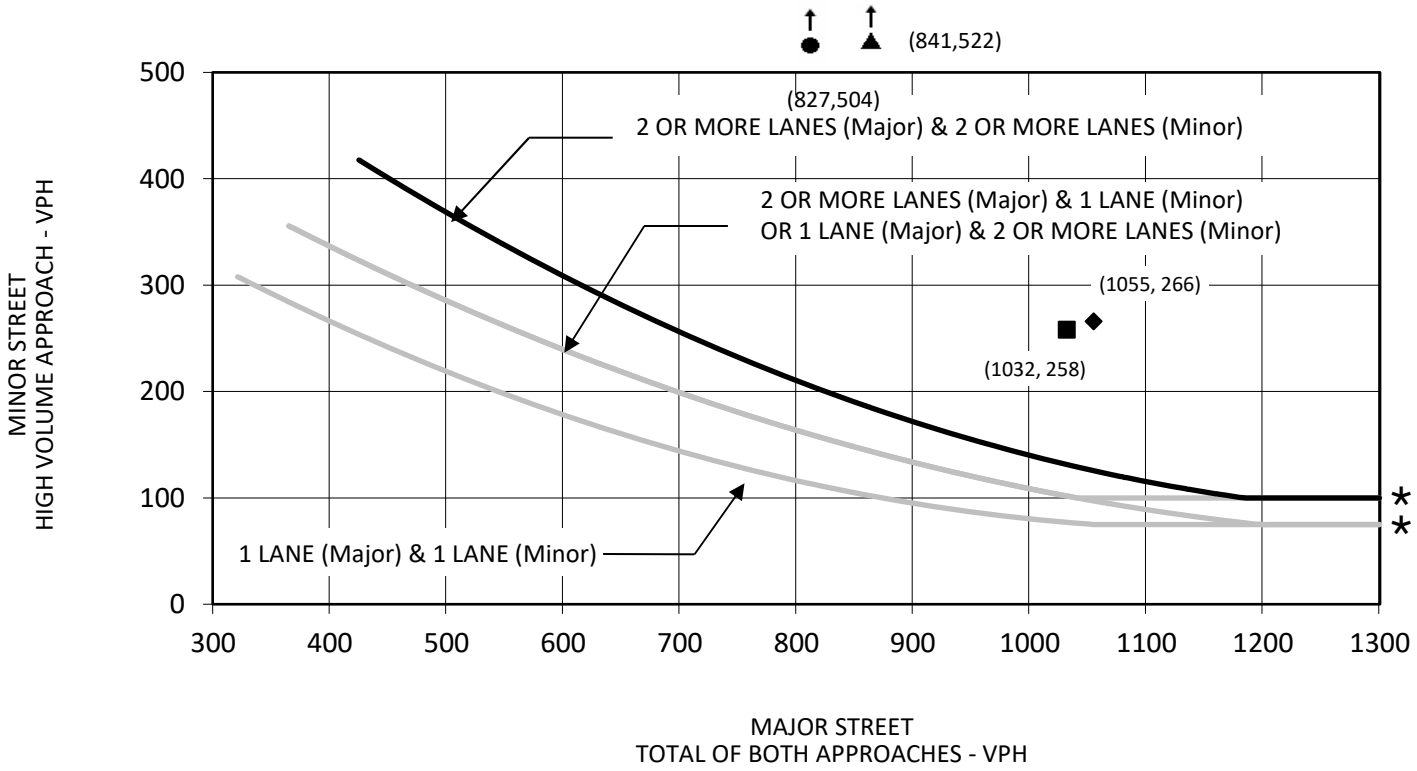
WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 11-2

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project

Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Traffic Impact Study

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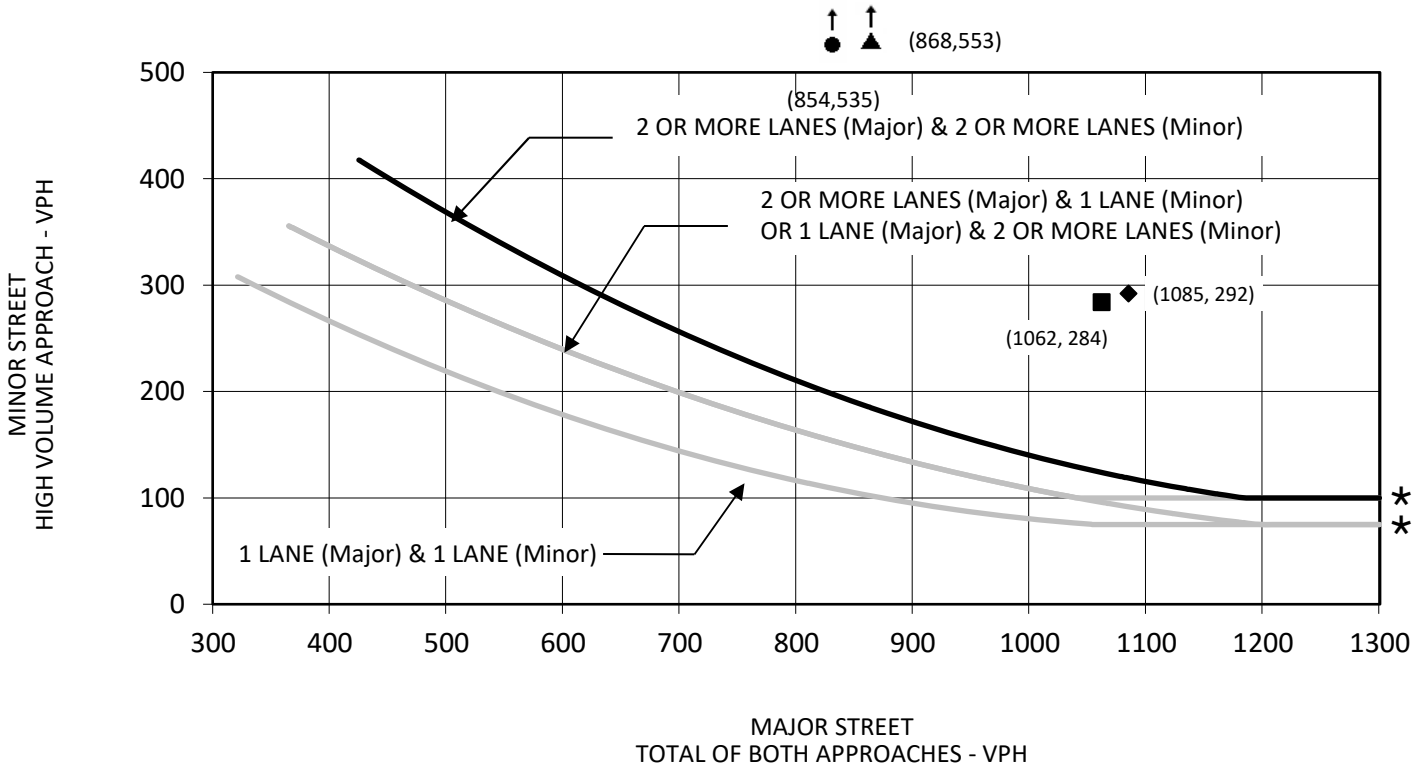
WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 11-3

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project

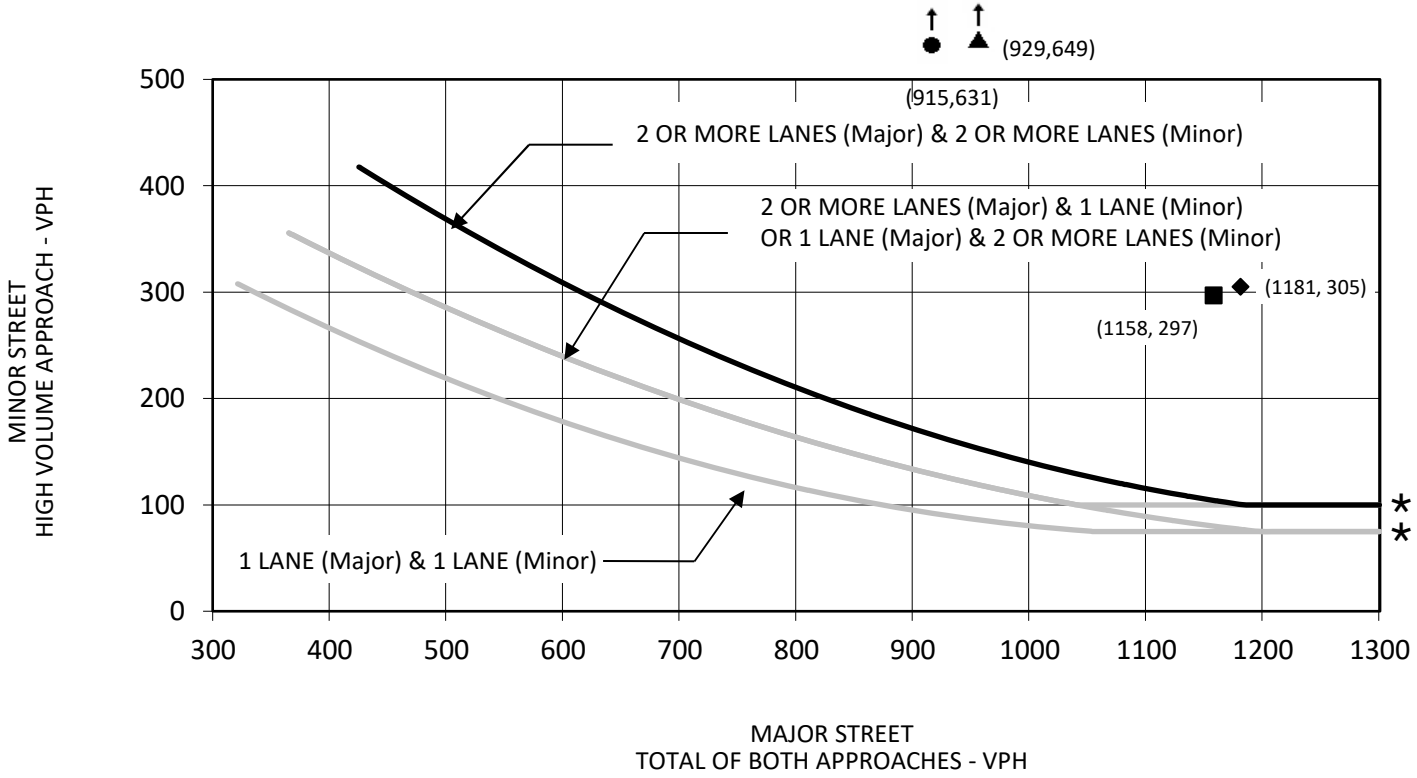
Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue – Near Term Plus Project Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Traffic Impact Study

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 11-4

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project

Warrant 3: Peak Hour - Marks Avenue/Belmont Avenue - Cumulative Year (2046) Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Traffic Impact Study

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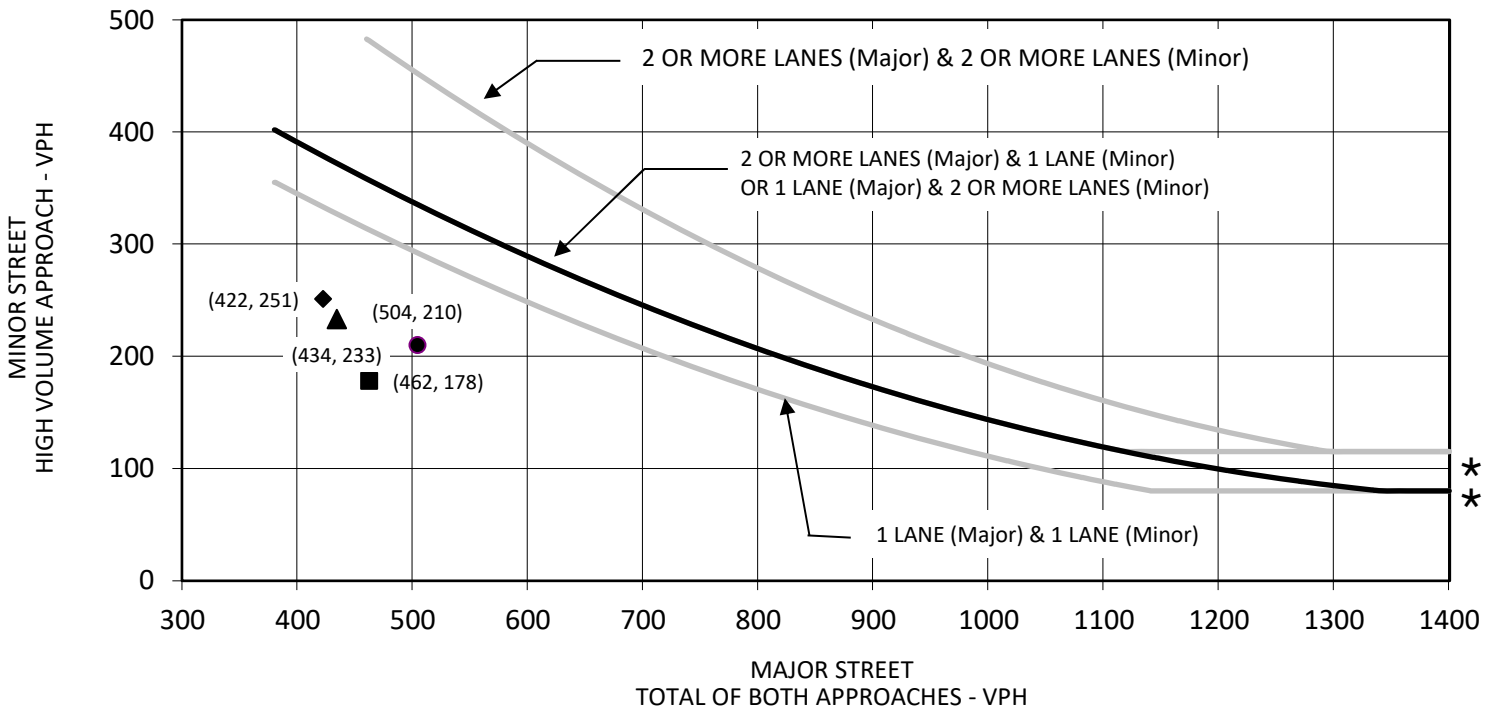
WARRANT 2, FOUR-HOUR VEHICULAR VOLUME



* 115 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 80 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 11-5

LSA

● Highest Hour Volumes (16:00-17:00)

▲ Third Highest Hourly Volumes (14:00-15:00)

■ Second Highest Hourly Volumes (17:00-18:00)

◆ Fourth Highest Hourly Volumes (12:00-13:00)

2740 West Nielsen Avenue Warehouse Project

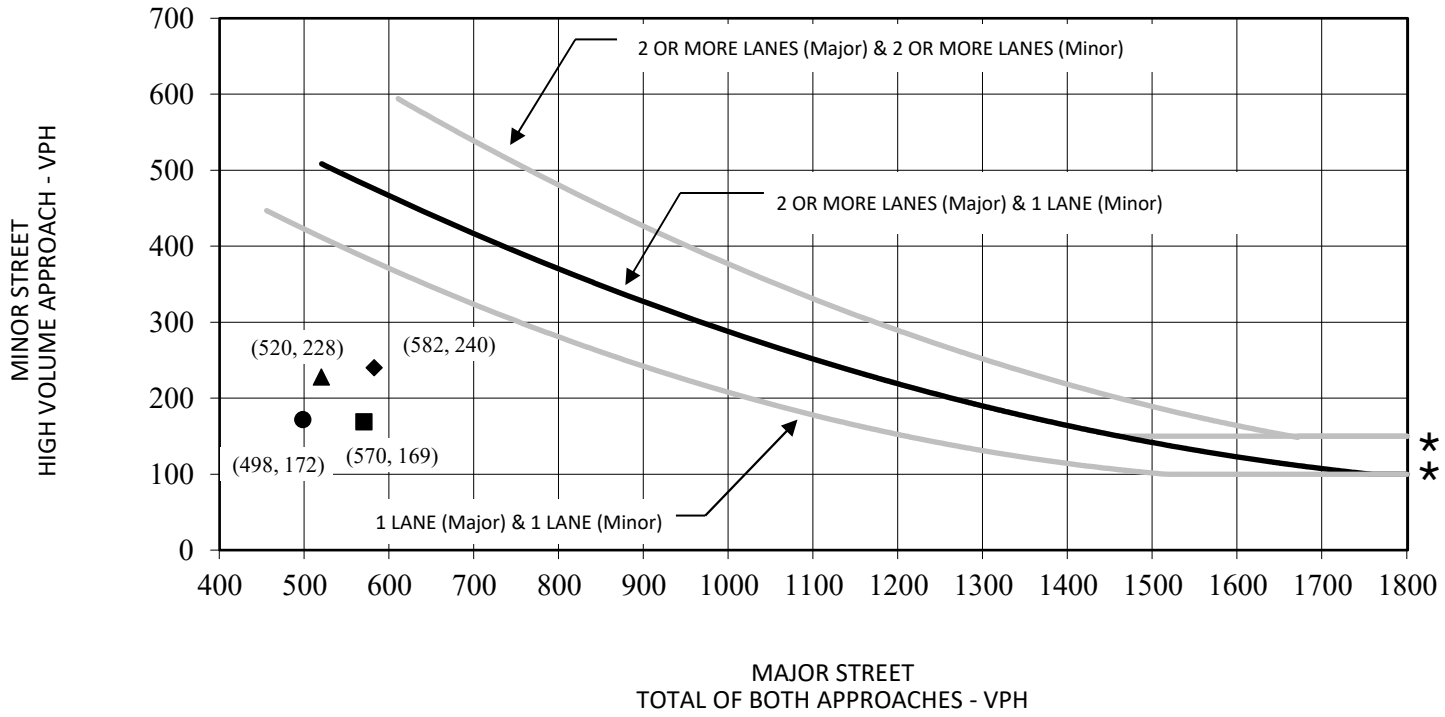
Warrant 2: 4 Hour - Hughes Avenue/Belmont Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-1

Traffic Impact Study

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\Warrant 2-Four Hour_Exist_Int 7.xlsx (12/20/2024)

WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-6

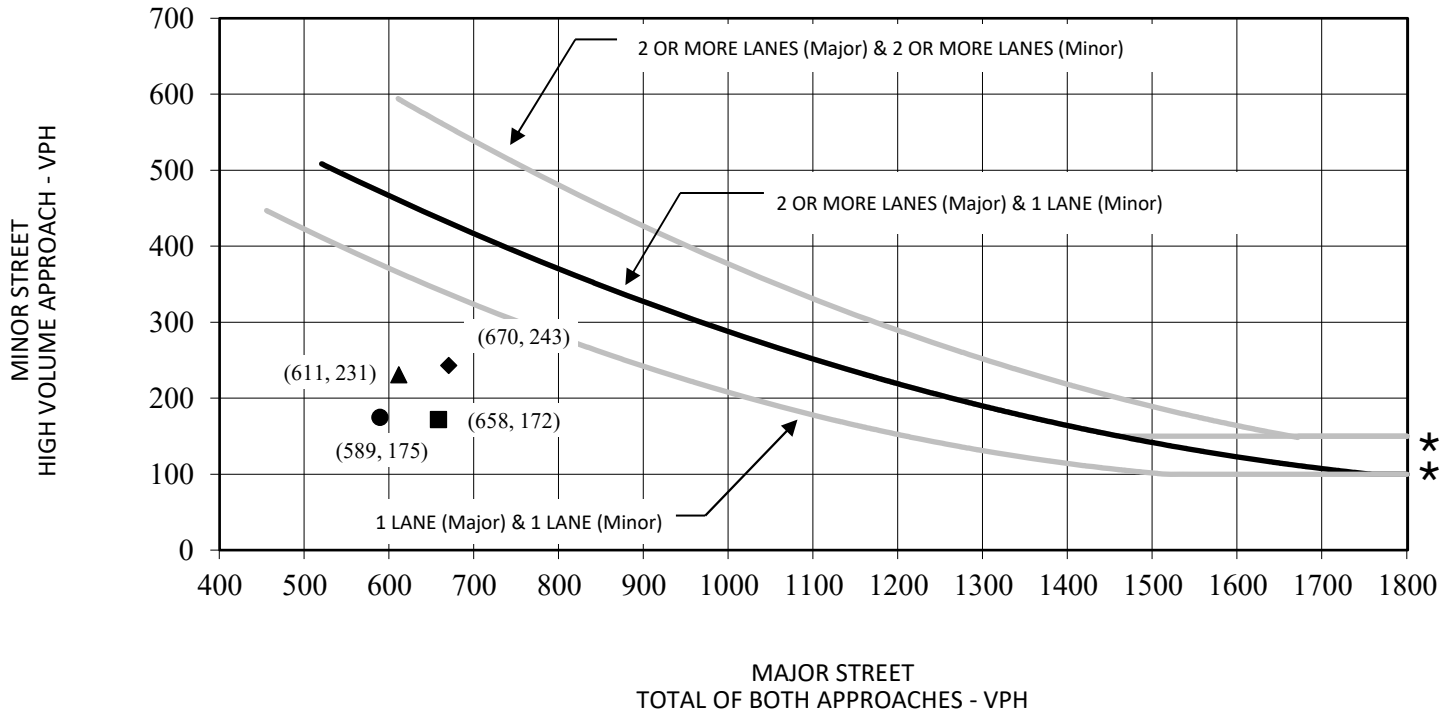
● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

Traffic Impact Study

WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-7

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Near Term Plus Project Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

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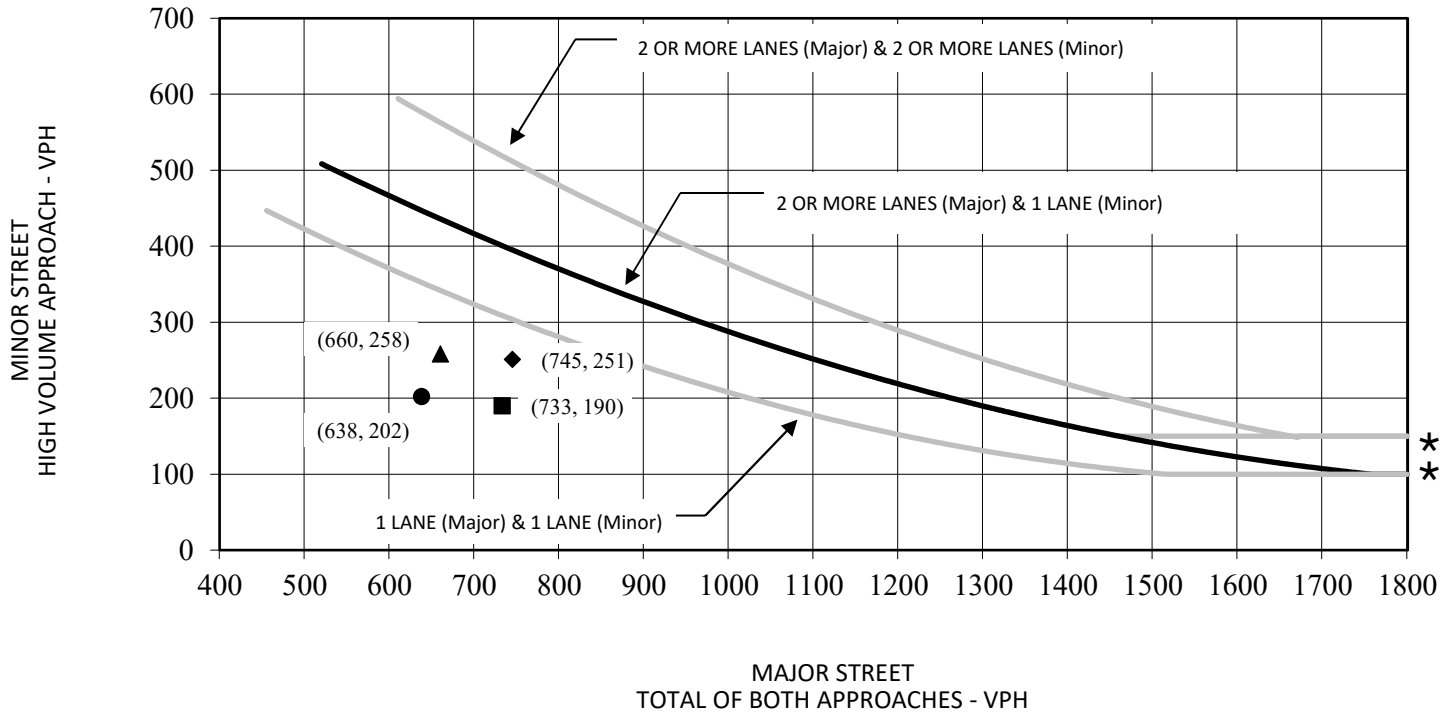
WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-8

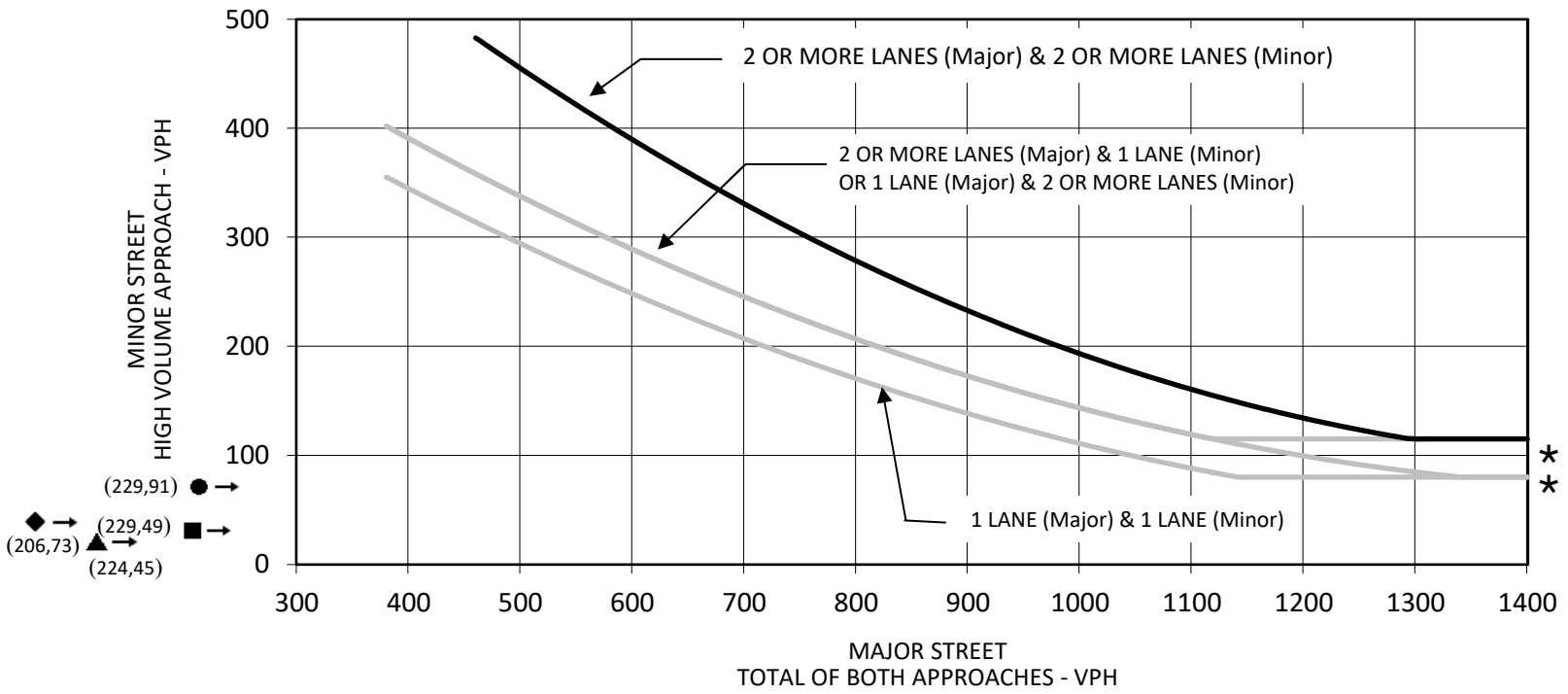
● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Belmont Avenue – Cumulative Year (2046) Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\SW_zCumul_Int 7 .xlsx (12/20/2024)

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME



* 115 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 80 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 11-9

LSA

● Highest Hour Volumes (8:00-9:00)

▲ Third Highest Hourly Volumes (15:00-16:00)

■ Second Highest Hourly Volumes (16:00-17:00)

◆ Fourth Highest Hourly Volumes (7:00-8:00)

2740 West Nielsen Avenue Warehouse Project

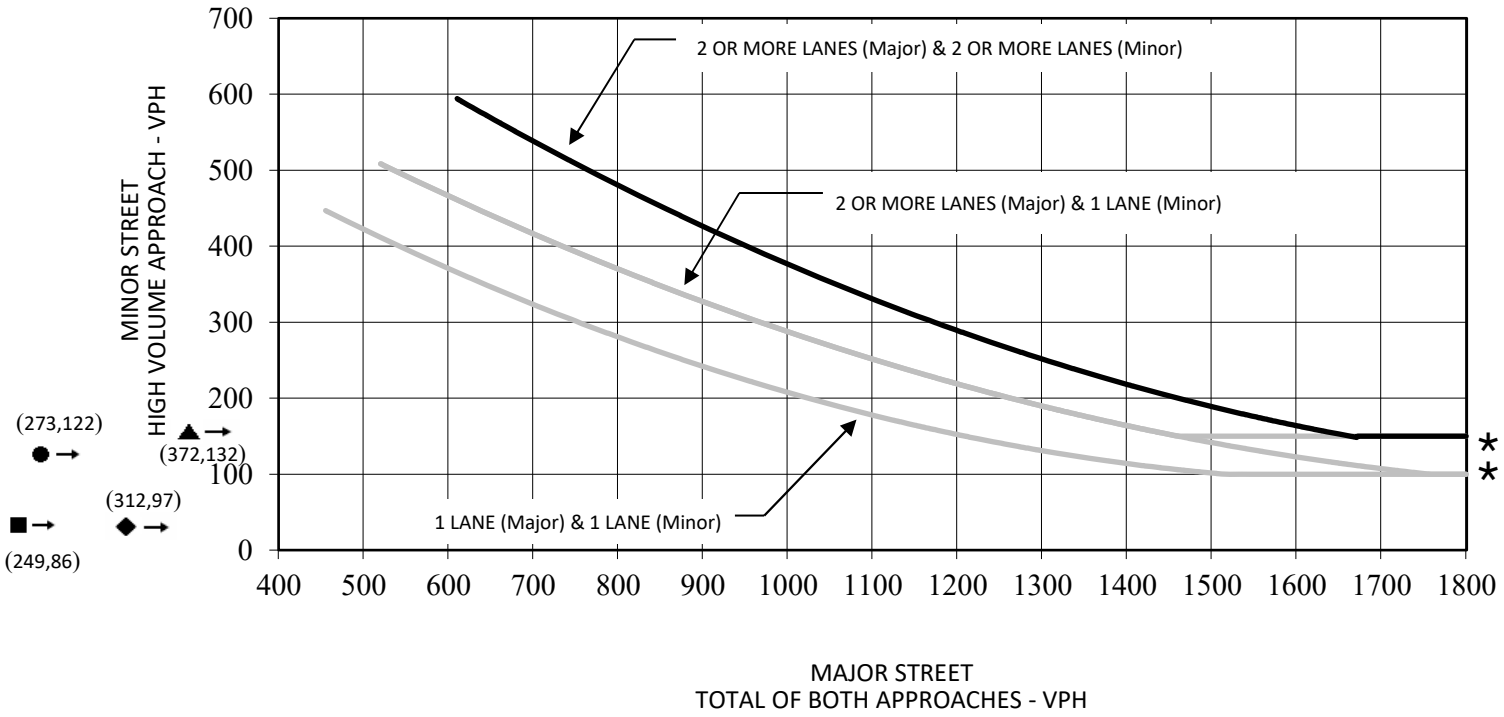
Warrant 2: 4 Hour - Hughes Avenue/Nielsen Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-1

Traffic Impact Study

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\Warrant 2-Four Hour_Exist_Int 8.xlsx (12/20/2024)

WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-10

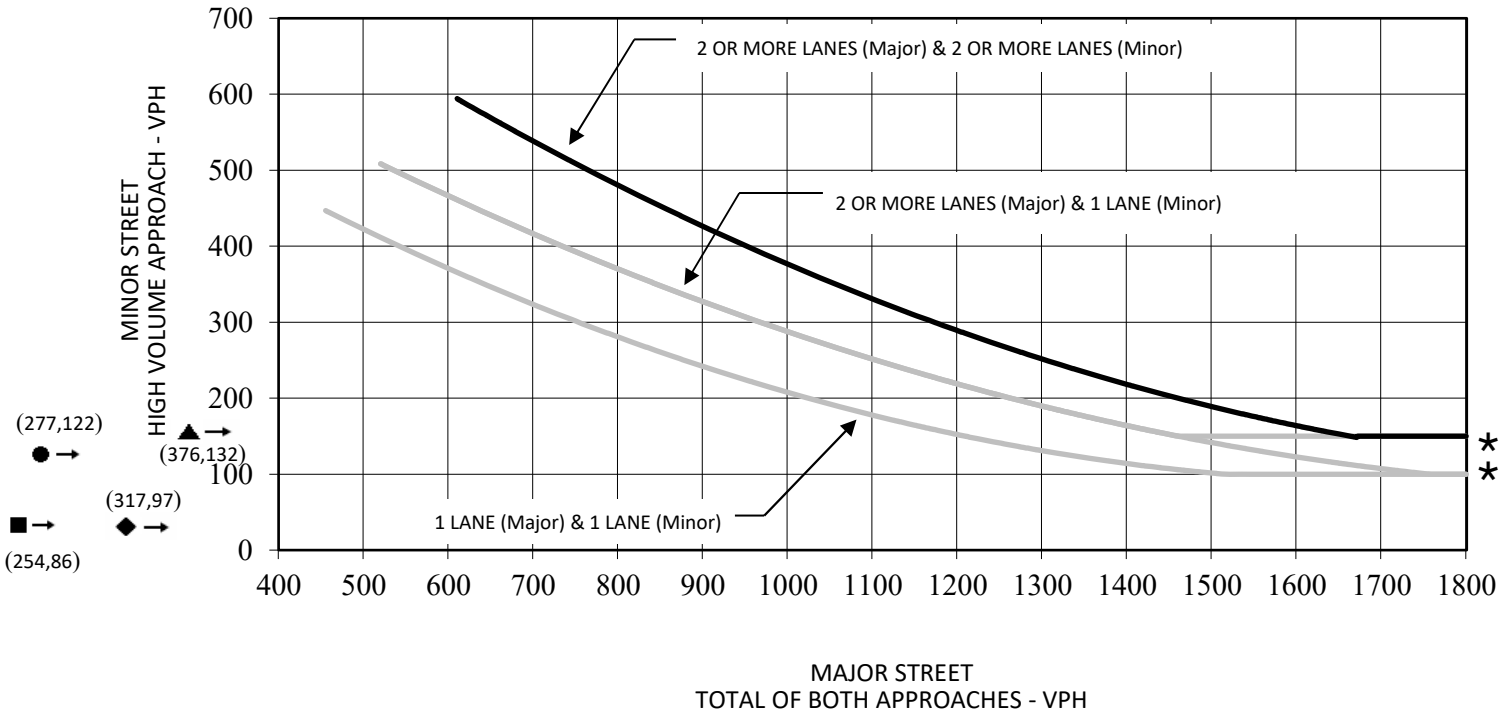
● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Existing Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\SW_Exist_Int 8.xlsx (12/20/2024)

WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-11

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

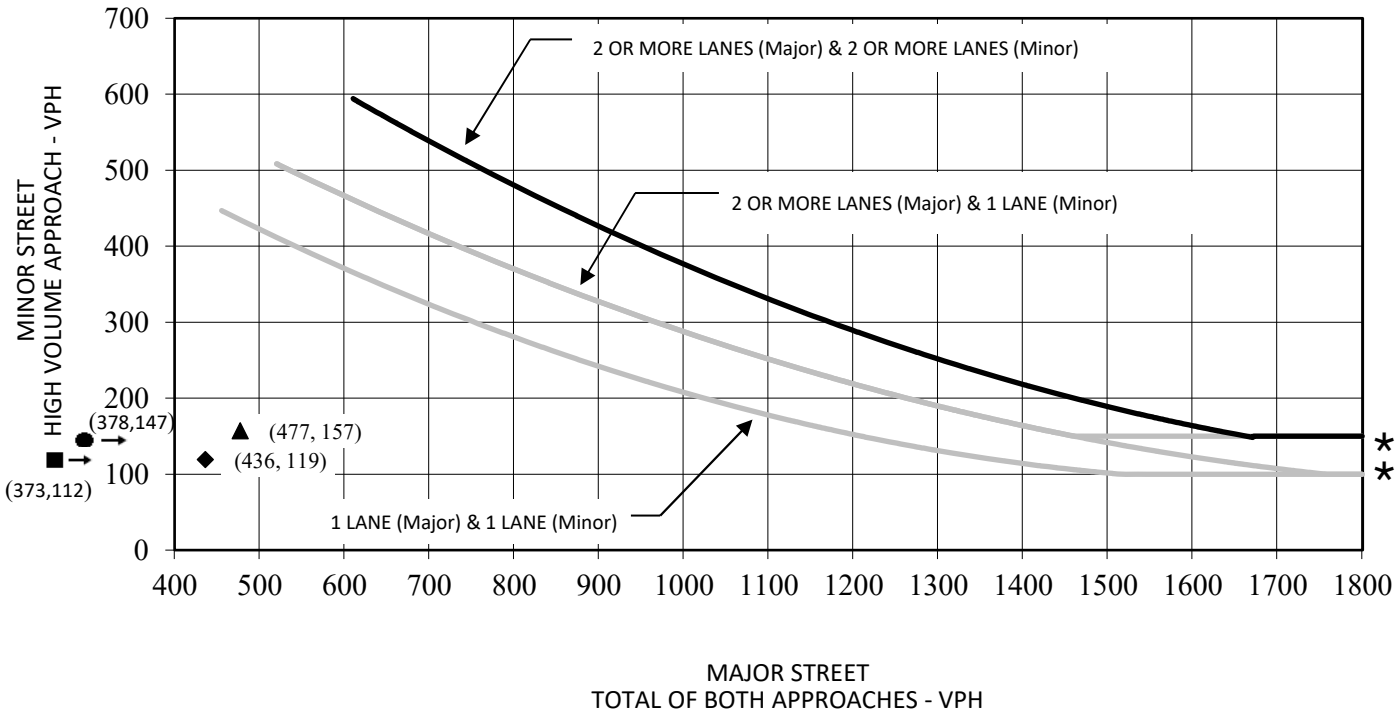
2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Near Term Plus Project Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

Traffic Impact Study

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\SW_NT_Int 8.xlsx (12/20/2024)

WARRANT 3, PEAK HOUR



* 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 approaching with one lane.

LSA

FIGURE 11-12

● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

2740 West Nielsen Avenue Warehouse Project
Warrant 3: Peak Hour - Hughes Avenue/Nielsen Avenue – Cumulative Year (2046) Conditions

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

P:\2024\20241963 2740 Nielsen Addendum\PRODUCTS\Traffic\Warrant\SW_zCumul_Int 8 .xlsx (12/20/2024)

LSA

Table 11.A: Eight-Hour Warrant Analysis - Condition A (70%)

Marks Avenue/Belmont Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 420 veh/hr)	Higher Minor Approaches (≥ 140 veh/hr)	Hourly Criteria Met
1 Marks Avenue/Belmont Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	22	8	43	27	70	22	No
1:00 - 2:00	11	12	26	11	37	12	No
2:00 - 3:00	9	11	12	12	24	11	No
3:00 - 4:00	10	14	12	18	30	14	No
4:00 - 5:00	36	19	22	28	50	36	No
5:00 - 6:00	81	67	72	85	157	81	No
6:00 - 7:00	110	92	132	103	235	110	No
7:00 - 8:00	378	87	265	350	615	378	Yes
8:00 - 9:00	240	85	297	264	561	240	Yes
9:00 - 10:00	161	112	189	129	318	161	No
10:00 - 11:00	119	99	183	123	306	119	No
11:00 - 12:00	142	123	203	120	323	142	No
12:00 - 13:00	164	171	212	144	356	171	No
13:00 - 14:00	167	120	302	150	452	167	Yes
14:00 - 15:00	190	147	366	141	507	190	Yes
15:00 - 16:00	202	145	545	205	750	202	Yes
16:00 - 17:00	224	180	639	192	831	224	Yes
17:00 - 18:00	238	157	704	150	854	238	Yes
18:00 - 19:00	110	113	261	100	361	113	No
19:00 - 20:00	119	90	179	88	267	119	No
20:00 - 21:00	72	52	120	68	188	72	No
21:00 - 22:00	53	33	93	51	144	53	No
22:00 -23:00	42	29	69	33	102	42	No
23:00 - 24:00	21	16	41	21	62	21	No
Total	2,921	1,982	4,987	2,613		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

LSA

Table 11.B: Eight-Hour Warrant Analysis - Condition B (70%)

Marks Avenue/Belmont Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 630 veh/hr)	Higher Minor Approaches (≥ 70 veh/hr)	Hourly Criteria Met
1 Marks Avenue/Belmont Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	22	8	43	27	70	22	No
1:00 - 2:00	11	12	26	11	37	12	No
2:00 - 3:00	9	11	12	12	24	11	No
3:00 - 4:00	10	14	12	18	30	14	No
4:00 - 5:00	36	19	22	28	50	36	No
5:00 - 6:00	81	67	72	85	157	81	No
6:00 - 7:00	110	92	132	103	235	110	No
7:00 - 8:00	378	87	265	350	615	378	No
8:00 - 9:00	240	85	297	264	561	240	No
9:00 - 10:00	161	112	189	129	318	161	No
10:00 - 11:00	119	99	183	123	306	119	No
11:00 - 12:00	142	123	203	120	323	142	No
12:00 - 13:00	164	171	212	144	356	171	No
13:00 - 14:00	167	120	302	150	452	167	No
14:00 - 15:00	190	147	366	141	507	190	No
15:00 - 16:00	202	145	545	205	750	202	Yes
16:00 - 17:00	224	180	639	192	831	224	Yes
17:00 - 18:00	238	157	704	150	854	238	Yes
18:00 - 19:00	110	113	261	100	361	113	No
19:00 - 20:00	119	90	179	88	267	119	No
20:00 - 21:00	72	52	120	68	188	72	No
21:00 - 22:00	53	33	93	51	144	53	No
22:00 -23:00	42	29	69	33	102	42	No
23:00 - 24:00	21	16	41	21	62	21	No
Total	2,921	1,982	4,987	2,613		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

LSA

Table 11.C: Eight-Hour Warrant Analysis - Condition A (80%)

Hughes Avenue/Belmont Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 480 veh/hr)	Higher Minor Approaches (≥ 120 veh/hr)	Hourly Criteria Met
7 Hughes Avenue/Belmont Avenue	**Major Approach**		**Minor Approach**				
0:00 - 1:00	13	20	14	8	33	14	No
1:00 - 2:00	17	23	11	4	40	11	No
2:00 - 3:00	7	20	11	6	27	11	No
3:00 - 4:00	11	28	6	8	39	8	No
4:00 - 5:00	30	41	11	17	71	17	No
5:00 - 6:00	57	95	12	32	152	32	No
6:00 - 7:00	88	123	18	66	211	66	No
7:00 - 8:00	224	150	70	141	374	141	No
8:00 - 9:00	221	184	124	133	405	133	No
9:00 - 10:00	152	182	91	76	334	91	No
10:00 - 11:00	133	213	84	74	346	84	No
11:00 - 12:00	166	208	95	95	374	95	No
12:00 - 13:00	171	251	103	96	422	103	No
13:00 - 14:00	175	180	80	102	355	102	No
14:00 - 15:00	201	233	137	126	434	137	No
15:00 - 16:00	243	181	126	162	424	162	No
16:00 - 17:00	294	210	161	115	504	161	Yes
17:00 - 18:00	284	178	146	88	462	146	No
18:00 - 19:00	114	140	96	65	254	96	No
19:00 - 20:00	95	132	61	45	227	61	No
20:00 - 21:00	63	75	34	34	138	34	No
21:00 - 22:00	48	60	27	31	108	31	No
22:00 -23:00	40	35	19	10	75	19	No
23:00 - 24:00	17	44	9	14	61	14	No
Total	2,864	3,006	1,546	1,548		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

LSA

Table 11.D: Eight-Hour Warrant Analysis - Condition B (80%)

Hughes Avenue/Belmont Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 720 veh/hr)	Higher Minor Approaches (≥ 60 veh/hr)	Hourly Criteria Met
7 Hughes Avenue/Belmont Avenue	**Major Approach**		**Minor Approach**				
0:00 - 1:00	13	20	14	8	33	14	No
1:00 - 2:00	17	23	11	4	40	11	No
2:00 - 3:00	7	20	11	6	27	11	No
3:00 - 4:00	11	28	6	8	39	8	No
4:00 - 5:00	30	41	11	17	71	17	No
5:00 - 6:00	57	95	12	32	152	32	No
6:00 - 7:00	88	123	18	66	211	66	No
7:00 - 8:00	224	150	70	141	374	141	No
8:00 - 9:00	221	184	124	133	405	133	No
9:00 - 10:00	152	182	91	76	334	91	No
10:00 - 11:00	133	213	84	74	346	84	No
11:00 - 12:00	166	208	95	95	374	95	No
12:00 - 13:00	171	251	103	96	422	103	No
13:00 - 14:00	175	180	80	102	355	102	No
14:00 - 15:00	201	233	137	126	434	137	No
15:00 - 16:00	243	181	126	162	424	162	No
16:00 - 17:00	294	210	161	115	504	161	No
17:00 - 18:00	284	178	146	88	462	146	No
18:00 - 19:00	114	140	96	65	254	96	No
19:00 - 20:00	95	132	61	45	227	61	No
20:00 - 21:00	63	75	34	34	138	34	No
21:00 - 22:00	48	60	27	31	108	31	No
22:00 -23:00	40	35	19	10	75	19	No
23:00 - 24:00	17	44	9	14	61	14	No
Total	2,864	3,006	1,546	1,548		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

LSA

Table 11.E: Eight-Hour Warrant Analysis - Condition A (80%)

Hughes Avenue/Nielsen Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 480 veh/hr)	Higher Minor Approaches (≥ 160 veh/hr)	Hourly Criteria Met
8 Hughes Avenue/Nielsen Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	3	11	8	11	19	11	No
1:00 - 2:00	2	3	13	11	24	3	No
2:00 - 3:00	5	5	5	8	13	5	No
3:00 - 4:00	5	5	6	13	19	5	No
4:00 - 5:00	11	4	4	23	27	11	No
5:00 - 6:00	31	6	13	47	60	31	No
6:00 - 7:00	86	17	31	36	67	86	No
7:00 - 8:00	73	19	65	141	206	73	No
8:00 - 9:00	91	53	104	125	229	91	No
9:00 - 10:00	47	31	78	87	165	47	No
10:00 - 11:00	68	40	57	76	133	68	No
11:00 - 12:00	39	68	64	97	161	68	No
12:00 - 13:00	44	57	73	85	158	57	No
13:00 - 14:00	43	46	71	97	168	46	No
14:00 - 15:00	46	57	108	105	213	57	No
15:00 - 16:00	45	57	103	121	224	57	No
16:00 - 17:00	49	76	124	105	229	76	No
17:00 - 18:00	41	60	113	90	203	60	No
18:00 - 19:00	23	32	73	55	128	32	No
19:00 - 20:00	23	26	46	53	99	26	No
20:00 - 21:00	3	8	24	33	57	8	No
21:00 - 22:00	5	5	26	34	60	5	No
22:00 -23:00	4	6	19	13	32	6	No
23:00 - 24:00	4	11	6	17	23	11	No
Total	791	703	1,234	1,483		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

LSA

Table 11.F: Eight-Hour Warrant Analysis - Condition B (80%)

Hughes Avenue/Nielsen Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 720 veh/hr)	Higher Minor Approaches (≥ 80 veh/hr)	Hourly Criteria Met
8 Hughes Avenue/Nielsen Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	3	11	8	11	19	11	No
1:00 - 2:00	2	3	13	11	24	3	No
2:00 - 3:00	5	5	5	8	13	5	No
3:00 - 4:00	5	5	6	13	19	5	No
4:00 - 5:00	11	4	4	23	27	11	No
5:00 - 6:00	31	6	13	47	60	31	No
6:00 - 7:00	86	17	31	36	67	86	No
7:00 - 8:00	73	19	65	141	206	73	No
8:00 - 9:00	91	53	104	125	229	91	No
9:00 - 10:00	47	31	78	87	165	47	No
10:00 - 11:00	68	40	57	76	133	68	No
11:00 - 12:00	39	68	64	97	161	68	No
12:00 - 13:00	44	57	73	85	158	57	No
13:00 - 14:00	43	46	71	97	168	46	No
14:00 - 15:00	46	57	108	105	213	57	No
15:00 - 16:00	45	57	103	121	224	57	No
16:00 - 17:00	49	76	124	105	229	76	No
17:00 - 18:00	41	60	113	90	203	60	No
18:00 - 19:00	23	32	73	55	128	32	No
19:00 - 20:00	23	26	46	53	99	26	No
20:00 - 21:00	3	8	24	33	57	8	No
21:00 - 22:00	5	5	26	34	60	5	No
22:00 -23:00	4	6	19	13	32	6	No
23:00 - 24:00	4	11	6	17	23	11	No
Total	791	703	1,234	1,483		**Warrant Met:**	**No**

Notes:

Meets Approach Volume Criteria

12.0 COLLISION ANALYSIS

Based on discussion with City staff, a collision analysis was performed for the project study area. As such, intersections and roadway segments within the study area where potential accidents may have occurred were evaluated to estimate the accident rates at those locations. For the arterial roadway network system in the vicinity of the project, Statewide Integrated Traffic Records System (SWITRS) collision data between April 2021 and March 2024 were obtained from the Transportation Injury Mapping System (TIMS) database. For the freeway facilities in the vicinity of the SR-180 and Marks Avenue interchange, Traffic Accident Surveillance and Analysis System (TASAS) crash data summary was obtained from Caltrans for the same time period.

It should be noted that collisions were only identified at intersections within the study area, and no collisions were identified on roadway segments within the study area. As such, none of the study roadway segments were analyzed under this analysis. The SWIRTS data summary and Caltrans TASAS data summary are included in Appendix F.

12.1 INTERSECTIONS

Based on SWIRTS data, four (4) non-fatal collisions occurred within the study area from April 2021 to March 2024. One collision occurred at study intersection 1 (Marks Avenue/Belmont Avenue), one collision occurred at study intersection 2 (Marks Avenue/Nielsen Avenue), one collision occurred at study intersection 6 (Marks Avenue/Whitesbridge Avenue), and one collision occurred at study intersection 8 (Hughes Avenue/Nielsen Avenue).

Rate per million entering vehicles (RMEV) was calculated to develop the accident rates at study intersections 1, 2, 6, and 8 where collisions occurred as previously mentioned. These rates were compared against corresponding statewide rates to identify their performance. The statewide rates were obtained or derived from the data published in the Caltrans *2022 Crash Data on California State Highways* (Caltrans Crash Data).

Table 12.A summarizes the accident rate per RMEV for the study intersections previously referenced as well as the corresponding statewide accident ratio for that intersection type. As shown in Table 12.A, all study intersections analyzed in this analysis have accident ratios that are substantially less than the corresponding statewide accident ratio for that intersection type. As such, all study intersections currently operate within the safety limits and no safety related improvements would be required at any of the study intersections. Since no accidents occurred at the other study intersections within recent years, no improvements are currently being recommended for those intersections.

Relevant pages from the Caltrans Crash Data summary are included in Appendix F.

12.2 FREEWAY SEGMENTS

A collision analysis was performed at the SR-180 freeway segments adjacent to the study area. The freeway segments within the study area were evaluated to estimate the current accident rate at these locations. For the freeway facilities in the project vicinity, TASAS crash data summary from

April 2021 to March 2024 was obtained from Caltrans. The Caltrans TASAS crash summary report is included in Appendix F.

12.2.1 SR-180 Freeway Segment Postmile R53.668 to R55.668 Collision Analysis Summary

Based on the TASAS data within this study segment, a total of 30 collisions occurred on the SR-180 eastbound and westbound segments from Post Mile (PM) R53.668 to PM R55.668 over a 36-month period.

A total of 19 collisions occurred on the SR-180 eastbound segment from PM R53.668 to PM R55.668 over a 36-month period. This segment had a fatal collision rate of 0.000 per Million Vehicle Miles (MVM), a fatal-plus-injury collision rate of 0.15 per MVM, and a total collision rate (fatal, injury, and property damage) of 0.55 per MVM. For similar facilities, the average fatal collision rate is 0.006 per MVM. Additionally, the average fatal-plus-injury collision rate is 0.33 per MVM and the average total collision rate is 0.95 per MVM.

A total of 11 collisions occurred on the SR-180 westbound segment from PM R53.668 to PM R55.668 over a 36-month period. This segment had a fatal collision rate of 0.000 per MVM, a fatal-plus-injury collision rate of 0.03 per MVM, and a total collision rate (fatal, injury, and property damage) of 0.32 per MVM. For similar facilities, the average fatal collision rate is 0.006 per MVM. Additionally, the average fatal-plus-injury collision rate is 0.33 per MVM and the average total collision rate is 0.95 per MVM.

Overall, the actual fatal collision rate, fatal-to-injury collision rate, and total collision rate for both the eastbound and westbound segments from PM R53.668 to PM R55.668 of SR-180 are lower than the average corresponding rates of similar facilities.

12.3 CONCLUSION

Based on the results of this analysis, no improvements are necessary within the study area. Though the project will be adding new trips within the study area, it is not estimated that the project traffic will be significantly changing the traffic flow pattern within the surrounding circulation network. As such, it is not expected that the project traffic will result in unsafe environment within the study area from a traffic safety perspective. As described in the previous chapter, project traffic is estimated to have adequate time for turn movements and corner sight clearance along the project driveways and study intersections. Therefore, both car and truck trips generated by the project could safely maneuver throughout the study area. As such, the project would not potentially increase traffic collision rates along any facility within the study area.

12.4 LIST OF CHAPTER 12.0 TABLES

- Table 12.A: Intersection Accident Rate per RMEV

Table 12.A: Intersection Accident Rate per RMEV

Intersection	# of Crashes C	Existing Daily Approach V	Years of Data N	Accident Ratio R	Statewide Accident Ratio*
1 . Marks Avenue/Belmont Avenue	1	12,503	3	0.07	0.39
2 . Marks Avenue/Nielsen Avenue	1	10,175	3	0.09	0.55
6 . Marks Avenue/Whitesbridge Avenue	1	11,435	3	0.08	0.55
8 . Hughes Avenue/Nielsen Avenue	1	4,211	3	0.22	0.39

Notes:

RMEV= Rate per Million Entering Vehicle

* Statewide basic average crash rate was obtained from the Caltrans *2022 Crash Data on California State Highways* report for surburban settings.

13.0 VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

The City adopted the City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds (VMT Guidelines) on June 25, 2020, which includes the screening criteria, VMT analysis methodology, VMT impact thresholds, and VMT mitigation measures. Therefore, the City's VMT Guidelines was used in the evaluation of the project's VMT analysis.

13.1 METHODOLOGY

The VMT Guidelines provide multiple screening criteria for land use projects. The project was compared with the screening criteria established in the "Project Screening" section of the VMT Guidelines to check if the project can be screened out. Following is a brief description about the project in relation to the project screening criteria:

- **Transit Priority Area (TPA) Screening:** The project is not located within a TPA. Therefore, this screening criteria does not apply to the project.
- **Low Trip Generator:** The VMT Guidelines identify that projects generating less than 500 daily trips could be screened out of a VMT analysis. As shown in previously referenced Table 5.A, the project is estimated to generate 2,229 daily trips. Therefore, the project does not satisfy this screening criteria.
- **Other Screening Criteria:** The project is not a residential or office land use, and therefore it could not be screened out using low VMT area maps. Additionally, it is neither an affordable housing project nor it could be classified as retail, institutional/government uses or public service uses. Therefore, these criteria do not apply for the project.

As shown above, the project could not be screened out from detailed VMT analysis. As such, pursuant to the VMT Guidelines, a detailed VMT analysis was conducted to assess the project's VMT impact.

13.1.1 Thresholds of Significance

Though the project is non-residential, the project could not be classified as a retail or office project. Additionally, the project does not require a General Plan Amendment (GPA). Therefore, pursuant to the VMT Guidelines, the project VMT per employee needs to be compared with the existing VMT per employee for the region. The City's VMT Guidelines establish a numerical value of 25.6 for the regional VMT per employee.

As recommended in the VMT Guidelines, Fresno COG ABM was used for the project VMT analysis. The project land uses should be isolated to estimate project VMT and its respective VMT metrics. Fresno COG ABM includes ability to conduct zone splits/add new TAZs. Therefore, one new TAZ was

added to the model to include the project land uses. The model database was updated with the project land uses to calculate project VMT. The project VMT was calculated from Fresno COG ABM model run as described below:

13.1.2 Project Traffic Analysis Zone Update

The first step in preparation of this analysis was to update the newly added traffic analysis zone (TAZ) in the model that include the project area. The project land use was converted to employees. SF to employee conversion factor were estimated from ITE *Trip Generation Manual* (11th Edition). Daily Trip rates per employee were divided by daily trip rates per 1,000 SF to estimate the ratio between land use square footage and number of employees for project land use. The socioeconomic data for the project TAZ in the existing year model scenario was updated accordingly.

13.1.3 Model Runs and Project VMT Estimation

Model run was conducted for this updated model upon completion of the socioeconomic data update. The outputs from this updated model run were used to calculate the project VMT per employee.

13.2 PROJECT VMT ANALYSIS

Table 13.A summarizes the regional threshold and project VMT per employee. As shown in Table 13.A, the project VMT per employee is 45.6% lower than the existing regional VMT per employee. Therefore, based on the VMT Guidelines, the project will not have any significant VMT impact.

Detailed VMT calculation for the project is included in Appendix G.

13.3 LIST OF CHAPTER 13.0 TABLES

- Table 13.A: Existing (2019) Regional and Project VMT per Employee

Table 13.A: Regional and Project VMT per Employee

Region (Fresno County)[1]	Project	Difference	Percentage Difference
25.6	13.9	(11.7)	-45.6%

Source: Fresno Council of Governments' Activity-Based Model

VMT = Vehicle Miles Traveled

[1]*The Fresno County VMT per capita was obtained from CEQA Guidelines for Vehicle Miles Traveled Thresholds, City of Fresno - June 25, 2020*

14.0 SUMMARY AND CONCLUSIONS

The proposed project consists of three industrial buildings with a total area of 810,666 sf. Building 1 and Building 3 will be used as High Cube Fulfillment Center warehouses. Building 2 will be used for general light industrial purposes. Access to the project site would be provided via eight (8) driveways located on Marks Avenue, Nielsen Avenue and Hughes Avenue. The project is estimated to generate a total of 3,339 daily PCE trips, with 399 PCE trips occurring during the a.m. peak hour and 377 PCE trips occurring during the p.m. peak hour.

14.1 EXISTING CONDITIONS SUMMARY

All study intersections and roadway segments operate at satisfactory LOS under existing conditions. Furthermore, all study intersections and roadway segments are forecast to operate at satisfactory LOS under existing plus project conditions.

14.2 NEAR TERM PLUS PROJECT CONDITIONS SUMMARY

All study intersections and roadway segments are forecast to operate at satisfactory LOS under near term plus project conditions.

14.3 CUMULATIVE YEAR (2046) CONDITIONS SUMMARY

All study intersections and roadway segments are forecast to operate at satisfactory LOS under cumulative year (2046) without project and plus project conditions.

14.4 QUEUING ANALYSIS SUMMARY

Queue lengths for all turning movements at all study intersections are projected to not exceed the corresponding available turn-pocket storage length under existing and near term conditions. Queue lengths for all turning movements at all study intersections, except for the SBL and WBR movements at the intersection of Marks Avenue/Whitesbridge Avenue, are projected to not exceed the corresponding available turn-pocket storage length under cumulative year (2046) conditions.

14.5 REQUIREMENT OF CIRCULATION IMPROVEMENTS SUMMARY

All study intersections and roadway segments are either currently operating at or forecast to operate at satisfactory LOS under all analysis scenarios. As such, no circulation improvements are currently being recommended.

14.6 SITE ACCESS AND CIRCULATION ANALYSIS SUMMARY

The project driveways have adequate corner sight distance and will be stop controlled. Based on the locations of the project driveways, the project is not anticipated to create deficiency in the neighborhood traffic flow pattern.

14.7 COLLISION ANALYSIS SUMMARY

Accident ratio within the study area is lower than the corresponding countywide and statewide average and no improvement is necessary to enhance safety within the study area. Within one mile of the SR-180 and Marks Avenue interchange, the accident rates are lower than the average for similar facilities. It is not estimated that the project traffic will significantly change the traffic flow pattern within the study area or increase the current collision frequency.

14.8 VEHICLE MILES TRAVELED SUMMARY

The project could not be screened out and a detailed VMT analysis using the Fresno COG ABM was conducted for the project. The project VMT is 45.6 percent lower than the City's threshold. As such, the project will not have a significant VMT impact.

APPENDIX A

TRAFFIC COUNT AND SIGNAL TIMING SHEETS

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	30	2	39	12	16	5	33	12	37	10	59	1	30	35	66	197
07:15 AM	11	65	2	78	10	17	3	30	8	44	21	73	4	29	55	88	269
07:30 AM	13	102	6	121	2	12	3	17	15	40	10	65	4	43	84	131	334
07:45 AM	15	110	6	131	8	18	4	30	21	49	24	94	3	41	83	127	382
Total	46	307	16	369	32	63	15	110	56	170	65	291	12	143	257	412	1182
08:00 AM	17	98	5	120	4	10	5	19	17	40	17	74	6	44	52	102	315
08:15 AM	12	53	2	67	8	15	2	25	19	49	20	88	3	42	26	71	251
08:30 AM	8	40	1	49	10	20	5	35	18	48	17	83	1	32	22	55	222
08:45 AM	5	34	4	43	3	14	4	21	23	33	19	75	2	23	17	42	181
Total	42	225	12	279	25	59	16	100	77	170	73	320	12	141	117	270	969
Grand Total	88	532	28	648	57	122	31	210	133	340	138	611	24	284	374	682	2151
Apprch %	13.6	82.1	4.3		27.1	58.1	14.8		21.8	55.6	22.6		3.5	41.6	54.8		
Total %	4.1	24.7	1.3	30.1	2.6	5.7	1.4	9.8	6.2	15.8	6.4	28.4	1.1	13.2	17.4	31.7	
Passenger Vehicles	82	508	24	614	42	104	26	172	116	325	121	562	22	242	354	618	1966
% Passenger Vehicles	93.2	95.5	85.7	94.8	73.7	85.2	83.9	81.9	87.2	95.6	87.7	92	91.7	85.2	94.7	90.6	91.4
Large 2 Axle Vehicles	5	9	1	15	2	2	2	6	5	7	2	14	1	11	8	20	55
% Large 2 Axle Vehicles	5.7	1.7	3.6	2.3	3.5	1.6	6.5	2.9	3.8	2.1	1.4	2.3	4.2	3.9	2.1	2.9	2.6
3 Axle Vehicles	0	4	1	5	5	6	3	14	4	0	4	8	0	12	5	17	44
% 3 Axle Vehicles	0	0.8	3.6	0.8	8.8	4.9	9.7	6.7	3	0	2.9	1.3	0	4.2	1.3	2.5	2
4+ Axle Trucks	1	11	2	14	8	10	0	18	8	8	11	27	1	19	7	27	86
% 4+ Axle Trucks	1.1	2.1	7.1	2.2	14	8.2	0	8.6	6	2.4	8	4.4	4.2	6.7	1.9	4	4

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	11	65	2	78	**10**	17	3	**30**	8	44	21	73	4	29	55	88	269
07:30 AM	13	102	**6**	121	2	12	3	17	15	40	10	65	4	43	**84**	**131**	334
07:45 AM	15	**110**	6	**131**	8	**18**	4	30	**21**	**49**	**24**	**94**	3	41	83	127	**382**
08:00 AM	**17**	98	5	120	4	10	**5**	19	17	40	17	74	**6**	**44**	52	102	315
Total Volume	56	375	19	450	24	57	15	96	61	173	72	306	17	157	274	448	1300
% App. Total	12.4	83.3	4.2		25	59.4	15.6		19.9	56.5	23.5		3.8	35	61.2		
PHF	.824	.852	.792	.859	.600	.792	.750	.800	.726	.883	.750	.814	.708	.892	.815	.855	.851

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City of Fresno
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Weather: Clear

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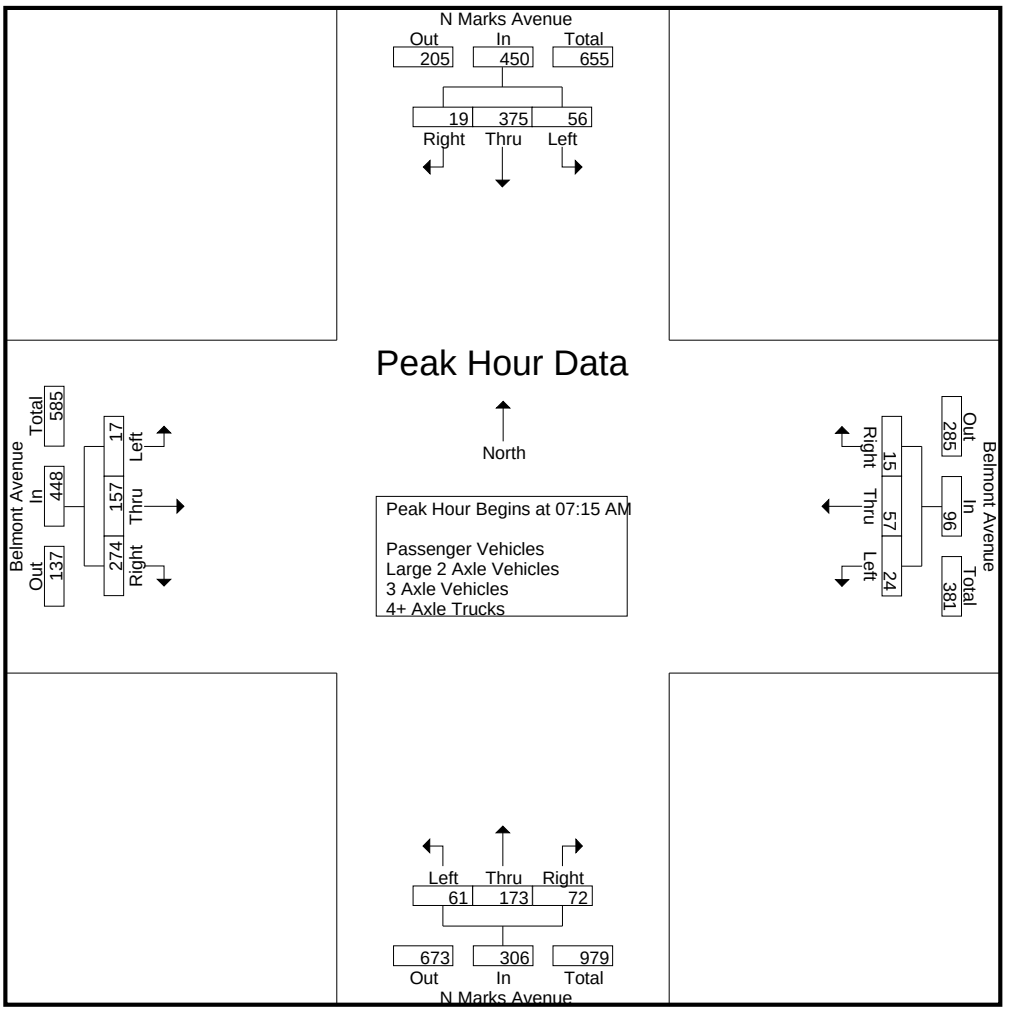
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	11	65	2	78	**12**	16	**5**	**33**	**21**	**49**	**24**	**94**	4	29	55	88
+15 mins.	13	102	**6**	121	10	17	3	30	17	40	17	74	4	43	**84**	**131**
+30 mins.	15	**110**	6	**131**	2	12	3	17	19	49	20	88	3	41	83	127
+45 mins.	**17**	98	5	120	8	**18**	4	30	18	48	17	83	**6**	**44**	52	102
Total Volume	56	375	19	450	32	63	15	110	75	186	78	339	17	157	274	448
% App. Total	12.4	83.3	4.2		29.1	57.3	13.6		22.1	54.9	23		3.8	35	61.2	
PHF	.824	.852	.792	.859	.667	.875	.750	.833	.893	.949	.813	.902	.708	.892	.815	.855

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Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	30	1	37	9	12	5	26	7	37	8	52	1	26	32	59	174
07:15 AM	9	62	2	73	9	16	1	26	7	41	18	66	3	24	53	80	245
07:30 AM	13	97	5	115	1	11	3	15	12	39	9	60	4	37	80	121	311
07:45 AM	15	105	5	125	3	14	3	20	18	47	22	87	3	37	78	118	350
Total	43	294	13	350	22	53	12	87	44	164	57	265	11	124	243	378	1080
08:00 AM	16	95	5	116	4	7	5	16	17	40	14	71	5	36	49	90	293
08:15 AM	10	50	2	62	6	14	2	22	16	44	20	80	3	36	24	63	227
08:30 AM	8	36	1	45	8	18	3	29	17	48	17	82	1	27	21	49	205
08:45 AM	5	33	3	41	2	12	4	18	22	29	13	64	2	19	17	38	161
Total	39	214	11	264	20	51	14	85	72	161	64	297	11	118	111	240	886
Grand Total	82	508	24	614	42	104	26	172	116	325	121	562	22	242	354	618	1966
Apprch %	13.4	82.7	3.9		24.4	60.5	15.1		20.6	57.8	21.5		3.6	39.2	57.3		
Total %	4.2	25.8	1.2	31.2	2.1	5.3	1.3	8.7	5.9	16.5	6.2	28.6	1.1	12.3	18	31.4	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	9	62	2	73	**9**	**16**	1	**26**	7	41	18	66	3	24	53	80	245
07:30 AM	13	97	**5**	115	1	11	3	15	12	39	9	60	4	**37**	**80**	**121**	311
07:45 AM	15	**105**	5	**125**	3	14	3	20	**18**	**47**	**22**	**87**	3	37	78	118	**350**
08:00 AM	**16**	95	5	116	4	7	**5**	16	17	40	14	71	**5**	36	49	90	293
Total Volume	53	359	17	429	17	48	12	77	54	167	63	284	15	134	260	409	1199
% App. Total	12.4	83.7	4		22.1	62.3	15.6		19	58.8	22.2		3.7	32.8	63.6		
PHF	.828	.855	.850	.858	.472	.750	.600	.740	.750	.888	.716	.816	.750	.905	.813	.845	.856

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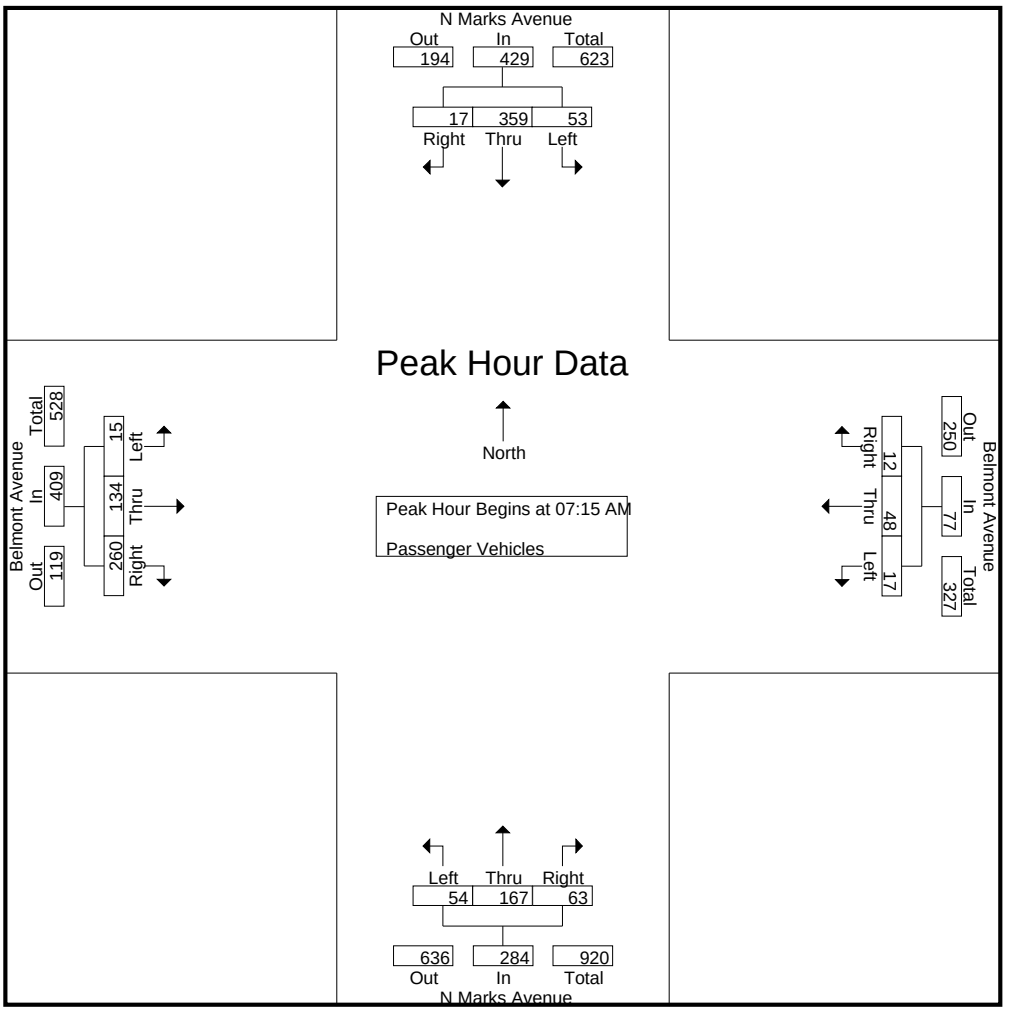

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	9	62	2	73	**9**	**16**	1	**26**	7	41	18	66	3	24	53	80
+15 mins.	13	97	**5**	115	1	11	3	15	12	39	9	60	4	**37**	**80**	**121**
+30 mins.	15	**105**	5	**125**	3	14	3	20	**18**	**47**	**22**	**87**	3	37	78	118
+45 mins.	**16**	95	5	116	4	7	**5**	16	17	40	14	71	**5**	36	49	90
Total Volume	53	359	17	429	17	48	12	77	54	167	63	284	15	134	260	409
% App. Total	12.4	83.7	4		22.1	62.3	15.6		19	58.8	22.2		3.7	32.8	63.6	
PHF	.828	.855	.850	.858	.472	.750	.600	.740	.750	.888	.716	.816	.750	.905	.813	.845

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N/S: N Marks Avenue
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Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	1	0	0	1	4	0	1	5	0	0	0	0	7
07:15 AM	1	1	0	2	0	0	1	1	1	1	0	2	0	0	1	1	6
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	2	1	3	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	3	5
Total	2	3	0	5	1	2	1	4	5	1	1	7	0	2	5	7	23
08:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	1	1	1	3	5
08:15 AM	2	3	0	5	1	0	0	1	0	3	0	3	0	4	1	5	14
08:30 AM	0	2	0	2	0	0	1	1	0	0	0	0	0	2	1	3	6
08:45 AM	0	0	1	1	0	0	0	0	0	3	1	4	0	2	0	2	7
Total	3	6	1	10	1	0	1	2	0	6	1	7	1	9	3	13	32
Grand Total	5	9	1	15	2	2	2	6	5	7	2	14	1	11	8	20	55
Apprch %	33.3	60	6.7		33.3	33.3	33.3		35.7	50	14.3		5	55	40		
Total %	9.1	16.4	1.8	27.3	3.6	3.6	3.6	10.9	9.1	12.7	3.6	25.5	1.8	20	14.5	36.4	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	1	0	**2**	0	0	**1**	1	**1**	**1**	0	**2**	0	0	1	1	**6**
07:30 AM	0	**2**	0	2	0	0	0	0	0	0	0	0	0	**2**	1	**3**	5
07:45 AM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	**3**	3	5
08:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	**1**	1	1	3	5
Total Volume	2	4	0	6	0	2	1	3	1	1	0	2	1	3	6	10	21
% App. Total	33.3	66.7	0		0	66.7	33.3		50	50	0		10	30	60		
PHF	.500	.500	.000	.750	.000	.250	.250	.375	.250	.250	.000	.250	.250	.375	.500	.833	.875

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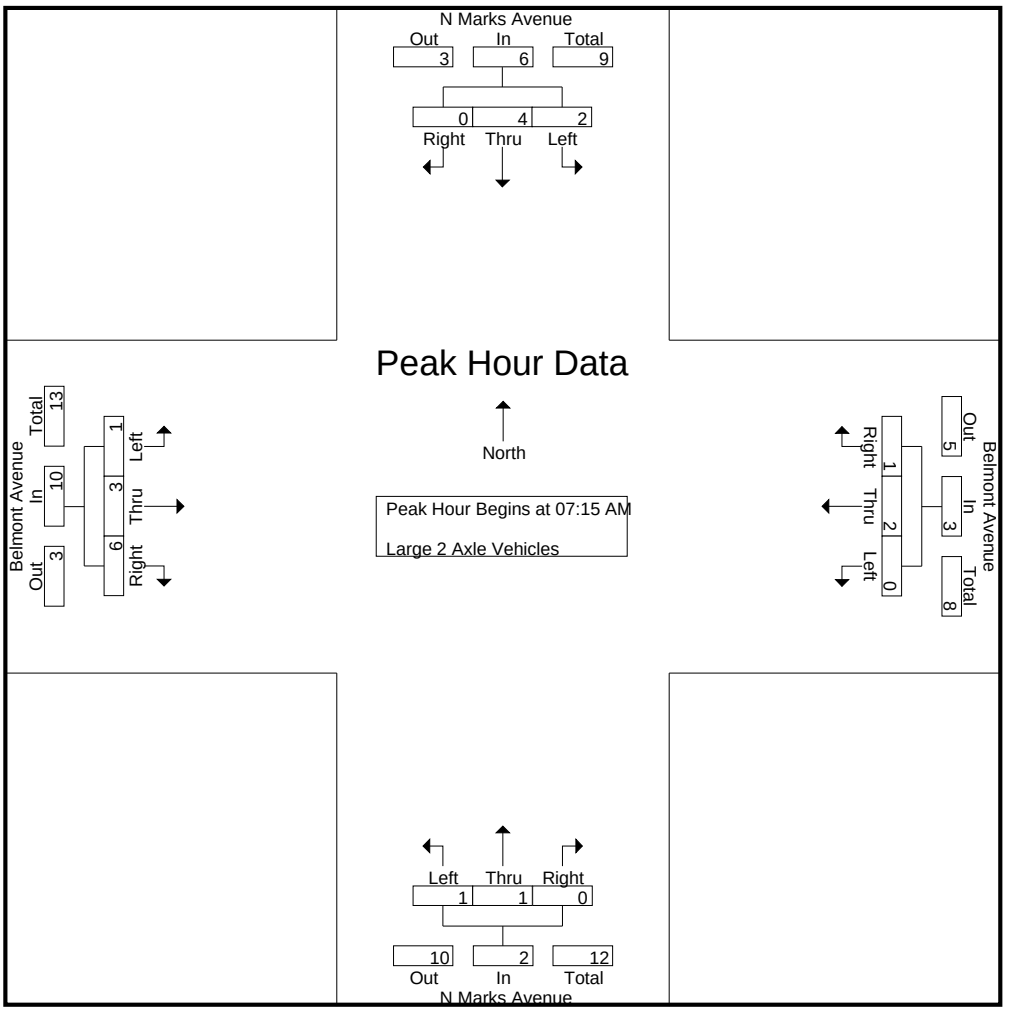

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	1	0	**2**	0	0	**1**	1	**1**	**1**	0	**2**	0	0	1	1
+15 mins.	0	**2**	0	2	0	0	0	0	0	0	0	0	0	**2**	1	**3**
+30 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	**3**	3
+45 mins.	1	1	0	2	0	0	0	0	0	0	0	0	**1**	1	1	3
Total Volume	2	4	0	6	0	2	1	3	1	1	0	2	1	3	6	10
% App. Total	33.3	66.7	0		0	66.7	33.3		50	50	0		10	30	60	
PHF	.500	.500	.000	.750	.000	.250	.250	.375	.250	.250	.000	.250	.250	.375	.500	.833

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	1	1	0	0	1	1	0	2	0	2	4
07:30 AM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	3	3	5
07:45 AM	0	2	0	2	3	1	1	5	2	0	0	2	0	3	1	4	13
Total	0	2	1	3	4	3	2	9	2	0	2	4	0	5	4	9	25
08:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	1	3	6
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:30 AM	0	2	0	2	1	0	1	2	1	0	0	1	0	2	0	2	7
08:45 AM	0	0	0	0	0	0	0	0	1	0	2	3	0	1	0	1	4
Total	0	2	0	2	1	3	1	5	2	0	2	4	0	7	1	8	19
Grand Total	0	4	1	5	5	6	3	14	4	0	4	8	0	12	5	17	44
Apprch %	0	80	20		35.7	42.9	21.4		50	0	50		0	70.6	29.4		
Total %	0	9.1	2.3	11.4	11.4	13.6	6.8	31.8	9.1	0	9.1	18.2	0	27.3	11.4	38.6	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	2	0	2	4
07:30 AM	0	0	**1**	1	0	0	0	0	0	0	1	1	0	0	**3**	3	5
07:45 AM	0	**2**	0	**2**	**3**	1	1	**5**	**2**	0	0	**2**	0	**3**	1	**4**	**13**
08:00 AM	0	0	0	0	0	**3**	0	3	0	0	0	0	0	2	1	3	6
Total Volume	0	2	1	3	3	4	2	9	2	0	2	4	0	7	5	12	28
% App. Total	0	66.7	33.3		33.3	44.4	22.2		50	0	50		0	58.3	41.7		
PHF	.000	.250	.250	.375	.250	.333	.500	.450	.250	.000	.500	.500	.000	.583	.417	.750	.538

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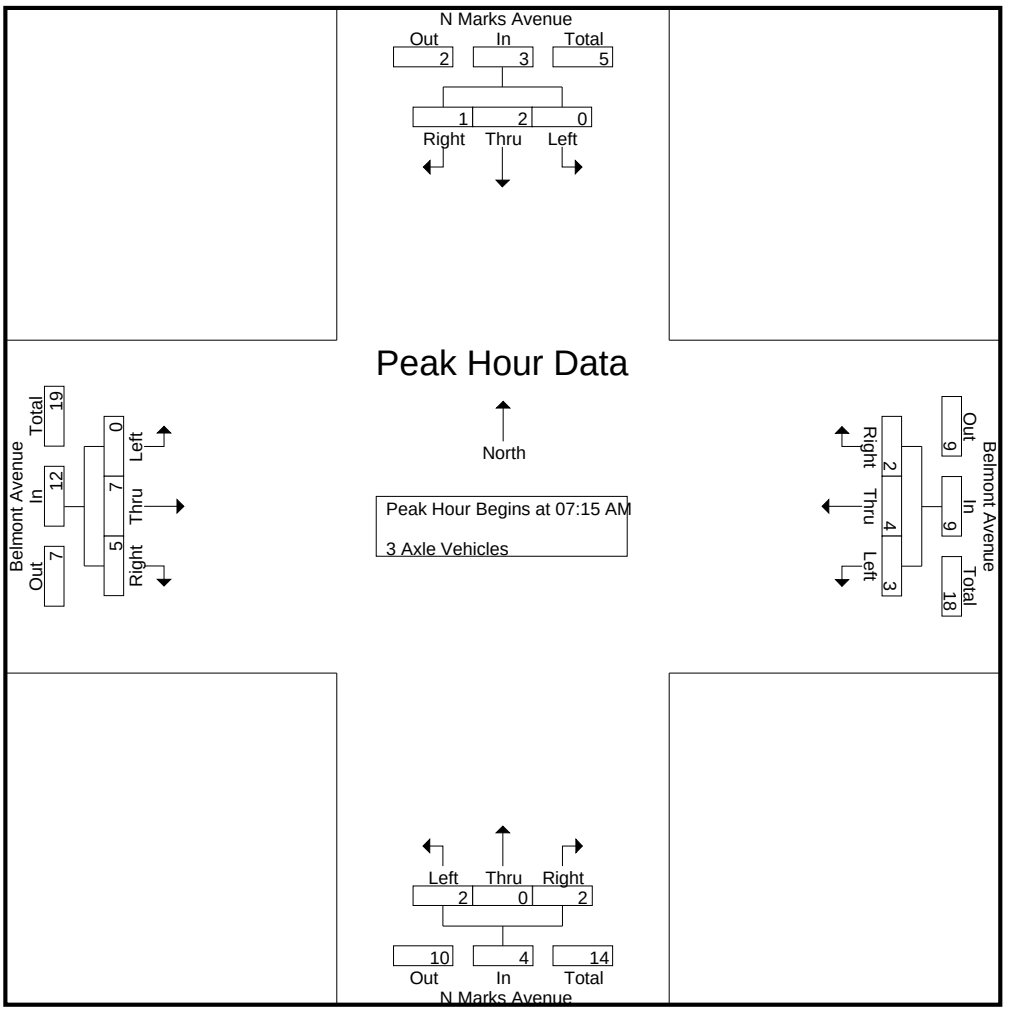
City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	2	0	2
+15 mins.	0	0	**1**	1	0	0	0	0	0	0	1	1	0	0	**3**	3
+30 mins.	0	**2**	0	**2**	**3**	1	1	**5**	**2**	0	0	**2**	0	**3**	1	**4**
+45 mins.	0	0	0	0	0	**3**	0	3	0	0	0	0	0	2	1	3
Total Volume	0	2	1	3	3	4	2	9	2	0	2	4	0	7	5	12
% App. Total	0	66.7	33.3		33.3	44.4	22.2		50	0	50		0	58.3	41.7	
PHF	.000	.250	.250	.375	.250	.333	.500	.450	.250	.000	.500	.500	.000	.583	.417	.750

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	1	2	0	3	1	0	1	2	0	4	3	7	13
07:15 AM	1	2	0	3	1	1	0	2	0	2	2	4	1	3	1	5	14
07:30 AM	0	3	0	3	1	1	0	2	3	1	0	4	0	4	0	4	13
07:45 AM	0	3	1	4	2	1	0	3	1	2	2	5	0	1	1	2	14
Total	1	8	2	11	5	5	0	10	5	5	5	15	1	12	5	18	54
08:00 AM	0	2	0	2	0	0	0	0	0	0	3	3	0	5	1	6	11
08:15 AM	0	0	0	0	1	1	0	2	3	2	0	5	0	0	1	1	8
08:30 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	1	0	1	4
08:45 AM	0	1	0	1	1	2	0	3	0	1	3	4	0	1	0	1	9
Total	0	3	0	3	3	5	0	8	3	3	6	12	0	7	2	9	32
Grand Total	1	11	2	14	8	10	0	18	8	8	11	27	1	19	7	27	86
Apprch %	7.1	78.6	14.3		44.4	55.6	0		29.6	29.6	40.7		3.7	70.4	25.9		
Total %	1.2	12.8	2.3	16.3	9.3	11.6	0	20.9	9.3	9.3	12.8	31.4	1.2	22.1	8.1	31.4	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	2	0	3	1	**1**	0	2	0	**2**	2	4	**1**	3	**1**	5	**14**
07:30 AM	0	**3**	0	3	1	1	0	2	**3**	1	0	4	0	4	0	4	13
07:45 AM	0	3	**1**	**4**	**2**	1	0	**3**	1	2	2	**5**	0	1	1	2	14
08:00 AM	0	2	0	2	0	0	0	0	0	0	**3**	3	0	**5**	1	**6**	11
Total Volume	1	10	1	12	4	3	0	7	4	5	7	16	1	13	3	17	52
% App. Total	8.3	83.3	8.3		57.1	42.9	0		25	31.2	43.8		5.9	76.5	17.6		
PHF	.250	.833	.250	.750	.500	.750	.000	.583	.333	.625	.583	.800	.250	.650	.750	.708	.929

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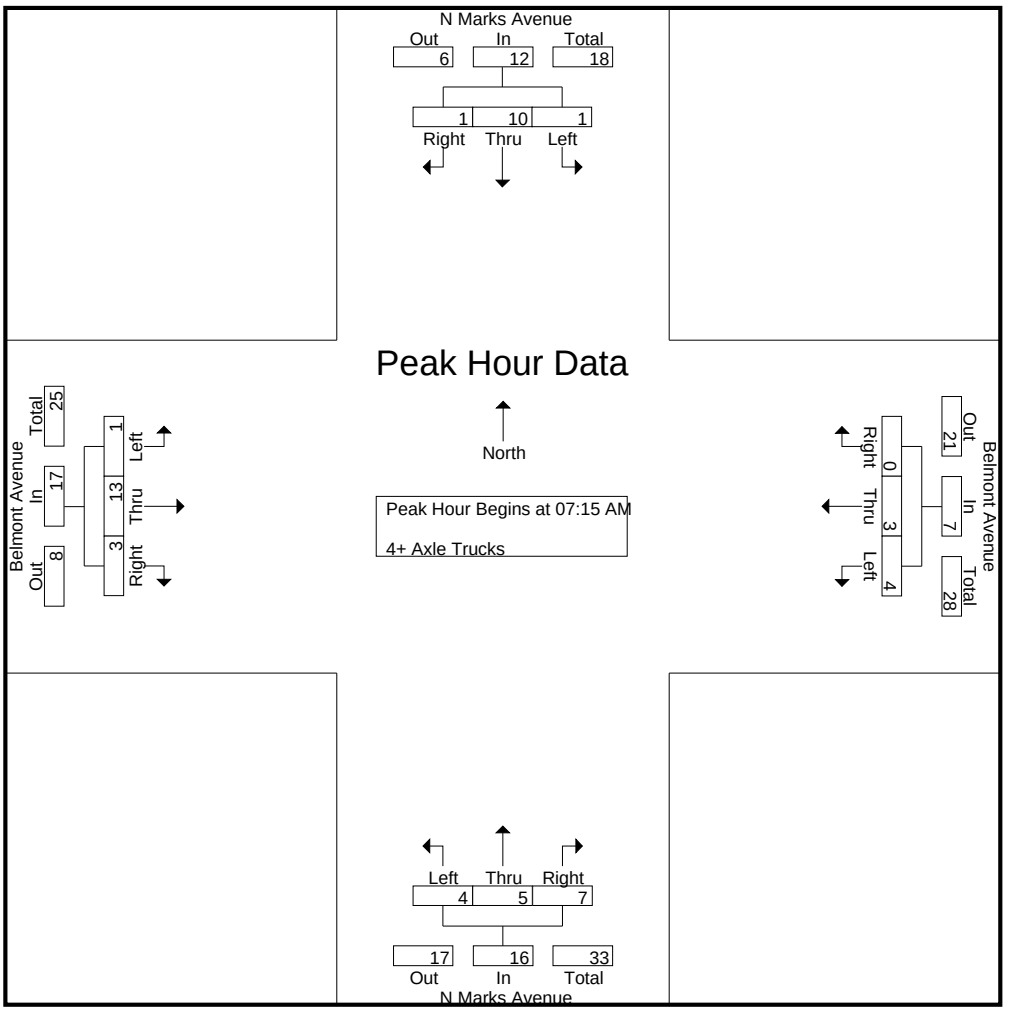
City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	2	0	3	1	**1**	0	2	0	**2**	2	4	**1**	3	**1**	5
+15 mins.	0	**3**	0	3	1	1	0	2	**3**	1	0	4	0	4	0	4
+30 mins.	0	3	**1**	**4**	**2**	1	0	**3**	1	2	2	**5**	0	1	1	2
+45 mins.	0	2	0	2	0	0	0	0	0	0	**3**	3	0	**5**	1	**6**
Total Volume	1	10	1	12	4	3	0	7	4	5	7	16	1	13	3	17
% App. Total	8.3	83.3	8.3		57.1	42.9	0		25	31.2	43.8		5.9	76.5	17.6	
PHF	.250	.833	.250	.750	.500	.750	.000	.583	.333	.625	.583	.800	.250	.650	.750	.708

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	9	42	6	57	12	32	13	57	52	83	40	175	5	32	24	61	350
04:15 PM	9	45	5	59	9	27	9	45	43	84	36	163	2	39	18	59	326
04:30 PM	15	51	3	69	12	29	8	49	46	82	33	161	5	34	29	68	347
04:45 PM	5	22	5	32	9	29	8	46	55	95	36	186	6	29	21	56	320
Total	38	160	19	217	42	117	38	197	196	344	145	685	18	134	92	244	1343
05:00 PM	6	39	4	49	11	26	16	53	64	97	34	195	7	41	19	67	364
05:15 PM	4	29	4	37	8	29	6	43	65	105	43	213	3	32	18	53	346
05:30 PM	5	31	3	39	9	27	10	46	73	96	32	201	6	37	22	65	351
05:45 PM	7	23	5	35	8	13	7	28	36	73	22	131	6	35	18	59	253
Total	22	122	16	160	36	95	39	170	238	371	131	740	22	145	77	244	1314
Grand Total	60	282	35	377	78	212	77	367	434	715	276	1425	40	279	169	488	2657
Apprch %	15.9	74.8	9.3		21.3	57.8	21		30.5	50.2	19.4		8.2	57.2	34.6		
Total %	2.3	10.6	1.3	14.2	2.9	8	2.9	13.8	16.3	26.9	10.4	53.6	1.5	10.5	6.4	18.4	
Passenger Vehicles	56	255	31	342	72	192	73	337	404	685	254	1343	39	268	155	462	2484
% Passenger Vehicles	93.3	90.4	88.6	90.7	92.3	90.6	94.8	91.8	93.1	95.8	92	94.2	97.5	96.1	91.7	94.7	93.5
Large 2 Axle Vehicles	2	23	1	26	1	1	0	2	3	9	5	17	1	4	6	11	56
% Large 2 Axle Vehicles	3.3	8.2	2.9	6.9	1.3	0.5	0	0.5	0.7	1.3	1.8	1.2	2.5	1.4	3.6	2.3	2.1
3 Axle Vehicles	1	2	0	3	2	6	2	10	8	8	4	20	0	1	5	6	39
% 3 Axle Vehicles	1.7	0.7	0	0.8	2.6	2.8	2.6	2.7	1.8	1.1	1.4	1.4	0	0.4	3	1.2	1.5
4+ Axle Trucks	1	2	3	6	3	13	2	18	19	13	13	45	0	6	3	9	78
% 4+ Axle Trucks	1.7	0.7	8.6	1.6	3.8	6.1	2.6	4.9	4.4	1.8	4.7	3.2	0	2.2	1.8	1.8	2.9

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	5	22	**5**	32	9	**29**	8	46	55	95	36	186	6	29	21	56	320
05:00 PM	**6**	**39**	4	**49**	**11**	26	**16**	**53**	64	97	34	195	**7**	**41**	19	**67**	**364**
05:15 PM	4	29	4	37	8	29	6	43	65	**105**	**43**	**213**	3	32	18	53	346
05:30 PM	5	31	3	39	9	27	10	46	**73**	96	32	201	6	37	**22**	65	351
Total Volume	20	121	16	157	37	111	40	188	257	393	145	795	22	139	80	241	1381
% App. Total	12.7	77.1	10.2		19.7	59	21.3		32.3	49.4	18.2		9.1	57.7	33.2		
PHF	.833	.776	.800	.801	.841	.957	.625	.887	.880	.936	.843	.933	.786	.848	.909	.899	.948

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City of Fresno
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E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
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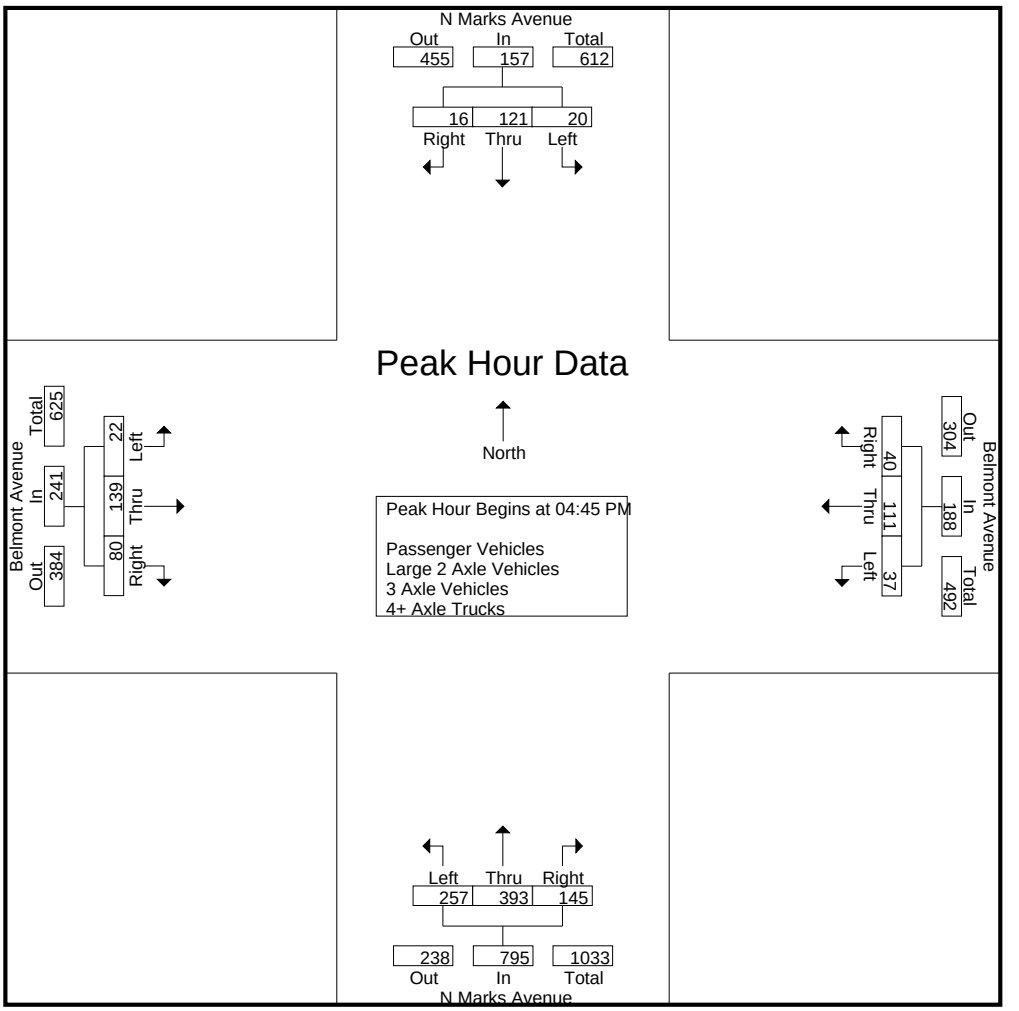

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:45 PM				04:15 PM			
+0 mins.	9	42	**6**	57	**12**	**32**	**13**	**57**	55	95	36	186	2	39	18	59
+15 mins.	9	45	5	59	9	27	9	45	64	97	34	195	5	34	**29**	**68**
+30 mins.	**15**	**51**	3	**69**	12	29	8	49	65	**105**	**43**	**213**	6	29	21	56
+45 mins.	5	22	5	32	9	29	8	46	**73**	96	32	201	**7**	**41**	19	67
Total Volume	38	160	19	217	42	117	38	197	257	393	145	795	20	143	87	250
% App. Total	17.5	73.7	8.8		21.3	59.4	19.3		32.3	49.4	18.2		8	57.2	34.8	
PHF	.633	.784	.792	.786	.875	.914	.731	.864	.880	.936	.843	.933	.714	.872	.750	.919

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City of Fresno
N/S: N Marks Avenue
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File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
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Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	7	34	5	46	9	27	12	48	51	78	37	166	5	29	21	55	315
04:15 PM	9	42	3	54	9	23	9	41	35	80	36	151	2	38	16	56	302
04:30 PM	15	44	3	62	11	28	8	47	42	78	31	151	4	33	26	63	323
04:45 PM	5	20	5	30	8	29	7	44	50	92	29	171	6	25	19	50	295
Total	36	140	16	192	37	107	36	180	178	328	133	639	17	125	82	224	1235
05:00 PM	6	35	4	45	11	24	15	50	59	95	32	186	7	40	18	65	346
05:15 PM	4	27	3	34	7	25	6	38	64	101	41	206	3	32	17	52	330
05:30 PM	5	31	3	39	9	26	9	44	68	90	28	186	6	36	20	62	331
05:45 PM	5	22	5	32	8	10	7	25	35	71	20	126	6	35	18	59	242
Total	20	115	15	150	35	85	37	157	226	357	121	704	22	143	73	238	1249
Grand Total	56	255	31	342	72	192	73	337	404	685	254	1343	39	268	155	462	2484
Apprch %	16.4	74.6	9.1		21.4	57	21.7		30.1	51	18.9		8.4	58	33.5		
Total %	2.3	10.3	1.2	13.8	2.9	7.7	2.9	13.6	16.3	27.6	10.2	54.1	1.6	10.8	6.2	18.6	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	5	20	**5**	30	8	**29**	7	44	50	92	29	171	6	25	19	50	295
05:00 PM	**6**	**35**	4	**45**	**11**	24	**15**	**50**	59	95	32	186	**7**	**40**	18	**65**	**346**
05:15 PM	4	27	3	34	7	25	6	38	64	**101**	**41**	**206**	3	32	17	52	330
05:30 PM	5	31	3	39	9	26	9	44	**68**	90	28	186	6	36	**20**	62	331
Total Volume	20	113	15	148	35	104	37	176	241	378	130	749	22	133	74	229	1302
% App. Total	13.5	76.4	10.1		19.9	59.1	21		32.2	50.5	17.4		9.6	58.1	32.3		
PHF	.833	.807	.750	.822	.795	.897	.617	.880	.886	.936	.793	.909	.786	.831	.925	.881	.941

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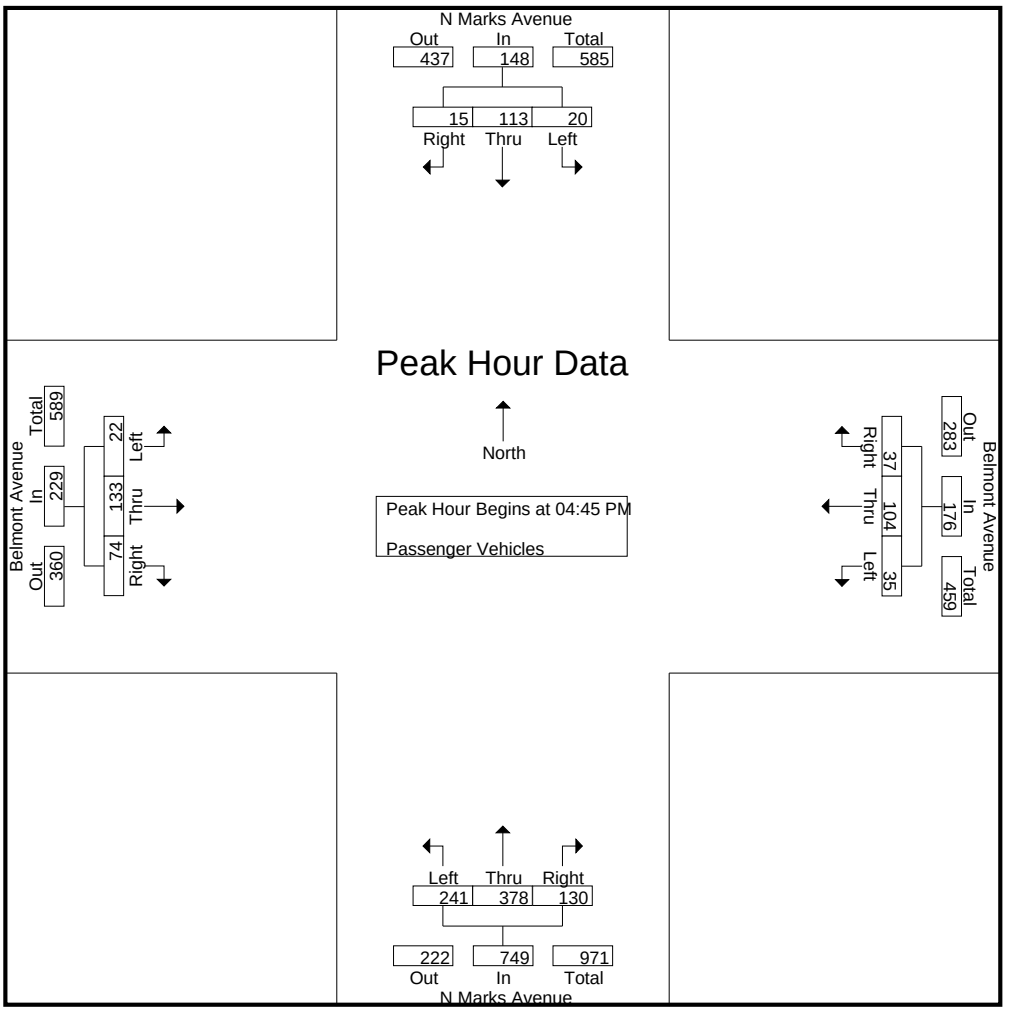

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	5	20	**5**	30	8	**29**	7	44	50	92	29	171	6	25	19	50
+15 mins.	**6**	**35**	4	**45**	**11**	24	**15**	**50**	59	95	32	186	**7**	**40**	18	**65**
+30 mins.	4	27	3	34	7	25	6	38	64	**101**	**41**	**206**	3	32	17	52
+45 mins.	5	31	3	39	9	26	9	44	**68**	90	28	186	6	36	**20**	62
Total Volume	20	113	15	148	35	104	37	176	241	378	130	749	22	133	74	229
% App. Total	13.5	76.4	10.1		19.9	59.1	21		32.2	50.5	17.4		9.6	58.1	32.3	
PHF	.833	.807	.750	.822	.795	.897	.617	.880	.886	.936	.793	.909	.786	.831	.925	.881

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City of Fresno
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E/W: Belmont Avenue
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File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	6	0	8	1	0	0	1	0	1	1	2	0	1	1	2	13
04:15 PM	0	3	0	3	0	0	0	0	2	2	0	4	0	0	0	0	7
04:30 PM	0	7	0	7	0	0	0	0	0	2	1	3	1	1	1	3	13
04:45 PM	0	2	0	2	0	0	0	0	0	2	2	4	0	1	1	2	8
Total	2	18	0	20	1	0	0	1	2	7	4	13	1	3	3	7	41
05:00 PM	0	4	0	4	0	0	0	0	0	0	1	1	0	1	1	2	7
05:15 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	0	1	1	4
05:30 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	1	1	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	1	6	0	1	0	1	1	2	1	4	0	1	3	4	15
Grand Total	2	23	1	26	1	1	0	2	3	9	5	17	1	4	6	11	56
Apprch %	7.7	88.5	3.8		50	50	0		17.6	52.9	29.4		9.1	36.4	54.5		
Total %	3.6	41.1	1.8	46.4	1.8	1.8	0	3.6	5.4	16.1	8.9	30.4	1.8	7.1	10.7	19.6	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	0	0	0	0	0	**2**	**2**	**4**	0	**1**	**1**	**2**	**8**
05:00 PM	0	**4**	0	**4**	0	0	0	0	0	0	1	1	0	1	1	2	7
05:15 PM	0	1	**1**	2	0	**1**	0	**1**	0	0	0	0	0	0	1	1	4
05:30 PM	0	0	0	0	0	0	0	0	**1**	2	0	3	0	0	1	1	4
Total Volume	0	7	1	8	0	1	0	1	1	4	3	8	0	2	4	6	23
% App. Total	0	87.5	12.5		0	100	0		12.5	50	37.5		0	33.3	66.7		
PHF	.000	.438	.250	.500	.000	.250	.000	.250	.250	.500	.375	.500	.000	.500	1.00	.750	.719

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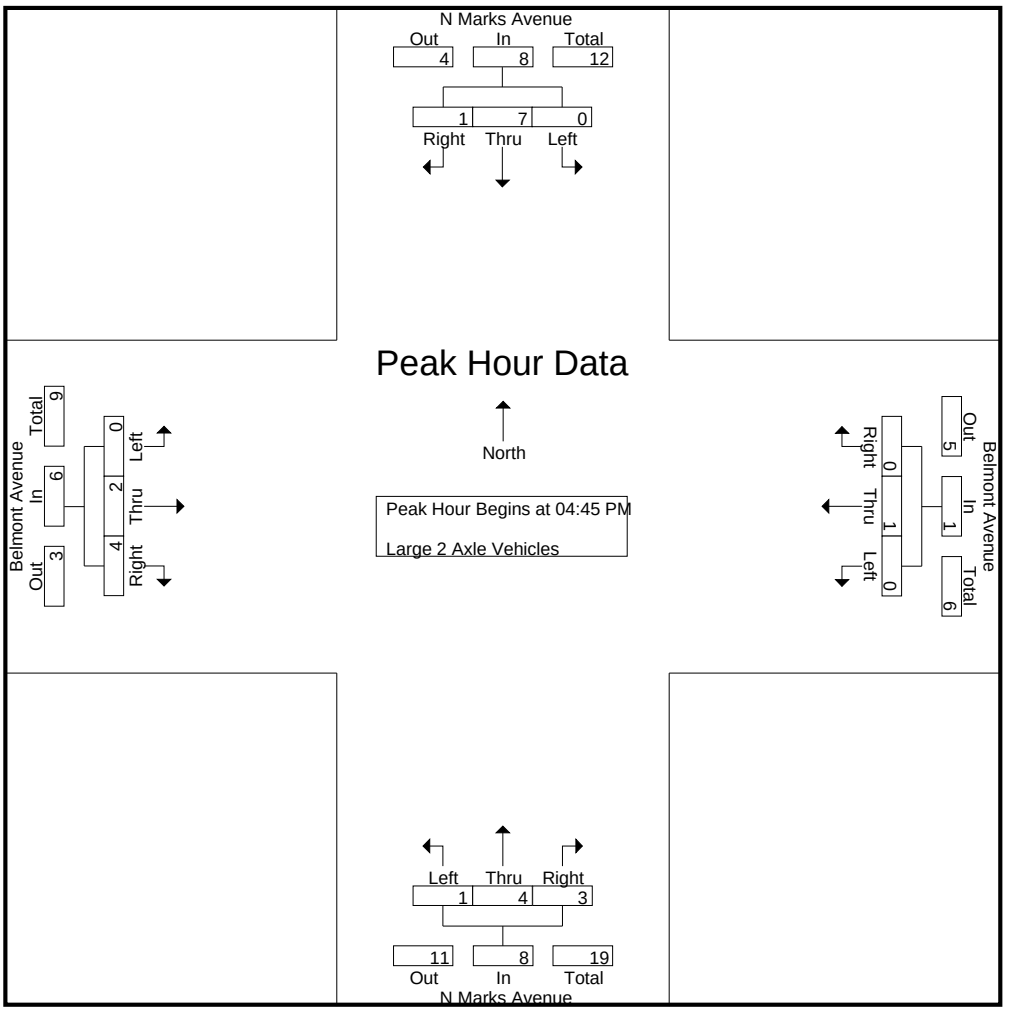
City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	**2**	**2**	**4**	0	**1**	**1**	**2**
+15 mins.	0	**4**	0	**4**	0	0	0	0	0	0	1	1	0	1	1	2
+30 mins.	0	1	**1**	2	0	**1**	0	**1**	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	**1**	2	0	3	0	0	1	1
Total Volume	0	7	1	8	0	1	0	1	1	4	3	8	0	2	4	6
% App. Total	0	87.5	12.5		0	100	0		12.5	50	37.5		0	33.3	66.7	
PHF	.000	.438	.250	.500	.000	.250	.000	.250	.250	.500	.375	.500	.000	.500	1.000	.750

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	1	2	1	4	0	1	0	1	0	0	1	1	8
04:15 PM	0	0	0	0	0	1	0	1	2	1	0	3	0	1	2	3	7
04:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
04:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
Total	0	2	0	2	1	4	1	6	4	2	1	7	0	1	4	5	20
05:00 PM	0	0	0	0	0	1	0	1	2	1	0	3	0	0	0	0	4
05:15 PM	0	0	0	0	1	0	0	1	1	3	0	4	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	1	1	1	2	2	5	0	0	1	1	7
05:45 PM	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	3
Total	1	0	0	1	1	2	1	4	4	6	3	13	0	0	1	1	19
Grand Total	1	2	0	3	2	6	2	10	8	8	4	20	0	1	5	6	39
Apprch %	33.3	66.7	0		20	60	20		40	40	20		0	16.7	83.3		
Total %	2.6	5.1	0	7.7	5.1	15.4	5.1	25.6	20.5	20.5	10.3	51.3	0	2.6	12.8	15.4	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	**2**	0	0	2	0	0	0	0	2
05:00 PM	0	0	0	0	0	**1**	0	**1**	2	1	0	3	0	0	0	0	4
05:15 PM	0	0	0	0	**1**	0	0	1	1	**3**	0	4	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	**1**	1	1	2	**2**	**5**	0	0	**1**	**1**	**7**
Total Volume	0	0	0	0	1	1	1	3	6	6	2	14	0	0	1	1	18
% App. Total	0	0	0		33.3	33.3	33.3		42.9	42.9	14.3		0	0	100		
PHF	.000	.000	.000	.000	.250	.250	.250	.750	.750	.500	.250	.700	.000	.000	.250	.250	.643

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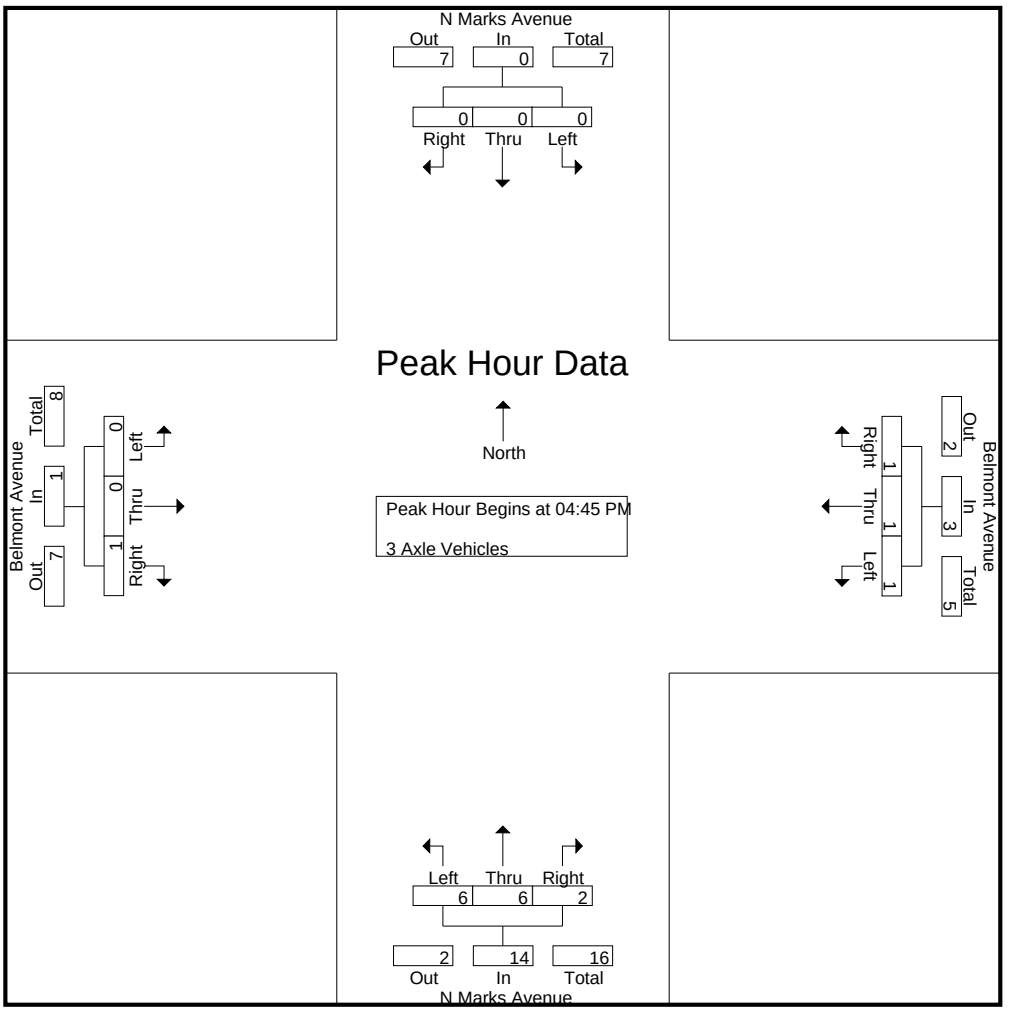
City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	**2**	0	0	2	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	2	1	0	3	0	0	0	0
+30 mins.	0	0	0	0	**1**	0	0	1	1	**3**	0	4	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	1	1	2	**2**	**5**	0	0	**1**	**1**
Total Volume	0	0	0	0	1	1	1	3	6	6	2	14	0	0	1	1
% App. Total	0	0	0		33.3	33.3	33.3		42.9	42.9	14.3		0	0	100	
PHF	.000	.000	.000	.000	.250	.250	.250	.750	.750	.500	.250	.700	.000	.000	.250	.250

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City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	1	3	0	4	1	3	2	6	0	2	1	3	14
04:15 PM	0	0	2	2	0	3	0	3	4	1	0	5	0	0	0	0	10
04:30 PM	0	0	0	0	1	0	0	1	4	2	0	6	0	0	1	1	8
04:45 PM	0	0	0	0	1	0	1	2	3	1	5	9	0	3	1	4	15
Total	0	0	3	3	3	6	1	10	12	7	7	26	0	5	3	8	47
05:00 PM	0	0	0	0	0	1	1	2	3	1	1	5	0	0	0	0	7
05:15 PM	0	1	0	1	0	3	0	3	0	1	2	3	0	0	0	0	7
05:30 PM	0	0	0	0	0	1	0	1	3	2	2	7	0	1	0	1	9
05:45 PM	1	1	0	2	0	2	0	2	1	2	1	4	0	0	0	0	8
Total	1	2	0	3	0	7	1	8	7	6	6	19	0	1	0	1	31
Grand Total	1	2	3	6	3	13	2	18	19	13	13	45	0	6	3	9	78
Apprch %	16.7	33.3	50		16.7	72.2	11.1		42.2	28.9	28.9		0	66.7	33.3		
Total %	1.3	2.6	3.8	7.7	3.8	16.7	2.6	23.1	24.4	16.7	16.7	57.7	0	7.7	3.8	11.5	

	N Marks Avenue Southbound				Belmont Avenue Westbound				N Marks Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	**1**	0	**1**	2	**3**	1	**5**	**9**	0	**3**	**1**	**4**	**15**
05:00 PM	0	0	0	0	0	1	1	2	3	1	1	5	0	0	0	0	7
05:15 PM	0	**1**	0	**1**	0	**3**	0	**3**	0	1	2	3	0	0	0	0	7
05:30 PM	0	0	0	0	0	1	0	1	3	**2**	2	7	0	1	0	1	9
Total Volume	0	1	0	1	1	5	2	8	9	5	10	24	0	4	1	5	38
% App. Total	0	100	0		12.5	62.5	25		37.5	20.8	41.7		0	80	20		
PHF	.000	.250	.000	.250	.250	.417	.500	.667	.750	.625	.500	.667	.000	.333	.250	.313	.633

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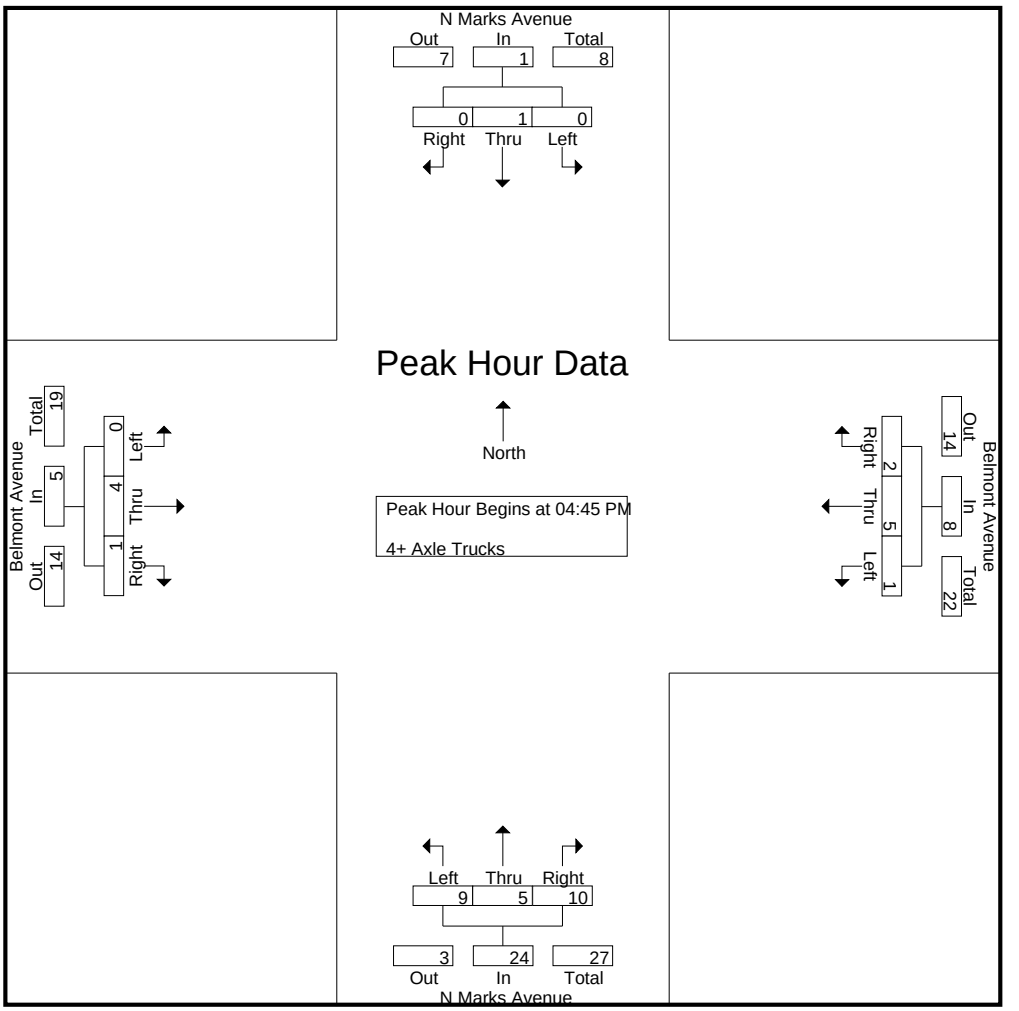
City of Fresno
N/S: N Marks Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 01_FSO_Marks_Bel PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	**1**	0	**1**	2	**3**	1	**5**	**9**	0	**3**	**1**	**4**
+15 mins.	0	0	0	0	0	1	1	2	3	1	1	5	0	0	0	0
+30 mins.	0	**1**	0	**1**	0	**3**	0	**3**	0	1	2	3	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	3	**2**	2	7	0	1	0	1
Total Volume	0	1	0	1	1	5	2	8	9	5	10	24	0	4	1	5
% App. Total	0	100	0		12.5	62.5	25		37.5	20.8	41.7		0	80	20	
PHF	.000	.250	.000	.250	.250	.417	.500	.667	.750	.625	.500	.667	.000	.333	.250	.313

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	66	4	78	6	2	5	13	5	33	14	52	4	0	13	17	160
07:15 AM	2	125	5	132	6	2	1	9	5	65	13	83	3	3	11	17	241
07:30 AM	4	173	4	181	5	0	2	7	6	66	5	77	2	3	6	11	276
07:45 AM	13	183	2	198	6	5	3	14	9	81	13	103	1	3	6	10	325
Total	27	547	15	589	23	9	11	43	25	245	45	315	10	9	36	55	1002
08:00 AM	9	134	9	152	6	2	3	11	12	65	20	97	5	2	4	11	271
08:15 AM	9	82	4	95	9	1	4	14	14	87	12	113	5	3	7	15	237
08:30 AM	14	52	3	69	4	3	5	12	4	68	12	84	4	3	11	18	183
08:45 AM	5	46	5	56	8	1	7	16	5	62	8	75	2	4	8	14	161
Total	37	314	21	372	27	7	19	53	35	282	52	369	16	12	30	58	852
Grand Total	64	861	36	961	50	16	30	96	60	527	97	684	26	21	66	113	1854
Apprch %	6.7	89.6	3.7		52.1	16.7	31.2		8.8	77	14.2		23	18.6	58.4		
Total %	3.5	46.4	1.9	51.8	2.7	0.9	1.6	5.2	3.2	28.4	5.2	36.9	1.4	1.1	3.6	6.1	
Passenger Vehicles	62	800	33	895	28	14	28	70	55	496	86	637	20	16	42	78	1680
% Passenger Vehicles	96.9	92.9	91.7	93.1	56	87.5	93.3	72.9	91.7	94.1	88.7	93.1	76.9	76.2	63.6	69	90.6
Large 2 Axle Vehicles	1	23	2	26	5	1	0	6	2	10	3	15	5	4	15	24	71
% Large 2 Axle Vehicles	1.6	2.7	5.6	2.7	10	6.2	0	6.2	3.3	1.9	3.1	2.2	19.2	19	22.7	21.2	3.8
3 Axle Vehicles	1	20	1	22	3	1	0	4	0	9	1	10	0	0	6	6	42
% 3 Axle Vehicles	1.6	2.3	2.8	2.3	6	6.2	0	4.2	0	1.7	1	1.5	0	0	9.1	5.3	2.3
4+ Axle Trucks	0	18	0	18	14	0	2	16	3	12	7	22	1	1	3	5	61
% 4+ Axle Trucks	0	2.1	0	1.9	28	0	6.7	16.7	5	2.3	7.2	3.2	3.8	4.8	4.5	4.4	3.3

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	125	5	132	**6**	2	1	9	5	65	13	83	3	**3**	**11**	**17**	241
07:30 AM	4	173	4	181	5	0	2	7	6	66	5	77	2	3	6	11	276
07:45 AM	**13**	**183**	2	**198**	6	**5**	**3**	**14**	9	**81**	13	**103**	1	3	6	10	**325**
08:00 AM	9	134	**9**	152	6	2	3	11	**12**	65	**20**	97	**5**	2	4	11	271
Total Volume	28	615	20	663	23	9	9	41	32	277	51	360	11	11	27	49	1113
% App. Total	4.2	92.8	3		56.1	22	22		8.9	76.9	14.2		22.4	22.4	55.1		
PHF	.538	.840	.556	.837	.958	.450	.750	.732	.667	.855	.638	.874	.550	.917	.614	.721	.856

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City of Fresno
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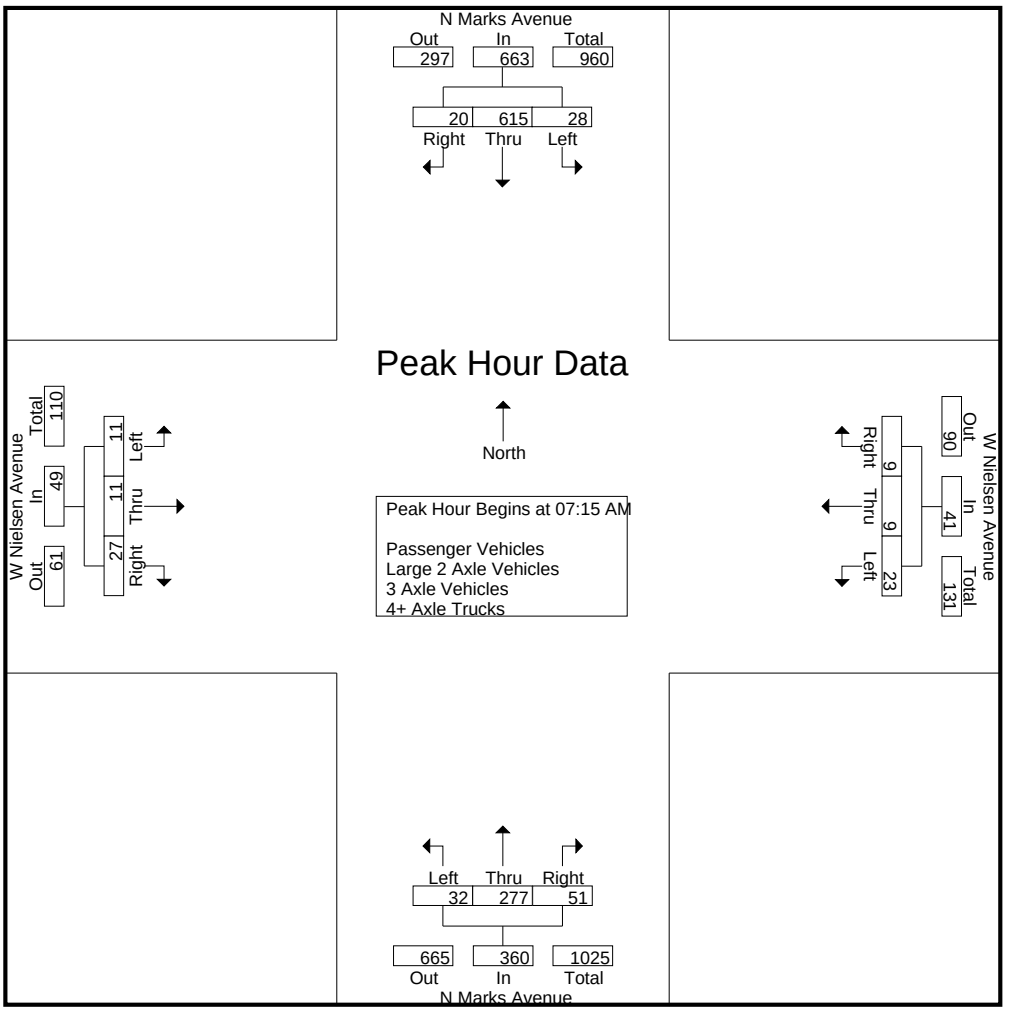
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	2	125	5	132	6	2	3	11	9	81	13	103	**5**	2	4	11
+15 mins.	4	173	4	181	**9**	1	4	14	12	65	**20**	97	5	3	7	15
+30 mins.	**13**	**183**	2	**198**	4	**3**	5	12	**14**	**87**	12	**113**	4	3	**11**	**18**
+45 mins.	9	134	**9**	152	8	1	**7**	**16**	4	68	12	84	2	**4**	8	14
Total Volume	28	615	20	663	27	7	19	53	39	301	57	397	16	12	30	58
% App. Total	4.2	92.8	3		50.9	13.2	35.8		9.8	75.8	14.4		27.6	20.7	51.7	
PHF	.538	.840	.556	.837	.750	.583	.679	.828	.696	.865	.713	.878	.800	.750	.682	.806

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	58	4	70	3	2	5	10	4	30	13	47	1	0	2	3	130
07:15 AM	1	117	5	123	2	2	1	5	5	62	12	79	2	2	7	11	218
07:30 AM	4	165	2	171	4	0	2	6	6	62	5	73	2	3	4	9	259
07:45 AM	13	170	2	185	3	4	2	9	9	78	12	99	1	0	3	4	297
Total	26	510	13	549	12	8	10	30	24	232	42	298	6	5	16	27	904
08:00 AM	9	126	9	144	4	1	3	8	11	63	17	91	5	2	3	10	253
08:15 AM	9	76	3	88	5	1	3	9	12	81	12	105	5	3	5	13	215
08:30 AM	13	47	3	63	2	3	5	10	3	65	9	77	3	2	11	16	166
08:45 AM	5	41	5	51	5	1	7	13	5	55	6	66	1	4	7	12	142
Total	36	290	20	346	16	6	18	40	31	264	44	339	14	11	26	51	776
Grand Total	62	800	33	895	28	14	28	70	55	496	86	637	20	16	42	78	1680
Apprch %	6.9	89.4	3.7		40	20	40		8.6	77.9	13.5		25.6	20.5	53.8		
Total %	3.7	47.6	2	53.3	1.7	0.8	1.7	4.2	3.3	29.5	5.1	37.9	1.2	1	2.5	4.6	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	117	5	123	2	2	1	5	5	62	12	79	2	2	**7**	**11**	218
07:30 AM	4	165	2	171	**4**	0	2	6	6	62	5	73	2	**3**	4	9	259
07:45 AM	**13**	**170**	2	**185**	3	**4**	2	**9**	9	**78**	12	**99**	1	0	3	4	**297**
08:00 AM	9	126	**9**	144	4	1	**3**	8	**11**	63	**17**	91	**5**	2	3	10	253
Total Volume	27	578	18	623	13	7	8	28	31	265	46	342	10	7	17	34	1027
% App. Total	4.3	92.8	2.9		46.4	25	28.6		9.1	77.5	13.5		29.4	20.6	50		
PHF	.519	.850	.500	.842	.813	.438	.667	.778	.705	.849	.676	.864	.500	.583	.607	.773	.864

Counts Unlimited, Inc.
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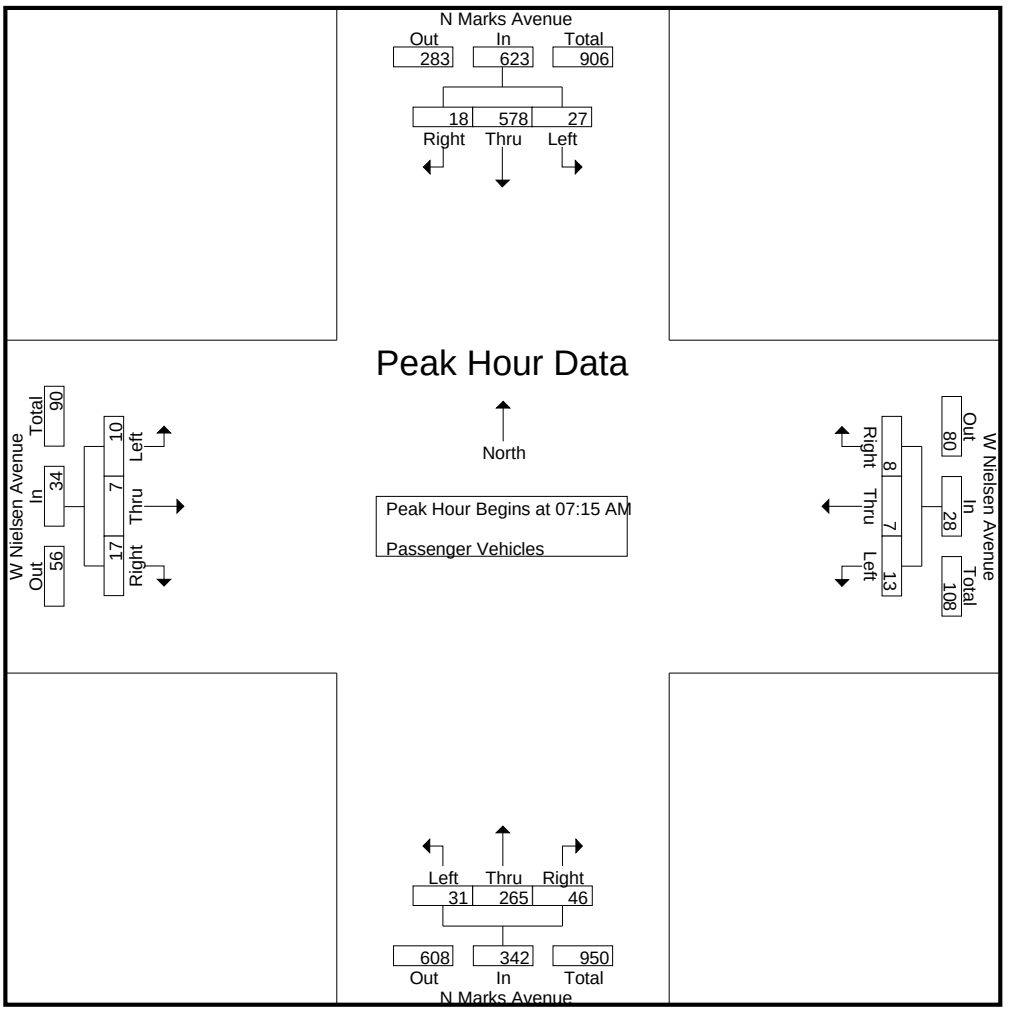
City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	117	5	123	2	2	1	5	5	62	12	79	2	2	**7**	**11**
+15 mins.	4	165	2	171	**4**	0	2	6	6	62	5	73	2	**3**	4	9
+30 mins.	**13**	**170**	2	**185**	3	**4**	2	**9**	9	**78**	12	**99**	1	0	3	4
+45 mins.	9	126	**9**	144	4	1	**3**	8	**11**	63	**17**	91	**5**	2	3	10
Total Volume	27	578	18	623	13	7	8	28	31	265	46	342	10	7	17	34
% App. Total	4.3	92.8	2.9		46.4	25	28.6		9.1	77.5	13.5		29.4	20.6	50	
PHF	.519	.850	.500	.842	.813	.438	.667	.778	.705	.849	.676	.864	.500	.583	.607	.773

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	3	0	9	12	15
07:15 AM	0	4	0	4	2	0	0	2	0	1	0	1	1	1	4	6	13
07:30 AM	0	4	1	5	0	0	0	0	0	0	0	0	0	0	1	1	6
07:45 AM	0	3	0	3	0	1	0	1	0	1	0	1	0	2	0	2	7
Total	0	12	1	13	2	1	0	3	0	4	0	4	4	3	14	21	41
08:00 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
08:15 AM	0	4	1	5	1	0	0	1	2	1	0	3	0	0	0	0	9
08:30 AM	1	2	0	3	1	0	0	1	0	1	2	3	1	1	0	2	9
08:45 AM	0	2	0	2	1	0	0	1	0	3	1	4	0	0	1	1	8
Total	1	11	1	13	3	0	0	3	2	6	3	11	1	1	1	3	30
Grand Total	1	23	2	26	5	1	0	6	2	10	3	15	5	4	15	24	71
Apprch %	3.8	88.5	7.7		83.3	16.7	0		13.3	66.7	20		20.8	16.7	62.5		
Total %	1.4	32.4	2.8	36.6	7	1.4	0	8.5	2.8	14.1	4.2	21.1	7	5.6	21.1	33.8	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**4**	0	4	**2**	0	0	**2**	0	**1**	0	**1**	**1**	1	**4**	**6**	**13**
07:30 AM	0	4	**1**	**5**	0	0	0	0	0	0	0	0	0	0	1	1	6
07:45 AM	0	3	0	3	0	**1**	0	1	0	1	0	1	0	**2**	0	2	7
08:00 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total Volume	0	14	1	15	2	1	0	3	0	3	0	3	1	3	5	9	30
% App. Total	0	93.3	6.7		66.7	33.3	0		0	100	0		11.1	33.3	55.6		
PHF	.000	.875	.250	.750	.250	.250	.000	.375	.000	.750	.000	.750	.250	.375	.313	.375	.577

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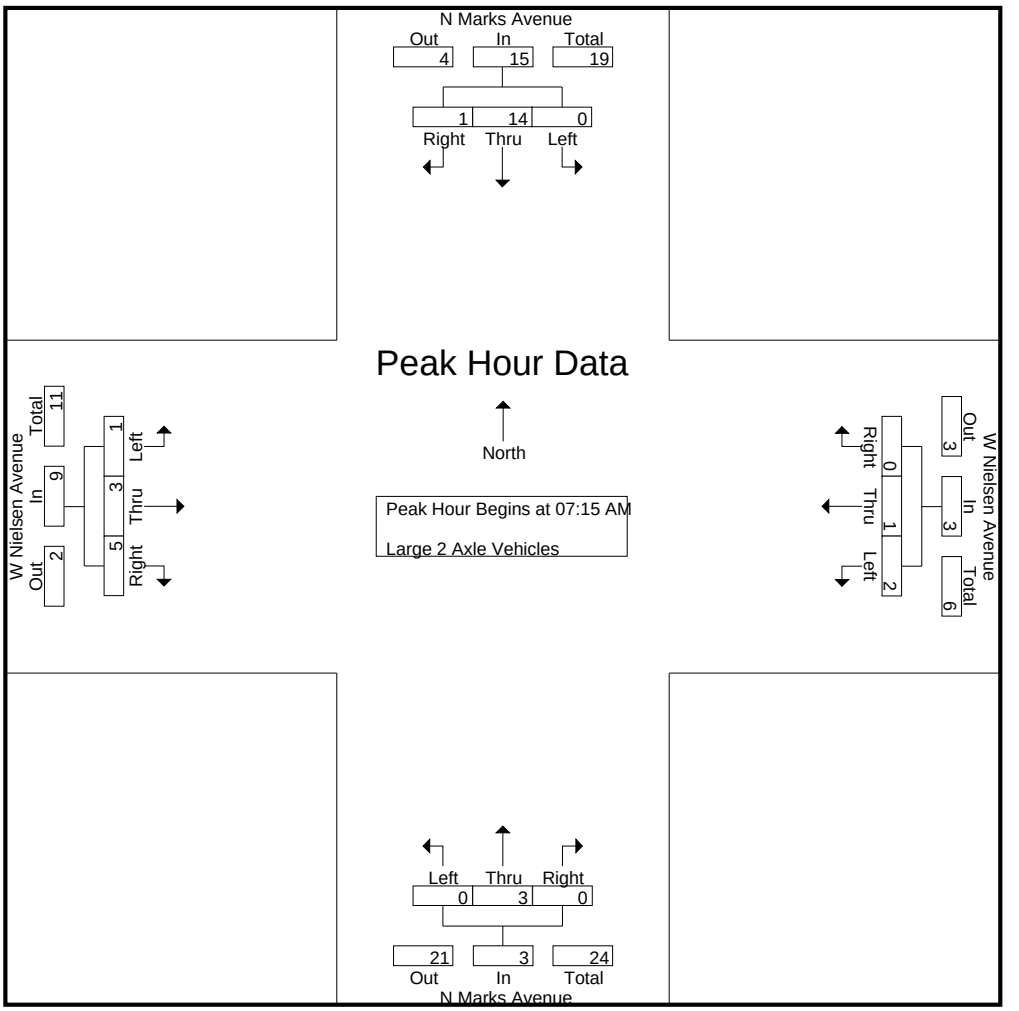
City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**4**	0	4	**2**	0	0	**2**	0	**1**	0	**1**	**1**	1	**4**	**6**
+15 mins.	0	4	**1**	**5**	0	0	0	0	0	0	0	0	0	0	1	1
+30 mins.	0	3	0	3	0	**1**	0	1	0	1	0	1	0	**2**	0	2
+45 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	14	1	15	2	1	0	3	0	3	0	3	1	3	5	9
% App. Total	0	93.3	6.7		66.7	33.3	0		0	100	0		11.1	33.3	55.6	
PHF	.000	.875	.250	.750	.250	.250	.000	.375	.000	.750	.000	.750	.250	.375	.313	.375

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:15 AM	1	2	0	3	1	0	0	1	0	1	0	1	0	0	0	0	5
07:30 AM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	1	1	5
07:45 AM	0	6	0	6	0	0	0	0	0	1	1	2	0	0	3	3	11
Total	1	13	1	15	1	0	0	1	0	3	1	4	0	0	4	4	24
08:00 AM	0	1	0	1	1	1	0	2	0	0	0	0	0	0	0	0	3
08:15 AM	0	2	0	2	1	0	0	1	0	1	0	1	0	0	2	2	6
08:30 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:45 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total	0	7	0	7	2	1	0	3	0	6	0	6	0	0	2	2	18
Grand Total	1	20	1	22	3	1	0	4	0	9	1	10	0	0	6	6	42
Apprch %	4.5	90.9	4.5		75	25	0		0	90	10		0	0	100		
Total %	2.4	47.6	2.4	52.4	7.1	2.4	0	9.5	0	21.4	2.4	23.8	0	0	14.3	14.3	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	2	0	3	**1**	0	0	1	0	**1**	0	1	0	0	0	0	5
07:30 AM	0	2	**1**	3	0	0	0	0	0	1	0	1	0	0	1	1	5
07:45 AM	0	**6**	0	**6**	0	0	0	0	0	1	**1**	**2**	0	0	**3**	**3**	**11**
08:00 AM	0	1	0	1	1	**1**	0	**2**	0	0	0	0	0	0	0	0	3
Total Volume	1	11	1	13	2	1	0	3	0	3	1	4	0	0	4	4	24
% App. Total	7.7	84.6	7.7		66.7	33.3	0		0	75	25		0	0	100		
PHF	.250	.458	.250	.542	.500	.250	.000	.375	.000	.750	.250	.500	.000	.000	.333	.333	.545

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City of Fresno
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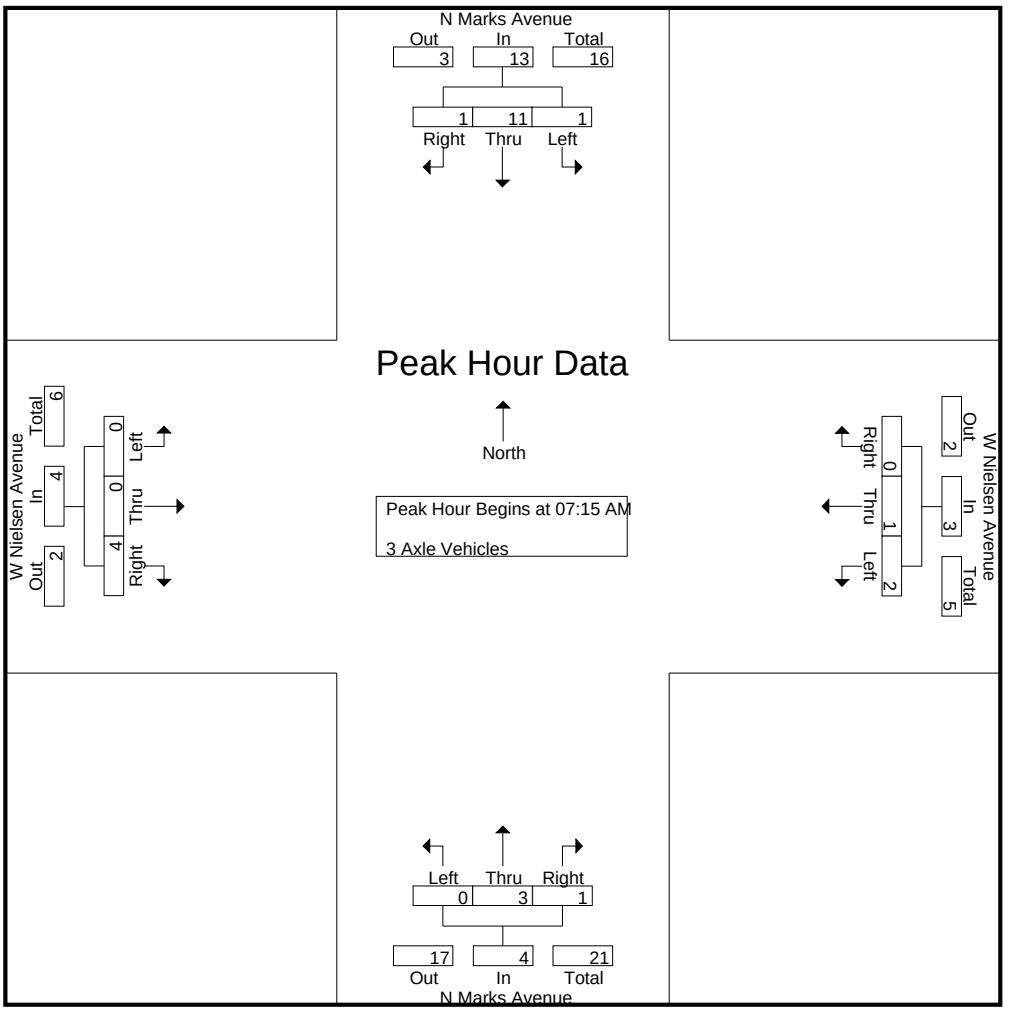
Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	2	0	3	**1**	0	0	1	0	**1**	0	1	0	0	0	0
+15 mins.	0	2	**1**	3	0	0	0	0	0	1	0	1	0	0	1	1
+30 mins.	0	**6**	0	**6**	0	0	0	0	0	1	**1**	**2**	0	0	**3**	**3**
+45 mins.	0	1	0	1	1	**1**	0	**2**	0	0	0	0	0	0	0	0
Total Volume	1	11	1	13	2	1	0	3	0	3	1	4	0	0	4	4
% App. Total	7.7	84.6	7.7		66.7	33.3	0		0	75	25		0	0	100	
PHF	.250	.458	.250	.542	.500	.250	.000	.375	.000	.750	.250	.500	.000	.000	.333	.333

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City of Fresno
N/S: N Marks Avenue
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Weather: Clear

File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	0	4	3	0	0	3	1	1	1	3	0	0	2	2	12
07:15 AM	0	2	0	2	1	0	0	1	0	1	1	2	0	0	0	0	5
07:30 AM	0	2	0	2	1	0	0	1	0	3	0	3	0	0	0	0	6
07:45 AM	0	4	0	4	3	0	1	4	0	1	0	1	0	1	0	1	10
Total	0	12	0	12	8	0	1	9	1	6	2	9	0	1	2	3	33
08:00 AM	0	4	0	4	1	0	0	1	1	1	3	5	0	0	1	1	11
08:15 AM	0	0	0	0	2	0	1	3	0	4	0	4	0	0	0	0	7
08:30 AM	0	0	0	0	1	0	0	1	1	0	1	2	0	0	0	0	3
08:45 AM	0	2	0	2	2	0	0	2	0	1	1	2	1	0	0	1	7
Total	0	6	0	6	6	0	1	7	2	6	5	13	1	0	1	2	28
Grand Total	0	18	0	18	14	0	2	16	3	12	7	22	1	1	3	5	61
Apprch %	0	100	0		87.5	0	12.5		13.6	54.5	31.8		20	20	60		
Total %	0	29.5	0	29.5	23	0	3.3	26.2	4.9	19.7	11.5	36.1	1.6	1.6	4.9	8.2	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	2	0	2	1	0	0	1	0	1	1	2	0	0	0	0	5
07:30 AM	0	2	0	2	1	0	0	1	0	**3**	0	3	0	0	0	0	6
07:45 AM	0	**4**	0	**4**	**3**	0	**1**	**4**	0	1	0	1	0	**1**	0	**1**	10
08:00 AM	0	4	0	4	1	0	0	1	**1**	1	**3**	**5**	0	0	**1**	1	**11**
Total Volume	0	12	0	12	6	0	1	7	1	6	4	11	0	1	1	2	32
% App. Total	0	100	0		85.7	0	14.3		9.1	54.5	36.4		0	50	50		
PHF	.000	.750	.000	.750	.500	.000	.250	.438	.250	.500	.333	.550	.000	.250	.250	.500	.727

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City of Fresno
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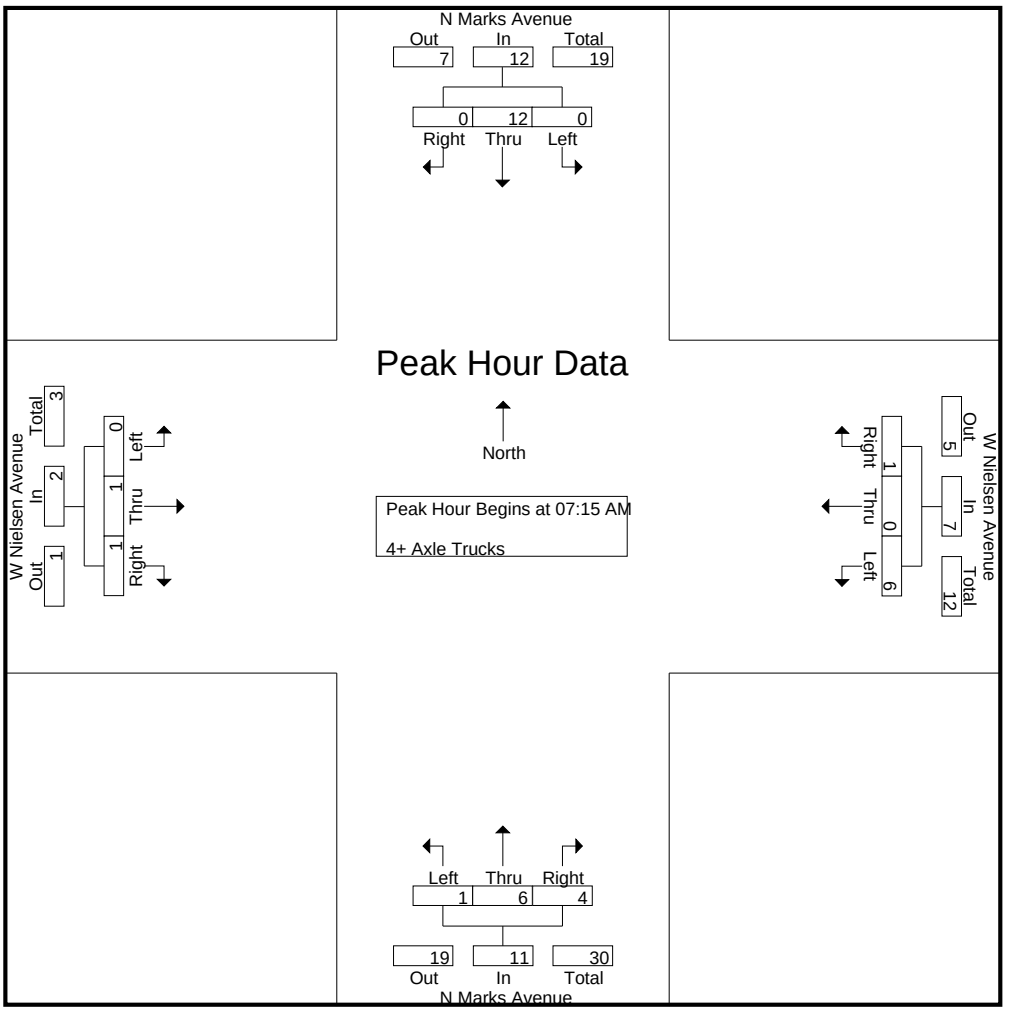
File Name : 02_FSO_Marks_Nie AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	2	0	2	1	0	0	1	0	1	1	2	0	0	0	0
+15 mins.	0	2	0	2	1	0	0	1	0	**3**	0	3	0	0	0	0
+30 mins.	0	**4**	0	**4**	**3**	0	**1**	**4**	0	1	0	1	0	**1**	0	**1**
+45 mins.	0	4	0	4	1	0	0	1	**1**	1	**3**	**5**	0	0	**1**	1
Total Volume	0	12	0	12	6	0	1	7	1	6	4	11	0	1	1	2
% App. Total	0	100	0		85.7	0	14.3		9.1	54.5	36.4		0	50	50	
PHF	.000	.750	.000	.750	.500	.000	.250	.438	.250	.500	.333	.550	.000	.250	.250	.500

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City of Fresno
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File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	65	7	77	12	2	7	21	5	163	8	176	3	1	9	13	287
04:15 PM	3	63	2	68	8	1	5	14	8	149	6	163	4	2	14	20	265
04:30 PM	5	72	12	89	6	3	7	16	2	155	8	165	1	3	7	11	281
04:45 PM	2	52	5	59	6	2	6	14	8	177	11	196	3	3	3	9	278
Total	15	252	26	293	32	8	25	65	23	644	33	700	11	9	33	53	1111
05:00 PM	2	51	4	57	20	3	8	31	3	178	2	183	5	2	20	27	298
05:15 PM	0	51	1	52	3	1	10	14	4	189	10	203	3	2	8	13	282
05:30 PM	5	57	1	63	3	0	7	10	7	172	6	185	6	3	5	14	272
05:45 PM	2	39	3	44	9	1	8	18	2	120	6	128	2	2	3	7	197
Total	9	198	9	216	35	5	33	73	16	659	24	699	16	9	36	61	1049
Grand Total	24	450	35	509	67	13	58	138	39	1303	57	1399	27	18	69	114	2160
Apprch %	4.7	88.4	6.9		48.6	9.4	42		2.8	93.1	4.1		23.7	15.8	60.5		
Total %	1.1	20.8	1.6	23.6	3.1	0.6	2.7	6.4	1.8	60.3	2.6	64.8	1.2	0.8	3.2	5.3	
Passenger Vehicles	22	424	12	458	62	11	57	130	27	1217	50	1294	25	18	62	105	1987
% Passenger Vehicles	91.7	94.2	34.3	90	92.5	84.6	98.3	94.2	69.2	93.4	87.7	92.5	92.6	100	89.9	92.1	92
Large 2 Axle Vehicles	0	7	21	28	1	2	0	3	2	18	0	20	1	0	1	2	53
% Large 2 Axle Vehicles	0	1.6	60	5.5	1.5	15.4	0	2.2	5.1	1.4	0	1.4	3.7	0	1.4	1.8	2.5
3 Axle Vehicles	1	9	1	11	0	0	1	1	1	25	1	27	0	0	0	0	39
% 3 Axle Vehicles	4.2	2	2.9	2.2	0	0	1.7	0.7	2.6	1.9	1.8	1.9	0	0	0	0	1.8
4+ Axle Trucks	1	10	1	12	4	0	0	4	9	43	6	58	1	0	6	7	81
% 4+ Axle Trucks	4.2	2.2	2.9	2.4	6	0	0	2.9	23.1	3.3	10.5	4.1	3.7	0	8.7	6.1	3.8

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**5**	**72**	**12**	**89**	6	**3**	7	16	2	155	8	165	1	**3**	7	11	281
04:45 PM	2	52	5	59	6	2	6	14	**8**	177	**11**	196	3	3	3	9	278
05:00 PM	2	51	4	57	**20**	3	8	**31**	3	178	2	183	**5**	2	**20**	**27**	**298**
05:15 PM	0	51	1	52	3	1	**10**	14	4	**189**	10	**203**	3	2	8	13	282
Total Volume	9	226	22	257	35	9	31	75	17	699	31	747	12	10	38	60	1139
% App. Total	3.5	87.9	8.6		46.7	12	41.3		2.3	93.6	4.1		20	16.7	63.3		
PHF	.450	.785	.458	.722	.438	.750	.775	.605	.531	.925	.705	.920	.600	.833	.475	.556	.956

Counts Unlimited, Inc.
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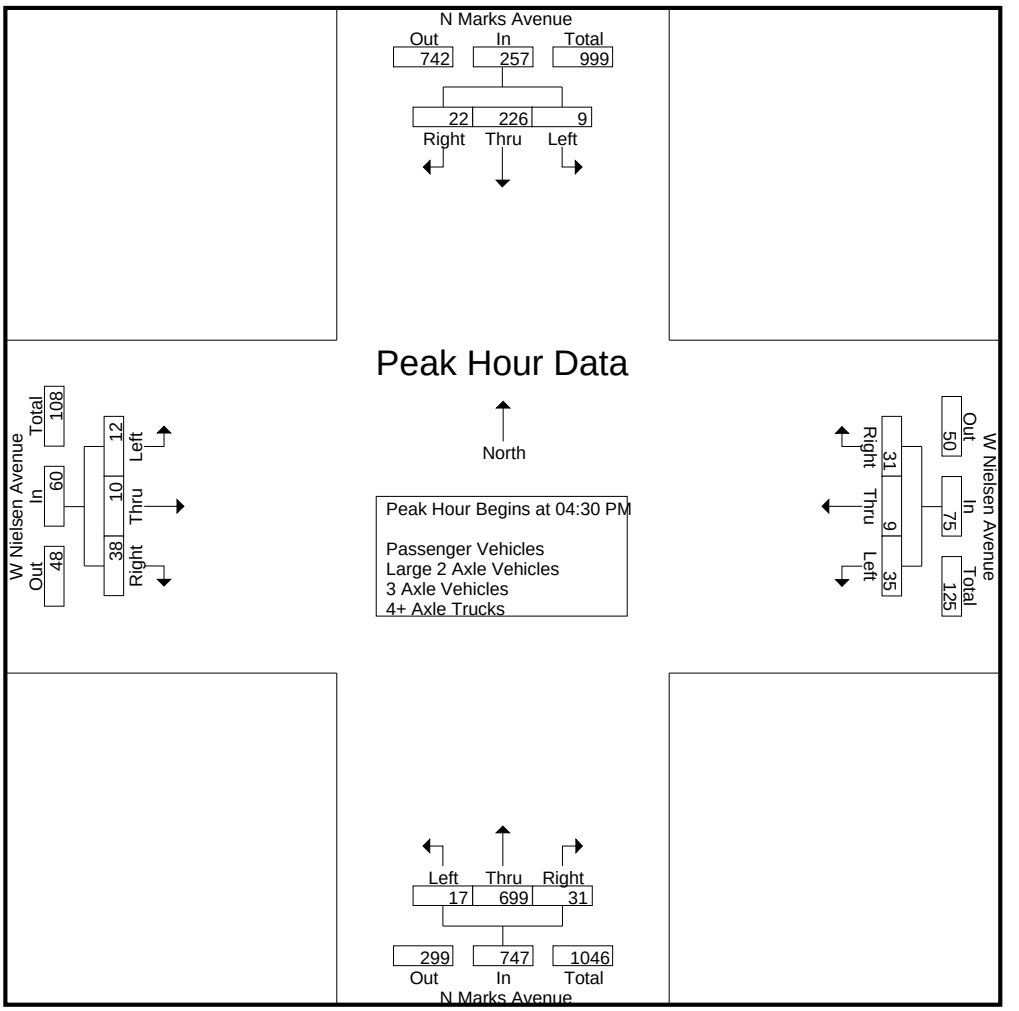
City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:15 PM			
+0 mins.	**5**	65	7	77	8	1	5	14	**8**	177	**11**	196	4	2	14	20
+15 mins.	3	63	2	68	6	**3**	7	16	3	178	2	183	1	**3**	7	11
+30 mins.	5	**72**	**12**	**89**	6	2	6	14	4	**189**	10	**203**	3	3	3	9
+45 mins.	2	52	5	59	**20**	3	**8**	**31**	7	172	6	185	**5**	2	**20**	**27**
Total Volume	15	252	26	293	40	9	26	75	22	716	29	767	13	10	44	67
% App. Total	5.1	86	8.9		53.3	12	34.7		2.9	93.4	3.8		19.4	14.9	65.7	
PHF	.750	.875	.542	.823	.500	.750	.813	.605	.688	.947	.659	.945	.650	.833	.550	.620

Counts Unlimited, Inc.
PO Box 1178
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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	56	0	60	11	1	7	19	1	154	8	163	3	1	7	11	253
04:15 PM	3	61	0	64	8	1	5	14	7	136	5	148	4	2	12	18	244
04:30 PM	4	69	6	79	6	3	7	16	2	143	7	152	1	3	7	11	258
04:45 PM	2	49	2	53	6	1	6	13	7	159	7	173	2	3	2	7	246
Total	13	235	8	256	31	6	25	62	17	592	27	636	10	9	28	47	1001
05:00 PM	2	48	0	50	19	3	8	30	2	169	2	173	5	2	20	27	280
05:15 PM	0	49	0	49	3	1	9	13	3	180	9	192	3	2	8	13	267
05:30 PM	5	54	1	60	1	0	7	8	4	161	6	171	5	3	3	11	250
05:45 PM	2	38	3	43	8	1	8	17	1	115	6	122	2	2	3	7	189
Total	9	189	4	202	31	5	32	68	10	625	23	658	15	9	34	58	986
Grand Total	22	424	12	458	62	11	57	130	27	1217	50	1294	25	18	62	105	1987
Apprch %	4.8	92.6	2.6		47.7	8.5	43.8		2.1	94	3.9		23.8	17.1	59		
Total %	1.1	21.3	0.6	23	3.1	0.6	2.9	6.5	1.4	61.2	2.5	65.1	1.3	0.9	3.1	5.3	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**4**	**69**	**6**	**79**	6	**3**	7	16	2	143	7	152	1	**3**	7	11	258
04:45 PM	2	49	2	53	6	1	6	13	**7**	159	7	173	2	3	2	7	246
05:00 PM	2	48	0	50	**19**	3	8	**30**	2	169	2	173	**5**	2	**20**	**27**	**280**
05:15 PM	0	49	0	49	3	1	**9**	13	3	**180**	**9**	**192**	3	2	8	13	267
Total Volume	8	215	8	231	34	8	30	72	14	651	25	690	11	10	37	58	1051
% App. Total	3.5	93.1	3.5		47.2	11.1	41.7		2	94.3	3.6		19	17.2	63.8		
PHF	.500	.779	.333	.731	.447	.667	.833	.600	.500	.904	.694	.898	.550	.833	.463	.537	.938

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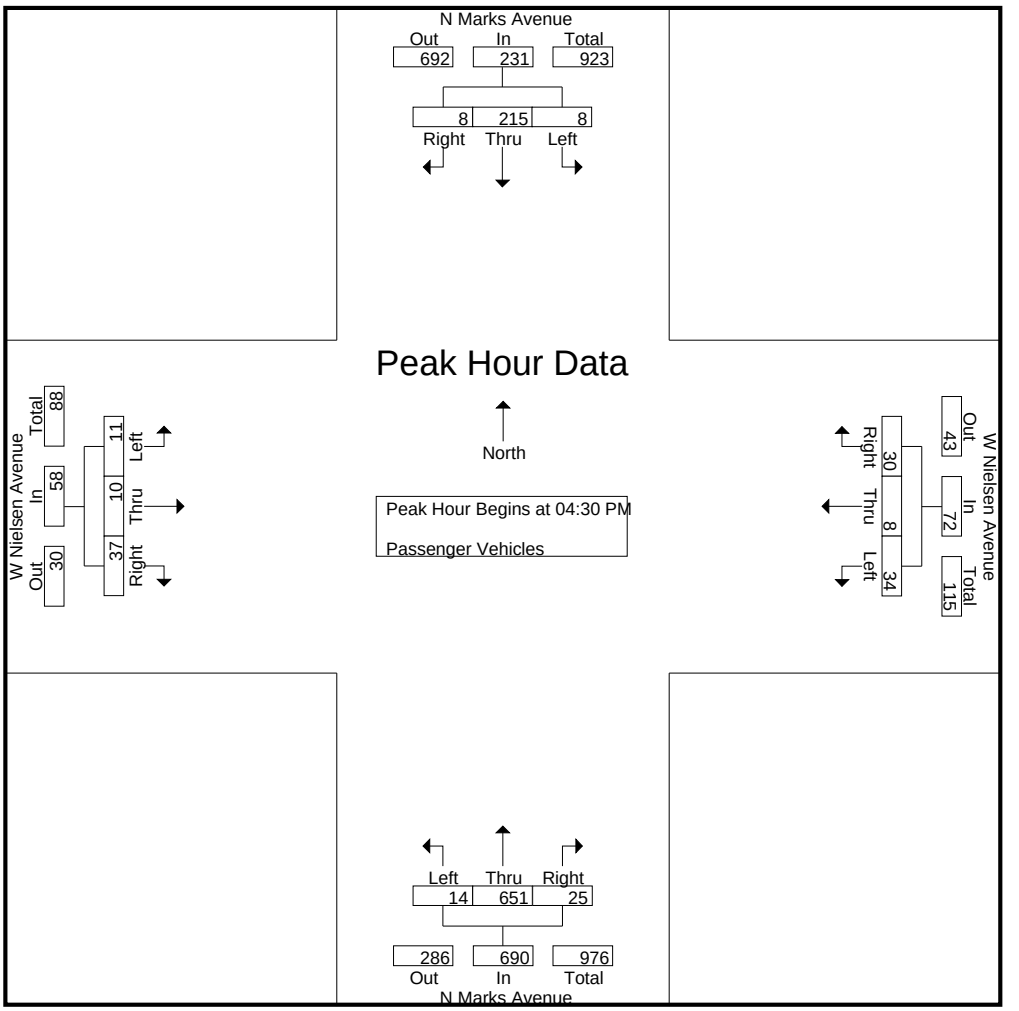
City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**4**	**69**	**6**	**79**	6	**3**	7	16	2	143	7	152	1	**3**	7	11
+15 mins.	2	49	2	53	6	1	6	13	**7**	159	7	173	2	3	2	7
+30 mins.	2	48	0	50	**19**	3	8	**30**	2	169	2	173	**5**	2	**20**	**27**
+45 mins.	0	49	0	49	3	1	**9**	13	3	**180**	**9**	**192**	3	2	8	13
Total Volume	8	215	8	231	34	8	30	72	14	651	25	690	11	10	37	58
% App. Total	3.5	93.1	3.5		47.2	11.1	41.7		2	94.3	3.6		19	17.2	63.8	
PHF	.500	.779	.333	.731	.447	.667	.833	.600	.500	.904	.694	.898	.550	.833	.463	.537

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	6	9	0	1	0	1	1	2	0	3	0	0	0	0	13
04:15 PM	0	0	2	2	0	0	0	0	1	4	0	5	0	0	0	0	7
04:30 PM	0	1	6	7	0	0	0	0	0	3	0	3	0	0	0	0	10
04:45 PM	0	0	3	3	0	1	0	1	0	5	0	5	1	0	0	1	10
Total	0	4	17	21	0	2	0	2	2	14	0	16	1	0	0	1	40
05:00 PM	0	2	4	6	0	0	0	0	0	1	0	1	0	0	0	0	7
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	3	4	7	1	0	0	1	0	4	0	4	0	0	1	1	13
Grand Total	0	7	21	28	1	2	0	3	2	18	0	20	1	0	1	2	53
Apprch %	0	25	75		33.3	66.7	0		10	90	0		50	0	50		
Total %	0	13.2	39.6	52.8	1.9	3.8	0	5.7	3.8	34	0	37.7	1.9	0	1.9	3.8	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	**6**	**7**	0	0	0	0	0	3	0	3	0	0	0	0	**10**
04:45 PM	0	0	3	3	0	**1**	0	**1**	0	**5**	0	**5**	**1**	0	0	**1**	10
05:00 PM	0	**2**	4	6	0	0	0	0	0	1	0	1	0	0	0	0	7
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	4	13	17	0	1	0	1	0	10	0	10	1	0	0	1	29
% App. Total	0	23.5	76.5		0	100	0		0	100	0		100	0	0		
PHF	.000	.500	.542	.607	.000	.250	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250	.725

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
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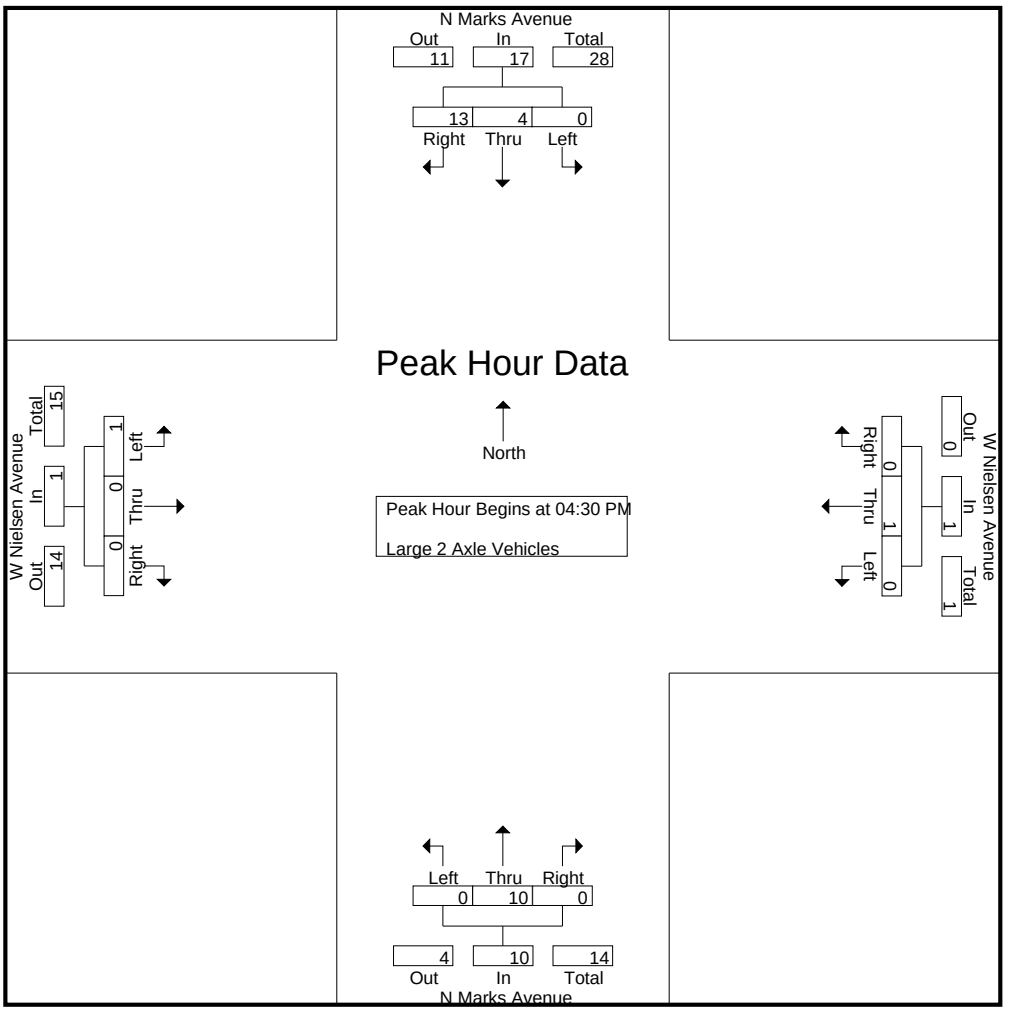

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	1	**6**	**7**	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	0	3	3	0	**1**	0	**1**	0	**5**	0	**5**	**1**	0	0	**1**
+30 mins.	0	**2**	4	6	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	4	13	17	0	1	0	1	0	10	0	10	1	0	0	1
% App. Total	0	23.5	76.5		0	100	0		0	100	0		100	0	0	
PHF	.000	.500	.542	.607	.000	.250	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	4	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
04:15 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:30 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:45 PM	0	1	0	1	0	0	0	0	0	4	1	5	0	0	0	0	6
Total	1	8	0	9	0	0	0	0	0	12	1	13	0	0	0	0	22
05:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:15 PM	0	0	1	1	0	0	1	1	0	6	0	6	0	0	0	0	8
05:30 PM	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	1	1	2	0	0	1	1	1	13	0	14	0	0	0	0	17
Grand Total	1	9	1	11	0	0	1	1	1	25	1	27	0	0	0	0	39
Apprch %	9.1	81.8	9.1		0	0	100		3.7	92.6	3.7		0	0	0		
Total %	2.6	23.1	2.6	28.2	0	0	2.6	2.6	2.6	64.1	2.6	69.2	0	0	0	0	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**1**	0	**1**	0	0	0	0	0	3	0	3	0	0	0	0	4
04:45 PM	0	1	0	1	0	0	0	0	0	4	**1**	5	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:15 PM	0	0	**1**	1	0	0	**1**	**1**	0	**6**	0	**6**	0	0	0	0	**8**
Total Volume	0	2	1	3	0	0	1	1	0	16	1	17	0	0	0	0	21
% App. Total	0	66.7	33.3		0	0	100		0	94.1	5.9		0	0	0		
PHF	.000	.500	.250	.750	.000	.000	.250	.250	.000	.667	.250	.708	.000	.000	.000	.000	.656

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
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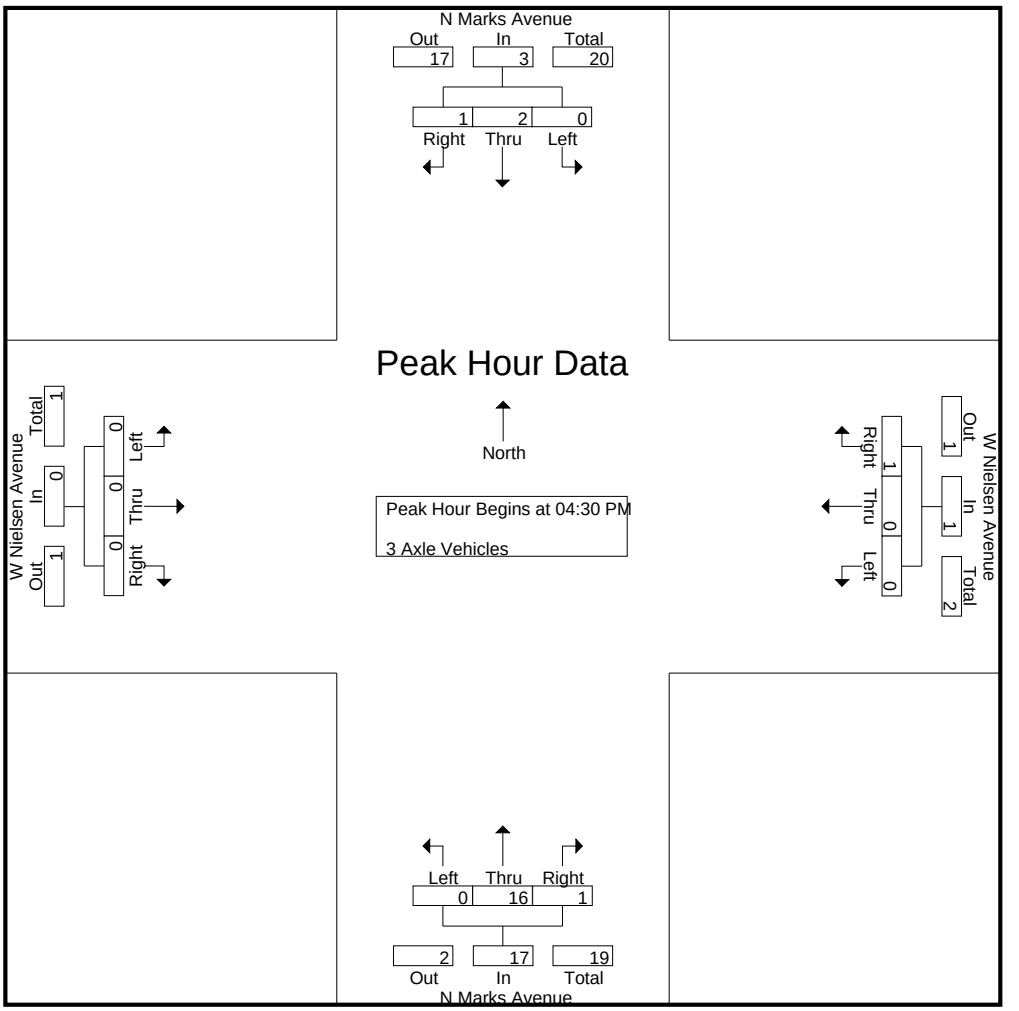

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	4	**1**	5	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
+45 mins.	0	0	**1**	1	0	0	**1**	**1**	0	**6**	0	**6**	0	0	0	0
Total Volume	0	2	1	3	0	0	1	1	0	16	1	17	0	0	0	0
% App. Total	0	66.7	33.3		0	0	100		0	94.1	5.9		0	0	0	
PHF	.000	.500	.250	.750	.000	.000	.250	.250	.000	.667	.250	.708	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	1	3	1	0	0	1	3	5	0	8	0	0	2	2	14
04:15 PM	0	0	0	0	0	0	0	0	0	6	1	7	0	0	2	2	9
04:30 PM	1	1	0	2	0	0	0	0	0	6	1	7	0	0	0	0	9
04:45 PM	0	2	0	2	0	0	0	0	1	9	3	13	0	0	1	1	16
Total	1	5	1	7	1	0	0	1	4	26	5	35	0	0	5	5	48
05:00 PM	0	1	0	1	1	0	0	1	1	5	0	6	0	0	0	0	8
05:15 PM	0	1	0	1	0	0	0	0	1	2	1	4	0	0	0	0	5
05:30 PM	0	2	0	2	2	0	0	2	2	7	0	9	1	0	1	2	15
05:45 PM	0	1	0	1	0	0	0	0	1	3	0	4	0	0	0	0	5
Total	0	5	0	5	3	0	0	3	5	17	1	23	1	0	1	2	33
Grand Total	1	10	1	12	4	0	0	4	9	43	6	58	1	0	6	7	81
Apprch %	8.3	83.3	8.3		100	0	0		15.5	74.1	10.3		14.3	0	85.7		
Total %	1.2	12.3	1.2	14.8	4.9	0	0	4.9	11.1	53.1	7.4	71.6	1.2	0	7.4	8.6	

	N Marks Avenue Southbound				W Nielsen Avenue Westbound				N Marks Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	1	0	**2**	0	0	0	0	0	6	1	7	0	0	0	0	9
04:45 PM	0	**2**	0	2	0	0	0	0	**1**	**9**	**3**	**13**	0	0	**1**	**1**	**16**
05:00 PM	0	1	0	1	**1**	0	0	**1**	1	5	0	6	0	0	0	0	8
05:15 PM	0	1	0	1	0	0	0	0	1	2	1	4	0	0	0	0	5
Total Volume	1	5	0	6	1	0	0	1	3	22	5	30	0	0	1	1	38
% App. Total	16.7	83.3	0		100	0	0		10	73.3	16.7		0	0	100		
PHF	.250	.625	.000	.750	.250	.000	.000	.250	.750	.611	.417	.577	.000	.000	.250	.250	.594

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City of Fresno
N/S: N Marks Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 02_FSO_Marks_Nie PMC
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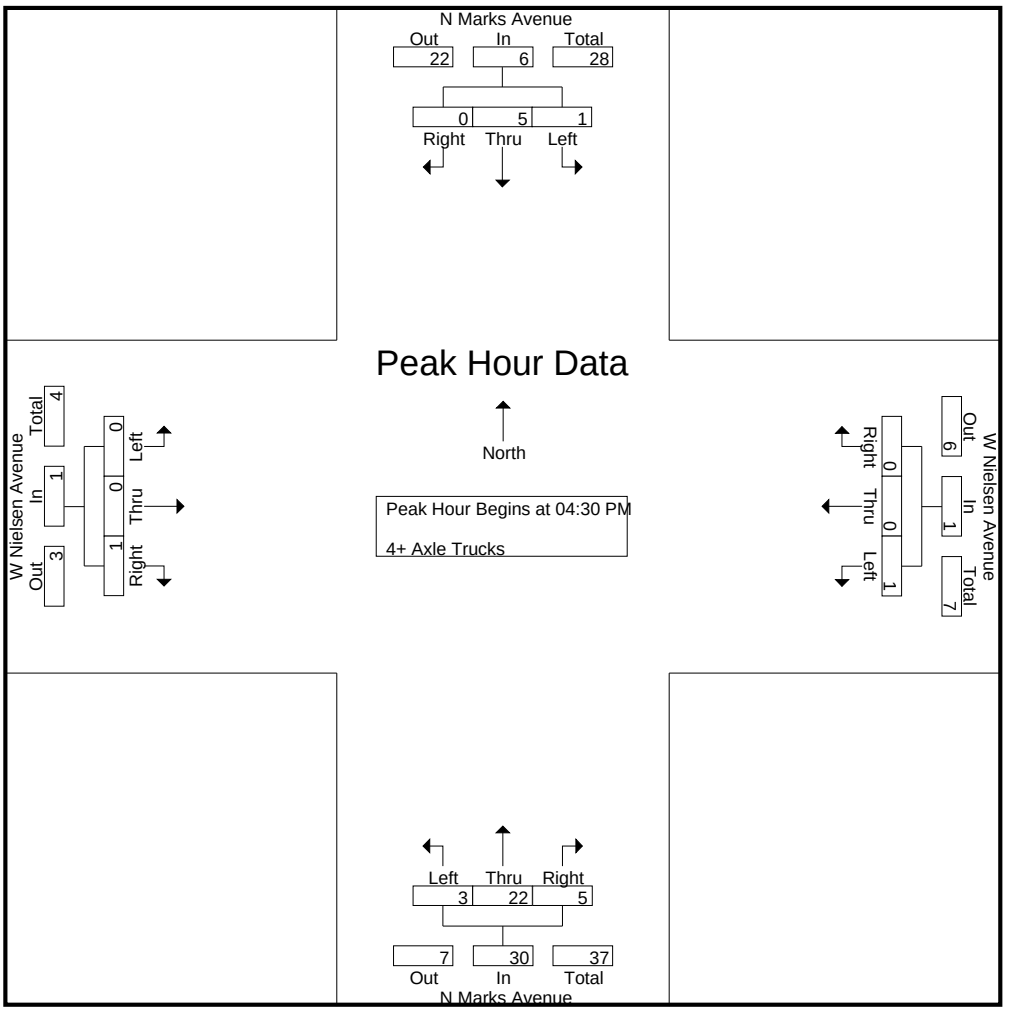

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**1**	1	0	**2**	0	0	0	0	0	6	1	7	0	0	0	0
+15 mins.	0	**2**	0	2	0	0	0	0	**1**	**9**	**3**	**13**	0	0	**1**	**1**
+30 mins.	0	1	0	1	**1**	0	0	**1**	1	5	0	6	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	1	2	1	4	0	0	0	0
Total Volume	1	5	0	6	1	0	0	1	3	22	5	30	0	0	1	1
% App. Total	16.7	83.3	0		100	0	0		10	73.3	16.7		0	0	100	
PHF	.250	.625	.000	.750	.250	.000	.000	.250	.750	.611	.417	.577	.000	.000	.250	.250

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	87	87	2	0	2	52	1	53	142
07:15 AM	1	140	141	3	1	4	84	2	86	231
07:30 AM	1	183	184	3	0	3	75	3	78	265
07:45 AM	3	185	188	4	1	5	104	4	108	301
Total	5	595	600	12	2	14	315	10	325	939
08:00 AM	2	144	146	3	0	3	92	2	94	243
08:15 AM	1	92	93	5	0	5	111	3	114	212
08:30 AM	2	70	72	4	1	5	92	1	93	170
08:45 AM	1	61	62	3	0	3	70	4	74	139
Total	6	367	373	15	1	16	365	10	375	764
Grand Total	11	962	973	27	3	30	680	20	700	1703
Apprch %	1.1	98.9		90	10		97.1	2.9		
Total %	0.6	56.5	57.1	1.6	0.2	1.8	39.9	1.2	41.1	
Passenger Vehicles	11	880	891	17	2	19	634	13	647	1557
% Passenger Vehicles	100	91.5	91.6	63	66.7	63.3	93.2	65	92.4	91.4
Large 2 Axle Vehicles	0	34	34	1	1	2	10	0	10	46
% Large 2 Axle Vehicles	0	3.5	3.5	3.7	33.3	6.7	1.5	0	1.4	2.7
3 Axle Vehicles	0	19	19	1	0	1	12	5	17	37
% 3 Axle Vehicles	0	2	2	3.7	0	3.3	1.8	25	2.4	2.2
4+ Axle Trucks	0	29	29	8	0	8	24	2	26	63
% 4+ Axle Trucks	0	3	3	29.6	0	26.7	3.5	10	3.7	3.7

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	140	141	3	**1**	4	84	2	86	231
07:30 AM	1	183	184	3	0	3	75	3	78	265
07:45 AM	**3**	**185**	**188**	**4**	1	**5**	**104**	**4**	**108**	**301**
08:00 AM	2	144	146	3	0	3	92	2	94	243
Total Volume	7	652	659	13	2	15	355	11	366	1040
% App. Total	1.1	98.9		86.7	13.3		97	3		
PHF	.583	.881	.876	.813	.500	.750	.853	.688	.847	.864

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
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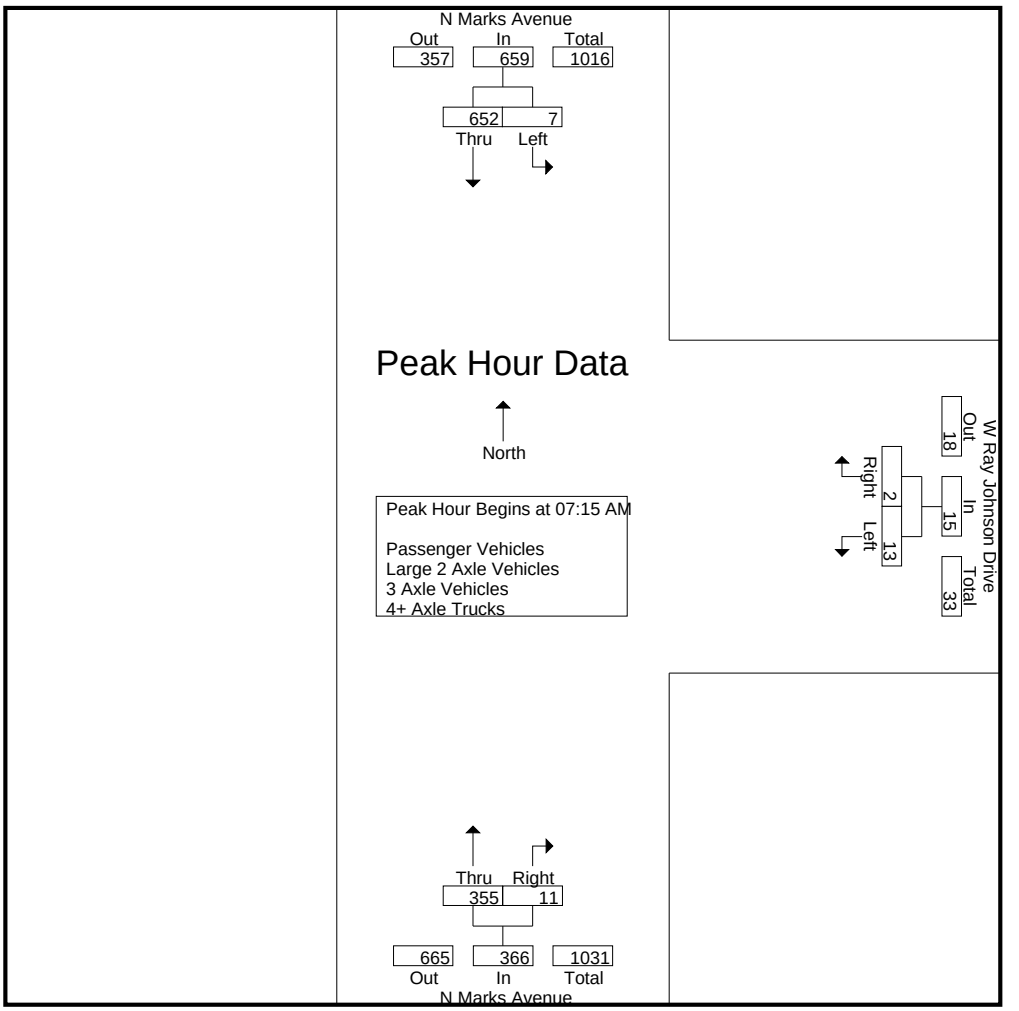

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:45 AM			07:45 AM		
+0 mins.	1	140	141	4	**1**	**5**	104	**4**	108
+15 mins.	1	183	184	3	0	3	92	2	94
+30 mins.	**3**	**185**	**188**	**5**	0	5	**111**	3	**114**
+45 mins.	2	144	146	4	1	5	92	1	93
Total Volume	7	652	659	16	2	18	399	10	409
% App. Total	1.1	98.9		88.9	11.1		97.6	2.4	
PHF	.583	.881	.876	.800	.500	.900	.899	.625	.897

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	66	66	2	0	2	47	0	47	115
07:15 AM	1	128	129	2	1	3	80	1	81	213
07:30 AM	1	177	178	3	0	3	70	2	72	253
07:45 AM	3	175	178	2	1	3	100	2	102	283
Total	5	546	551	9	2	11	297	5	302	864
08:00 AM	2	136	138	1	0	1	84	2	86	225
08:15 AM	1	81	82	4	0	4	103	3	106	192
08:30 AM	2	62	64	2	0	2	87	1	88	154
08:45 AM	1	55	56	1	0	1	63	2	65	122
Total	6	334	340	8	0	8	337	8	345	693
Grand Total	11	880	891	17	2	19	634	13	647	1557
Apprch %	1.2	98.8		89.5	10.5		98	2		
Total %	0.7	56.5	57.2	1.1	0.1	1.2	40.7	0.8	41.6	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	128	129	2	**1**	**3**	80	1	81	213
07:30 AM	1	**177**	**178**	**3**	0	3	70	**2**	72	253
07:45 AM	**3**	175	178	2	1	3	**100**	2	**102**	**283**
08:00 AM	2	136	138	1	0	1	84	2	86	225
Total Volume	7	616	623	8	2	10	334	7	341	974
% App. Total	1.1	98.9		80	20		97.9	2.1		
PHF	.583	.870	.875	.667	.500	.833	.835	.875	.836	.860

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
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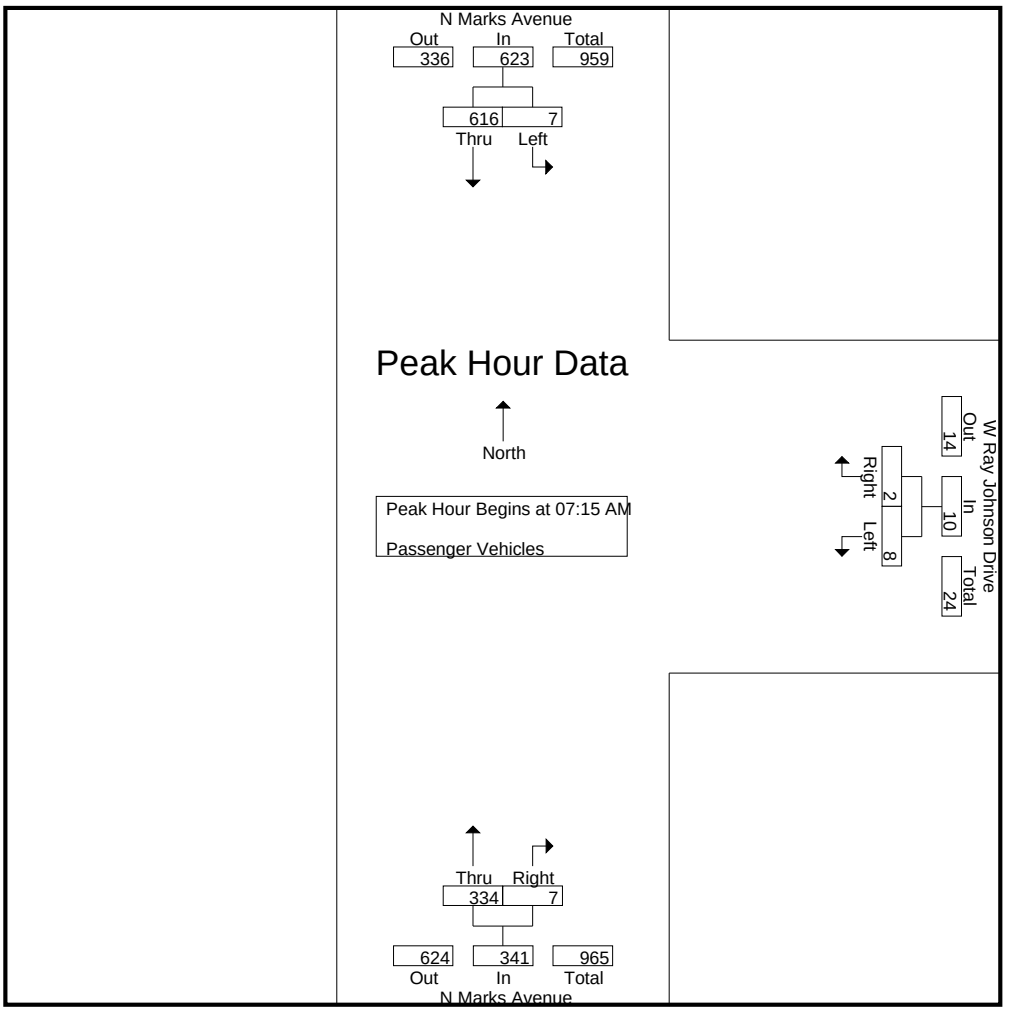

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	1	128	129	2	**1**	**3**	80	1	81
+15 mins.	1	**177**	**178**	**3**	0	3	70	**2**	72
+30 mins.	**3**	175	178	2	1	3	**100**	2	**102**
+45 mins.	2	136	138	1	0	1	84	2	86
Total Volume	7	616	623	8	2	10	334	7	341
% App. Total	1.1	98.9		80	20		97.9	2.1	
PHF	.583	.870	.875	.667	.500	.833	.835	.875	.836

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	11	11	0	0	0	2	0	2	13
07:15 AM	0	7	7	0	0	0	1	0	1	8
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	20	20	0	0	0	3	0	3	23
08:00 AM	0	3	3	0	0	0	1	0	1	4
08:15 AM	0	5	5	0	0	0	3	0	3	8
08:30 AM	0	4	4	0	1	1	1	0	1	6
08:45 AM	0	2	2	1	0	1	2	0	2	5
Total	0	14	14	1	1	2	7	0	7	23
Grand Total	0	34	34	1	1	2	10	0	10	46
Apprch %	0	100		50	50		100	0		
Total %	0	73.9	73.9	2.2	2.2	4.3	21.7	0	21.7	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	**7**	**7**	0	0	0	**1**	0	**1**	**8**
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	3	3	0	0	0	1	0	1	4
Total Volume	0	12	12	0	0	0	2	0	2	14
% App. Total	0	100		0	0		100	0		
PHF	.000	.429	.429	.000	.000	.000	.500	.000	.500	.438

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
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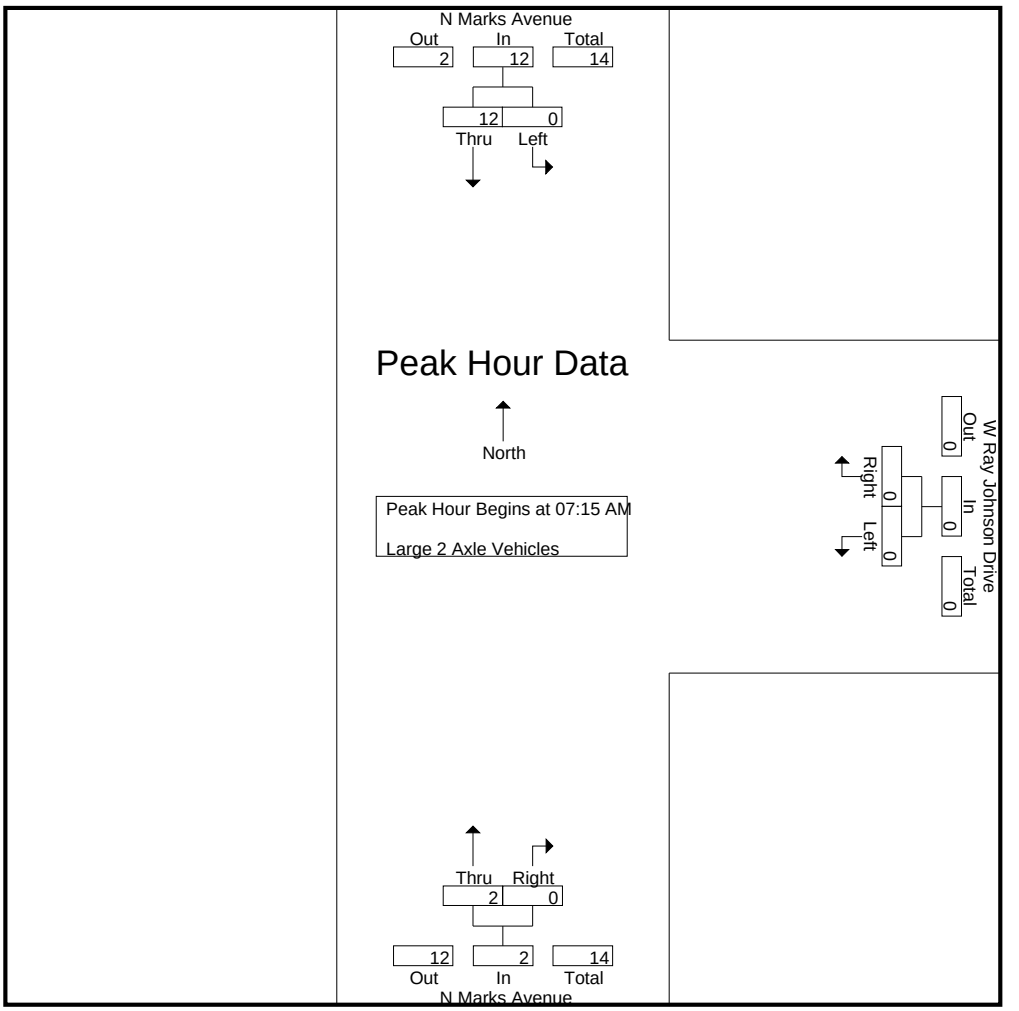

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	**7**	**7**	0	0	0	**1**	0	**1**
+15 mins.	0	2	2	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	3	3	0	0	0	1	0	1
Total Volume	0	12	12	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.429	.429	.000	.000	.000	.500	.000	.500

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City of Fresno
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E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	2	2	0	0	0	0	1	1	3
07:30 AM	0	3	3	0	0	0	2	1	3	6
07:45 AM	0	4	4	0	0	0	2	1	3	7
Total	0	9	9	0	0	0	4	4	8	17
08:00 AM	0	2	2	0	0	0	2	0	2	4
08:15 AM	0	4	4	0	0	0	1	0	1	5
08:30 AM	0	3	3	1	0	1	2	0	2	6
08:45 AM	0	1	1	0	0	0	3	1	4	5
Total	0	10	10	1	0	1	8	1	9	20
Grand Total	0	19	19	1	0	1	12	5	17	37
Apprch %	0	100		100	0		70.6	29.4		
Total %	0	51.4	51.4	2.7	0	2.7	32.4	13.5	45.9	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	2	2	0	0	0	0	**1**	1	3
07:30 AM	0	3	3	0	0	0	**2**	1	**3**	6
07:45 AM	0	**4**	**4**	0	0	0	2	1	3	**7**
08:00 AM	0	2	2	0	0	0	2	0	2	4
Total Volume	0	11	11	0	0	0	6	3	9	20
% App. Total	0	100		0	0		66.7	33.3		
PHF	.000	.688	.688	.000	.000	.000	.750	.750	.750	.714

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Weather: Clear

File Name : 03_FSO_Marks_Ray AMC
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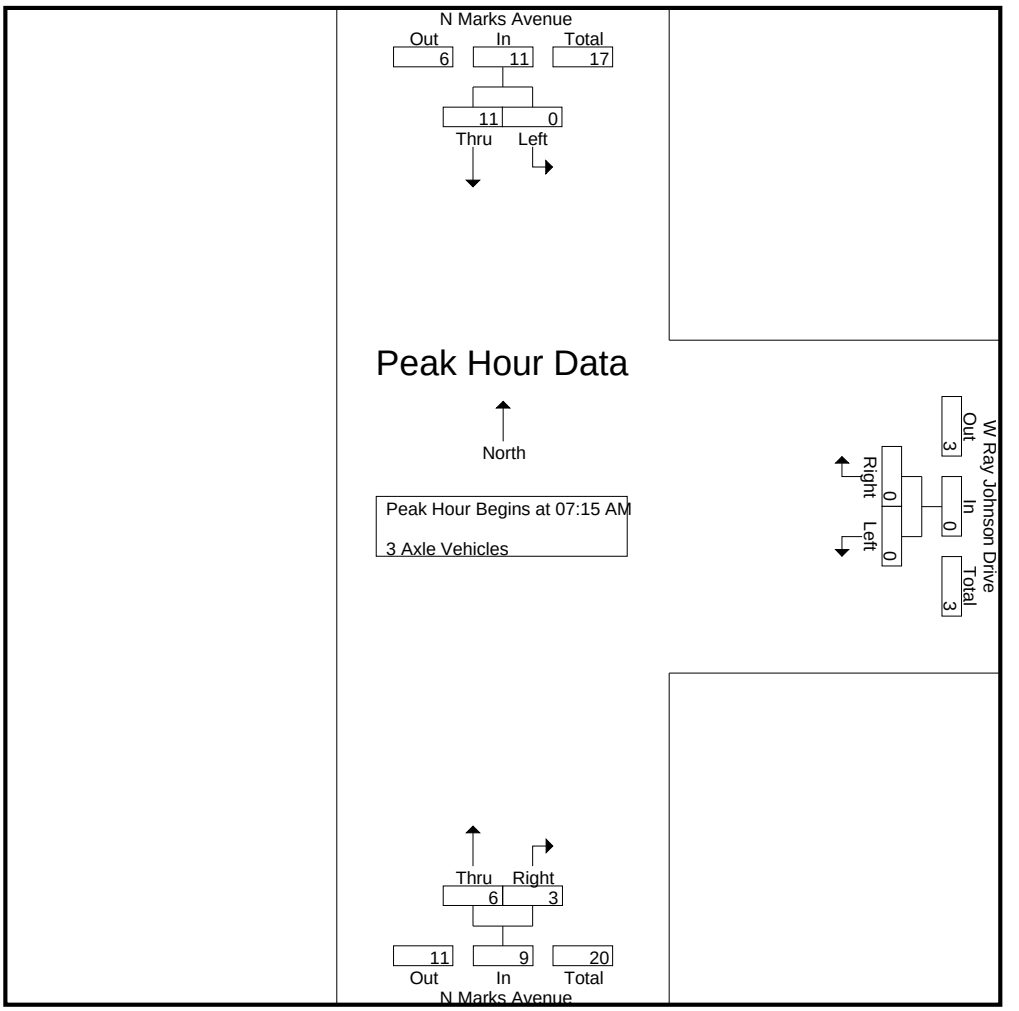

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	2	2	0	0	0	0	**1**	1
+15 mins.	0	3	3	0	0	0	**2**	1	**3**
+30 mins.	0	**4**	**4**	0	0	0	2	1	3
+45 mins.	0	2	2	0	0	0	2	0	2
Total Volume	0	11	11	0	0	0	6	3	9
% App. Total	0	100		0	0		66.7	33.3	
PHF	.000	.688	.688	.000	.000	.000	.750	.750	.750

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City of Fresno
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File Name : 03_FSO_Marks_Ray AMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	10	0	0	0	3	0	3	13
07:15 AM	0	3	3	1	0	1	3	0	3	7
07:30 AM	0	1	1	0	0	0	3	0	3	4
07:45 AM	0	6	6	2	0	2	2	1	3	11
Total	0	20	20	3	0	3	11	1	12	35
08:00 AM	0	3	3	2	0	2	5	0	5	10
08:15 AM	0	2	2	1	0	1	4	0	4	7
08:30 AM	0	1	1	1	0	1	2	0	2	4
08:45 AM	0	3	3	1	0	1	2	1	3	7
Total	0	9	9	5	0	5	13	1	14	28
Grand Total	0	29	29	8	0	8	24	2	26	63
Apprch %	0	100		100	0		92.3	7.7		
Total %	0	46	46	12.7	0	12.7	38.1	3.2	41.3	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	3	3	1	0	1	3	0	3	7
07:30 AM	0	1	1	0	0	0	3	0	3	4
07:45 AM	0	**6**	**6**	**2**	0	**2**	2	**1**	3	**11**
08:00 AM	0	3	3	2	0	2	**5**	0	**5**	10
Total Volume	0	13	13	5	0	5	13	1	14	32
% App. Total	0	100		100	0		92.9	7.1		
PHF	.000	.542	.542	.625	.000	.625	.650	.250	.700	.727

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City of Fresno
N/S: N Marks Avenue
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File Name : 03_FSO_Marks_Ray AMC
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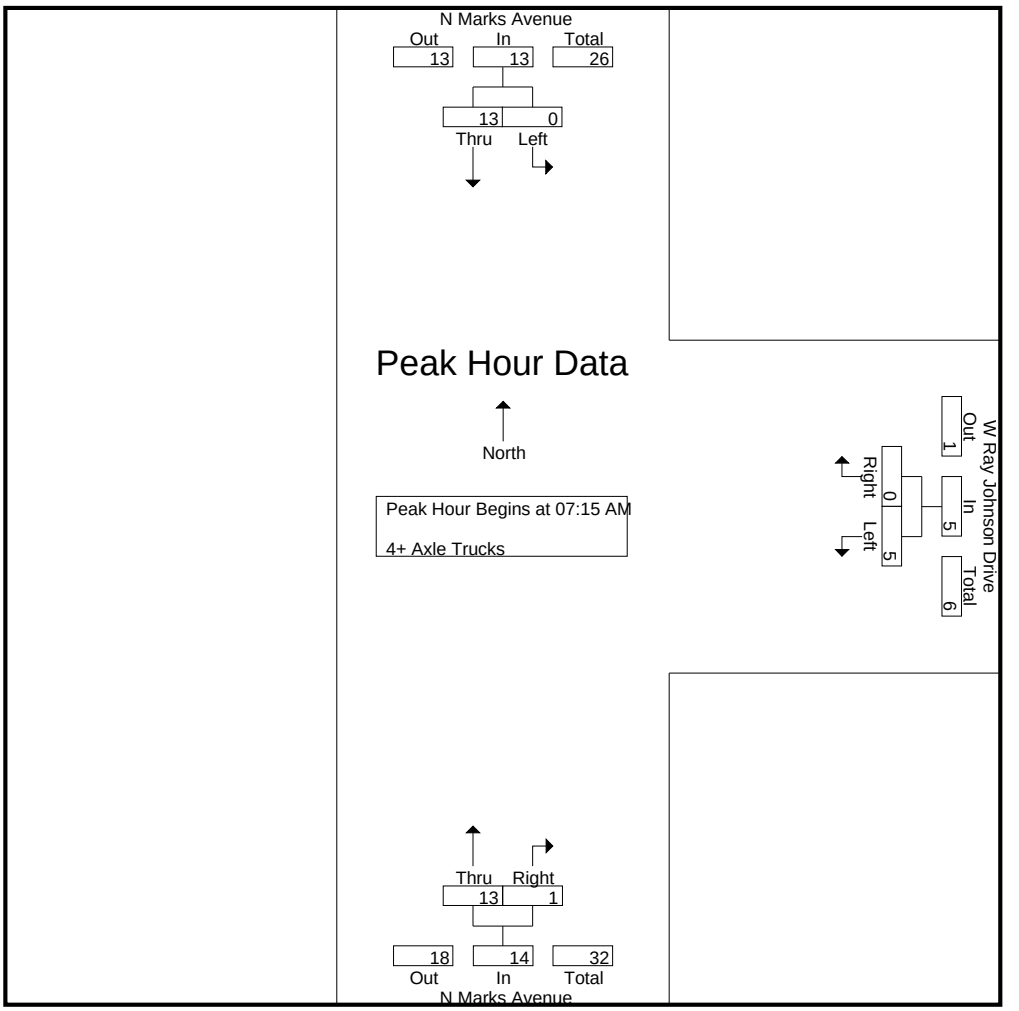

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	3	3	1	0	1	3	0	3
+15 mins.	0	1	1	0	0	0	3	0	3
+30 mins.	0	**6**	**6**	**2**	0	**2**	2	**1**	3
+45 mins.	0	3	3	2	0	2	**5**	0	**5**
Total Volume	0	13	13	5	0	5	13	1	14
% App. Total	0	100		100	0		92.9	7.1	
PHF	.000	.542	.542	.625	.000	.625	.650	.250	.700

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City of Fresno
N/S: N Marks Avenue
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File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	87	88	2	3	5	172	3	175	268
04:15 PM	0	84	84	3	2	5	156	2	158	247
04:30 PM	1	84	85	2	1	3	165	4	169	257
04:45 PM	3	61	64	2	1	3	195	2	197	264
Total	5	316	321	9	7	16	688	11	699	1036
05:00 PM	1	91	92	2	0	2	190	1	191	285
05:15 PM	0	64	64	2	0	2	199	2	201	267
05:30 PM	0	65	65	3	1	4	184	0	184	253
05:45 PM	0	50	50	0	0	0	129	4	133	183
Total	1	270	271	7	1	8	702	7	709	988
Grand Total	6	586	592	16	8	24	1390	18	1408	2024
Apprch %	1	99		66.7	33.3		98.7	1.3		
Total %	0.3	29	29.2	0.8	0.4	1.2	68.7	0.9	69.6	
Passenger Vehicles	6	549	555	9	7	16	1281	14	1295	1866
% Passenger Vehicles	100	93.7	93.8	56.2	87.5	66.7	92.2	77.8	92	92.2
Large 2 Axle Vehicles	0	8	8	0	1	1	23	1	24	33
% Large 2 Axle Vehicles	0	1.4	1.4	0	12.5	4.2	1.7	5.6	1.7	1.6
3 Axle Vehicles	0	11	11	5	0	5	23	0	23	39
% 3 Axle Vehicles	0	1.9	1.9	31.2	0	20.8	1.7	0	1.6	1.9
4+ Axle Trucks	0	18	18	2	0	2	63	3	66	86
% 4+ Axle Trucks	0	3.1	3	12.5	0	8.3	4.5	16.7	4.7	4.2

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	1	84	85	**2**	**1**	**3**	165	**4**	169	257
04:45 PM	**3**	61	64	2	1	3	195	2	197	264
05:00 PM	1	**91**	**92**	2	0	2	190	1	191	**285**
05:15 PM	0	64	64	2	0	2	**199**	2	**201**	267
Total Volume	5	300	305	8	2	10	749	9	758	1073
% App. Total	1.6	98.4		80	20		98.8	1.2		
PHF	.417	.824	.829	1.00	.500	.833	.941	.563	.943	.941

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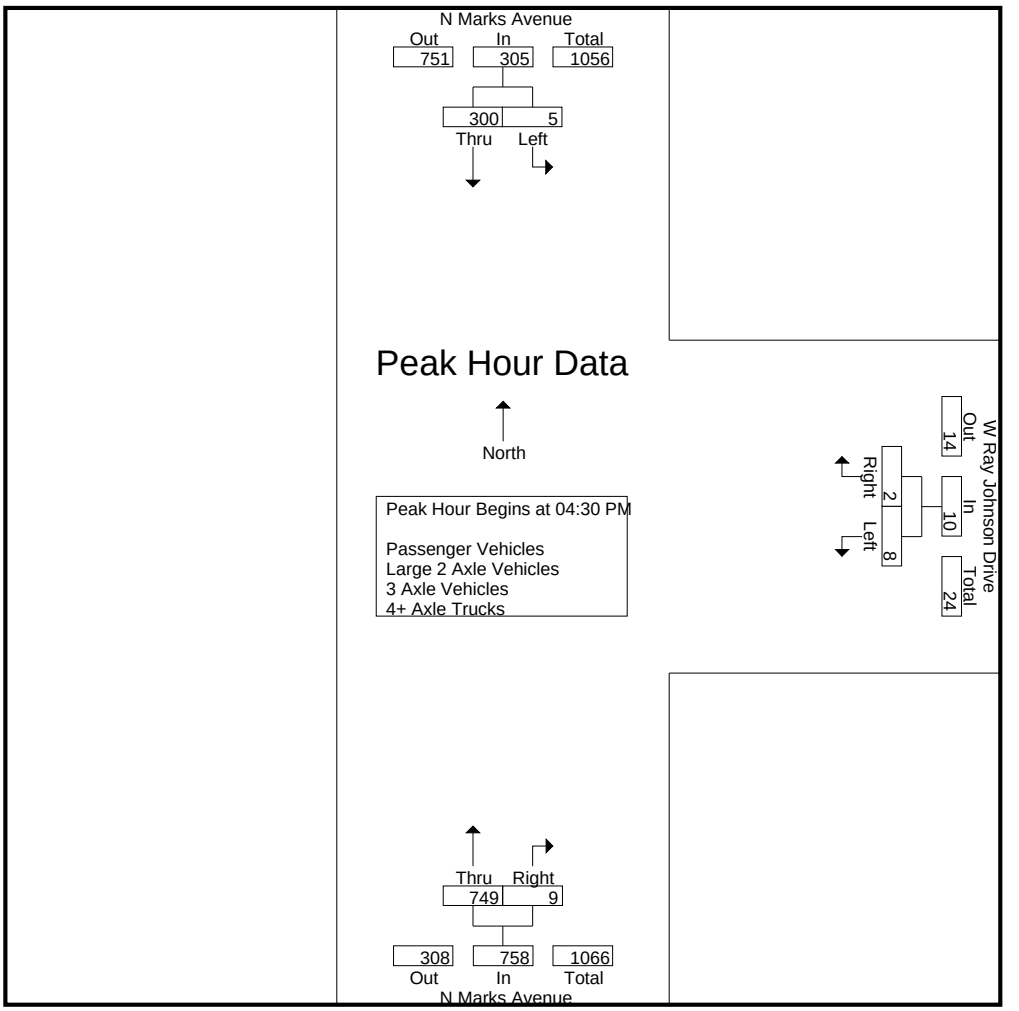

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:00 PM			04:45 PM		
+0 mins.	0	84	84	2	**3**	**5**	195	**2**	197
+15 mins.	1	84	85	**3**	2	5	190	1	191
+30 mins.	**3**	61	64	2	1	3	**199**	2	**201**
+45 mins.	1	**91**	**92**	2	1	3	184	0	184
Total Volume	5	320	325	9	7	16	768	5	773
% App. Total	1.5	98.5		56.2	43.8		99.4	0.6	
PHF	.417	.879	.883	.750	.583	.800	.965	.625	.961

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(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	76	77	2	2	4	160	3	163	244
04:15 PM	0	80	80	2	2	4	142	2	144	228
04:30 PM	1	80	81	1	1	2	148	4	152	235
04:45 PM	3	57	60	1	1	2	175	1	176	238
Total	5	293	298	6	6	12	625	10	635	945
05:00 PM	1	87	88	1	0	1	180	1	181	270
05:15 PM	0	62	62	1	0	1	186	1	187	250
05:30 PM	0	58	58	1	1	2	170	0	170	230
05:45 PM	0	49	49	0	0	0	120	2	122	171
Total	1	256	257	3	1	4	656	4	660	921
Grand Total	6	549	555	9	7	16	1281	14	1295	1866
Apprch %	1.1	98.9		56.2	43.8		98.9	1.1		
Total %	0.3	29.4	29.7	0.5	0.4	0.9	68.6	0.8	69.4	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	1	80	81	**1**	**1**	**2**	148	**4**	152	235
04:45 PM	**3**	57	60	1	1	2	175	1	176	238
05:00 PM	1	**87**	**88**	1	0	1	180	1	181	**270**
05:15 PM	0	62	62	1	0	1	**186**	1	**187**	250
Total Volume	5	286	291	4	2	6	689	7	696	993
% App. Total	1.7	98.3		66.7	33.3		99	1		
PHF	.417	.822	.827	1.00	.500	.750	.926	.438	.930	.919

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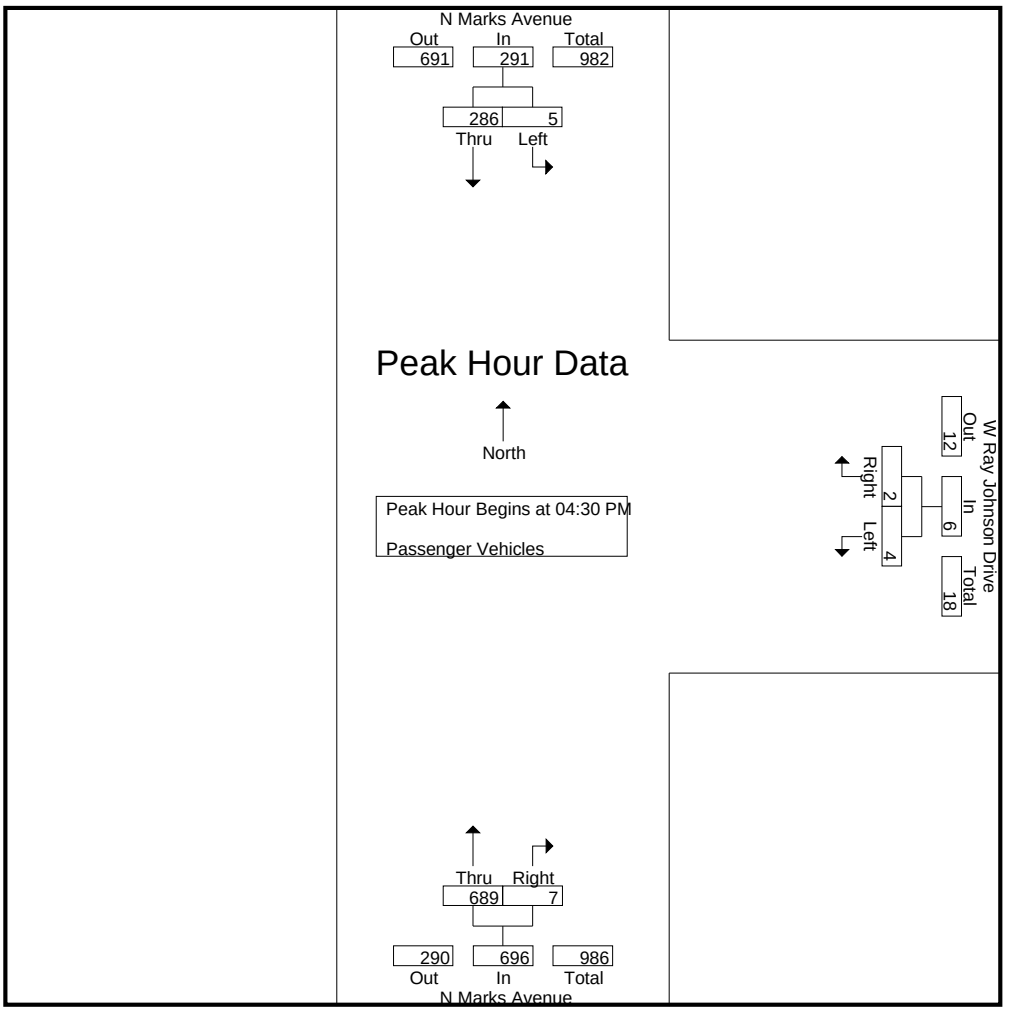
City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	1	80	81	**1**	**1**	**2**	148	**4**	152
+15 mins.	**3**	57	60	1	1	2	175	1	176
+30 mins.	1	**87**	**88**	1	0	1	180	1	181
+45 mins.	0	62	62	1	0	1	**186**	1	**187**
Total Volume	5	286	291	4	2	6	689	7	696
% App. Total	1.7	98.3		66.7	33.3		99	1	
PHF	.417	.822	.827	1.000	.500	.750	.926	.438	.930

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	0	1	1	2	0	2	5
04:15 PM	0	0	0	0	0	0	5	0	5	5
04:30 PM	0	1	1	0	0	0	6	0	6	7
04:45 PM	0	1	1	0	0	0	5	0	5	6
Total	0	4	4	0	1	1	18	0	18	23
05:00 PM	0	2	2	0	0	0	1	0	1	3
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	1	1	0	0	0	2	0	2	3
05:45 PM	0	0	0	0	0	0	1	1	2	2
Total	0	4	4	0	0	0	5	1	6	10
Grand Total	0	8	8	0	1	1	23	1	24	33
Apprch %	0	100		0	100		95.8	4.2		
Total %	0	24.2	24.2	0	3	3	69.7	3	72.7	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	1	1	0	0	0	**6**	0	**6**	**7**
04:45 PM	0	1	1	0	0	0	5	0	5	6
05:00 PM	0	**2**	**2**	0	0	0	1	0	1	3
05:15 PM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	5	5	0	0	0	13	0	13	18
% App. Total	0	100		0	0		100	0		
PHF	.000	.625	.625	.000	.000	.000	.542	.000	.542	.643

Counts Unlimited, Inc.
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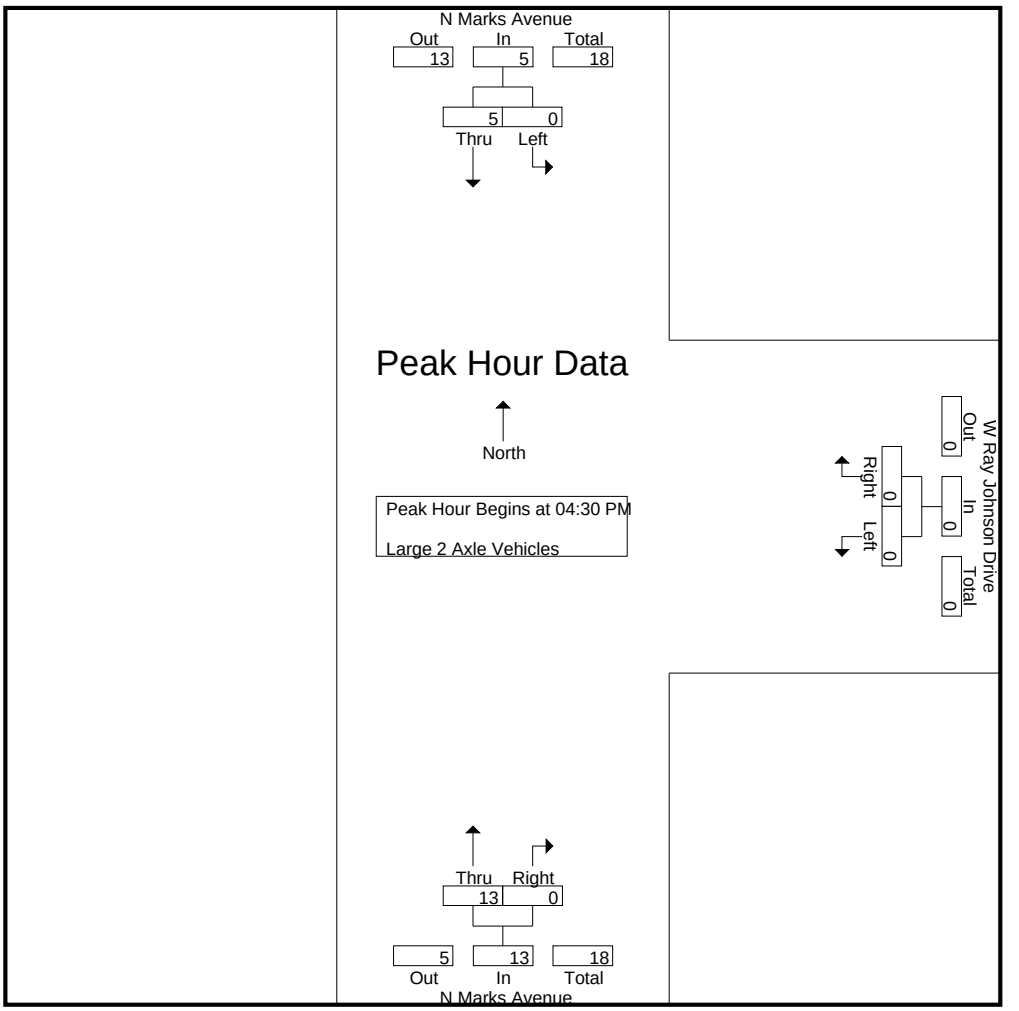
City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	1	1	0	0	0	**6**	0	**6**
+15 mins.	0	1	1	0	0	0	5	0	5
+30 mins.	0	**2**	**2**	0	0	0	1	0	1
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	5	5	0	0	0	13	0	13
% App. Total	0	100		0	0		100	0	
PHF	.000	.625	.625	.000	.000	.000	.542	.000	.542

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	3	0	0	0	0	0	0	3
04:15 PM	0	2	2	0	0	0	2	0	2	4
04:30 PM	0	2	2	1	0	1	1	0	1	4
04:45 PM	0	1	1	1	0	1	2	0	2	4
Total	0	8	8	2	0	2	5	0	5	15
05:00 PM	0	1	1	0	0	0	4	0	4	5
05:15 PM	0	0	0	1	0	1	6	0	6	7
05:30 PM	0	1	1	2	0	2	6	0	6	9
05:45 PM	0	1	1	0	0	0	2	0	2	3
Total	0	3	3	3	0	3	18	0	18	24
Grand Total	0	11	11	5	0	5	23	0	23	39
Apprch %	0	100		100	0		100	0		
Total %	0	28.2	28.2	12.8	0	12.8	59	0	59	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	**2**	**2**	**1**	0	**1**	1	0	1	4
04:45 PM	0	1	1	1	0	1	2	0	2	4
05:00 PM	0	1	1	0	0	0	4	0	4	5
05:15 PM	0	0	0	1	0	1	**6**	0	**6**	**7**
Total Volume	0	4	4	3	0	3	13	0	13	20
% App. Total	0	100		100	0		100	0		
PHF	.000	.500	.500	.750	.000	.750	.542	.000	.542	.714

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
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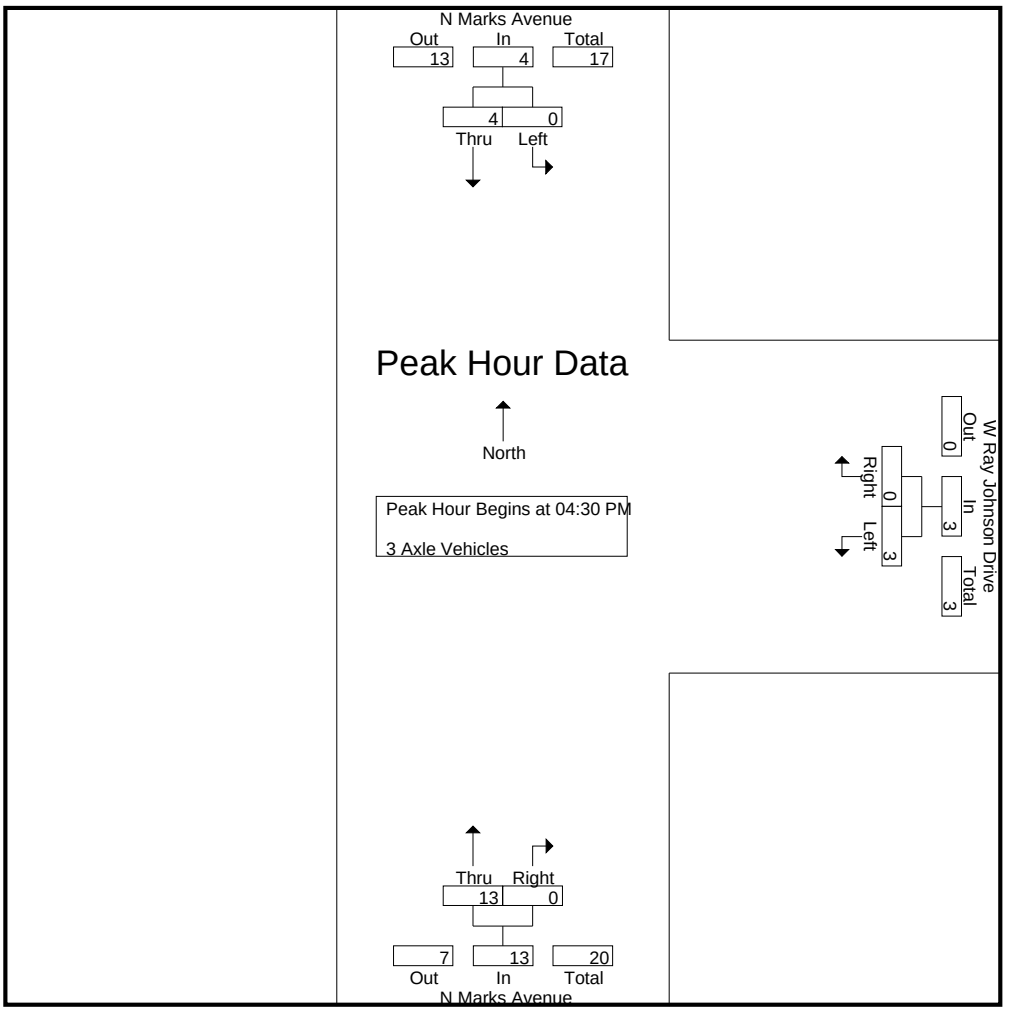

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	**2**	**2**	**1**	0	**1**	1	0	1
+15 mins.	0	1	1	1	0	1	2	0	2
+30 mins.	0	1	1	0	0	0	4	0	4
+45 mins.	0	0	0	1	0	1	**6**	0	**6**
Total Volume	0	4	4	3	0	3	13	0	13
% App. Total	0	100		100	0		100	0	
PHF	.000	.500	.500	.750	.000	.750	.542	.000	.542

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	6	6	0	0	0	10	0	10	16
04:15 PM	0	2	2	1	0	1	7	0	7	10
04:30 PM	0	1	1	0	0	0	10	0	10	11
04:45 PM	0	2	2	0	0	0	13	1	14	16
Total	0	11	11	1	0	1	40	1	41	53
05:00 PM	0	1	1	1	0	1	5	0	5	7
05:15 PM	0	1	1	0	0	0	6	1	7	8
05:30 PM	0	5	5	0	0	0	6	0	6	11
05:45 PM	0	0	0	0	0	0	6	1	7	7
Total	0	7	7	1	0	1	23	2	25	33
Grand Total	0	18	18	2	0	2	63	3	66	86
Apprch %	0	100		100	0		95.5	4.5		
Total %	0	20.9	20.9	2.3	0	2.3	73.3	3.5	76.7	

	N Marks Avenue Southbound			W Ray Johnson Drive Westbound			N Marks Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	1	1	0	0	0	10	0	10	11
04:45 PM	0	**2**	**2**	0	0	0	**13**	**1**	**14**	**16**
05:00 PM	0	1	1	**1**	0	**1**	5	0	5	7
05:15 PM	0	1	1	0	0	0	6	1	7	8
Total Volume	0	5	5	1	0	1	34	2	36	42
% App. Total	0	100		100	0		94.4	5.6		
PHF	.000	.625	.625	.250	.000	.250	.654	.500	.643	.656

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City of Fresno
N/S: N Marks Avenue
E/W: W Ray Johnson Drive
Weather: Clear

File Name : 03_FSO_Marks_Ray PMC
Site Code : 00324843
Start Date : 9/25/2024
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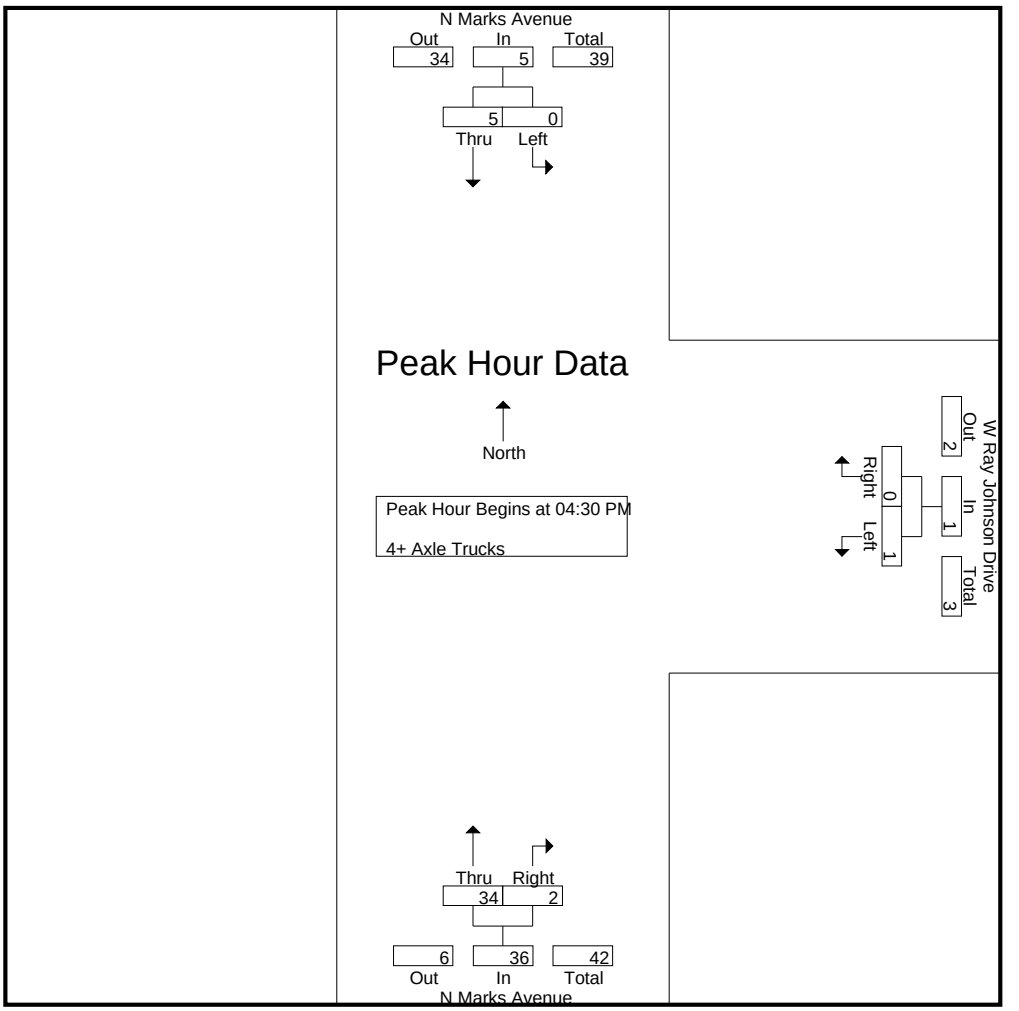

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	1	1	0	0	0	10	0	10
+15 mins.	0	**2**	**2**	0	0	0	**13**	**1**	**14**
+30 mins.	0	1	1	**1**	0	**1**	5	0	5
+45 mins.	0	1	1	0	0	0	6	1	7
Total Volume	0	5	5	1	0	1	34	2	36
% App. Total	0	100		100	0		94.4	5.6	
PHF	.000	.625	.625	.250	.000	.250	.654	.500	.643

Counts Unlimited, Inc.
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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	90	4	94	44	0	46	90	0	12	6	18	0	0	0	0	202
07:15 AM	0	133	10	143	51	0	69	120	0	20	4	24	0	0	0	0	287
07:30 AM	0	180	16	196	63	0	59	122	0	16	3	19	0	0	0	0	337
07:45 AM	0	184	11	195	70	0	94	164	0	27	5	32	0	0	0	0	391
Total	0	587	41	628	228	0	268	496	0	75	18	93	0	0	0	0	1217
08:00 AM	0	132	6	138	89	0	68	157	0	28	3	31	0	0	0	0	326
08:15 AM	0	102	5	107	71	0	69	140	0	46	4	50	0	0	0	0	297
08:30 AM	0	65	5	70	53	0	60	113	0	40	4	44	0	0	0	0	227
08:45 AM	0	59	2	61	61	0	61	122	0	21	2	23	0	0	0	0	206
Total	0	358	18	376	274	0	258	532	0	135	13	148	0	0	0	0	1056
Grand Total	0	945	59	1004	502	0	526	1028	0	210	31	241	0	0	0	0	2273
Apprch %	0	94.1	5.9		48.8	0	51.2		0	87.1	12.9		0	0	0		
Total %	0	41.6	2.6	44.2	22.1	0	23.1	45.2	0	9.2	1.4	10.6	0	0	0	0	
Passenger Vehicles	0	857	53	910	474	0	491	965	0	193	30	223	0	0	0	0	2098
% Passenger Vehicles	0	90.7	89.8	90.6	94.4	0	93.3	93.9	0	91.9	96.8	92.5	0	0	0	0	92.3
Large 2 Axle Vehicles	0	36	4	40	10	0	5	15	0	13	1	14	0	0	0	0	69
% Large 2 Axle Vehicles	0	3.8	6.8	4	2	0	1	1.5	0	6.2	3.2	5.8	0	0	0	0	3
3 Axle Vehicles	0	18	1	19	8	0	18	26	0	1	0	1	0	0	0	0	46
% 3 Axle Vehicles	0	1.9	1.7	1.9	1.6	0	3.4	2.5	0	0.5	0	0.4	0	0	0	0	2
4+ Axle Trucks	0	34	1	35	10	0	12	22	0	3	0	3	0	0	0	0	60
% 4+ Axle Trucks	0	3.6	1.7	3.5	2	0	2.3	2.1	0	1.4	0	1.2	0	0	0	0	2.6

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	180	**16**	**196**	63	0	59	122	0	16	3	19	0	0	0	0	337
07:45 AM	0	**184**	11	195	70	0	**94**	**164**	0	27	**5**	32	0	0	0	0	**391**
08:00 AM	0	132	6	138	**89**	0	68	157	0	28	3	31	0	0	0	0	326
08:15 AM	0	102	5	107	71	0	69	140	0	**46**	4	**50**	0	0	0	0	297
Total Volume	0	598	38	636	293	0	290	583	0	117	15	132	0	0	0	0	1351
% App. Total	0	94	6		50.3	0	49.7		0	88.6	11.4		0	0	0		
PHF	.000	.813	.594	.811	.823	.000	.771	.889	.000	.636	.750	.660	.000	.000	.000	.000	.864

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
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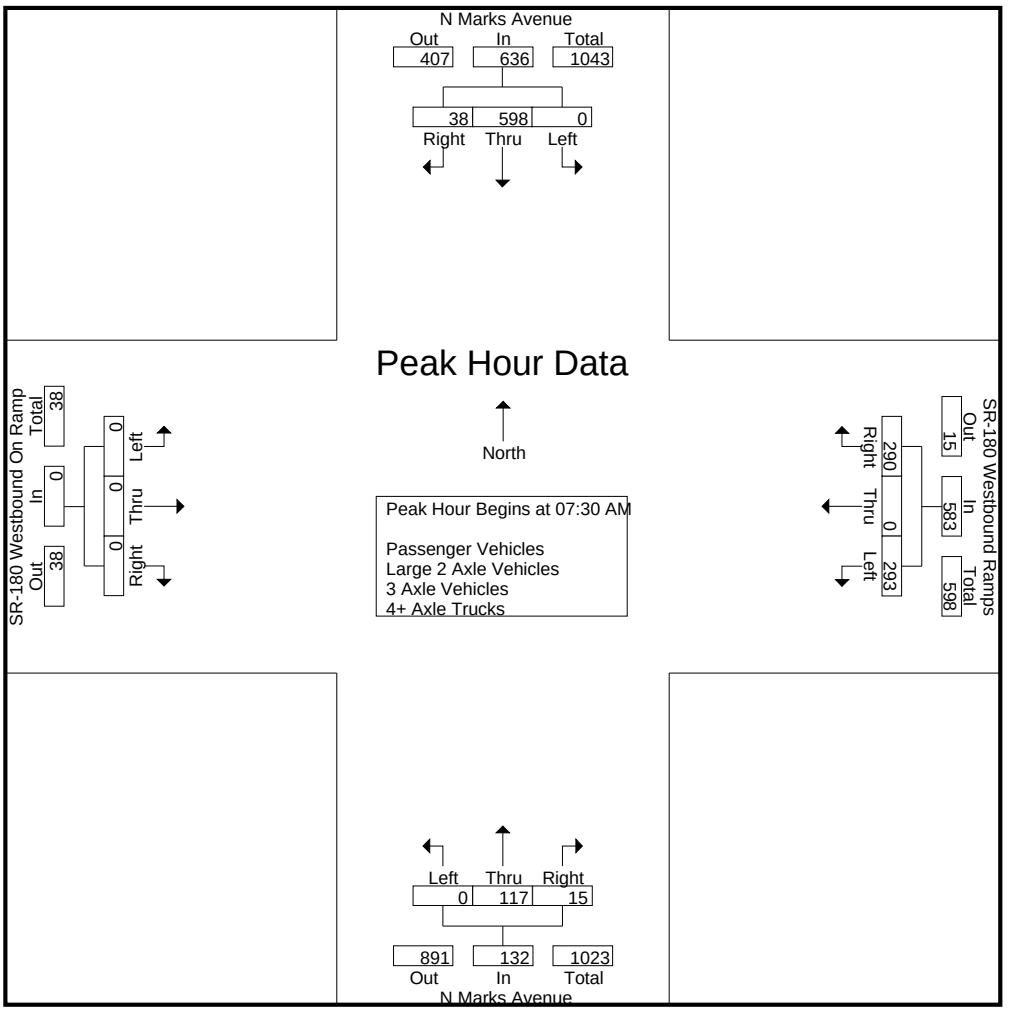

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				07:00 AM			
+0 mins.	0	133	10	143	63	0	59	122	0	27	**5**	32	0	0	0	0
+15 mins.	0	180	**16**	**196**	70	0	**94**	**164**	0	28	3	31	0	0	0	0
+30 mins.	0	**184**	11	195	**89**	0	68	157	0	**46**	4	**50**	0	0	0	0
+45 mins.	0	132	6	138	71	0	69	140	0	40	4	44	0	0	0	0
Total Volume	0	629	43	672	293	0	290	583	0	141	16	157	0	0	0	0
% App. Total	0	93.6	6.4		50.3	0	49.7		0	89.8	10.2		0	0	0	
PHF	.000	.855	.672	.857	.823	.000	.771	.889	.000	.766	.800	.785	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	68	4	72	40	0	45	85	0	7	6	13	0	0	0	0	170
07:15 AM	0	122	8	130	49	0	66	115	0	19	3	22	0	0	0	0	267
07:30 AM	0	174	13	187	61	0	56	117	0	16	3	19	0	0	0	0	323
07:45 AM	0	171	11	182	67	0	89	156	0	27	5	32	0	0	0	0	370
Total	0	535	36	571	217	0	256	473	0	69	17	86	0	0	0	0	1130
08:00 AM	0	122	6	128	84	0	65	149	0	24	3	27	0	0	0	0	304
08:15 AM	0	91	4	95	67	0	65	132	0	43	4	47	0	0	0	0	274
08:30 AM	0	57	5	62	48	0	54	102	0	39	4	43	0	0	0	0	207
08:45 AM	0	52	2	54	58	0	51	109	0	18	2	20	0	0	0	0	183
Total	0	322	17	339	257	0	235	492	0	124	13	137	0	0	0	0	968
Grand Total	0	857	53	910	474	0	491	965	0	193	30	223	0	0	0	0	2098
Apprch %	0	94.2	5.8		49.1	0	50.9		0	86.5	13.5		0	0	0		
Total %	0	40.8	2.5	43.4	22.6	0	23.4	46	0	9.2	1.4	10.6	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**174**	**13**	**187**	61	0	56	117	0	16	3	19	0	0	0	0	323
07:45 AM	0	171	11	182	67	0	**89**	**156**	0	27	**5**	32	0	0	0	0	**370**
08:00 AM	0	122	6	128	**84**	0	65	149	0	24	3	27	0	0	0	0	304
08:15 AM	0	91	4	95	67	0	65	132	0	**43**	4	**47**	0	0	0	0	274
Total Volume	0	558	34	592	279	0	275	554	0	110	15	125	0	0	0	0	1271
% App. Total	0	94.3	5.7		50.4	0	49.6		0	88	12		0	0	0		
PHF	.000	.802	.654	.791	.830	.000	.772	.888	.000	.640	.750	.665	.000	.000	.000	.000	.859

Counts Unlimited, Inc.
PO Box 1178
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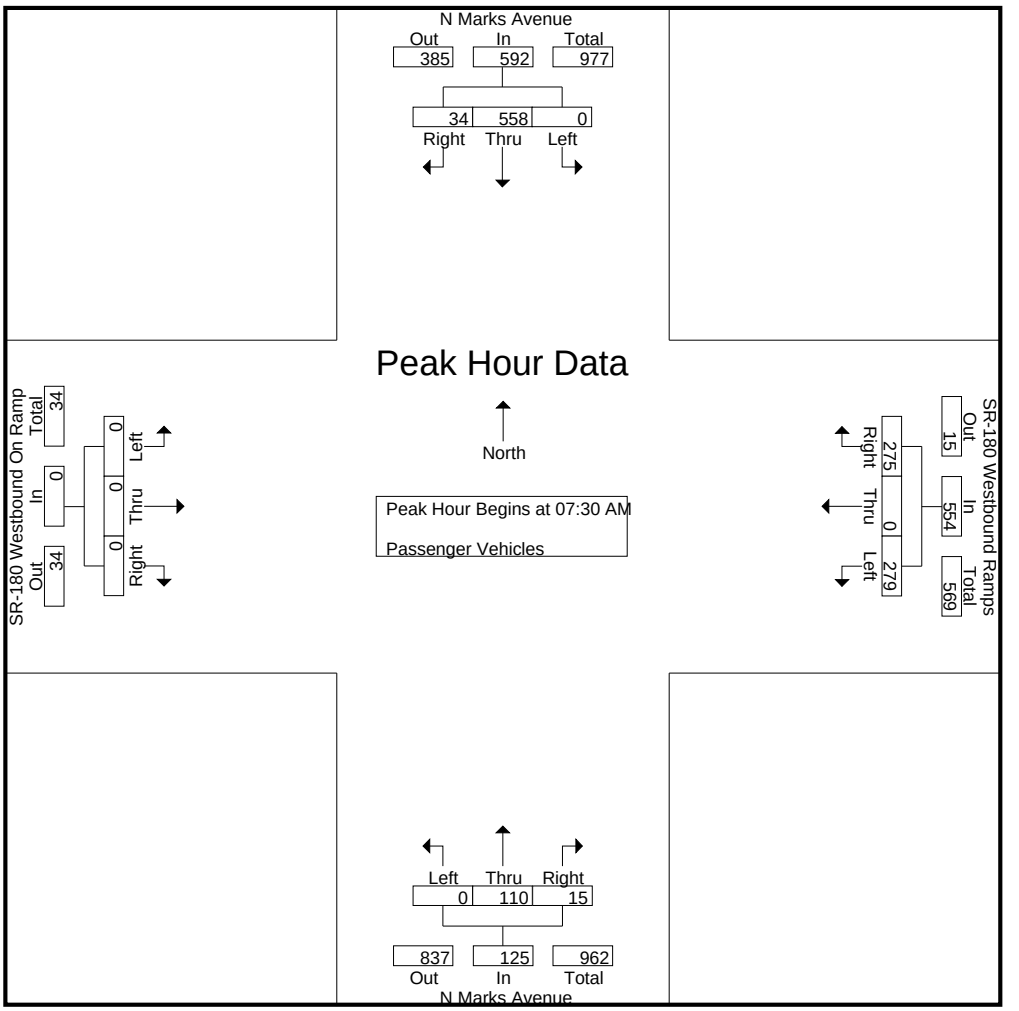
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**174**	**13**	**187**	61	0	56	117	0	16	3	19	0	0	0	0
+15 mins.	0	171	11	182	67	0	**89**	**156**	0	27	**5**	32	0	0	0	0
+30 mins.	0	122	6	128	**84**	0	65	149	0	24	3	27	0	0	0	0
+45 mins.	0	91	4	95	67	0	65	132	0	**43**	4	**47**	0	0	0	0
Total Volume	0	558	34	592	279	0	275	554	0	110	15	125	0	0	0	0
% App. Total	0	94.3	5.7		50.4	0	49.6		0	88	12		0	0	0	
PHF	.000	.802	.654	.791	.830	.000	.772	.888	.000	.640	.750	.665	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	0	12	0	0	0	0	0	2	0	2	0	0	0	0	14
07:15 AM	0	6	1	7	1	0	0	1	0	1	1	2	0	0	0	0	10
07:30 AM	0	3	2	5	1	0	0	1	0	0	0	0	0	0	0	0	6
07:45 AM	0	2	0	2	3	0	0	3	0	0	0	0	0	0	0	0	5
Total	0	23	3	26	5	0	0	5	0	3	1	4	0	0	0	0	35
08:00 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
08:15 AM	0	4	1	5	2	0	1	3	0	3	0	3	0	0	0	0	11
08:30 AM	0	3	0	3	3	0	1	4	0	1	0	1	0	0	0	0	8
08:45 AM	0	3	0	3	0	0	3	3	0	2	0	2	0	0	0	0	8
Total	0	13	1	14	5	0	5	10	0	10	0	10	0	0	0	0	34
Grand Total	0	36	4	40	10	0	5	15	0	13	1	14	0	0	0	0	69
Apprch %	0	90	10		66.7	0	33.3		0	92.9	7.1		0	0	0		
Total %	0	52.2	5.8	58	14.5	0	7.2	21.7	0	18.8	1.4	20.3	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	**2**	**5**	1	0	0	1	0	0	0	0	0	0	0	0	6
07:45 AM	0	2	0	2	**3**	0	0	**3**	0	0	0	0	0	0	0	0	5
08:00 AM	0	3	0	3	0	0	0	0	0	**4**	0	**4**	0	0	0	0	7
08:15 AM	0	**4**	1	5	2	0	**1**	3	0	3	0	3	0	0	0	0	**11**
Total Volume	0	12	3	15	6	0	1	7	0	7	0	7	0	0	0	0	29
% App. Total	0	80	20		85.7	0	14.3		0	100	0		0	0	0		
PHF	.000	.750	.375	.750	.500	.000	.250	.583	.000	.438	.000	.438	.000	.000	.000	.000	.659

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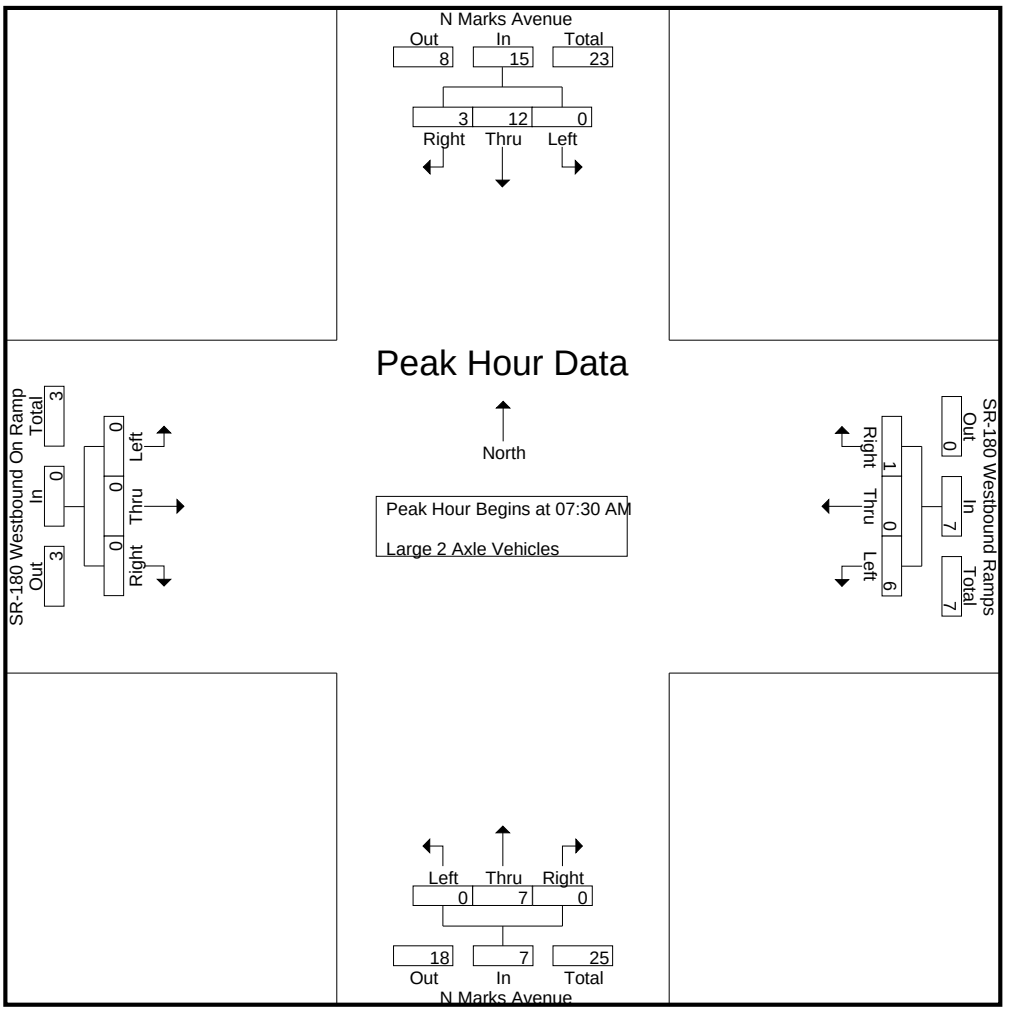
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	3	**2**	**5**	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	2	0	2	**3**	0	0	**3**	0	0	0	0	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	0	**4**	0	**4**	0	0	0	0
+45 mins.	0	**4**	1	5	2	0	**1**	3	0	3	0	3	0	0	0	0
Total Volume	0	12	3	15	6	0	1	7	0	7	0	7	0	0	0	0
% App. Total	0	80	20		85.7	0	14.3		0	100	0		0	0	0	
PHF	.000	.750	.375	.750	.500	.000	.250	.583	.000	.438	.000	.438	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
07:15 AM	0	2	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
07:30 AM	0	2	1	3	1	0	3	4	0	0	0	0	0	0	0	0	7
07:45 AM	0	5	0	5	0	0	4	4	0	0	0	0	0	0	0	0	9
Total	0	9	1	10	3	0	9	12	0	0	0	0	0	0	0	0	22
08:00 AM	0	2	0	2	2	0	0	2	0	0	0	0	0	0	0	0	4
08:15 AM	0	2	0	2	1	0	2	3	0	0	0	0	0	0	0	0	5
08:30 AM	0	4	0	4	0	0	3	3	0	0	0	0	0	0	0	0	7
08:45 AM	0	1	0	1	2	0	4	6	0	1	0	1	0	0	0	0	8
Total	0	9	0	9	5	0	9	14	0	1	0	1	0	0	0	0	24
Grand Total	0	18	1	19	8	0	18	26	0	1	0	1	0	0	0	0	46
Apprch %	0	94.7	5.3		30.8	0	69.2		0	100	0		0	0	0		
Total %	0	39.1	2.2	41.3	17.4	0	39.1	56.5	0	2.2	0	2.2	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	**1**	3	1	0	3	**4**	0	0	0	0	0	0	0	0	7
07:45 AM	0	**5**	0	**5**	0	0	**4**	4	0	0	0	0	0	0	0	0	**9**
08:00 AM	0	2	0	2	**2**	0	0	2	0	0	0	0	0	0	0	0	4
08:15 AM	0	2	0	2	1	0	2	3	0	0	0	0	0	0	0	0	5
Total Volume	0	11	1	12	4	0	9	13	0	0	0	0	0	0	0	0	25
% App. Total	0	91.7	8.3		30.8	0	69.2		0	0	0		0	0	0		
PHF	.000	.550	.250	.600	.500	.000	.563	.813	.000	.000	.000	.000	.000	.000	.000	.000	.694

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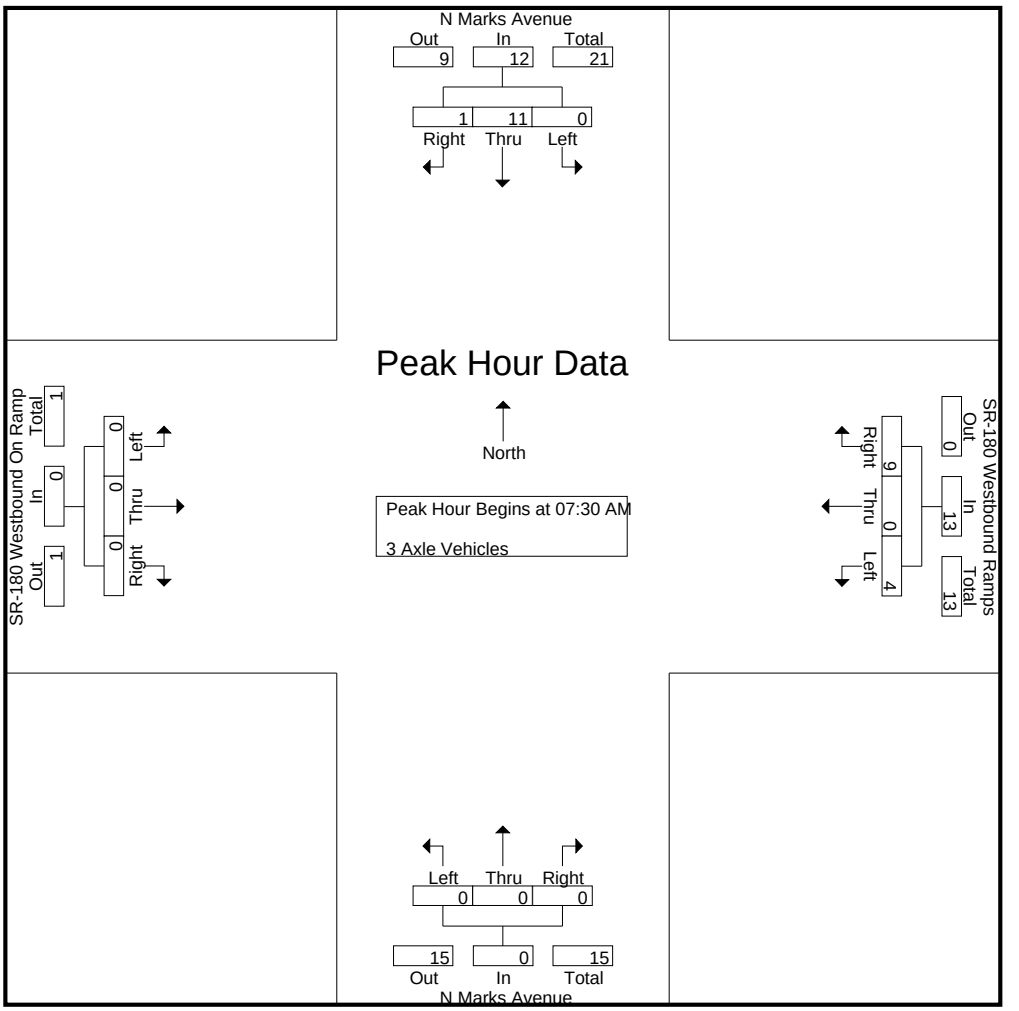
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	2	**1**	3	1	0	3	**4**	0	0	0	0	0	0	0	0
+15 mins.	0	**5**	0	**5**	0	0	**4**	4	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	**2**	0	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	1	0	2	3	0	0	0	0	0	0	0	0
Total Volume	0	11	1	12	4	0	9	13	0	0	0	0	0	0	0	0
% App. Total	0	91.7	8.3		30.8	0	69.2		0	0	0		0	0	0	
PHF	.000	.550	.250	.600	.500	.000	.563	.813	.000	.000	.000	.000	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	0	10	2	0	0	2	0	3	0	3	0	0	0	0	15
07:15 AM	0	3	1	4	1	0	2	3	0	0	0	0	0	0	0	0	7
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	6	0	6	0	0	1	1	0	0	0	0	0	0	0	0	7
Total	0	20	1	21	3	0	3	6	0	3	0	3	0	0	0	0	30
08:00 AM	0	5	0	5	3	0	3	6	0	0	0	0	0	0	0	0	11
08:15 AM	0	5	0	5	1	0	1	2	0	0	0	0	0	0	0	0	7
08:30 AM	0	1	0	1	2	0	2	4	0	0	0	0	0	0	0	0	5
08:45 AM	0	3	0	3	1	0	3	4	0	0	0	0	0	0	0	0	7
Total	0	14	0	14	7	0	9	16	0	0	0	0	0	0	0	0	30
Grand Total	0	34	1	35	10	0	12	22	0	3	0	3	0	0	0	0	60
Apprch %	0	97.1	2.9		45.5	0	54.5		0	100	0		0	0	0		
Total %	0	56.7	1.7	58.3	16.7	0	20	36.7	0	5	0	5	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	**6**	0	**6**	0	0	1	1	0	0	0	0	0	0	0	0	7
08:00 AM	0	5	0	5	**3**	0	**3**	**6**	0	0	0	0	0	0	0	0	**11**
08:15 AM	0	5	0	5	1	0	1	2	0	0	0	0	0	0	0	0	7
Total Volume	0	17	0	17	4	0	5	9	0	0	0	0	0	0	0	0	26
% App. Total	0	100	0		44.4	0	55.6		0	0	0		0	0	0		
PHF	.000	.708	.000	.708	.333	.000	.417	.375	.000	.000	.000	.000	.000	.000	.000	.000	.591

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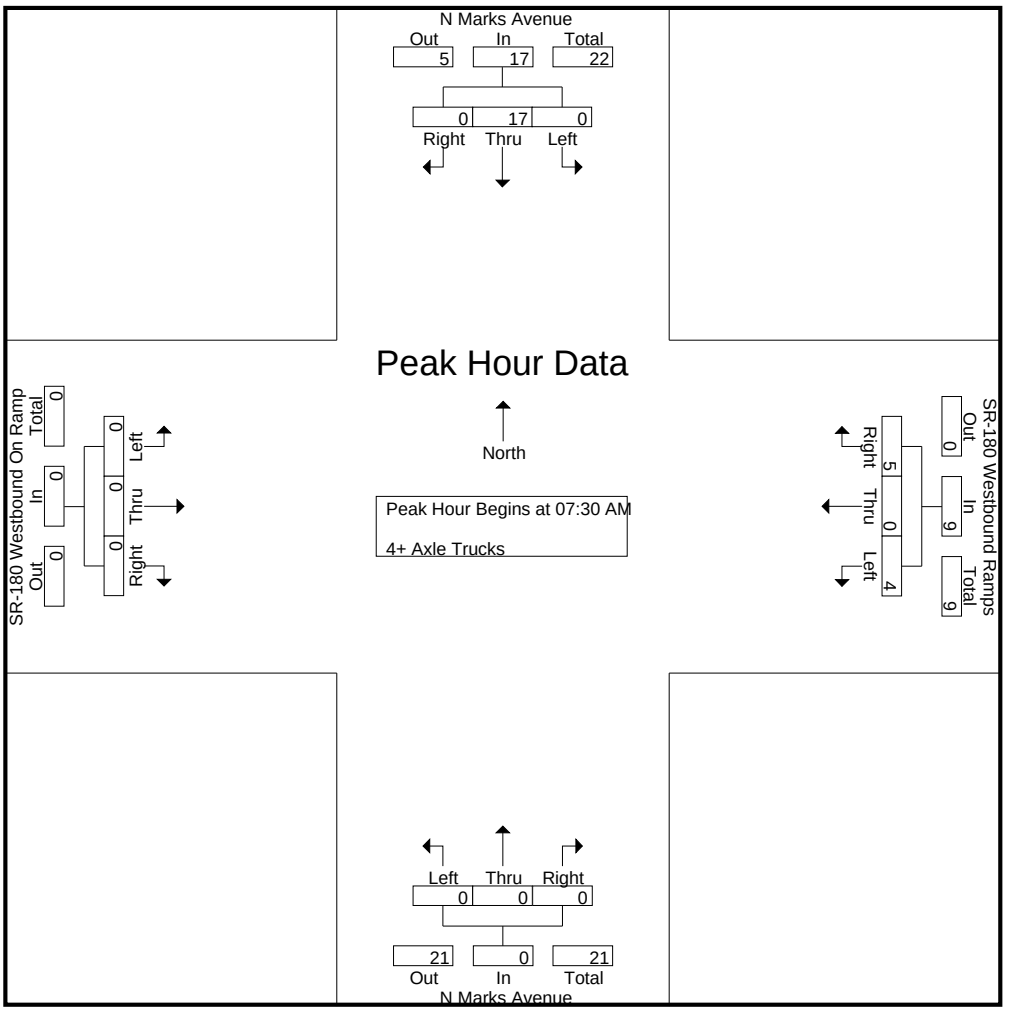
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**6**	0	**6**	0	0	1	1	0	0	0	0	0	0	0	0
+30 mins.	0	5	0	5	**3**	0	**3**	**6**	0	0	0	0	0	0	0	0
+45 mins.	0	5	0	5	1	0	1	2	0	0	0	0	0	0	0	0
Total Volume	0	17	0	17	4	0	5	9	0	0	0	0	0	0	0	0
% App. Total	0	100	0		44.4	0	55.6		0	0	0		0	0	0	
PHF	.000	.708	.000	.708	.333	.000	.417	.375	.000	.000	.000	.000	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

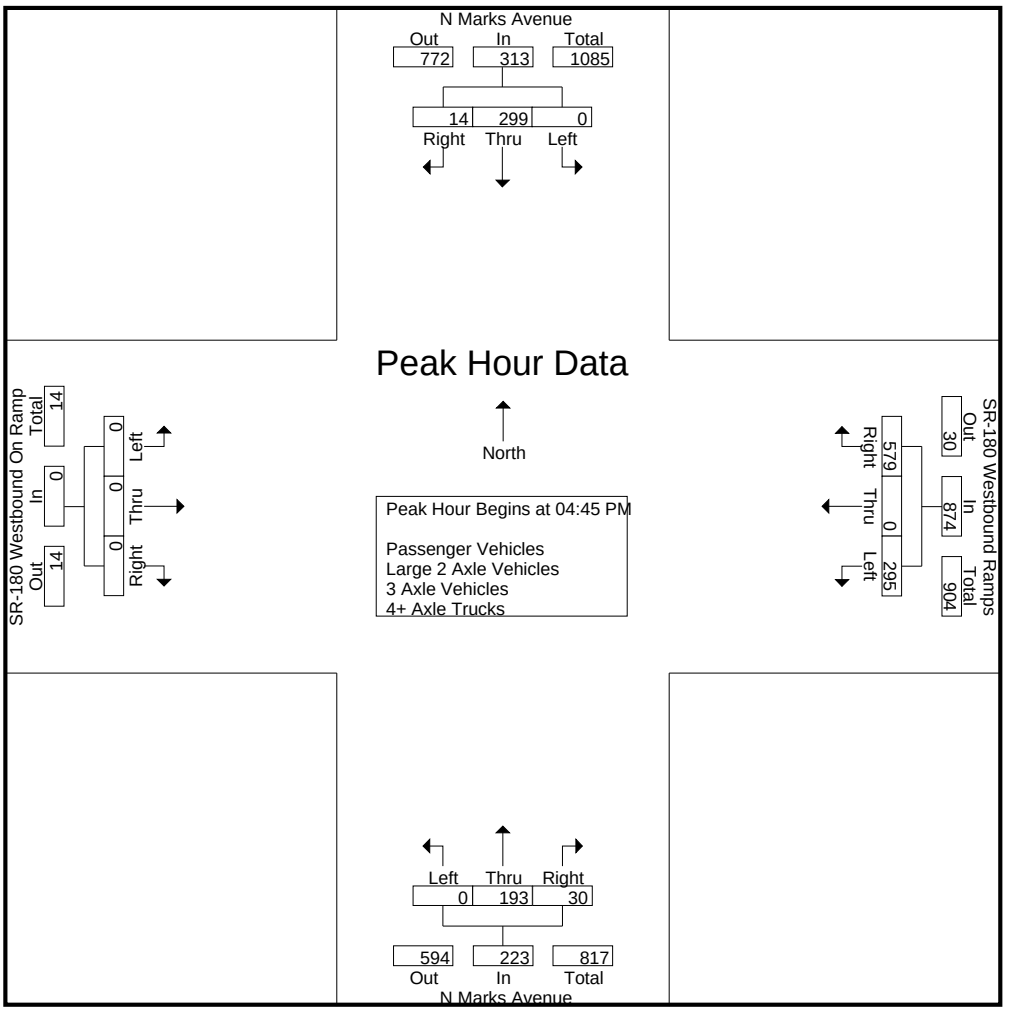
	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	77	6	83	71	0	121	192	0	53	13	66	0	0	0	0	341
04:15 PM	0	94	6	100	69	0	122	191	0	37	9	46	0	0	0	0	337
04:30 PM	0	82	7	89	59	0	117	176	0	60	6	66	0	0	0	0	331
04:45 PM	0	54	5	59	59	0	149	208	0	52	5	57	0	0	0	0	324
Total	0	307	24	331	258	0	509	767	0	202	33	235	0	0	0	0	1333
05:00 PM	0	106	3	109	79	0	133	212	0	46	10	56	0	0	0	0	377
05:15 PM	0	70	2	72	75	0	150	225	0	55	9	64	0	0	0	0	361
05:30 PM	0	69	4	73	82	0	147	229	0	40	6	46	0	0	0	0	348
05:45 PM	0	50	5	55	65	0	99	164	0	36	4	40	0	0	0	0	259
Total	0	295	14	309	301	0	529	830	0	177	29	206	0	0	0	0	1345
Grand Total	0	602	38	640	559	0	1038	1597	0	379	62	441	0	0	0	0	2678
Apprch %	0	94.1	5.9		35	0	65		0	85.9	14.1		0	0	0		
Total %	0	22.5	1.4	23.9	20.9	0	38.8	59.6	0	14.2	2.3	16.5	0	0	0	0	
Passenger Vehicles	0	569	34	603	507	0	938	1445	0	361	59	420	0	0	0	0	2468
% Passenger Vehicles	0	94.5	89.5	94.2	90.7	0	90.4	90.5	0	95.3	95.2	95.2	0	0	0	0	92.2
Large 2 Axle Vehicles	0	6	0	6	10	0	21	31	0	2	0	2	0	0	0	0	39
% Large 2 Axle Vehicles	0	1	0	0.9	1.8	0	2	1.9	0	0.5	0	0.5	0	0	0	0	1.5
3 Axle Vehicles	0	9	3	12	19	0	23	42	0	4	2	6	0	0	0	0	60
% 3 Axle Vehicles	0	1.5	7.9	1.9	3.4	0	2.2	2.6	0	1.1	3.2	1.4	0	0	0	0	2.2
4+ Axle Trucks	0	18	1	19	23	0	56	79	0	12	1	13	0	0	0	0	111
% 4+ Axle Trucks	0	3	2.6	3	4.1	0	5.4	4.9	0	3.2	1.6	2.9	0	0	0	0	4.1

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	54	**5**	59	59	0	149	208	0	52	5	57	0	0	0	0	324
05:00 PM	0	**106**	3	**109**	79	0	133	212	0	46	**10**	56	0	0	0	0	**377**
05:15 PM	0	70	2	72	75	0	**150**	225	0	**55**	9	**64**	0	0	0	0	361
05:30 PM	0	69	4	73	**82**	0	147	**229**	0	40	6	46	0	0	0	0	348
Total Volume	0	299	14	313	295	0	579	874	0	193	30	223	0	0	0	0	1410
% App. Total	0	95.5	4.5		33.8	0	66.2		0	86.5	13.5		0	0	0		
PHF	.000	.705	.700	.718	.899	.000	.965	.954	.000	.877	.750	.871	.000	.000	.000	.000	.935

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:30 PM				04:00 PM			
+0 mins.	0	94	6	100	59	0	149	208	0	**60**	6	**66**	0	0	0	0
+15 mins.	0	82	**7**	89	79	0	133	212	0	52	5	57	0	0	0	0
+30 mins.	0	54	5	59	75	0	**150**	225	0	46	**10**	56	0	0	0	0
+45 mins.	0	**106**	3	**109**	**82**	0	147	**229**	0	55	9	64	0	0	0	0
Total Volume	0	336	21	357	295	0	579	874	0	213	30	243	0	0	0	0
% App. Total	0	94.1	5.9		33.8	0	66.2		0	87.7	12.3		0	0	0	
PHF	.000	.792	.750	.819	.899	.000	.965	.954	.000	.888	.750	.920	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	70	5	75	64	0	111	175	0	50	11	61	0	0	0	0	311
04:15 PM	0	90	4	94	56	0	107	163	0	37	8	45	0	0	0	0	302
04:30 PM	0	78	7	85	52	0	102	154	0	57	6	63	0	0	0	0	302
04:45 PM	0	51	5	56	55	0	128	183	0	50	5	55	0	0	0	0	294
Total	0	289	21	310	227	0	448	675	0	194	30	224	0	0	0	0	1209
05:00 PM	0	102	3	105	75	0	126	201	0	45	10	55	0	0	0	0	361
05:15 PM	0	67	2	69	68	0	137	205	0	54	9	63	0	0	0	0	337
05:30 PM	0	61	3	64	75	0	135	210	0	37	6	43	0	0	0	0	317
05:45 PM	0	50	5	55	62	0	92	154	0	31	4	35	0	0	0	0	244
Total	0	280	13	293	280	0	490	770	0	167	29	196	0	0	0	0	1259
Grand Total	0	569	34	603	507	0	938	1445	0	361	59	420	0	0	0	0	2468
Apprch %	0	94.4	5.6		35.1	0	64.9		0	86	14		0	0	0		
Total %	0	23.1	1.4	24.4	20.5	0	38	58.5	0	14.6	2.4	17	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	51	**5**	56	55	0	128	183	0	50	5	55	0	0	0	0	294
05:00 PM	0	**102**	3	**105**	**75**	0	126	201	0	45	**10**	55	0	0	0	0	**361**
05:15 PM	0	67	2	69	68	0	**137**	205	0	**54**	9	**63**	0	0	0	0	337
05:30 PM	0	61	3	64	75	0	135	**210**	0	37	6	43	0	0	0	0	317
Total Volume	0	281	13	294	273	0	526	799	0	186	30	216	0	0	0	0	1309
% App. Total	0	95.6	4.4		34.2	0	65.8		0	86.1	13.9		0	0	0		
PHF	.000	.689	.650	.700	.910	.000	.960	.951	.000	.861	.750	.857	.000	.000	.000	.000	.907

Counts Unlimited, Inc.
PO Box 1178
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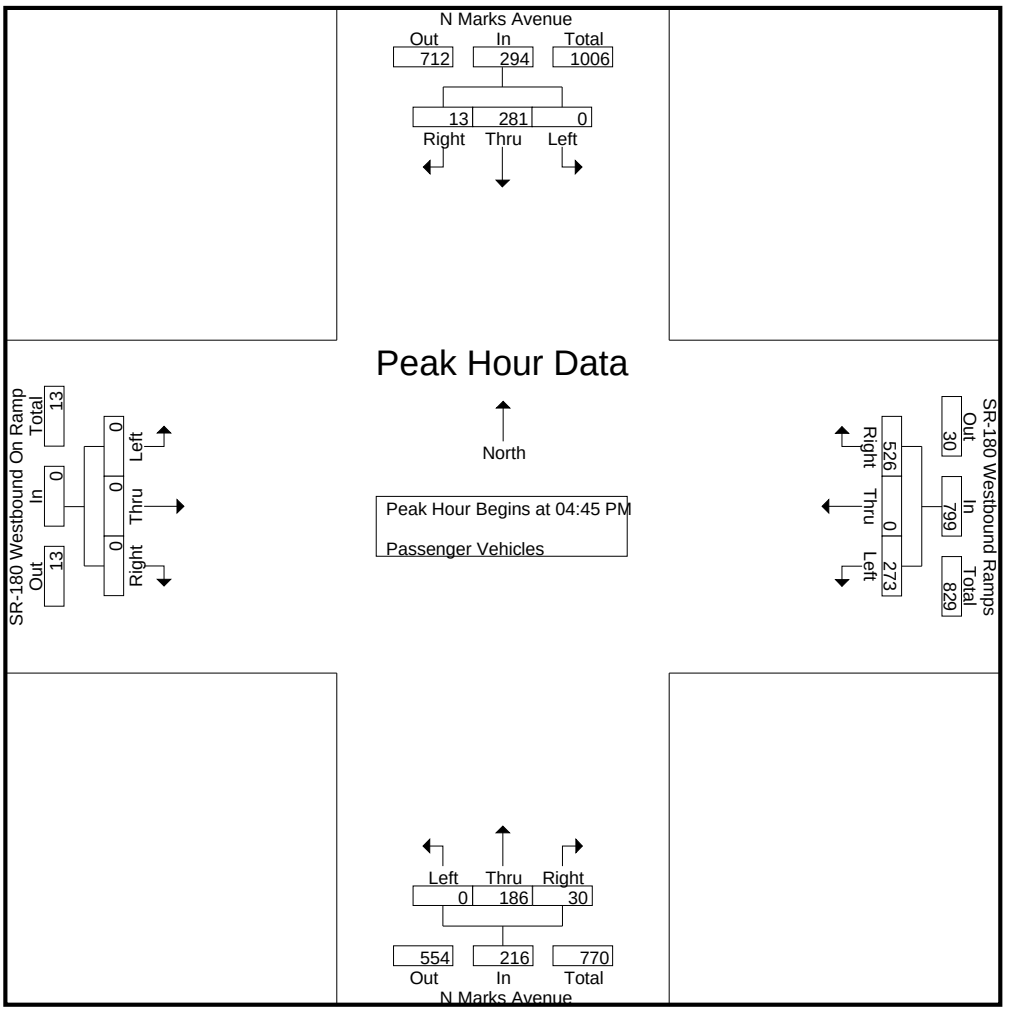
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	51	**5**	56	55	0	128	183	0	50	5	55	0	0	0	0
+15 mins.	0	**102**	3	**105**	**75**	0	126	201	0	45	**10**	55	0	0	0	0
+30 mins.	0	67	2	69	68	0	**137**	205	0	**54**	9	**63**	0	0	0	0
+45 mins.	0	61	3	64	75	0	135	**210**	0	37	6	43	0	0	0	0
Total Volume	0	281	13	294	273	0	526	799	0	186	30	216	0	0	0	0
% App. Total	0	95.6	4.4		34.2	0	65.8		0	86.1	13.9		0	0	0	
PHF	.000	.689	.650	.700	.910	.000	.960	.951	.000	.861	.750	.857	.000	.000	.000	.000

Counts Unlimited, Inc.
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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	1	0	2	3	0	0	0	0	0	0	0	0	5
04:15 PM	0	0	0	0	3	0	5	8	0	0	0	0	0	0	0	0	8
04:30 PM	0	1	0	1	1	0	7	8	0	0	0	0	0	0	0	0	9
04:45 PM	0	0	0	0	3	0	2	5	0	1	0	1	0	0	0	0	6
Total	0	3	0	3	8	0	16	24	0	1	0	1	0	0	0	0	28
05:00 PM	0	1	0	1	1	0	1	2	0	0	0	0	0	0	0	0	3
05:15 PM	0	1	0	1	1	0	2	3	0	0	0	0	0	0	0	0	4
05:30 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	2	0	5	7	0	1	0	1	0	0	0	0	11
Grand Total	0	6	0	6	10	0	21	31	0	2	0	2	0	0	0	0	39
Apprch %	0	100	0		32.3	0	67.7		0	100	0		0	0	0		
Total %	0	15.4	0	15.4	25.6	0	53.8	79.5	0	5.1	0	5.1	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	**3**	0	**2**	**5**	0	**1**	0	**1**	0	0	0	0	**6**
05:00 PM	0	**1**	0	**1**	1	0	1	2	0	0	0	0	0	0	0	0	3
05:15 PM	0	1	0	1	1	0	2	3	0	0	0	0	0	0	0	0	4
05:30 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
Total Volume	0	3	0	3	5	0	6	11	0	2	0	2	0	0	0	0	16
% App. Total	0	100	0		45.5	0	54.5		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.417	.000	.750	.550	.000	.500	.000	.500	.000	.000	.000	.000	.667

Counts Unlimited, Inc.
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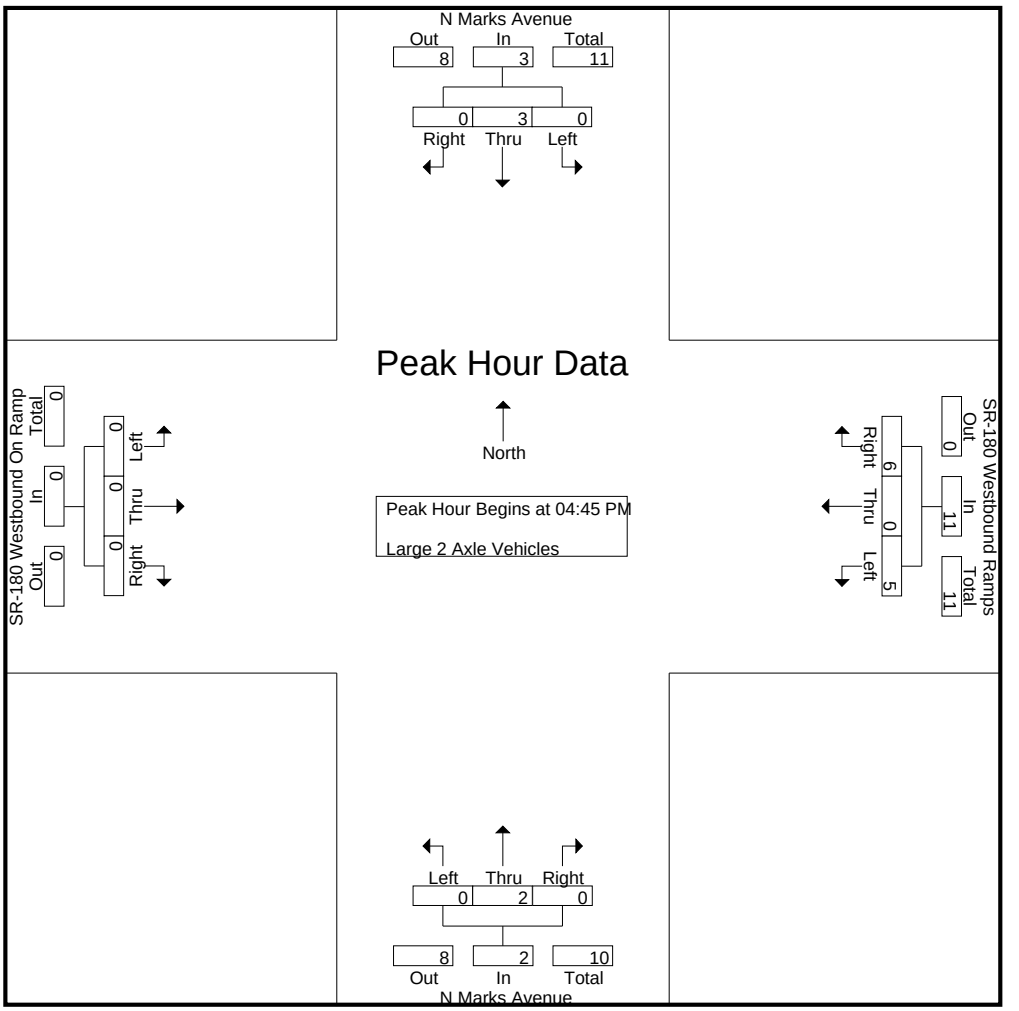
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	**3**	0	**2**	**5**	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	**1**	0	**1**	1	0	1	2	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	1	0	2	3	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0
Total Volume	0	3	0	3	5	0	6	11	0	2	0	2	0	0	0	0
% App. Total	0	100	0		45.5	0	54.5		0	100	0		0	0	0	
PHF	.000	.750	.000	.750	.417	.000	.750	.550	.000	.500	.000	.500	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	3	0	2	5	0	1	2	3	0	0	0	0	9
04:15 PM	0	2	1	3	6	0	3	9	0	0	0	0	0	0	0	0	12
04:30 PM	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	5
04:45 PM	0	2	0	2	1	0	5	6	0	0	0	0	0	0	0	0	8
Total	0	6	2	8	10	0	12	22	0	2	2	4	0	0	0	0	34
05:00 PM	0	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0	3
05:15 PM	0	1	0	1	4	0	4	8	0	1	0	1	0	0	0	0	10
05:30 PM	0	2	1	3	2	0	4	6	0	0	0	0	0	0	0	0	9
05:45 PM	0	0	0	0	2	0	1	3	0	1	0	1	0	0	0	0	4
Total	0	3	1	4	9	0	11	20	0	2	0	2	0	0	0	0	26
Grand Total	0	9	3	12	19	0	23	42	0	4	2	6	0	0	0	0	60
Apprch %	0	75	25		45.2	0	54.8		0	66.7	33.3		0	0	0		
Total %	0	15	5	20	31.7	0	38.3	70	0	6.7	3.3	10	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**2**	0	2	1	0	**5**	6	0	0	0	0	0	0	0	0	8
05:00 PM	0	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0	3
05:15 PM	0	1	0	1	**4**	0	4	**8**	0	**1**	0	**1**	0	0	0	0	**10**
05:30 PM	0	2	**1**	**3**	2	0	4	6	0	0	0	0	0	0	0	0	9
Total Volume	0	5	1	6	8	0	15	23	0	1	0	1	0	0	0	0	30
% App. Total	0	83.3	16.7		34.8	0	65.2		0	100	0		0	0	0		
PHF	.000	.625	.250	.500	.500	.000	.750	.719	.000	.250	.000	.250	.000	.000	.000	.000	.750

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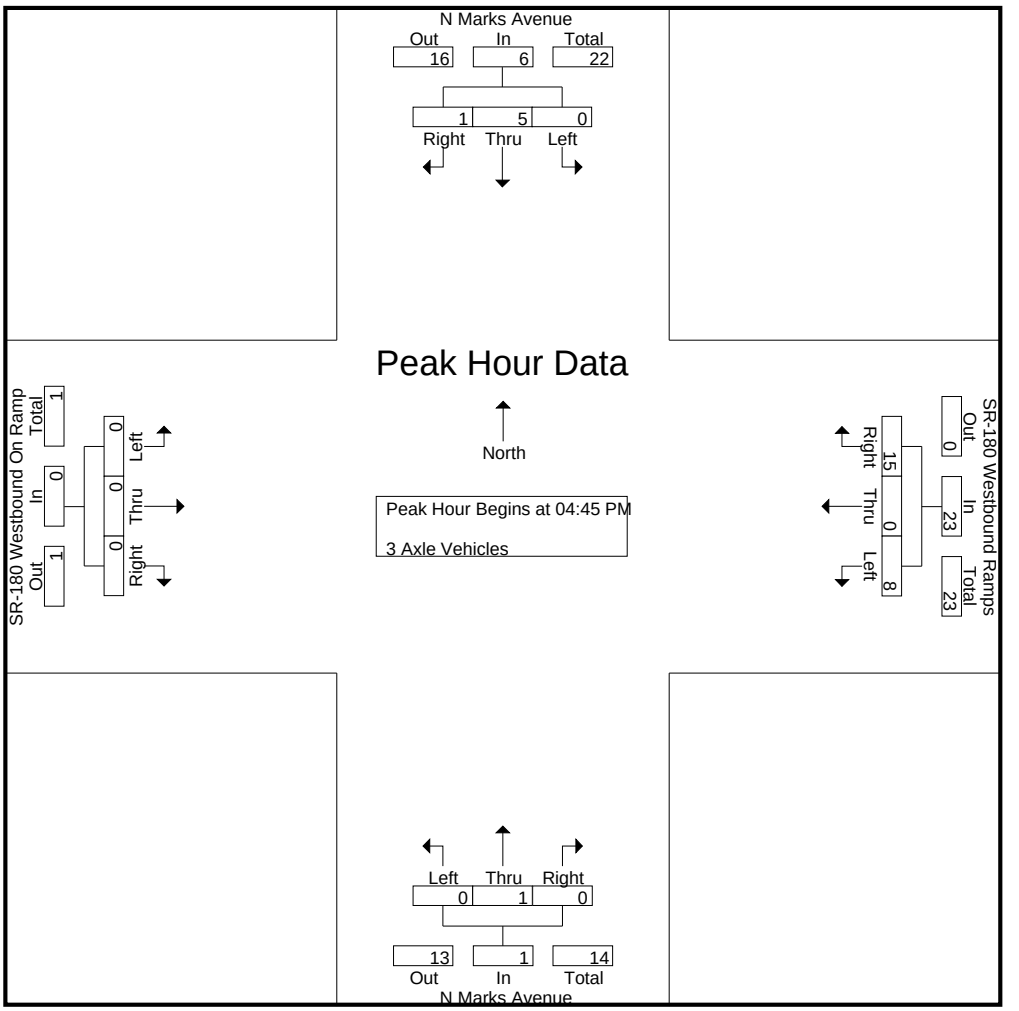
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	**2**	0	2	1	0	**5**	6	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	**4**	0	4	**8**	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	2	**1**	**3**	2	0	4	6	0	0	0	0	0	0	0	0
Total Volume	0	5	1	6	8	0	15	23	0	1	0	1	0	0	0	0
% App. Total	0	83.3	16.7		34.8	0	65.2		0	100	0		0	0	0	
PHF	.000	.625	.250	.500	.500	.000	.750	.719	.000	.250	.000	.250	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	5	0	5	3	0	6	9	0	2	0	2	0	0	0	0	16
04:15 PM	0	2	1	3	4	0	7	11	0	0	1	1	0	0	0	0	15
04:30 PM	0	1	0	1	6	0	6	12	0	2	0	2	0	0	0	0	15
04:45 PM	0	1	0	1	0	0	14	14	0	1	0	1	0	0	0	0	16
Total	0	9	1	10	13	0	33	46	0	5	1	6	0	0	0	0	62
05:00 PM	0	3	0	3	2	0	4	6	0	1	0	1	0	0	0	0	10
05:15 PM	0	1	0	1	2	0	7	9	0	0	0	0	0	0	0	0	10
05:30 PM	0	5	0	5	5	0	7	12	0	2	0	2	0	0	0	0	19
05:45 PM	0	0	0	0	1	0	5	6	0	4	0	4	0	0	0	0	10
Total	0	9	0	9	10	0	23	33	0	7	0	7	0	0	0	0	49
Grand Total	0	18	1	19	23	0	56	79	0	12	1	13	0	0	0	0	111
Apprch %	0	94.7	5.3		29.1	0	70.9		0	92.3	7.7		0	0	0		
Total %	0	16.2	0.9	17.1	20.7	0	50.5	71.2	0	10.8	0.9	11.7	0	0	0	0	

	N Marks Avenue Southbound				SR-180 Westbound Ramps Westbound				N Marks Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	**14**	**14**	0	1	0	1	0	0	0	0	16
05:00 PM	0	3	0	3	2	0	4	6	0	1	0	1	0	0	0	0	10
05:15 PM	0	1	0	1	2	0	7	9	0	0	0	0	0	0	0	0	10
05:30 PM	0	**5**	0	**5**	**5**	0	7	12	0	**2**	0	**2**	0	0	0	0	**19**
Total Volume	0	10	0	10	9	0	32	41	0	4	0	4	0	0	0	0	55
% App. Total	0	100	0		22	0	78		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.450	.000	.571	.732	.000	.500	.000	.500	.000	.000	.000	.000	.724

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 04_FSO_Marks_180W PMC
Site Code : 00324843
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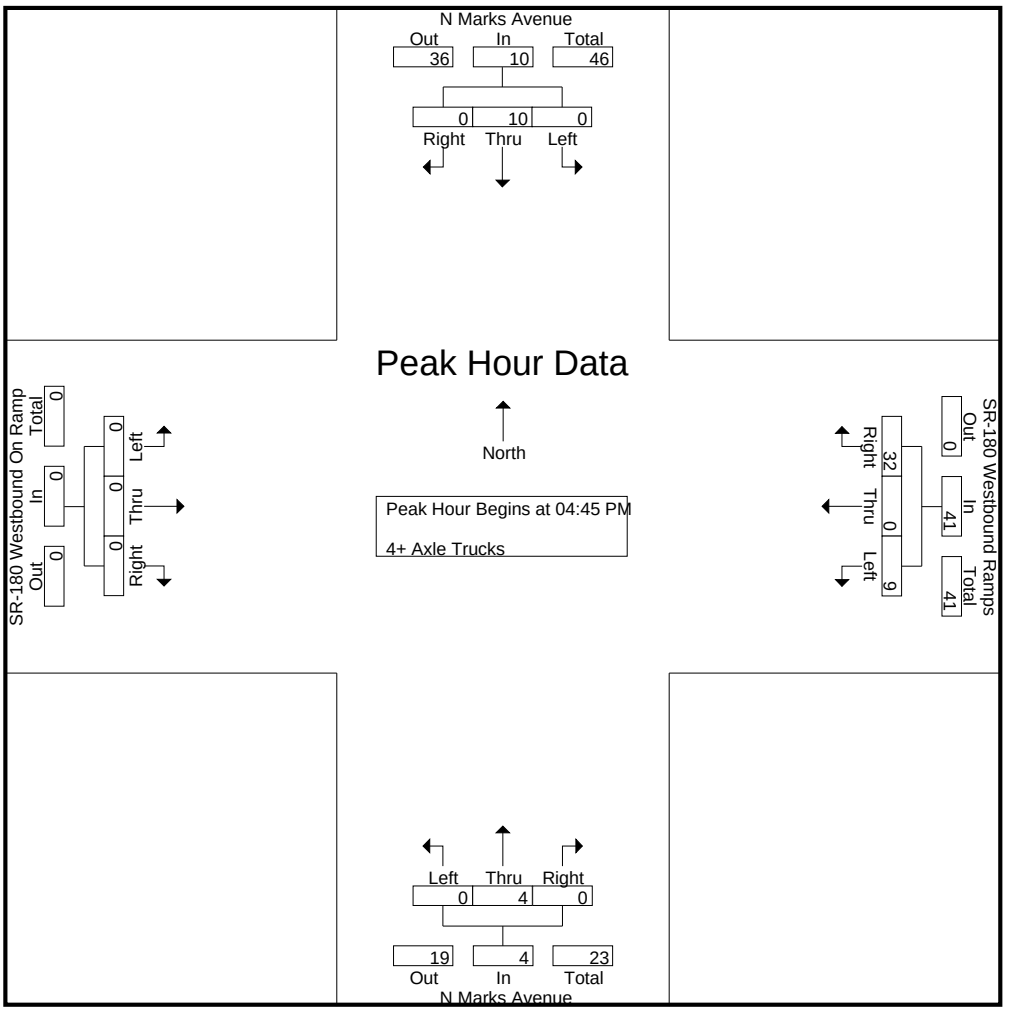

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	1	0	1	0	0	**14**	**14**	0	1	0	1	0	0	0	0
+15 mins.	0	3	0	3	2	0	4	6	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	2	0	7	9	0	0	0	0	0	0	0	0
+45 mins.	0	**5**	0	**5**	**5**	0	7	12	0	**2**	0	**2**	0	0	0	0
Total Volume	0	10	0	10	9	0	32	41	0	4	0	4	0	0	0	0
% App. Total	0	100	0		22	0	78		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.450	.000	.571	.732	.000	.500	.000	.500	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

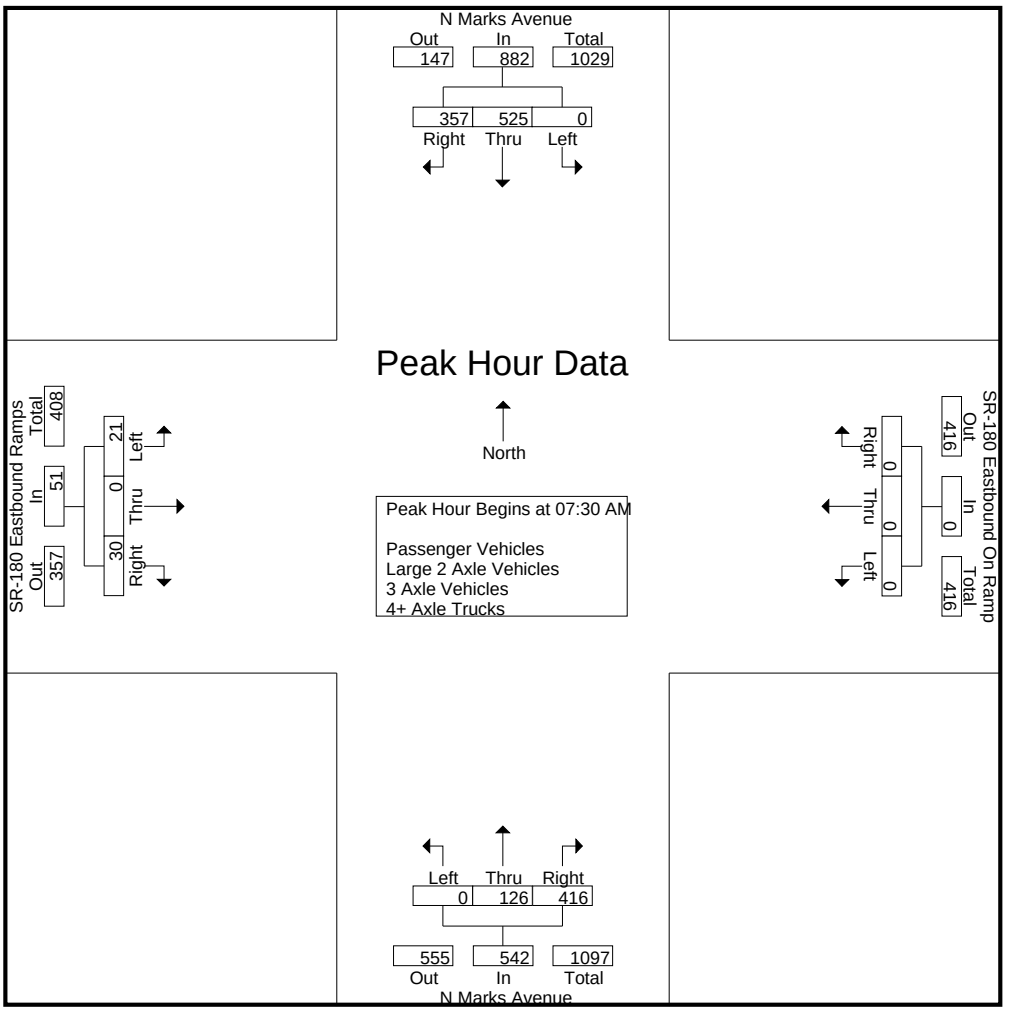
	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	63	73	136	0	0	0	0	0	16	50	66	0	0	3	3	205
07:15 AM	0	84	95	179	0	0	0	0	0	23	80	103	2	0	3	5	287
07:30 AM	0	113	127	240	0	0	0	0	0	19	106	125	2	0	4	6	371
07:45 AM	0	131	118	249	0	0	0	0	0	30	100	130	5	0	5	10	389
Total	0	391	413	804	0	0	0	0	0	88	336	424	9	0	15	24	1252
08:00 AM	0	156	63	219	0	0	0	0	0	27	97	124	8	0	14	22	365
08:15 AM	0	125	49	174	0	0	0	0	0	50	113	163	6	0	7	13	350
08:30 AM	0	78	41	119	0	0	0	0	0	39	85	124	3	0	4	7	250
08:45 AM	0	88	33	121	0	0	0	0	0	21	59	80	3	0	4	7	208
Total	0	447	186	633	0	0	0	0	0	137	354	491	20	0	29	49	1173
Grand Total	0	838	599	1437	0	0	0	0	0	225	690	915	29	0	44	73	2425
Apprch %	0	58.3	41.7		0	0	0		0	24.6	75.4		39.7	0	60.3		
Total %	0	34.6	24.7	59.3	0	0	0	0	0	9.3	28.5	37.7	1.2	0	1.8	3	
Passenger Vehicles	0	789	518	1307	0	0	0	0	0	198	633	831	27	0	41	68	2206
% Passenger Vehicles	0	94.2	86.5	91	0	0	0	0	0	88	91.7	90.8	93.1	0	93.2	93.2	91
Large 2 Axle Vehicles	0	20	19	39	0	0	0	0	0	10	12	22	1	0	1	2	63
% Large 2 Axle Vehicles	0	2.4	3.2	2.7	0	0	0	0	0	4.4	1.7	2.4	3.4	0	2.3	2.7	2.6
3 Axle Vehicles	0	11	24	35	0	0	0	0	0	4	13	17	0	0	1	1	53
% 3 Axle Vehicles	0	1.3	4	2.4	0	0	0	0	0	1.8	1.9	1.9	0	0	2.3	1.4	2.2
4+ Axle Trucks	0	18	38	56	0	0	0	0	0	13	32	45	1	0	1	2	103
% 4+ Axle Trucks	0	2.1	6.3	3.9	0	0	0	0	0	5.8	4.6	4.9	3.4	0	2.3	2.7	4.2

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	113	**127**	240	0	0	0	0	0	19	106	125	2	0	4	6	371
07:45 AM	0	131	118	**249**	0	0	0	0	0	30	100	130	5	0	5	10	**389**
08:00 AM	0	**156**	63	219	0	0	0	0	0	27	97	124	**8**	0	**14**	**22**	365
08:15 AM	0	125	49	174	0	0	0	0	0	**50**	**113**	**163**	6	0	7	13	350
Total Volume	0	525	357	882	0	0	0	0	0	126	416	542	21	0	30	51	1475
% App. Total	0	59.5	40.5		0	0	0		0	23.2	76.8		41.2	0	58.8		
PHF	.000	.841	.703	.886	.000	.000	.000	.000	.000	.630	.920	.831	.656	.000	.536	.580	.948

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:30 AM				07:45 AM			
+0 mins.	0	84	95	179	0	0	0	0	0	19	106	125	5	0	5	10
+15 mins.	0	113	**127**	240	0	0	0	0	0	30	100	130	**8**	0	**14**	**22**
+30 mins.	0	131	118	**249**	0	0	0	0	0	27	97	124	6	0	7	13
+45 mins.	0	**156**	63	219	0	0	0	0	0	**50**	**113**	**163**	3	0	4	7
Total Volume	0	484	403	887	0	0	0	0	0	126	416	542	22	0	30	52
% App. Total	0	54.6	45.4		0	0	0		0	23.2	76.8		42.3	0	57.7	
PHF	.000	.776	.793	.891	.000	.000	.000	.000	.000	.630	.920	.831	.688	.000	.536	.591

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	59	53	112	0	0	0	0	0	11	48	59	0	0	3	3	174
07:15 AM	0	79	86	165	0	0	0	0	0	20	72	92	2	0	3	5	262
07:30 AM	0	109	119	228	0	0	0	0	0	15	99	114	2	0	4	6	348
07:45 AM	0	126	103	229	0	0	0	0	0	29	99	128	5	0	4	9	366
Total	0	373	361	734	0	0	0	0	0	75	318	393	9	0	14	23	1150
08:00 AM	0	147	54	201	0	0	0	0	0	22	90	112	7	0	12	19	332
08:15 AM	0	116	40	156	0	0	0	0	0	46	102	148	6	0	7	13	317
08:30 AM	0	72	34	106	0	0	0	0	0	37	73	110	3	0	4	7	223
08:45 AM	0	81	29	110	0	0	0	0	0	18	50	68	2	0	4	6	184
Total	0	416	157	573	0	0	0	0	0	123	315	438	18	0	27	45	1056
Grand Total	0	789	518	1307	0	0	0	0	0	198	633	831	27	0	41	68	2206
Apprch %	0	60.4	39.6		0	0	0		0	23.8	76.2		39.7	0	60.3		
Total %	0	35.8	23.5	59.2	0	0	0	0	0	9	28.7	37.7	1.2	0	1.9	3.1	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	109	**119**	228	0	0	0	0	0	15	99	114	2	0	4	6	348
07:45 AM	0	126	103	**229**	0	0	0	0	0	29	99	128	5	0	4	9	**366**
08:00 AM	0	**147**	54	201	0	0	0	0	0	22	90	112	**7**	0	**12**	**19**	332
08:15 AM	0	116	40	156	0	0	0	0	0	**46**	**102**	**148**	6	0	7	13	317
Total Volume	0	498	316	814	0	0	0	0	0	112	390	502	20	0	27	47	1363
% App. Total	0	61.2	38.8		0	0	0		0	22.3	77.7		42.6	0	57.4		
PHF	.000	.847	.664	.889	.000	.000	.000	.000	.000	.609	.956	.848	.714	.000	.563	.618	.931

Counts Unlimited, Inc.
PO Box 1178
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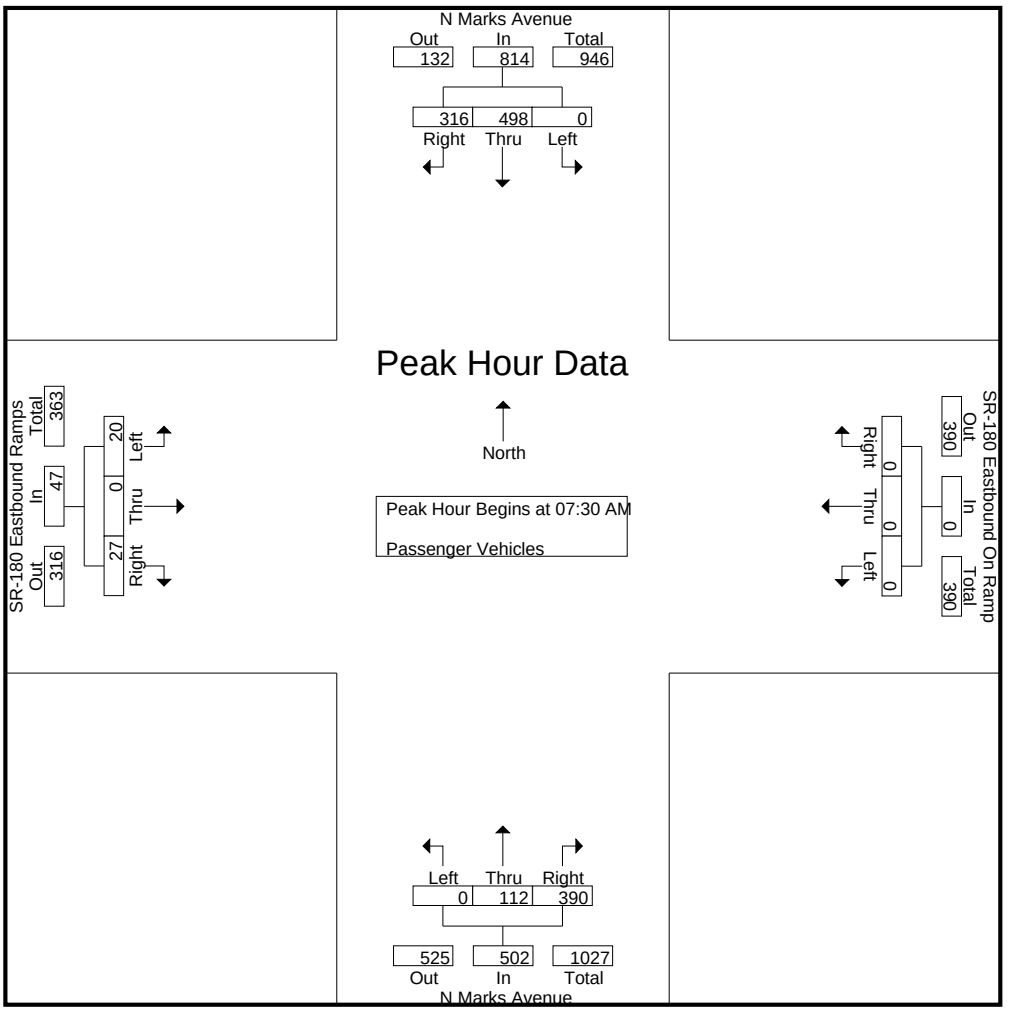
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	109	**119**	228	0	0	0	0	0	15	99	114	2	0	4	6
+15 mins.	0	126	103	**229**	0	0	0	0	0	29	99	128	5	0	4	9
+30 mins.	0	**147**	54	201	0	0	0	0	0	22	90	112	**7**	0	**12**	**19**
+45 mins.	0	116	40	156	0	0	0	0	0	**46**	**102**	**148**	6	0	7	13
Total Volume	0	498	316	814	0	0	0	0	0	112	390	502	20	0	27	47
% App. Total	0	61.2	38.8		0	0	0		0	22.3	77.7		42.6	0	57.4	
PHF	.000	.847	.664	.889	.000	.000	.000	.000	.000	.609	.956	.848	.714	.000	.563	.618

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	10	12	0	0	0	0	0	2	0	2	0	0	0	0	14
07:15 AM	0	3	4	7	0	0	0	0	0	2	1	3	0	0	0	0	10
07:30 AM	0	1	3	4	0	0	0	0	0	0	3	3	0	0	0	0	7
07:45 AM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	8	18	26	0	0	0	0	0	4	4	8	0	0	0	0	34
08:00 AM	0	2	1	3	0	0	0	0	0	2	2	4	0	0	1	1	8
08:15 AM	0	6	0	6	0	0	0	0	0	2	3	5	0	0	0	0	11
08:30 AM	0	2	0	2	0	0	0	0	0	1	2	3	0	0	0	0	5
08:45 AM	0	2	0	2	0	0	0	0	0	1	1	2	1	0	0	1	5
Total	0	12	1	13	0	0	0	0	0	6	8	14	1	0	1	2	29
Grand Total	0	20	19	39	0	0	0	0	0	10	12	22	1	0	1	2	63
Apprch %	0	51.3	48.7		0	0	0		0	45.5	54.5		50	0	50		
Total %	0	31.7	30.2	61.9	0	0	0	0	0	15.9	19	34.9	1.6	0	1.6	3.2	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	**3**	4	0	0	0	0	0	0	**3**	3	0	0	0	0	7
07:45 AM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00 AM	0	2	1	3	0	0	0	0	0	**2**	2	4	0	0	**1**	**1**	8
08:15 AM	0	**6**	0	**6**	0	0	0	0	0	2	3	**5**	0	0	0	0	**11**
Total Volume	0	11	5	16	0	0	0	0	0	4	8	12	0	0	1	1	29
% App. Total	0	68.8	31.2		0	0	0		0	33.3	66.7		0	0	100		
PHF	.000	.458	.417	.667	.000	.000	.000	.000	.000	.500	.667	.600	.000	.000	.250	.250	.659

Counts Unlimited, Inc.
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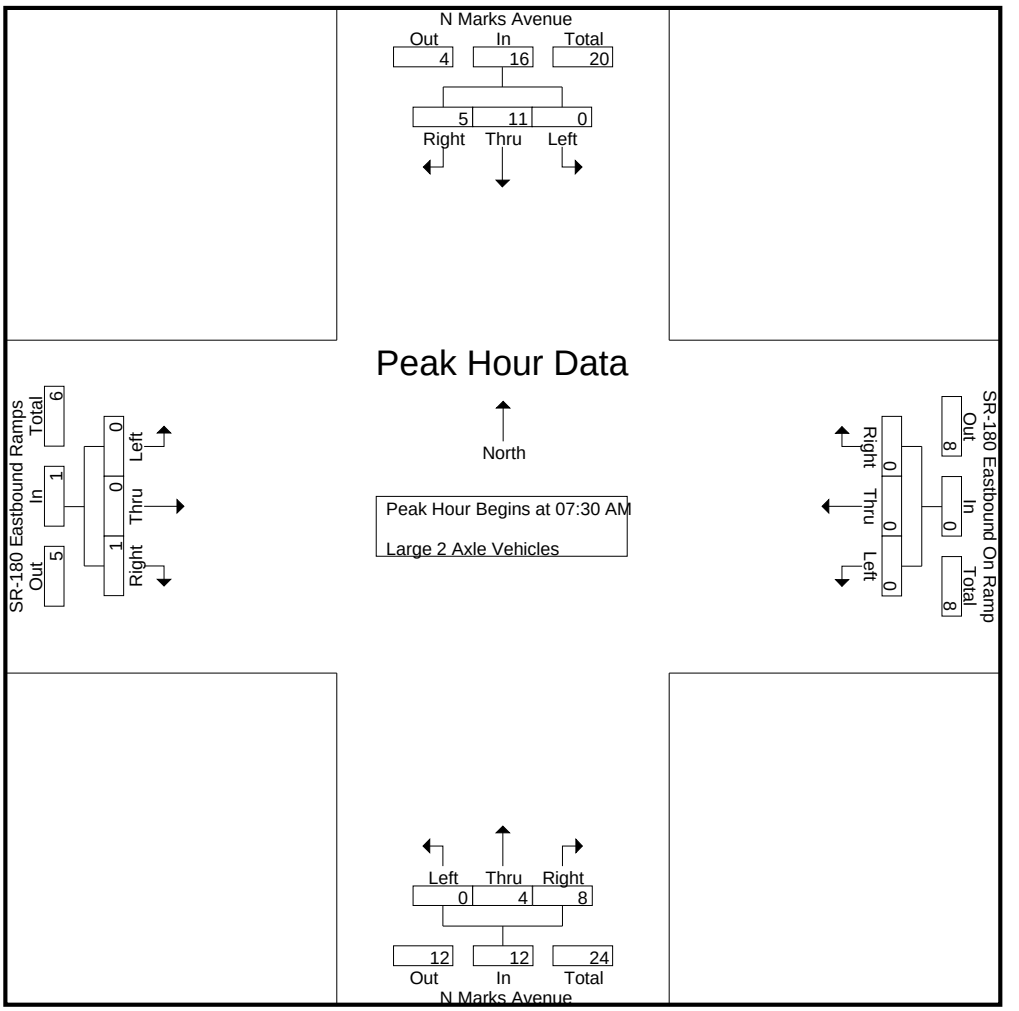
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	**3**	4	0	0	0	0	0	0	**3**	3	0	0	0	0
+15 mins.	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	1	3	0	0	0	0	0	**2**	2	4	0	0	**1**	**1**
+45 mins.	0	**6**	0	**6**	0	0	0	0	0	2	3	**5**	0	0	0	0
Total Volume	0	11	5	16	0	0	0	0	0	4	8	12	0	0	1	1
% App. Total	0	68.8	31.2		0	0	0		0	33.3	66.7		0	0	100	
PHF	.000	.458	.417	.667	.000	.000	.000	.000	.000	.500	.667	.600	.000	.000	.250	.250

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	2	2	0	0	0	0	0	0	3	3	0	0	0	0	5
07:30 AM	0	1	3	4	0	0	0	0	0	1	0	1	0	0	0	0	5
07:45 AM	0	3	5	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	0	4	10	14	0	0	0	0	0	1	3	4	0	0	0	0	18
08:00 AM	0	3	3	6	0	0	0	0	0	2	2	4	0	0	1	1	11
08:15 AM	0	0	5	5	0	0	0	0	0	0	1	1	0	0	0	0	6
08:30 AM	0	2	5	7	0	0	0	0	0	1	4	5	0	0	0	0	12
08:45 AM	0	2	1	3	0	0	0	0	0	0	3	3	0	0	0	0	6
Total	0	7	14	21	0	0	0	0	0	3	10	13	0	0	1	1	35
Grand Total	0	11	24	35	0	0	0	0	0	4	13	17	0	0	1	1	53
Apprch %	0	31.4	68.6		0	0	0		0	23.5	76.5		0	0	100		
Total %	0	20.8	45.3	66	0	0	0	0	0	7.5	24.5	32.1	0	0	1.9	1.9	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	3	4	0	0	0	0	0	1	0	1	0	0	0	0	5
07:45 AM	0	**3**	**5**	**8**	0	0	0	0	0	0	0	0	0	0	0	0	8
08:00 AM	0	3	3	6	0	0	0	0	0	**2**	**2**	**4**	0	0	**1**	**1**	**11**
08:15 AM	0	0	5	5	0	0	0	0	0	0	1	1	0	0	0	0	6
Total Volume	0	7	16	23	0	0	0	0	0	3	3	6	0	0	1	1	30
% App. Total	0	30.4	69.6		0	0	0		0	50	50		0	0	100		
PHF	.000	.583	.800	.719	.000	.000	.000	.000	.000	.375	.375	.375	.000	.000	.250	.250	.682

Counts Unlimited, Inc.
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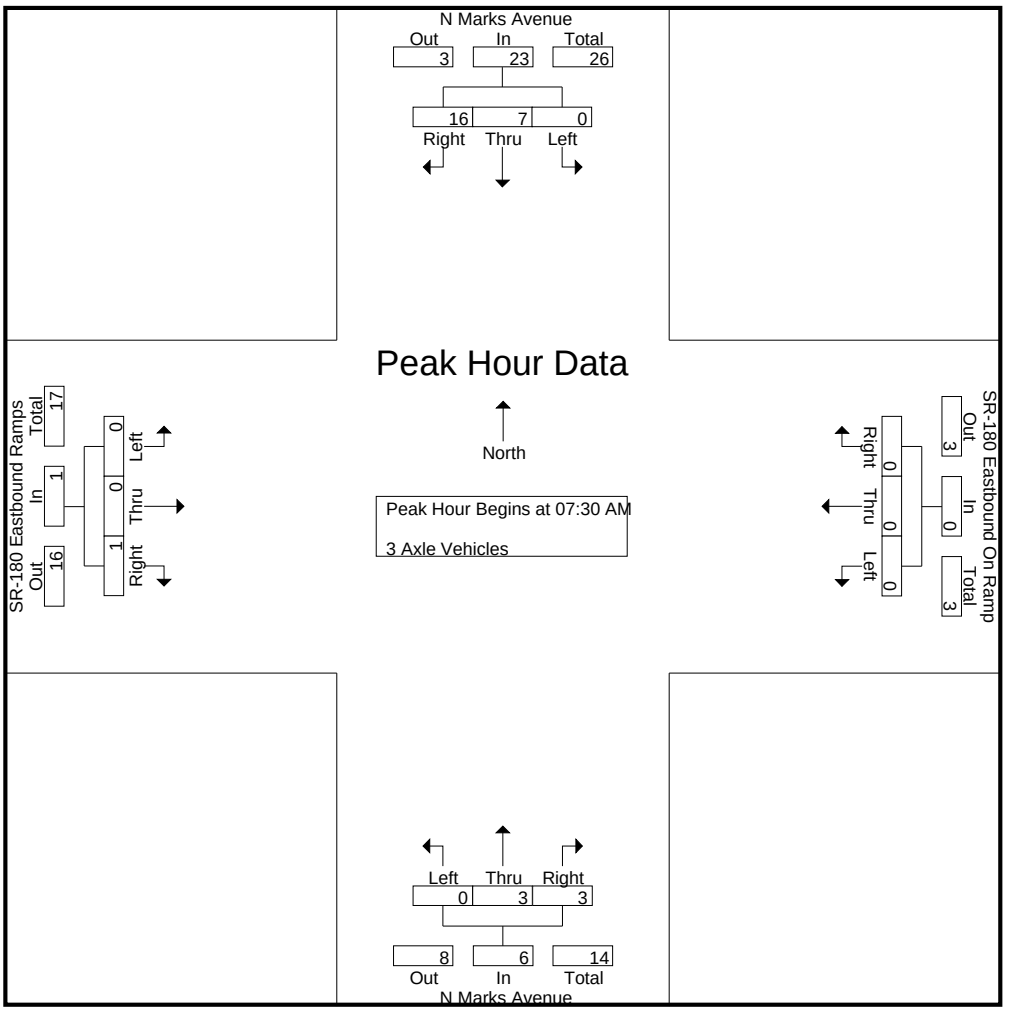
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	3	4	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	**3**	**5**	**8**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	3	3	6	0	0	0	0	0	**2**	**2**	**4**	0	0	**1**	**1**
+45 mins.	0	0	5	5	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	7	16	23	0	0	0	0	0	3	3	6	0	0	1	1
% App. Total	0	30.4	69.6		0	0	0		0	50	50		0	0	100	
PHF	.000	.583	.800	.719	.000	.000	.000	.000	.000	.375	.375	.375	.000	.000	.250	.250

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	10	12	0	0	0	0	0	3	2	5	0	0	0	0	17
07:15 AM	0	2	3	5	0	0	0	0	0	1	4	5	0	0	0	0	10
07:30 AM	0	2	2	4	0	0	0	0	0	3	4	7	0	0	0	0	11
07:45 AM	0	0	9	9	0	0	0	0	0	1	1	2	0	0	1	1	12
Total	0	6	24	30	0	0	0	0	0	8	11	19	0	0	1	1	50
08:00 AM	0	4	5	9	0	0	0	0	0	1	3	4	1	0	0	1	14
08:15 AM	0	3	4	7	0	0	0	0	0	2	7	9	0	0	0	0	16
08:30 AM	0	2	2	4	0	0	0	0	0	0	6	6	0	0	0	0	10
08:45 AM	0	3	3	6	0	0	0	0	0	2	5	7	0	0	0	0	13
Total	0	12	14	26	0	0	0	0	0	5	21	26	1	0	0	1	53
Grand Total	0	18	38	56	0	0	0	0	0	13	32	45	1	0	1	2	103
Apprch %	0	32.1	67.9		0	0	0		0	28.9	71.1		50	0	50		
Total %	0	17.5	36.9	54.4	0	0	0	0	0	12.6	31.1	43.7	1	0	1	1.9	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	2	4	0	0	0	0	0	**3**	4	7	0	0	0	0	11
07:45 AM	0	0	**9**	**9**	0	0	0	0	0	1	1	2	0	0	**1**	**1**	12
08:00 AM	0	**4**	5	9	0	0	0	0	0	1	3	4	**1**	0	0	1	14
08:15 AM	0	3	4	7	0	0	0	0	0	2	**7**	**9**	0	0	0	0	**16**
Total Volume	0	9	20	29	0	0	0	0	0	7	15	22	1	0	1	2	53
% App. Total	0	31	69		0	0	0		0	31.8	68.2		50	0	50		
PHF	.000	.563	.556	.806	.000	.000	.000	.000	.000	.583	.536	.611	.250	.000	.250	.500	.828

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E AMC
Site Code : 00324843
Start Date : 9/25/2024
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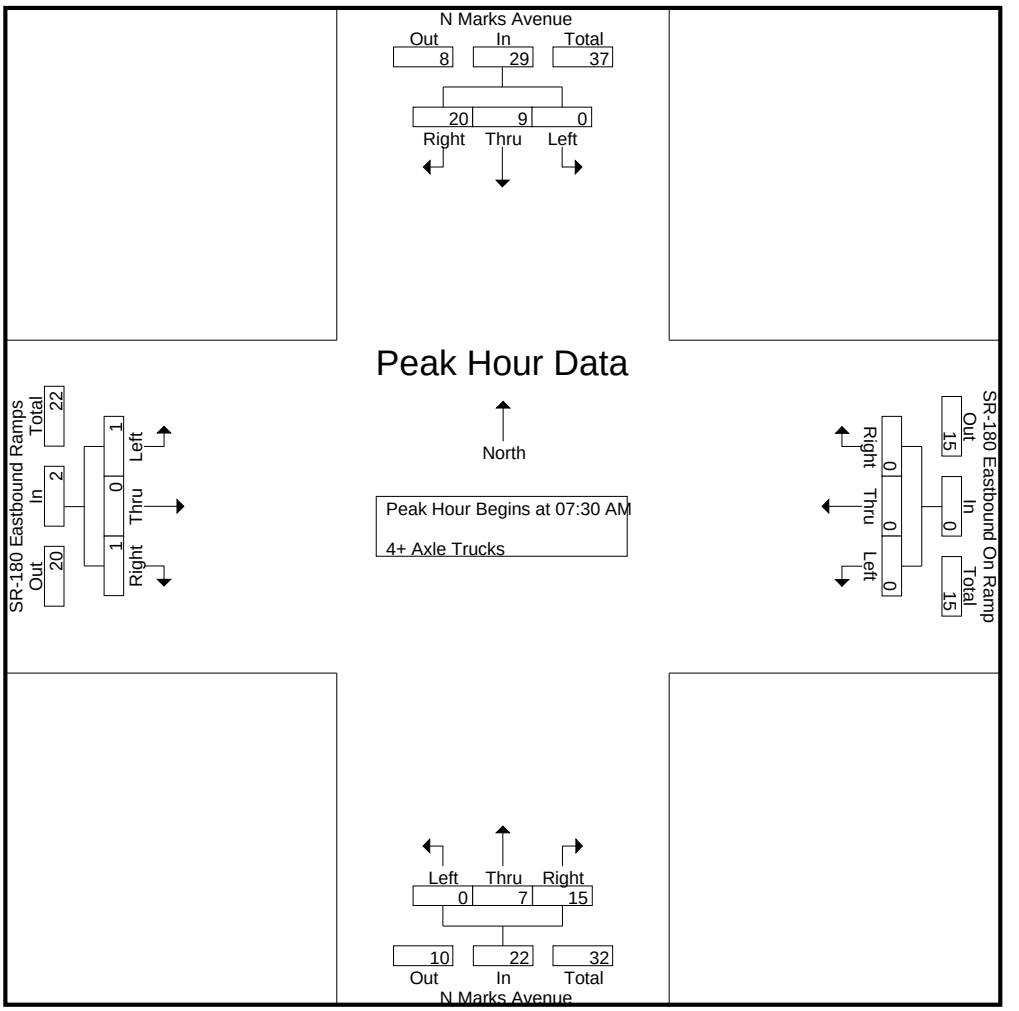

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	2	2	4	0	0	0	0	0	**3**	4	7	0	0	0	0
+15 mins.	0	0	**9**	**9**	0	0	0	0	0	1	1	2	0	0	**1**	**1**
+30 mins.	0	**4**	5	9	0	0	0	0	0	1	3	4	**1**	0	0	1
+45 mins.	0	3	4	7	0	0	0	0	0	2	**7**	**9**	0	0	0	0
Total Volume	0	9	20	29	0	0	0	0	0	7	15	22	1	0	1	2
% App. Total	0	31	69		0	0	0		0	31.8	68.2		50	0	50	
PHF	.000	.563	.556	.806	.000	.000	.000	.000	.000	.583	.536	.611	.250	.000	.250	.500

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	104	48	152	0	0	0	0	0	60	113	173	8	0	5	13	338
04:15 PM	0	100	59	159	0	0	0	0	0	46	75	121	1	0	6	7	287
04:30 PM	0	100	51	151	0	0	0	0	0	61	122	183	3	0	4	7	341
04:45 PM	0	87	25	112	0	0	0	0	0	53	75	128	3	0	1	4	244
Total	0	391	183	574	0	0	0	0	0	220	385	605	15	0	16	31	1210
05:00 PM	0	112	70	182	0	0	0	0	0	49	66	115	4	0	6	10	307
05:15 PM	0	97	37	134	0	0	0	0	0	63	70	133	4	0	4	8	275
05:30 PM	0	109	39	148	0	0	0	0	0	39	71	110	8	0	4	12	270
05:45 PM	0	80	30	110	0	0	0	0	0	38	82	120	2	0	5	7	237
Total	0	398	176	574	0	0	0	0	0	189	289	478	18	0	19	37	1089
Grand Total	0	789	359	1148	0	0	0	0	0	409	674	1083	33	0	35	68	2299
Apprch %	0	68.7	31.3		0	0	0		0	37.8	62.2		48.5	0	51.5		
Total %	0	34.3	15.6	49.9	0	0	0	0	0	17.8	29.3	47.1	1.4	0	1.5	3	
Passenger Vehicles	0	726	329	1055	0	0	0	0	0	402	659	1061	29	0	31	60	2176
% Passenger Vehicles	0	92	91.6	91.9	0	0	0	0	0	98.3	97.8	98	87.9	0	88.6	88.2	94.6
Large 2 Axle Vehicles	0	15	6	21	0	0	0	0	0	3	4	7	0	0	3	3	31
% Large 2 Axle Vehicles	0	1.9	1.7	1.8	0	0	0	0	0	0.7	0.6	0.6	0	0	8.6	4.4	1.3
3 Axle Vehicles	0	23	9	32	0	0	0	0	0	1	4	5	1	0	0	1	38
% 3 Axle Vehicles	0	2.9	2.5	2.8	0	0	0	0	0	0.2	0.6	0.5	3	0	0	1.5	1.7
4+ Axle Trucks	0	25	15	40	0	0	0	0	0	3	7	10	3	0	1	4	54
% 4+ Axle Trucks	0	3.2	4.2	3.5	0	0	0	0	0	0.7	1	0.9	9.1	0	2.9	5.9	2.3

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**104**	48	152	0	0	0	0	0	60	113	173	**8**	0	5	**13**	338
04:15 PM	0	100	**59**	**159**	0	0	0	0	0	46	75	121	1	0	**6**	7	287
04:30 PM	0	100	51	151	0	0	0	0	0	**61**	**122**	**183**	3	0	4	7	**341**
04:45 PM	0	87	25	112	0	0	0	0	0	53	75	128	3	0	1	4	244
Total Volume	0	391	183	574	0	0	0	0	0	220	385	605	15	0	16	31	1210
% App. Total	0	68.1	31.9		0	0	0		0	36.4	63.6		48.4	0	51.6		
PHF	.000	.940	.775	.903	.000	.000	.000	.000	.000	.902	.789	.827	.469	.000	.667	.596	.887

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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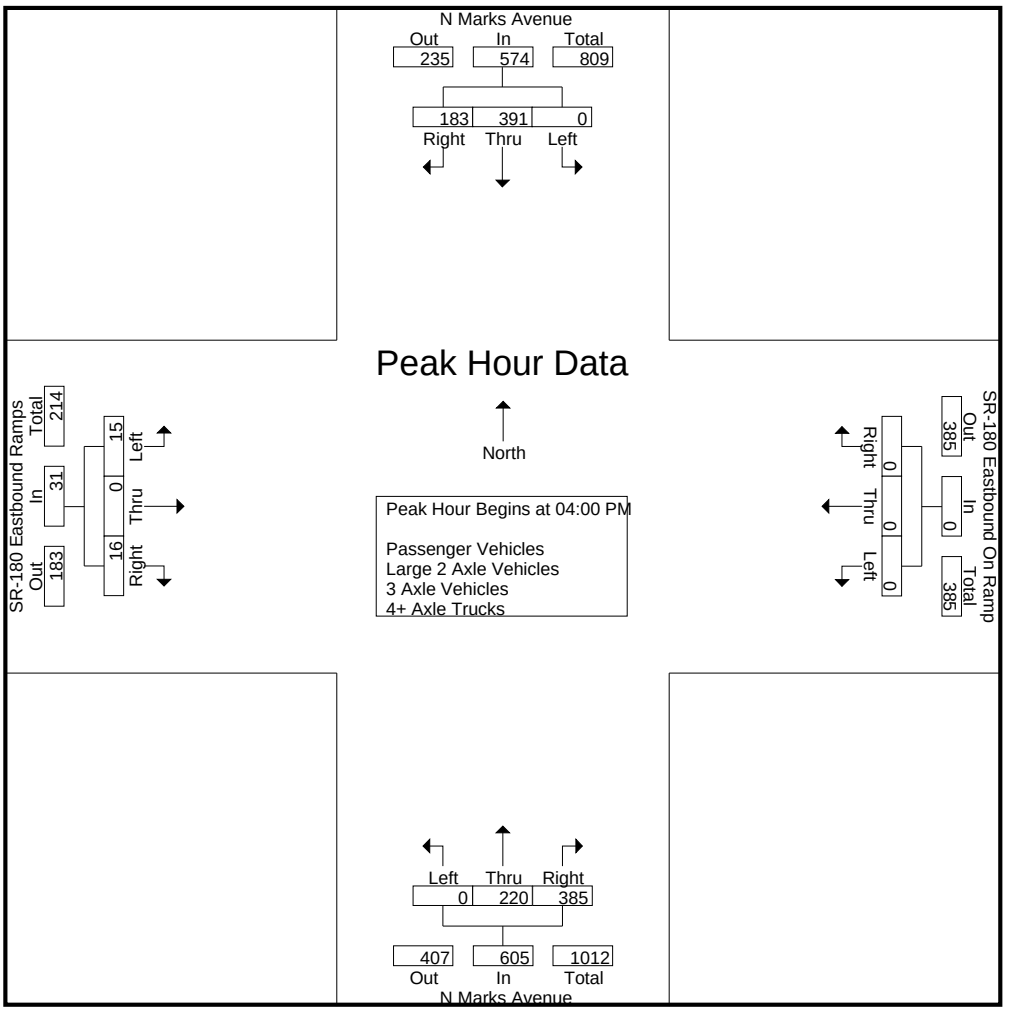

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	0	100	59	159	0	0	0	0	0	60	113	173	4	0	**6**	10
+15 mins.	0	100	51	151	0	0	0	0	0	46	75	121	4	0	4	8
+30 mins.	0	87	25	112	0	0	0	0	0	**61**	**122**	**183**	**8**	0	4	**12**
+45 mins.	0	**112**	**70**	**182**	0	0	0	0	0	53	75	128	2	0	5	7
Total Volume	0	399	205	604	0	0	0	0	0	220	385	605	18	0	19	37
% App. Total	0	66.1	33.9		0	0	0		0	36.4	63.6		48.6	0	51.4	
PHF	.000	.891	.732	.830	.000	.000	.000	.000	.000	.902	.789	.827	.563	.000	.792	.771

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	93	42	135	0	0	0	0	0	59	111	170	7	0	4	11	316
04:15 PM	0	84	57	141	0	0	0	0	0	46	74	120	1	0	5	6	267
04:30 PM	0	90	49	139	0	0	0	0	0	61	120	181	2	0	4	6	326
04:45 PM	0	81	22	103	0	0	0	0	0	52	73	125	3	0	1	4	232
Total	0	348	170	518	0	0	0	0	0	218	378	596	13	0	14	27	1141
05:00 PM	0	109	65	174	0	0	0	0	0	49	65	114	4	0	6	10	298
05:15 PM	0	90	35	125	0	0	0	0	0	63	70	133	4	0	4	8	266
05:30 PM	0	104	30	134	0	0	0	0	0	38	66	104	7	0	3	10	248
05:45 PM	0	75	29	104	0	0	0	0	0	34	80	114	1	0	4	5	223
Total	0	378	159	537	0	0	0	0	0	184	281	465	16	0	17	33	1035
Grand Total	0	726	329	1055	0	0	0	0	0	402	659	1061	29	0	31	60	2176
Apprch %	0	68.8	31.2		0	0	0		0	37.9	62.1		48.3	0	51.7		
Total %	0	33.4	15.1	48.5	0	0	0	0	0	18.5	30.3	48.8	1.3	0	1.4	2.8	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**93**	42	135	0	0	0	0	0	59	111	170	**7**	0	4	**11**	316
04:15 PM	0	84	**57**	**141**	0	0	0	0	0	46	74	120	1	0	**5**	6	267
04:30 PM	0	90	49	139	0	0	0	0	0	**61**	**120**	**181**	2	0	4	6	**326**
04:45 PM	0	81	22	103	0	0	0	0	0	52	73	125	3	0	1	4	232
Total Volume	0	348	170	518	0	0	0	0	0	218	378	596	13	0	14	27	1141
% App. Total	0	67.2	32.8		0	0	0		0	36.6	63.4		48.1	0	51.9		
PHF	.000	.935	.746	.918	.000	.000	.000	.000	.000	.893	.788	.823	.464	.000	.700	.614	.875

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Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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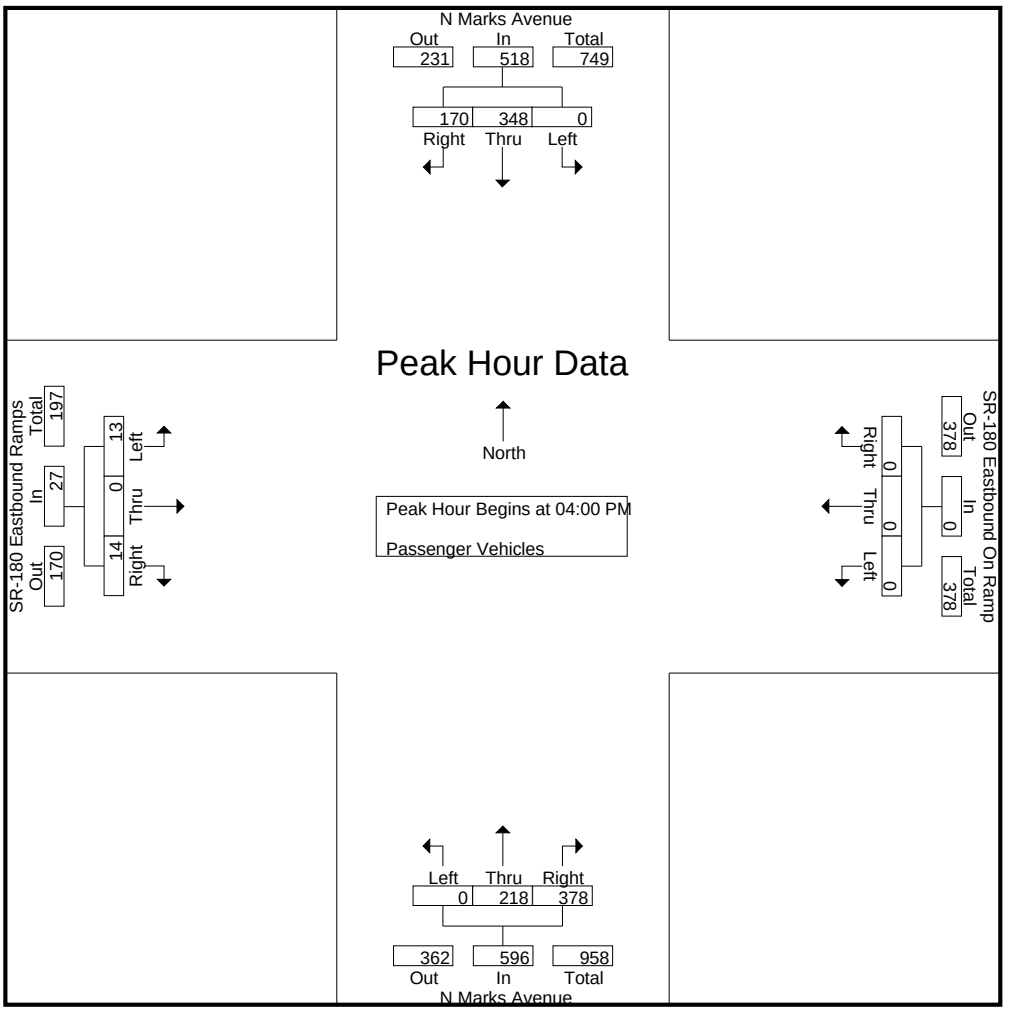

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**93**	42	135	0	0	0	0	0	59	111	170	**7**	0	4	**11**
+15 mins.	0	84	**57**	**141**	0	0	0	0	0	46	74	120	1	0	**5**	6
+30 mins.	0	90	49	139	0	0	0	0	0	**61**	**120**	**181**	2	0	4	6
+45 mins.	0	81	22	103	0	0	0	0	0	52	73	125	3	0	1	4
Total Volume	0	348	170	518	0	0	0	0	0	218	378	596	13	0	14	27
% App. Total	0	67.2	32.8		0	0	0		0	36.6	63.4		48.1	0	51.9	
PHF	.000	.935	.746	.918	.000	.000	.000	.000	.000	.893	.788	.823	.464	.000	.700	.614

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	1	5	0	0	0	0	0	1	1	2	0	0	1	1	8
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Total	0	13	2	15	0	0	0	0	0	2	1	3	0	0	1	1	19
05:00 PM	0	1	1	2	0	0	0	0	0	0	1	1	0	0	0	0	3
05:15 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	1	1	0	0	0	0	0	1	2	3	0	0	1	1	5
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	0	2	4	6	0	0	0	0	0	1	3	4	0	0	2	2	12
Grand Total	0	15	6	21	0	0	0	0	0	3	4	7	0	0	3	3	31
Apprch %	0	71.4	28.6		0	0	0		0	42.9	57.1		0	0	100		
Total %	0	48.4	19.4	67.7	0	0	0	0	0	9.7	12.9	22.6	0	0	9.7	9.7	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**4**	**1**	**5**	0	0	0	0	0	**1**	**1**	**2**	0	0	**1**	**1**	**8**
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	0	13	2	15	0	0	0	0	0	2	1	3	0	0	1	1	19
% App. Total	0	86.7	13.3		0	0	0		0	66.7	33.3		0	0	100		
PHF	.000	.813	.500	.750	.000	.000	.000	.000	.000	.500	.250	.375	.000	.000	.250	.250	.594

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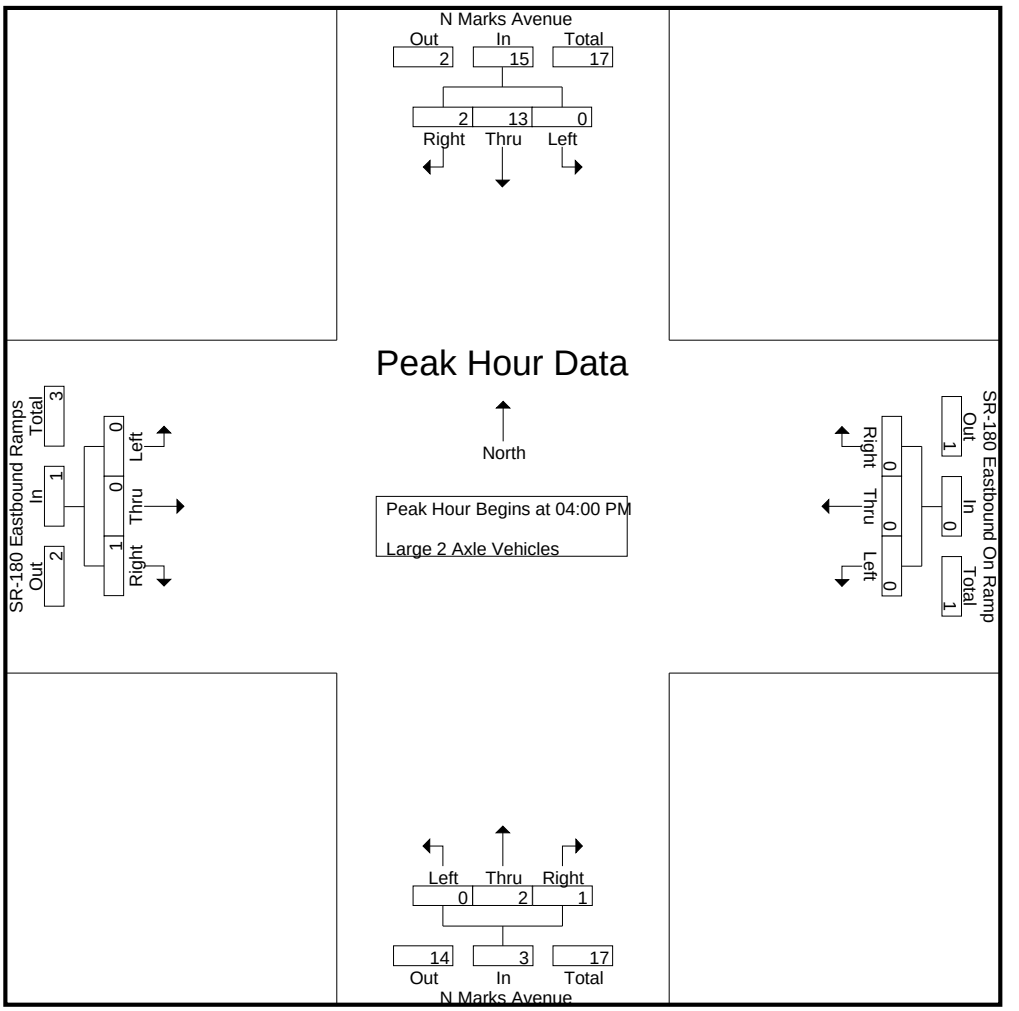

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**4**	**1**	**5**	0	0	0	0	0	**1**	**1**	**2**	0	0	**1**	**1**
+15 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	13	2	15	0	0	0	0	0	2	1	3	0	0	1	1
% App. Total	0	86.7	13.3		0	0	0		0	66.7	33.3		0	0	100	
PHF	.000	.813	.500	.750	.000	.000	.000	.000	.000	.500	.250	.375	.000	.000	.250	.250

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Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
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Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:15 PM	0	8	1	9	0	0	0	0	0	0	1	1	0	0	0	0	10
04:30 PM	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	1	3
04:45 PM	0	1	2	3	0	0	0	0	0	0	1	1	0	0	0	0	4
Total	0	12	5	17	0	0	0	0	0	0	3	3	1	0	0	1	21
05:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
05:30 PM	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5
05:45 PM	0	3	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
Total	0	11	4	15	0	0	0	0	0	1	1	2	0	0	0	0	17
Grand Total	0	23	9	32	0	0	0	0	0	1	4	5	1	0	0	1	38
Apprch %	0	71.9	28.1		0	0	0		0	20	80		100	0	0		
Total %	0	60.5	23.7	84.2	0	0	0	0	0	2.6	10.5	13.2	2.6	0	0	2.6	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:15 PM	0	**8**	1	**9**	0	0	0	0	0	0	**1**	**1**	0	0	0	0	**10**
04:30 PM	0	0	1	1	0	0	0	0	0	0	1	1	**1**	0	0	**1**	3
04:45 PM	0	1	**2**	3	0	0	0	0	0	0	1	1	0	0	0	0	4
Total Volume	0	12	5	17	0	0	0	0	0	0	3	3	1	0	0	1	21
% App. Total	0	70.6	29.4		0	0	0		0	0	100		100	0	0		
PHF	.000	.375	.625	.472	.000	.000	.000	.000	.000	.000	.750	.750	.250	.000	.000	.250	.525

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City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
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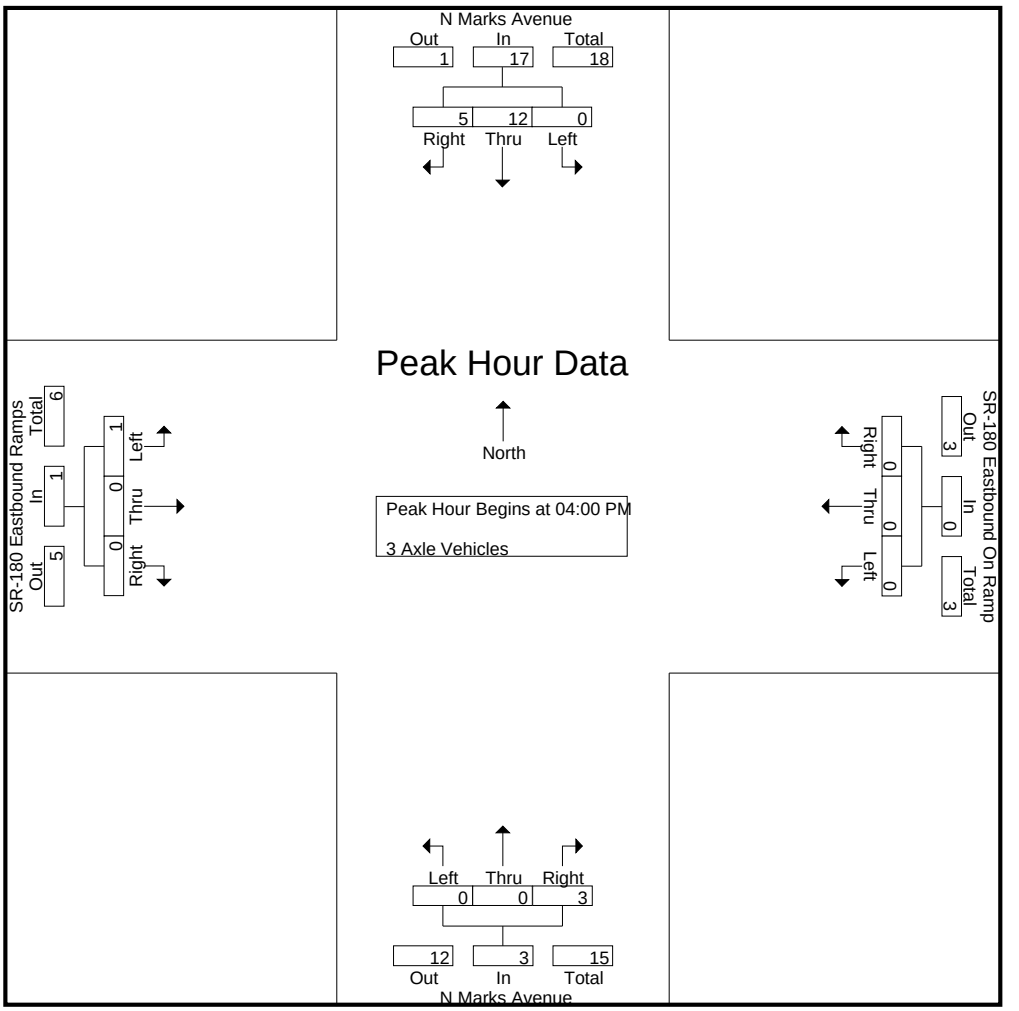

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**8**	1	**9**	0	0	0	0	0	0	**1**	**1**	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	0	1	1	**1**	0	0	**1**
+45 mins.	0	1	**2**	3	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	12	5	17	0	0	0	0	0	0	3	3	1	0	0	1
% App. Total	0	70.6	29.4		0	0	0		0	0	100		100	0	0	
PHF	.000	.375	.625	.472	.000	.000	.000	.000	.000	.000	.750	.750	.250	.000	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	4	8	0	0	0	0	0	0	1	1	1	0	0	1	10
04:15 PM	0	5	1	6	0	0	0	0	0	0	0	0	0	0	1	1	7
04:30 PM	0	8	0	8	0	0	0	0	0	0	1	1	0	0	0	0	9
04:45 PM	0	1	1	2	0	0	0	0	0	0	1	1	0	0	0	0	3
Total	0	18	6	24	0	0	0	0	0	0	3	3	1	0	1	2	29
05:00 PM	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	2	6	8	0	0	0	0	0	0	3	3	1	0	0	1	12
05:45 PM	0	2	0	2	0	0	0	0	0	3	1	4	1	0	0	1	7
Total	0	7	9	16	0	0	0	0	0	3	4	7	2	0	0	2	25
Grand Total	0	25	15	40	0	0	0	0	0	3	7	10	3	0	1	4	54
Apprch %	0	62.5	37.5		0	0	0		0	30	70		75	0	25		
Total %	0	46.3	27.8	74.1	0	0	0	0	0	5.6	13	18.5	5.6	0	1.9	7.4	

	N Marks Avenue Southbound				SR-180 Eastbound On Ramp Westbound				N Marks Avenue Northbound				SR-180 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	4	**4**	**8**	0	0	0	0	0	0	**1**	**1**	**1**	0	0	**1**	**10**
04:15 PM	0	5	1	6	0	0	0	0	0	0	0	0	0	0	**1**	1	7
04:30 PM	0	**8**	0	8	0	0	0	0	0	0	1	1	0	0	0	0	9
04:45 PM	0	1	1	2	0	0	0	0	0	0	1	1	0	0	0	0	3
Total Volume	0	18	6	24	0	0	0	0	0	0	3	3	1	0	1	2	29
% App. Total	0	75	25		0	0	0		0	0	100		50	0	50		
PHF	.000	.563	.375	.750	.000	.000	.000	.000	.000	.000	.750	.750	.250	.000	.250	.500	.725

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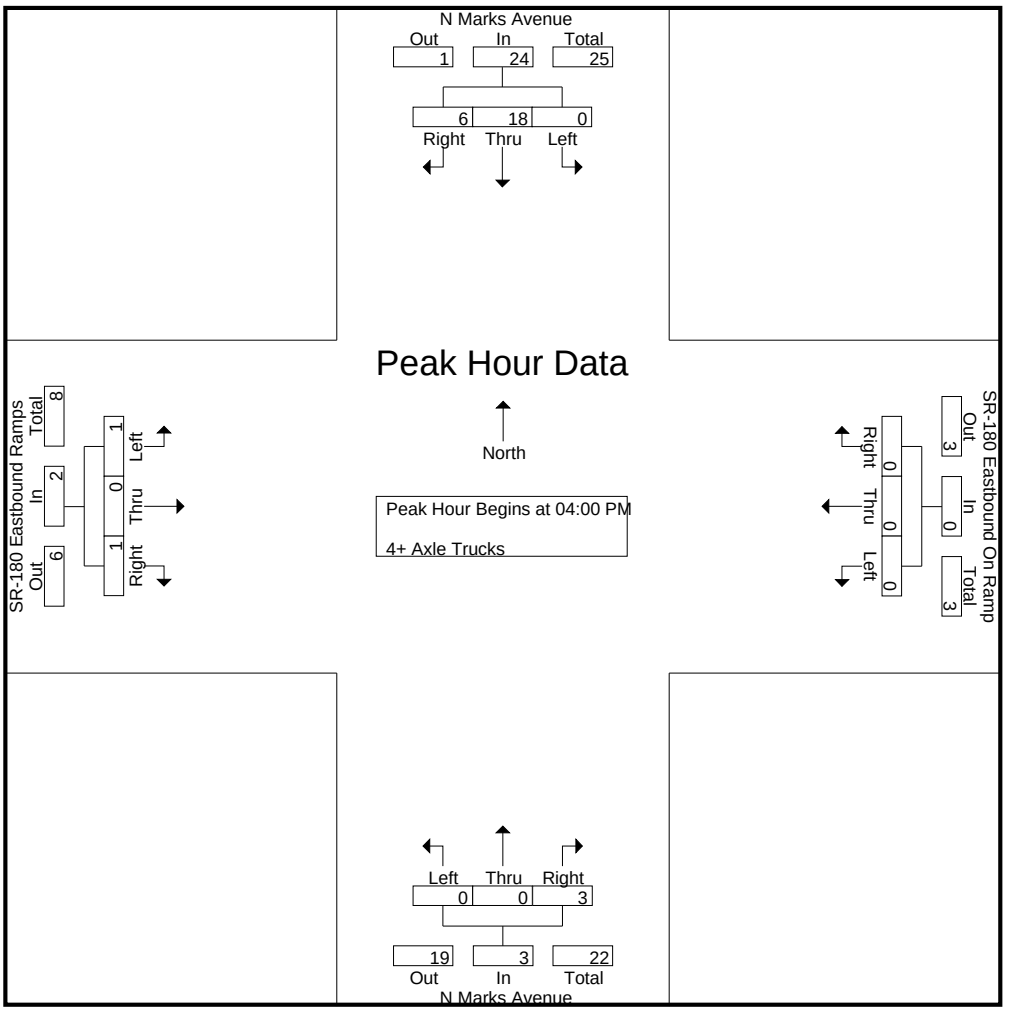
City of Fresno
N/S: N Marks Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 05_FSO_Marks_180E PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	4	**4**	**8**	0	0	0	0	0	0	**1**	**1**	**1**	0	0	**1**
+15 mins.	0	5	1	6	0	0	0	0	0	0	0	0	0	0	**1**	1
+30 mins.	0	**8**	0	8	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	1	1	2	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	18	6	24	0	0	0	0	0	0	3	3	1	0	1	2
% App. Total	0	75	25		0	0	0		0	0	100		50	0	50	
PHF	.000	.563	.375	.750	.000	.000	.000	.000	.000	.000	.750	.750	.250	.000	.250	.500

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	44	5	65	4	0	8	12	0	53	1	54	4	0	0	4	135
07:15 AM	15	67	3	85	2	4	27	33	0	76	4	80	3	0	2	5	203
07:30 AM	20	97	2	119	1	0	20	21	0	101	2	103	4	1	0	5	248
07:45 AM	32	101	5	138	2	0	16	18	0	106	1	107	4	0	2	6	269
Total	83	309	15	407	9	4	71	84	0	336	8	344	15	1	4	20	855
08:00 AM	32	135	5	172	6	0	15	21	0	108	4	112	3	1	0	4	309
08:15 AM	29	102	6	137	0	1	29	30	0	129	1	130	6	2	1	9	306
08:30 AM	13	62	4	79	4	1	28	33	0	89	2	91	5	0	0	5	208
08:45 AM	23	66	5	94	0	1	18	19	0	58	2	60	6	0	0	6	179
Total	97	365	20	482	10	3	90	103	0	384	9	393	20	3	1	24	1002
Grand Total	180	674	35	889	19	7	161	187	0	720	17	737	35	4	5	44	1857
Apprch %	20.2	75.8	3.9		10.2	3.7	86.1		0	97.7	2.3		79.5	9.1	11.4		
Total %	9.7	36.3	1.9	47.9	1	0.4	8.7	10.1	0	38.8	0.9	39.7	1.9	0.2	0.3	2.4	
Passenger Vehicles	166	639	28	833	15	7	133	155	0	671	16	687	29	4	4	37	1712
% Passenger Vehicles	92.2	94.8	80	93.7	78.9	100	82.6	82.9	0	93.2	94.1	93.2	82.9	100	80	84.1	92.2
Large 2 Axle Vehicles	5	17	0	22	1	0	7	8	0	13	1	14	2	0	0	2	46
% Large 2 Axle Vehicles	2.8	2.5	0	2.5	5.3	0	4.3	4.3	0	1.8	5.9	1.9	5.7	0	0	4.5	2.5
3 Axle Vehicles	4	8	3	15	1	0	8	9	0	14	0	14	2	0	0	2	40
% 3 Axle Vehicles	2.2	1.2	8.6	1.7	5.3	0	5	4.8	0	1.9	0	1.9	5.7	0	0	4.5	2.2
4+ Axle Trucks	5	10	4	19	2	0	13	15	0	22	0	22	2	0	1	3	59
% 4+ Axle Trucks	2.8	1.5	11.4	2.1	10.5	0	8.1	8	0	3.1	0	3	5.7	0	20	6.8	3.2

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	20	97	2	119	1	0	20	21	0	101	2	103	4	1	0	5	248
07:45 AM	**32**	101	5	138	2	0	16	18	0	106	1	107	4	0	**2**	6	269
08:00 AM	32	**135**	5	**172**	**6**	0	15	21	0	108	**4**	112	3	1	0	4	**309**
08:15 AM	29	102	**6**	137	0	**1**	**29**	**30**	0	**129**	1	**130**	**6**	**2**	1	**9**	306
Total Volume	113	435	18	566	9	1	80	90	0	444	8	452	17	4	3	24	1132
% App. Total	20	76.9	3.2		10	1.1	88.9		0	98.2	1.8		70.8	16.7	12.5		
PHF	.883	.806	.750	.823	.375	.250	.690	.750	.000	.860	.500	.869	.708	.500	.375	.667	.916

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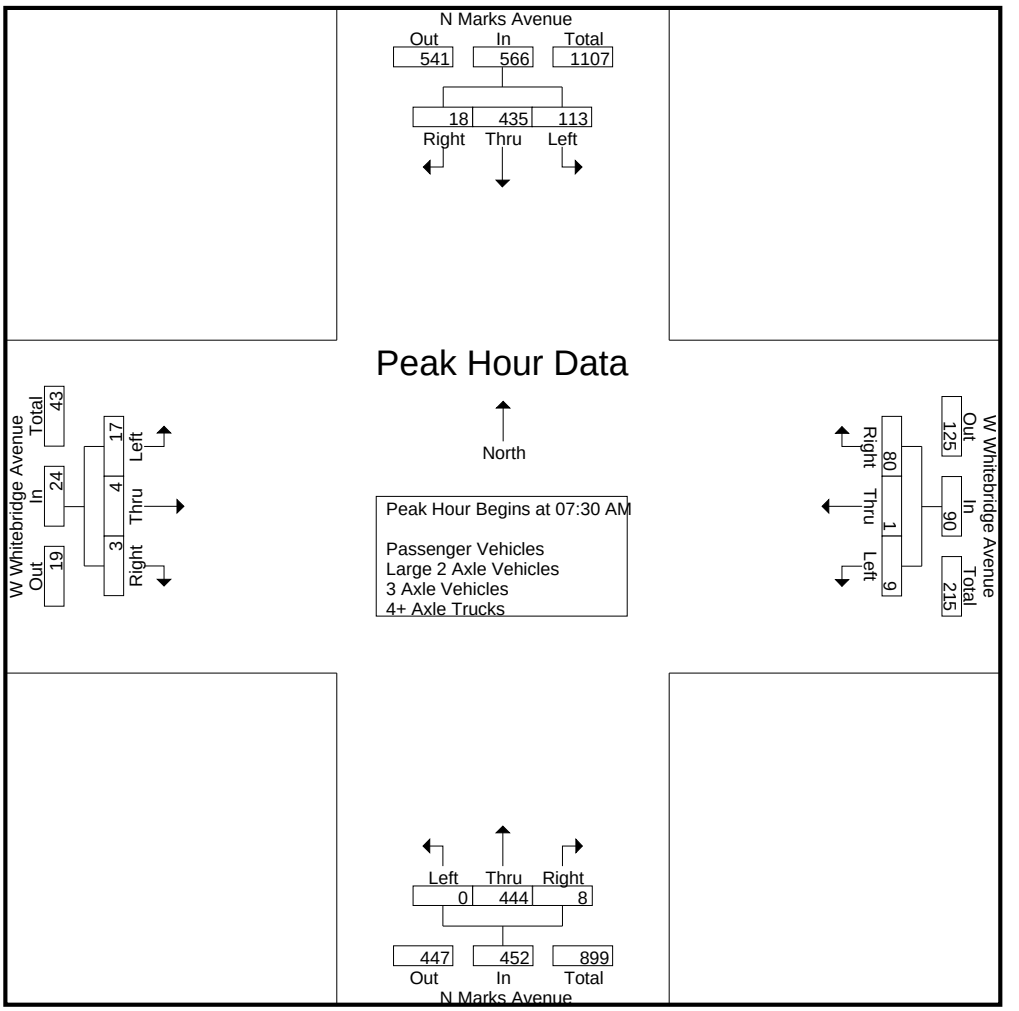
City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:30 AM				07:30 AM			
+0 mins.	20	97	2	119	**6**	0	15	21	0	101	2	103	4	1	0	5
+15 mins.	**32**	101	5	138	0	**1**	**29**	30	0	106	1	107	4	0	**2**	6
+30 mins.	32	**135**	5	**172**	4	1	28	**33**	0	108	**4**	112	3	1	0	4
+45 mins.	29	102	**6**	137	0	1	18	19	0	**129**	1	**130**	**6**	**2**	1	**9**
Total Volume	113	435	18	566	10	3	90	103	0	444	8	452	17	4	3	24
% App. Total	20	76.9	3.2		9.7	2.9	87.4		0	98.2	1.8		70.8	16.7	12.5	
PHF	.883	.806	.750	.823	.417	.750	.776	.780	.000	.860	.500	.869	.708	.500	.375	.667

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	38	4	57	4	0	8	12	0	47	1	48	3	0	0	3	120
07:15 AM	14	63	3	80	2	4	22	28	0	70	3	73	2	0	2	4	185
07:30 AM	19	94	2	115	0	0	16	16	0	96	2	98	3	1	0	4	233
07:45 AM	29	98	5	132	0	0	15	15	0	105	1	106	4	0	2	6	259
Total	77	293	14	384	6	4	61	71	0	318	7	325	12	1	4	17	797
08:00 AM	27	130	4	161	5	0	14	19	0	99	4	103	2	1	0	3	286
08:15 AM	27	96	5	128	0	1	22	23	0	121	1	122	6	2	0	8	281
08:30 AM	12	58	3	73	4	1	22	27	0	83	2	85	3	0	0	3	188
08:45 AM	23	62	2	87	0	1	14	15	0	50	2	52	6	0	0	6	160
Total	89	346	14	449	9	3	72	84	0	353	9	362	17	3	0	20	915
Grand Total	166	639	28	833	15	7	133	155	0	671	16	687	29	4	4	37	1712
Apprch %	19.9	76.7	3.4		9.7	4.5	85.8		0	97.7	2.3		78.4	10.8	10.8		
Total %	9.7	37.3	1.6	48.7	0.9	0.4	7.8	9.1	0	39.2	0.9	40.1	1.7	0.2	0.2	2.2	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	19	94	2	115	0	0	16	16	0	96	2	98	3	1	0	4	233
07:45 AM	**29**	98	**5**	132	0	0	15	15	0	105	1	106	4	0	**2**	6	259
08:00 AM	27	**130**	4	**161**	**5**	0	14	19	0	99	**4**	103	2	1	0	3	**286**
08:15 AM	27	96	5	128	0	**1**	**22**	**23**	0	**121**	1	**122**	**6**	**2**	0	**8**	281
Total Volume	102	418	16	536	5	1	67	73	0	421	8	429	15	4	2	21	1059
% App. Total	19	78	3		6.8	1.4	91.8		0	98.1	1.9		71.4	19	9.5		
PHF	.879	.804	.800	.832	.250	.250	.761	.793	.000	.870	.500	.879	.625	.500	.250	.656	.926

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
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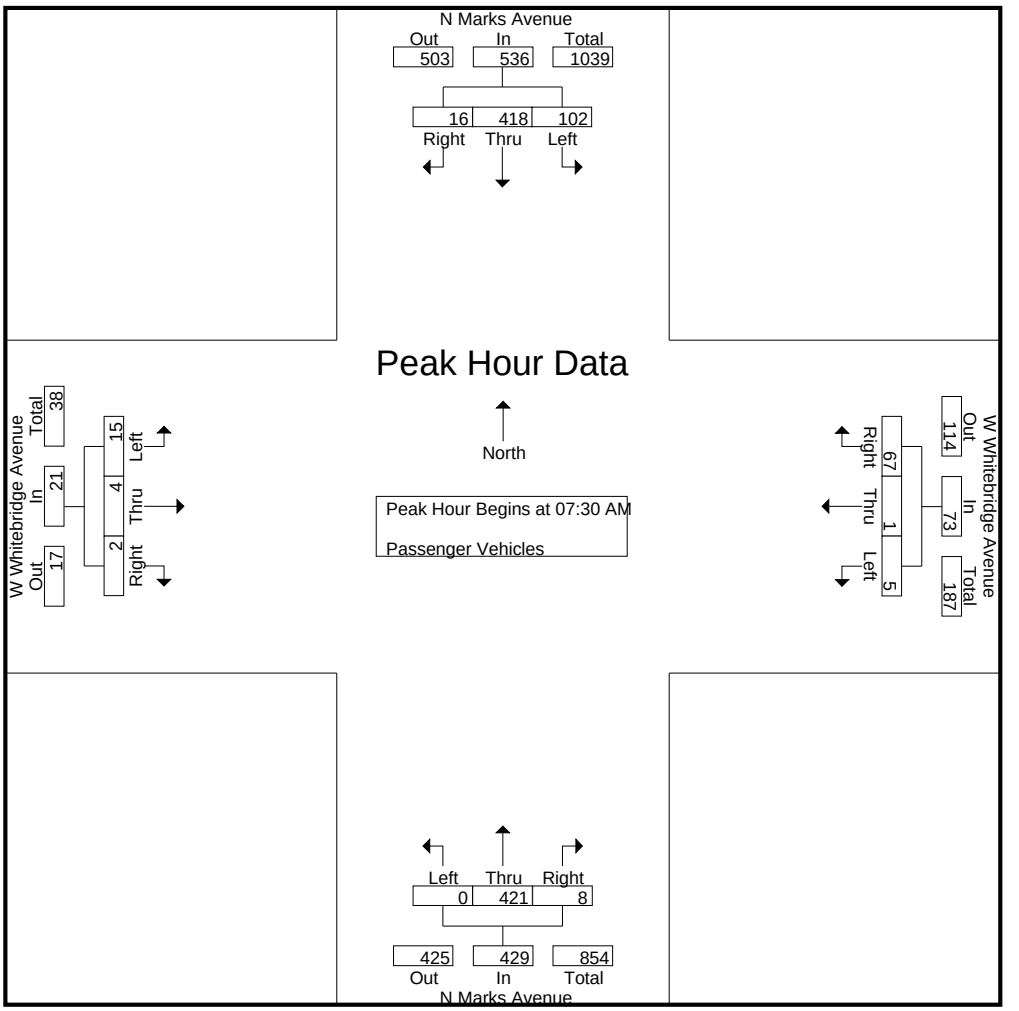

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	19	94	2	115	0	0	16	16	0	96	2	98	3	1	0	4
+15 mins.	**29**	98	**5**	132	0	0	15	15	0	105	1	106	4	0	**2**	6
+30 mins.	27	**130**	4	**161**	**5**	0	14	19	0	99	**4**	103	2	1	0	3
+45 mins.	27	96	5	128	0	**1**	**22**	**23**	0	**121**	1	**122**	**6**	**2**	0	**8**
Total Volume	102	418	16	536	5	1	67	73	0	421	8	429	15	4	2	21
% App. Total	19	78	3		6.8	1.4	91.8		0	98.1	1.9		71.4	19	9.5	
PHF	.879	.804	.800	.832	.250	.250	.761	.793	.000	.870	.500	.879	.625	.500	.250	.656

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	2	0	3	0	0	0	0	0	1	0	1	1	0	0	1	5
07:15 AM	0	3	0	3	0	0	1	1	0	2	1	3	0	0	0	0	7
07:30 AM	0	1	0	1	0	0	1	1	0	2	0	2	1	0	0	1	5
07:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	2	7	0	9	0	0	2	2	0	5	1	6	2	0	0	2	19
08:00 AM	1	2	0	3	1	0	0	1	0	3	0	3	0	0	0	0	7
08:15 AM	2	4	0	6	0	0	4	4	0	1	0	1	0	0	0	0	11
08:30 AM	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0	5
08:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	3	10	0	13	1	0	5	6	0	8	0	8	0	0	0	0	27
Grand Total	5	17	0	22	1	0	7	8	0	13	1	14	2	0	0	2	46
Apprch %	22.7	77.3	0		12.5	0	87.5		0	92.9	7.1		100	0	0		
Total %	10.9	37	0	47.8	2.2	0	15.2	17.4	0	28.3	2.2	30.4	4.3	0	0	4.3	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	1	1	0	2	0	2	**1**	0	0	**1**	5
07:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 AM	1	2	0	3	**1**	0	0	1	0	**3**	0	**3**	0	0	0	0	7
08:15 AM	**2**	**4**	0	**6**	0	0	**4**	**4**	0	1	0	1	0	0	0	0	**11**
Total Volume	4	8	0	12	1	0	5	6	0	6	0	6	1	0	0	1	25
% App. Total	33.3	66.7	0		16.7	0	83.3		0	100	0		100	0	0		
PHF	.500	.500	.000	.500	.250	.000	.313	.375	.000	.500	.000	.500	.250	.000	.000	.250	.568

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
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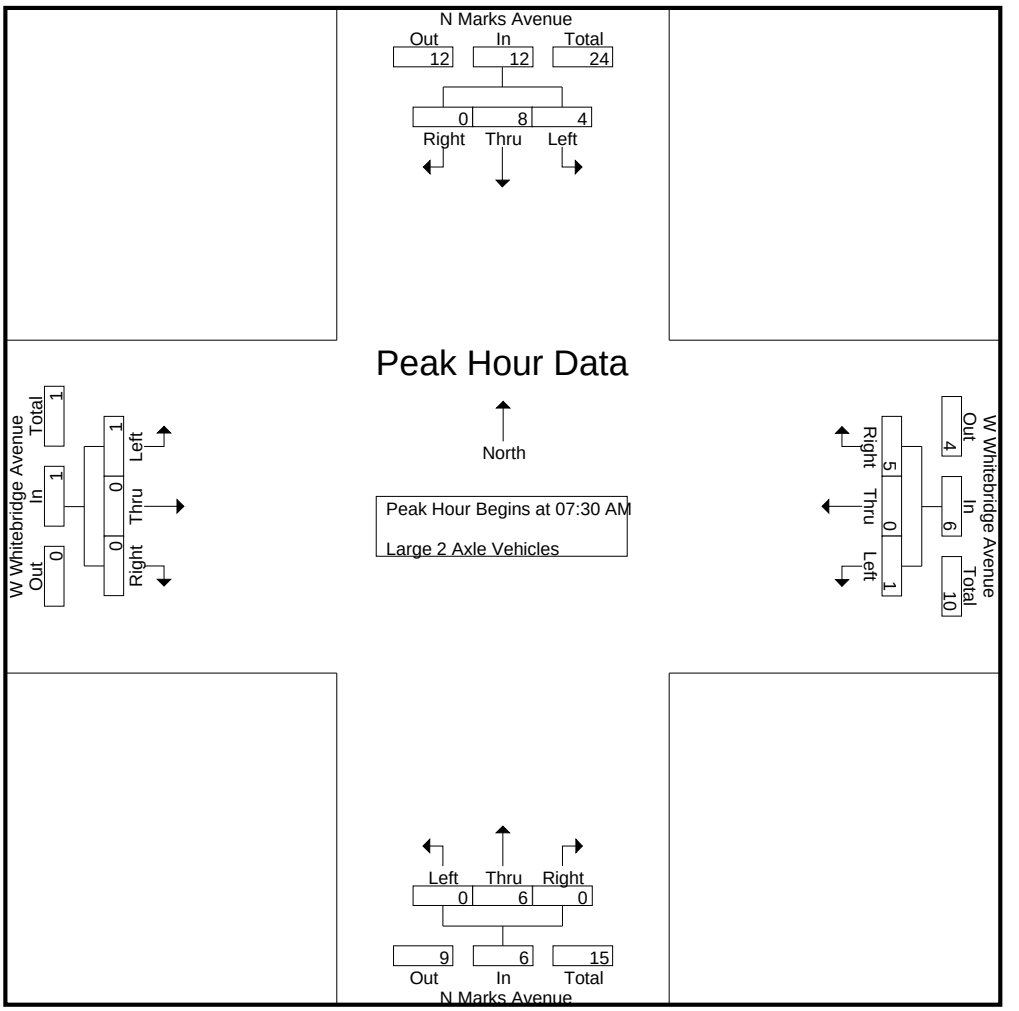

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	0	1	0	0	1	1	0	2	0	2	**1**	0	0	**1**
+15 mins.	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	2	0	3	**1**	0	0	1	0	**3**	0	**3**	0	0	0	0
+45 mins.	**2**	**4**	0	**6**	0	0	**4**	**4**	0	1	0	1	0	0	0	0
Total Volume	4	8	0	12	1	0	5	6	0	6	0	6	1	0	0	1
% App. Total	33.3	66.7	0		16.7	0	83.3		0	100	0		100	0	0	
PHF	.500	.500	.000	.500	.250	.000	.313	.375	.000	.500	.000	.500	.250	.000	.000	.250

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(951) 268-6268

City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
07:15 AM	0	0	0	0	0	0	3	3	0	1	0	1	0	0	0	0	4
07:30 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	1	2	0	3	1	0	0	1	0	0	0	0	0	0	0	0	4
Total	2	5	0	7	1	0	3	4	0	4	0	4	0	0	0	0	15
08:00 AM	1	2	1	4	0	0	1	1	0	4	0	4	1	0	0	1	10
08:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
08:30 AM	1	0	1	2	0	0	2	2	0	3	0	3	1	0	0	1	8
08:45 AM	0	1	1	2	0	0	1	1	0	2	0	2	0	0	0	0	5
Total	2	3	3	8	0	0	5	5	0	10	0	10	2	0	0	2	25
Grand Total	4	8	3	15	1	0	8	9	0	14	0	14	2	0	0	2	40
Apprch %	26.7	53.3	20		11.1	0	88.9		0	100	0		100	0	0		
Total %	10	20	7.5	37.5	2.5	0	20	22.5	0	35	0	35	5	0	0	5	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	1	**2**	0	3	**1**	0	0	**1**	0	0	0	0	0	0	0	0	4
08:00 AM	1	2	**1**	**4**	0	0	**1**	1	0	**4**	0	**4**	**1**	0	0	**1**	**10**
08:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
Total Volume	3	5	1	9	1	0	2	3	0	5	0	5	1	0	0	1	18
% App. Total	33.3	55.6	11.1		33.3	0	66.7		0	100	0		100	0	0		
PHF	.750	.625	.250	.563	.250	.000	.500	.750	.000	.313	.000	.313	.250	.000	.000	.250	.450

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
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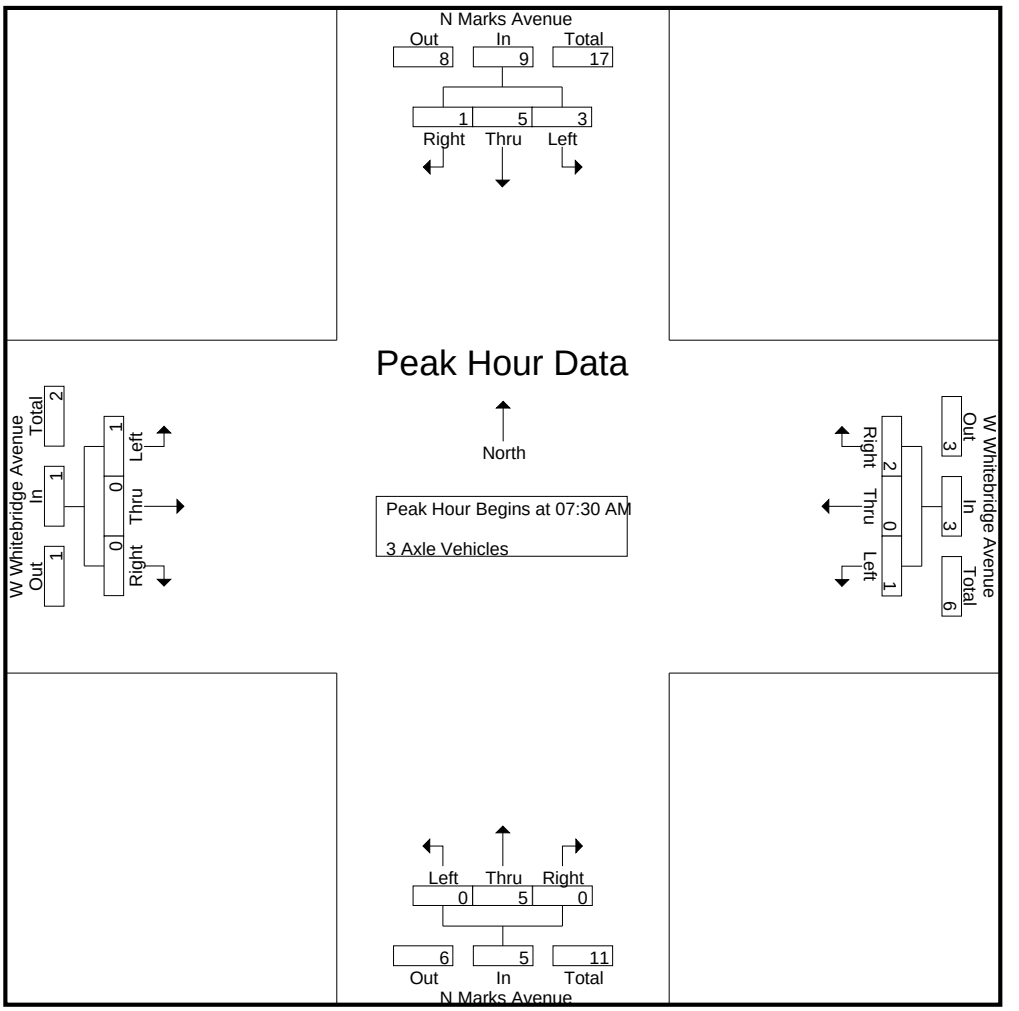

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	**1**	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	1	**2**	0	3	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	1	2	**1**	**4**	0	0	**1**	1	0	**4**	0	**4**	**1**	0	0	**1**
+45 mins.	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0
Total Volume	3	5	1	9	1	0	2	3	0	5	0	5	1	0	0	1
% App. Total	33.3	55.6	11.1		33.3	0	66.7		0	100	0		100	0	0	
PHF	.750	.625	.250	.563	.250	.000	.500	.750	.000	.313	.000	.313	.250	.000	.000	.250

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	1	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:15 AM	1	1	0	2	0	0	1	1	0	3	0	3	1	0	0	1	7
07:30 AM	0	1	0	1	1	0	3	4	0	3	0	3	0	0	0	0	8
07:45 AM	1	0	0	1	1	0	1	2	0	1	0	1	0	0	0	0	4
Total	2	4	1	7	2	0	5	7	0	9	0	9	1	0	0	1	24
08:00 AM	3	1	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
08:15 AM	0	2	1	3	0	0	2	2	0	6	0	6	0	0	1	1	12
08:30 AM	0	2	0	2	0	0	3	3	0	1	0	1	1	0	0	1	7
08:45 AM	0	1	2	3	0	0	3	3	0	4	0	4	0	0	0	0	10
Total	3	6	3	12	0	0	8	8	0	13	0	13	1	0	1	2	35
Grand Total	5	10	4	19	2	0	13	15	0	22	0	22	2	0	1	3	59
Apprch %	26.3	52.6	21.1		13.3	0	86.7		0	100	0		66.7	0	33.3		
Total %	8.5	16.9	6.8	32.2	3.4	0	22	25.4	0	37.3	0	37.3	3.4	0	1.7	5.1	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	**1**	0	**3**	**4**	0	3	0	3	0	0	0	0	8
07:45 AM	1	0	0	1	1	0	1	2	0	1	0	1	0	0	0	0	4
08:00 AM	**3**	1	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0	6
08:15 AM	0	**2**	**1**	3	0	0	2	2	0	**6**	0	**6**	0	0	**1**	**1**	**12**
Total Volume	4	4	1	9	2	0	6	8	0	12	0	12	0	0	1	1	30
% App. Total	44.4	44.4	11.1		25	0	75		0	100	0		0	0	100		
PHF	.333	.500	.250	.563	.500	.000	.500	.500	.000	.500	.000	.500	.000	.000	.250	.250	.625

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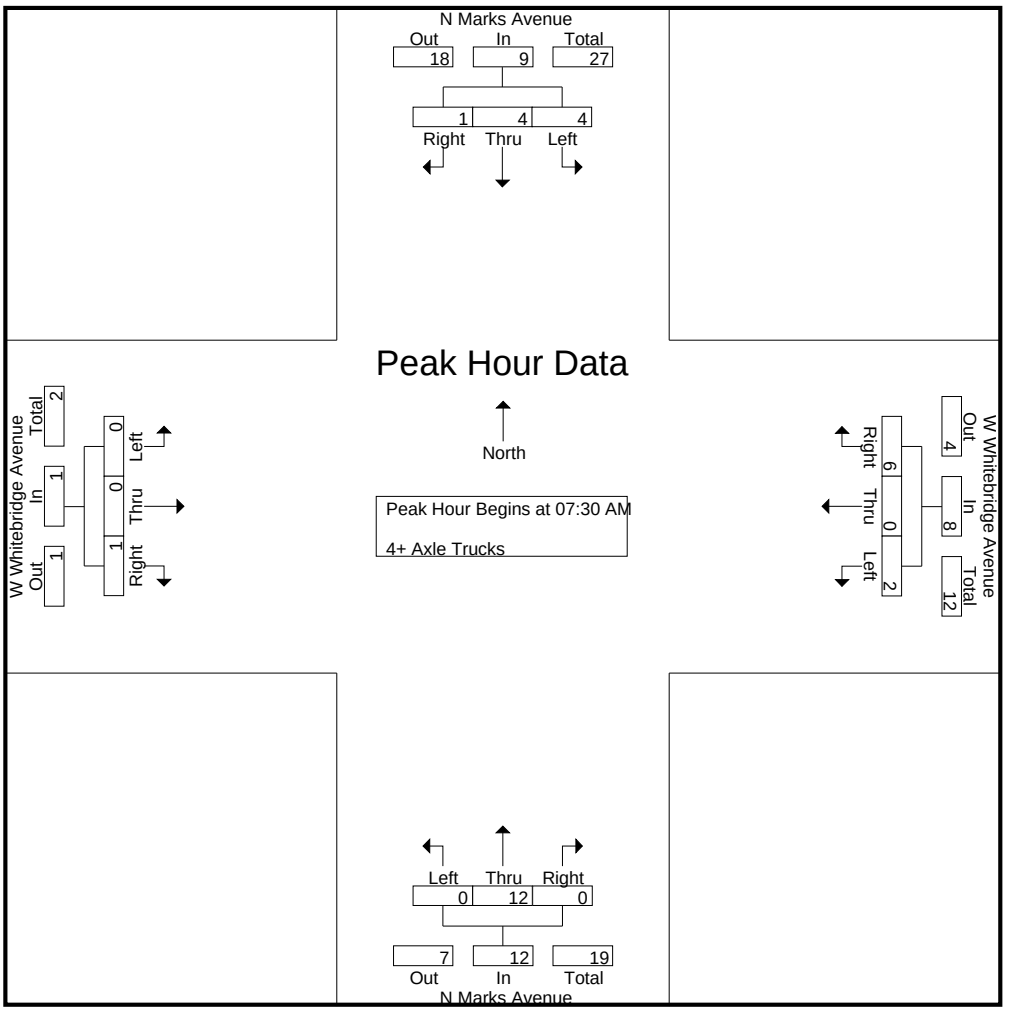
City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit AMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	0	1	**1**	0	**3**	**4**	0	3	0	3	0	0	0	0
+15 mins.	1	0	0	1	1	0	1	2	0	1	0	1	0	0	0	0
+30 mins.	**3**	1	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	**2**	**1**	3	0	0	2	2	0	**6**	0	**6**	0	0	**1**	**1**
Total Volume	4	4	1	9	2	0	6	8	0	12	0	12	0	0	1	1
% App. Total	44.4	44.4	11.1		25	0	75		0	100	0		0	0	100	
PHF	.333	.500	.250	.563	.500	.000	.500	.500	.000	.500	.000	.500	.000	.000	.250	.250

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	74	10	108	1	3	38	42	1	139	1	141	11	0	2	13	304
04:15 PM	26	72	8	106	3	0	27	30	2	80	1	83	13	1	1	15	234
04:30 PM	22	74	7	103	4	0	44	48	1	128	0	129	8	1	0	9	289
04:45 PM	11	74	5	90	6	2	28	36	0	87	2	89	17	1	0	18	233
Total	83	294	30	407	14	5	137	156	4	434	4	442	49	3	3	55	1060
05:00 PM	25	82	10	117	5	2	28	35	0	79	5	84	11	0	2	13	249
05:15 PM	22	77	8	107	11	2	29	42	0	95	3	98	7	0	2	9	256
05:30 PM	16	90	3	109	3	1	34	38	0	73	1	74	8	0	1	9	230
05:45 PM	23	62	6	91	2	1	16	19	0	93	1	94	4	0	0	4	208
Total	86	311	27	424	21	6	107	134	0	340	10	350	30	0	5	35	943
Grand Total	169	605	57	831	35	11	244	290	4	774	14	792	79	3	8	90	2003
Apprch %	20.3	72.8	6.9		12.1	3.8	84.1		0.5	97.7	1.8		87.8	3.3	8.9		
Total %	8.4	30.2	2.8	41.5	1.7	0.5	12.2	14.5	0.2	38.6	0.7	39.5	3.9	0.1	0.4	4.5	
Passenger Vehicles	144	575	46	765	34	8	231	273	2	750	12	764	77	2	8	87	1889
% Passenger Vehicles	85.2	95	80.7	92.1	97.1	72.7	94.7	94.1	50	96.9	85.7	96.5	97.5	66.7	100	96.7	94.3
Large 2 Axle Vehicles	1	10	2	13	1	0	1	2	0	2	1	3	0	0	0	0	18
% Large 2 Axle Vehicles	0.6	1.7	3.5	1.6	2.9	0	0.4	0.7	0	0.3	7.1	0.4	0	0	0	0	0.9
3 Axle Vehicles	9	7	8	24	0	3	5	8	2	8	0	10	1	1	0	2	44
% 3 Axle Vehicles	5.3	1.2	14	2.9	0	27.3	2	2.8	50	1	0	1.3	1.3	33.3	0	2.2	2.2
4+ Axle Trucks	15	13	1	29	0	0	7	7	0	14	1	15	1	0	0	1	52
% 4+ Axle Trucks	8.9	2.1	1.8	3.5	0	0	2.9	2.4	0	1.8	7.1	1.9	1.3	0	0	1.1	2.6

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	24	**74**	**10**	**108**	1	**3**	38	42	1	**139**	1	**141**	11	0	**2**	13	**304**
04:15 PM	**26**	72	8	106	3	0	27	30	**2**	80	1	83	13	**1**	1	15	234
04:30 PM	22	74	7	103	4	0	**44**	**48**	1	128	0	129	8	1	0	9	289
04:45 PM	11	74	5	90	**6**	2	28	36	0	87	**2**	89	**17**	1	0	**18**	233
Total Volume	83	294	30	407	14	5	137	156	4	434	4	442	49	3	3	55	1060
% App. Total	20.4	72.2	7.4		9	3.2	87.8		0.9	98.2	0.9		89.1	5.5	5.5		
PHF	.798	.993	.750	.942	.583	.417	.778	.813	.500	.781	.500	.784	.721	.750	.375	.764	.872

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
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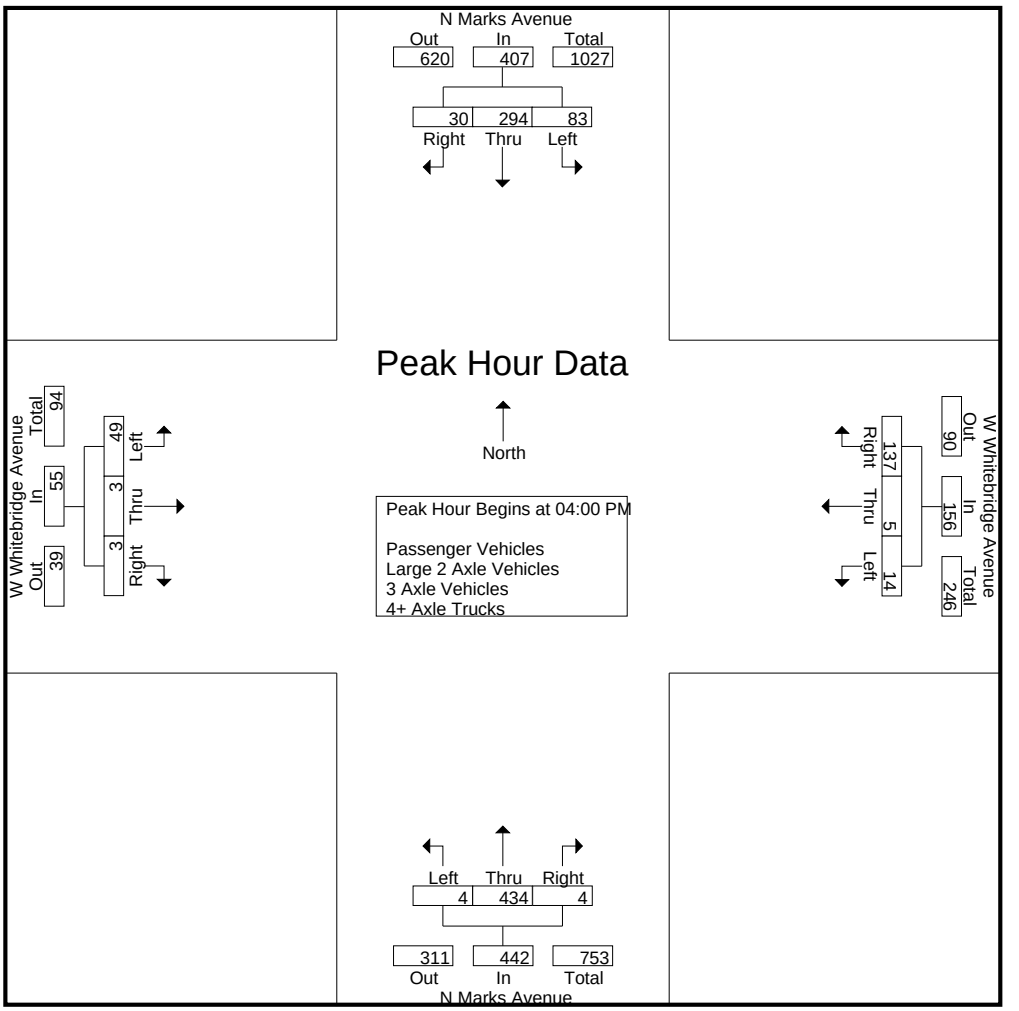

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:00 PM				04:00 PM			
+0 mins.	**25**	82	**10**	**117**	4	0	**44**	**48**	1	**139**	1	**141**	11	0	**2**	13
+15 mins.	22	77	8	107	6	**2**	28	36	**2**	80	1	83	13	**1**	1	15
+30 mins.	16	**90**	3	109	5	2	28	35	1	128	0	129	8	1	0	9
+45 mins.	23	62	6	91	**11**	2	29	42	0	87	**2**	89	**17**	1	0	**18**
Total Volume	86	311	27	424	26	6	129	161	4	434	4	442	49	3	3	55
% App. Total	20.3	73.3	6.4		16.1	3.7	80.1		0.9	98.2	0.9		89.1	5.5	5.5	
PHF	.860	.864	.675	.906	.591	.750	.733	.839	.500	.781	.500	.784	.721	.750	.375	.764

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
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Groups Printed- Passenger Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	21	68	9	98	1	1	36	38	1	133	1	135	11	0	2	13	284
04:15 PM	21	66	3	90	3	0	25	28	1	79	1	81	13	1	1	15	214
04:30 PM	17	68	7	92	4	0	42	46	0	124	0	124	8	1	0	9	271
04:45 PM	11	70	3	84	5	2	27	34	0	84	1	85	17	0	0	17	220
Total	70	272	22	364	13	3	130	146	2	420	3	425	49	2	3	54	989
05:00 PM	24	80	9	113	5	2	28	35	0	77	5	82	11	0	2	13	243
05:15 PM	19	74	7	100	11	1	29	41	0	94	2	96	7	0	2	9	246
05:30 PM	13	88	3	104	3	1	29	33	0	71	1	72	6	0	1	7	216
05:45 PM	18	61	5	84	2	1	15	18	0	88	1	89	4	0	0	4	195
Total	74	303	24	401	21	5	101	127	0	330	9	339	28	0	5	33	900
Grand Total	144	575	46	765	34	8	231	273	2	750	12	764	77	2	8	87	1889
Apprch %	18.8	75.2	6		12.5	2.9	84.6		0.3	98.2	1.6		88.5	2.3	9.2		
Total %	7.6	30.4	2.4	40.5	1.8	0.4	12.2	14.5	0.1	39.7	0.6	40.4	4.1	0.1	0.4	4.6	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**21**	68	**9**	**98**	1	1	36	38	**1**	**133**	**1**	**135**	11	0	**2**	13	**284**
04:15 PM	21	66	3	90	3	0	25	28	1	79	1	81	13	**1**	1	15	214
04:30 PM	17	68	7	92	4	0	**42**	**46**	0	124	0	124	8	1	0	9	271
04:45 PM	11	**70**	3	84	**5**	**2**	27	34	0	84	1	85	**17**	0	0	**17**	220
Total Volume	70	272	22	364	13	3	130	146	2	420	3	425	49	2	3	54	989
% App. Total	19.2	74.7	6		8.9	2.1	89		0.5	98.8	0.7		90.7	3.7	5.6		
PHF	.833	.971	.611	.929	.650	.375	.774	.793	.500	.789	.750	.787	.721	.500	.375	.794	.871

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City of Fresno
N/S: N Marks Avenue
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File Name : 06_FSO_Marks_Whit PMC
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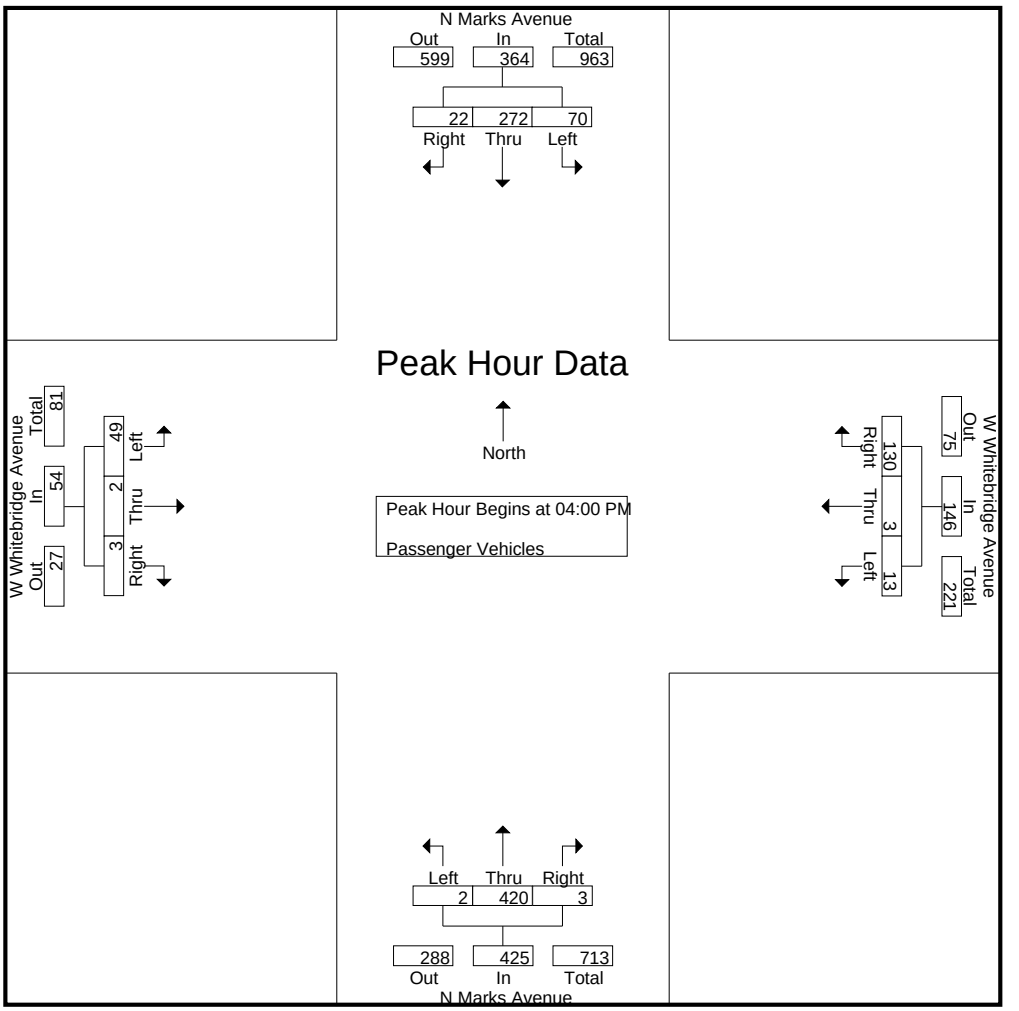

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**21**	68	**9**	**98**	1	1	36	38	**1**	**133**	**1**	**135**	11	0	**2**	13
+15 mins.	21	66	3	90	3	0	25	28	1	79	1	81	13	**1**	1	15
+30 mins.	17	68	7	92	4	0	**42**	**46**	0	124	0	124	8	1	0	9
+45 mins.	11	**70**	3	84	**5**	**2**	27	34	0	84	1	85	**17**	0	0	**17**
Total Volume	70	272	22	364	13	3	130	146	2	420	3	425	49	2	3	54
% App. Total	19.2	74.7	6		8.9	2.1	89		0.5	98.8	0.7		90.7	3.7	5.6	
PHF	.833	.971	.611	.929	.650	.375	.774	.793	.500	.789	.750	.787	.721	.500	.375	.794

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	1	3	1	0	0	1	0	1	1	2	0	0	0	0	6
Total	0	9	1	10	1	0	0	1	0	1	1	2	0	0	0	0	13
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
05:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	1	1	3	0	0	1	1	0	1	0	1	0	0	0	0	5
Grand Total	1	10	2	13	1	0	1	2	0	2	1	3	0	0	0	0	18
Apprch %	7.7	76.9	15.4		50	0	50		0	66.7	33.3		0	0	0		
Total %	5.6	55.6	11.1	72.2	5.6	0	5.6	11.1	0	11.1	5.6	16.7	0	0	0	0	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**3**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	**1**	3	**1**	0	0	**1**	0	**1**	**1**	**2**	0	0	0	0	**6**
Total Volume	0	9	1	10	1	0	0	1	0	1	1	2	0	0	0	0	13
% App. Total	0	90	10		100	0	0		0	50	50		0	0	0		
PHF	.000	.750	.250	.833	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000	.542

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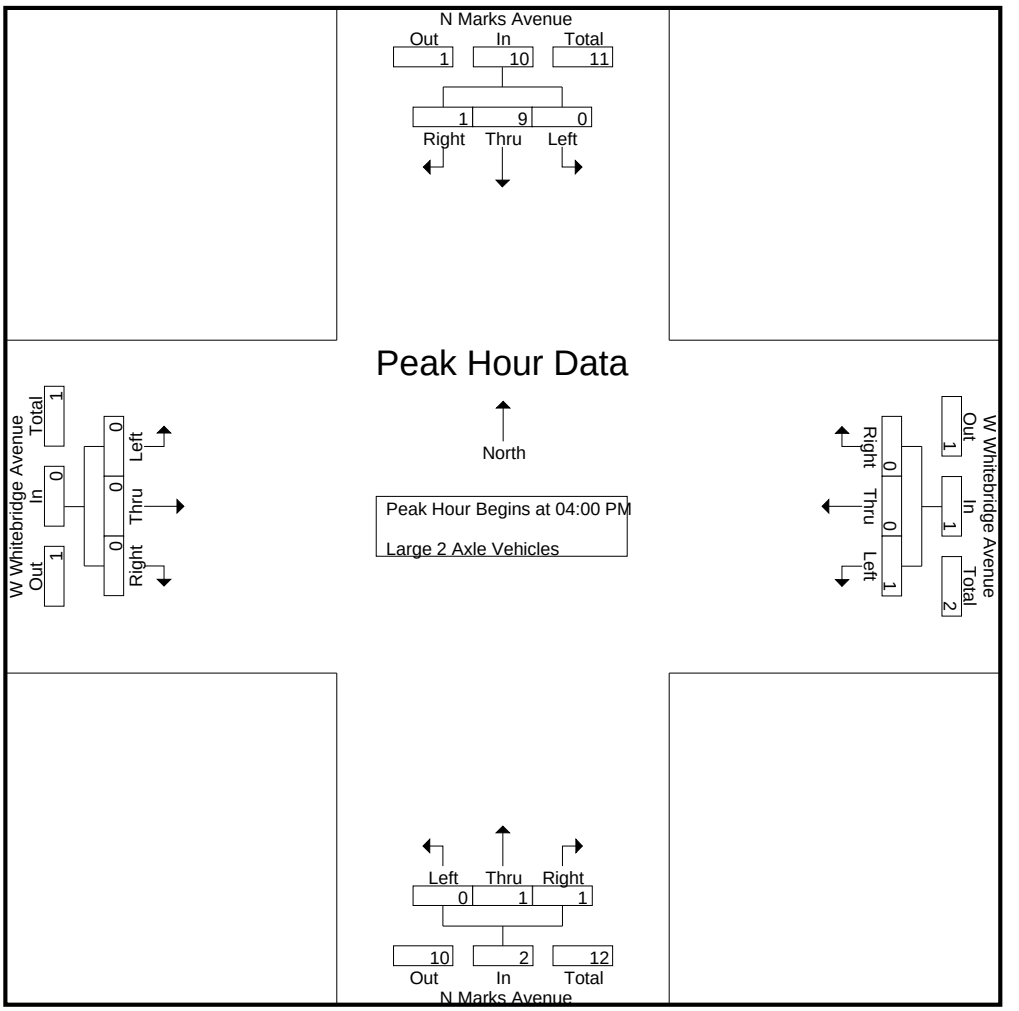
City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**3**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	**1**	3	**1**	0	0	**1**	0	**1**	**1**	**2**	0	0	0	0
Total Volume	0	9	1	10	1	0	0	1	0	1	1	2	0	0	0	0
% App. Total	0	90	10		100	0	0		0	50	50		0	0	0	
PHF	.000	.750	.250	.833	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 3 Axle Vehicles

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	2	1	4	0	2	1	3	0	3	0	3	0	0	0	0	10
04:15 PM	2	1	5	8	0	0	2	2	1	1	0	2	0	0	0	0	12
04:30 PM	1	0	0	1	0	0	1	1	1	2	0	3	0	0	0	0	5
04:45 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
Total	4	4	7	15	0	2	4	6	2	6	0	8	0	1	0	1	30
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	1	2	0	3	0	1	0	1	0	1	0	1	0	0	0	0	5
05:30 PM	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
05:45 PM	3	0	0	3	0	0	1	1	0	1	0	1	0	0	0	0	5
Total	5	3	1	9	0	1	1	2	0	2	0	2	1	0	0	1	14
Grand Total	9	7	8	24	0	3	5	8	2	8	0	10	1	1	0	2	44
Apprch %	37.5	29.2	33.3		0	37.5	62.5		20	80	0		50	50	0		
Total %	20.5	15.9	18.2	54.5	0	6.8	11.4	18.2	4.5	18.2	0	22.7	2.3	2.3	0	4.5	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	**2**	1	4	0	**2**	1	**3**	0	**3**	0	**3**	0	0	0	0	10
04:15 PM	**2**	1	**5**	**8**	0	0	**2**	2	**1**	1	0	2	0	0	0	0	**12**
04:30 PM	1	0	0	1	0	0	1	1	1	2	0	3	0	0	0	0	5
04:45 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	**1**	0	**1**	3
Total Volume	4	4	7	15	0	2	4	6	2	6	0	8	0	1	0	1	30
% App. Total	26.7	26.7	46.7		0	33.3	66.7		25	75	0		0	100	0		
PHF	.500	.500	.350	.469	.000	.250	.500	.500	.500	.500	.000	.667	.000	.250	.000	.250	.625

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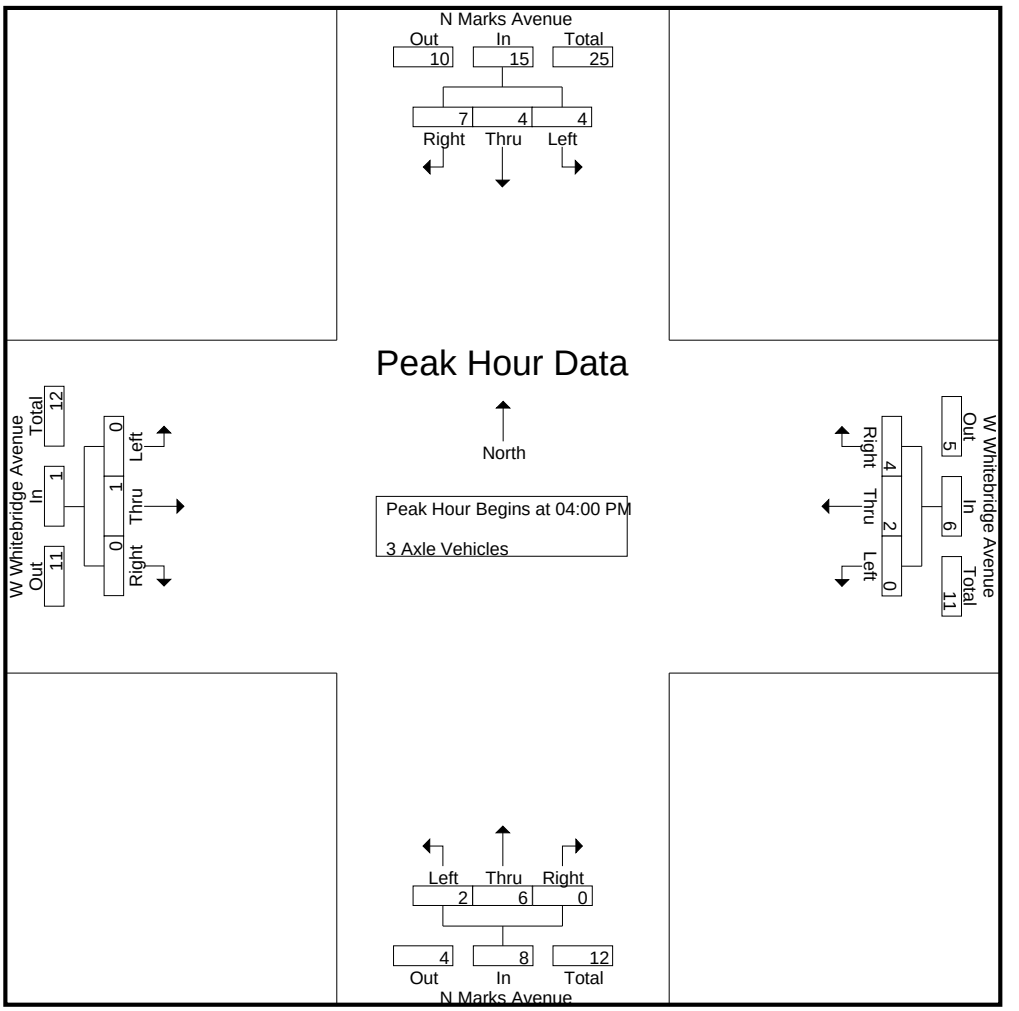
City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	**2**	1	4	0	**2**	1	**3**	0	**3**	0	**3**	0	0	0	0
+15 mins.	**2**	1	**5**	**8**	0	0	**2**	2	**1**	1	0	2	0	0	0	0
+30 mins.	1	0	0	1	0	0	1	1	1	2	0	3	0	0	0	0
+45 mins.	0	1	1	2	0	0	0	0	0	0	0	0	0	**1**	0	**1**
Total Volume	4	4	7	15	0	2	4	6	2	6	0	8	0	1	0	1
% App. Total	26.7	26.7	46.7		0	33.3	66.7		25	75	0		0	100	0	
PHF	.500	.500	.350	.469	.000	.250	.500	.500	.500	.500	.000	.667	.000	.250	.000	.250

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City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- 4+ Axle Trucks

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	1	0	3	0	0	1	1	0	3	0	3	0	0	0	0	7
04:15 PM	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30 PM	4	5	0	9	0	0	1	1	0	2	0	2	0	0	0	0	12
04:45 PM	0	1	0	1	0	0	1	1	0	2	0	2	0	0	0	0	4
Total	9	9	0	18	0	0	3	3	0	7	0	7	0	0	0	0	28
05:00 PM	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	2	1	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
05:30 PM	2	1	0	3	0	0	4	4	0	2	0	2	1	0	0	1	10
05:45 PM	1	1	1	3	0	0	0	0	0	4	0	4	0	0	0	0	7
Total	6	4	1	11	0	0	4	4	0	7	1	8	1	0	0	1	24
Grand Total	15	13	1	29	0	0	7	7	0	14	1	15	1	0	0	1	52
Apprch %	51.7	44.8	3.4		0	0	100		0	93.3	6.7		100	0	0		
Total %	28.8	25	1.9	55.8	0	0	13.5	13.5	0	26.9	1.9	28.8	1.9	0	0	1.9	

	N Marks Avenue Southbound				W Whitebridge Avenue Westbound				N Marks Avenue Northbound				W Whitebridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	2	1	0	3	0	0	**1**	**1**	0	**3**	0	**3**	0	0	0	0	7
04:15 PM	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30 PM	**4**	**5**	0	**9**	0	0	1	1	0	2	0	2	0	0	0	0	**12**
04:45 PM	0	1	0	1	0	0	1	1	0	2	0	2	0	0	0	0	4
Total Volume	9	9	0	18	0	0	3	3	0	7	0	7	0	0	0	0	28
% App. Total	50	50	0		0	0	100		0	100	0		0	0	0		
PHF	.563	.450	.000	.500	.000	.000	.750	.750	.000	.583	.000	.583	.000	.000	.000	.000	.583

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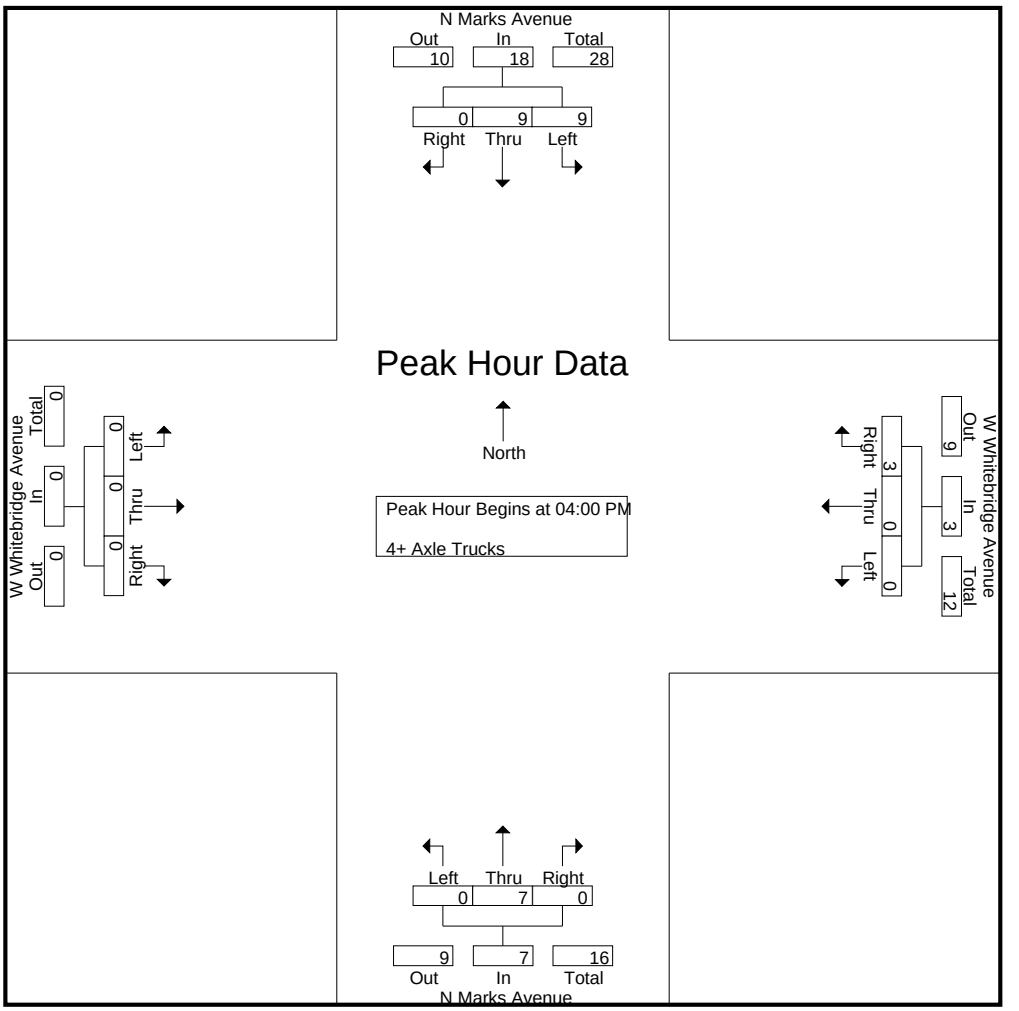
City of Fresno
N/S: N Marks Avenue
E/W: W Whitebridge Avenue
Weather: Clear

File Name : 06_FSO_Marks_Whit PMC
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	2	1	0	3	0	0	**1**	**1**	0	**3**	0	**3**	0	0	0	0
+15 mins.	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	**4**	**5**	0	**9**	0	0	1	1	0	2	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	1	1	0	2	0	2	0	0	0	0
Total Volume	9	9	0	18	0	0	3	3	0	7	0	7	0	0	0	0
% App. Total	50	50	0		0	0	100		0	100	0		0	0	0	
PHF	.563	.450	.000	.500	.000	.000	.750	.750	.000	.583	.000	.583	.000	.000	.000	.000

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City of Fresno
N/S: Hughes Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 07_FSO_Hughes_Bel AM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Total Volume

	Hughes Avenue Southbound				Belmont Avenue Westbound				Hughes Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	16	1	21	6	32	7	45	6	6	4	16	4	36	6	46	128
07:15 AM	9	19	5	33	4	23	14	41	4	9	0	13	10	48	2	60	147
07:30 AM	13	26	3	42	5	19	12	36	2	12	11	25	3	53	9	65	168
07:45 AM	12	34	2	48	4	38	15	57	2	11	11	24	11	61	13	85	214
Total	38	95	11	144	19	112	48	179	14	38	26	78	28	198	30	256	657
08:00 AM	15	34	8	57	7	24	14	45	3	18	8	29	7	53	10	70	201
08:15 AM	14	17	2	33	7	27	14	48	7	19	10	36	11	55	8	74	191
08:30 AM	16	12	6	34	9	38	15	62	7	28	13	48	13	39	5	57	201
08:45 AM	9	12	3	24	9	34	7	50	1	14	7	22	6	36	5	47	143
Total	54	75	19	148	32	123	50	205	18	79	38	135	37	183	28	248	736
Grand Total	92	170	30	292	51	235	98	384	32	117	64	213	65	381	58	504	1393
Apprch %	31.5	58.2	10.3		13.3	61.2	25.5		15	54.9	30		12.9	75.6	11.5		
Total %	6.6	12.2	2.2	21	3.7	16.9	7	27.6	2.3	8.4	4.6	15.3	4.7	27.4	4.2	36.2	

	Hughes Avenue Southbound				Belmont Avenue Westbound				Hughes Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	12	**34**	2	48	4	**38**	**15**	57	2	11	11	24	11	**61**	**13**	**85**	**214**
08:00 AM	15	34	**8**	**57**	7	24	14	45	3	18	8	29	7	53	10	70	201
08:15 AM	14	17	2	33	7	27	14	48	**7**	19	10	36	11	55	8	74	191
08:30 AM	**16**	12	6	34	**9**	38	15	**62**	7	**28**	**13**	**48**	**13**	39	5	57	201
Total Volume	57	97	18	172	27	127	58	212	19	76	42	137	42	208	36	286	807
% App. Total	33.1	56.4	10.5		12.7	59.9	27.4		13.9	55.5	30.7		14.7	72.7	12.6		
PHF	.891	.713	.563	.754	.750	.836	.967	.855	.679	.679	.808	.714	.808	.852	.692	.841	.943

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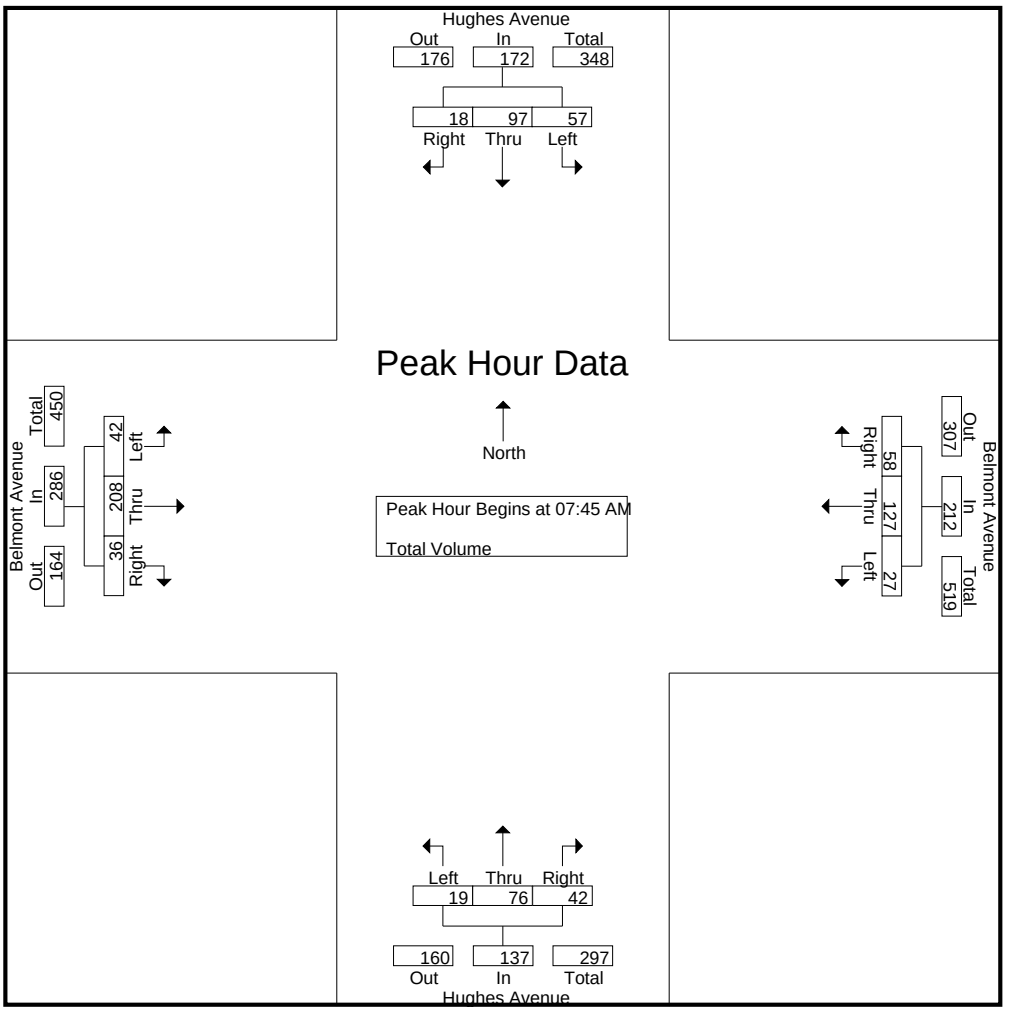
City of Fresno
N/S: Hughes Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 07_FSO_Hughes_Bel AM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:45 AM				07:30 AM			
+0 mins.	9	19	5	33	4	**38**	**15**	57	2	11	11	24	3	53	9	65
+15 mins.	13	26	3	42	7	24	14	45	3	18	8	29	**11**	**61**	**13**	**85**
+30 mins.	12	**34**	2	48	7	27	14	48	**7**	19	10	36	7	53	10	70
+45 mins.	**15**	34	**8**	**57**	**9**	38	15	**62**	7	**28**	**13**	**48**	11	55	8	74
Total Volume	49	113	18	180	27	127	58	212	19	76	42	137	32	222	40	294
% App. Total	27.2	62.8	10		12.7	59.9	27.4		13.9	55.5	30.7		10.9	75.5	13.6	
PHF	.817	.831	.563	.789	.750	.836	.967	.855	.679	.679	.808	.714	.727	.910	.769	.865

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City of Fresno
N/S: Hughes Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 07_FSO_Hughes_Bel PM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Total Volume

	Hughes Avenue Southbound				Belmont Avenue Westbound				Hughes Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	16	11	37	5	40	14	59	8	26	13	47	10	59	3	72	215
04:15 PM	11	23	3	37	5	46	10	61	6	21	11	38	10	74	9	93	229
04:30 PM	10	15	6	31	2	39	8	49	6	21	9	36	14	70	8	92	208
04:45 PM	9	6	1	16	14	40	15	69	8	27	13	48	10	59	6	75	208
Total	40	60	21	121	26	165	47	238	28	95	46	169	44	262	26	332	860
05:00 PM	5	20	0	25	4	33	12	49	4	30	15	49	10	77	3	90	213
05:15 PM	11	14	1	26	5	29	9	43	10	21	16	47	16	65	3	84	200
05:30 PM	6	13	3	22	8	44	13	65	4	20	11	35	8	64	3	75	197
05:45 PM	4	13	2	19	10	26	7	43	1	15	6	22	6	54	4	64	148
Total	26	60	6	92	27	132	41	200	19	86	48	153	40	260	13	313	758
Grand Total	66	120	27	213	53	297	88	438	47	181	94	322	84	522	39	645	1618
Apprch %	31	56.3	12.7		12.1	67.8	20.1		14.6	56.2	29.2		13	80.9	6		
Total %	4.1	7.4	1.7	13.2	3.3	18.4	5.4	27.1	2.9	11.2	5.8	19.9	5.2	32.3	2.4	39.9	

	Hughes Avenue Southbound				Belmont Avenue Westbound				Hughes Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	10	16	**11**	**37**	5	40	14	59	**8**	26	**13**	47	10	59	3	72	215
04:15 PM	**11**	**23**	3	37	5	**46**	10	61	6	21	11	38	10	**74**	**9**	**93**	**229**
04:30 PM	10	15	6	31	2	39	8	49	6	21	9	36	**14**	70	8	92	208
04:45 PM	9	6	1	16	**14**	40	**15**	**69**	8	**27**	13	**48**	10	59	6	75	208
Total Volume	40	60	21	121	26	165	47	238	28	95	46	169	44	262	26	332	860
% App. Total	33.1	49.6	17.4		10.9	69.3	19.7		16.6	56.2	27.2		13.3	78.9	7.8		
PHF	.909	.652	.477	.818	.464	.897	.783	.862	.875	.880	.885	.880	.786	.885	.722	.892	.939

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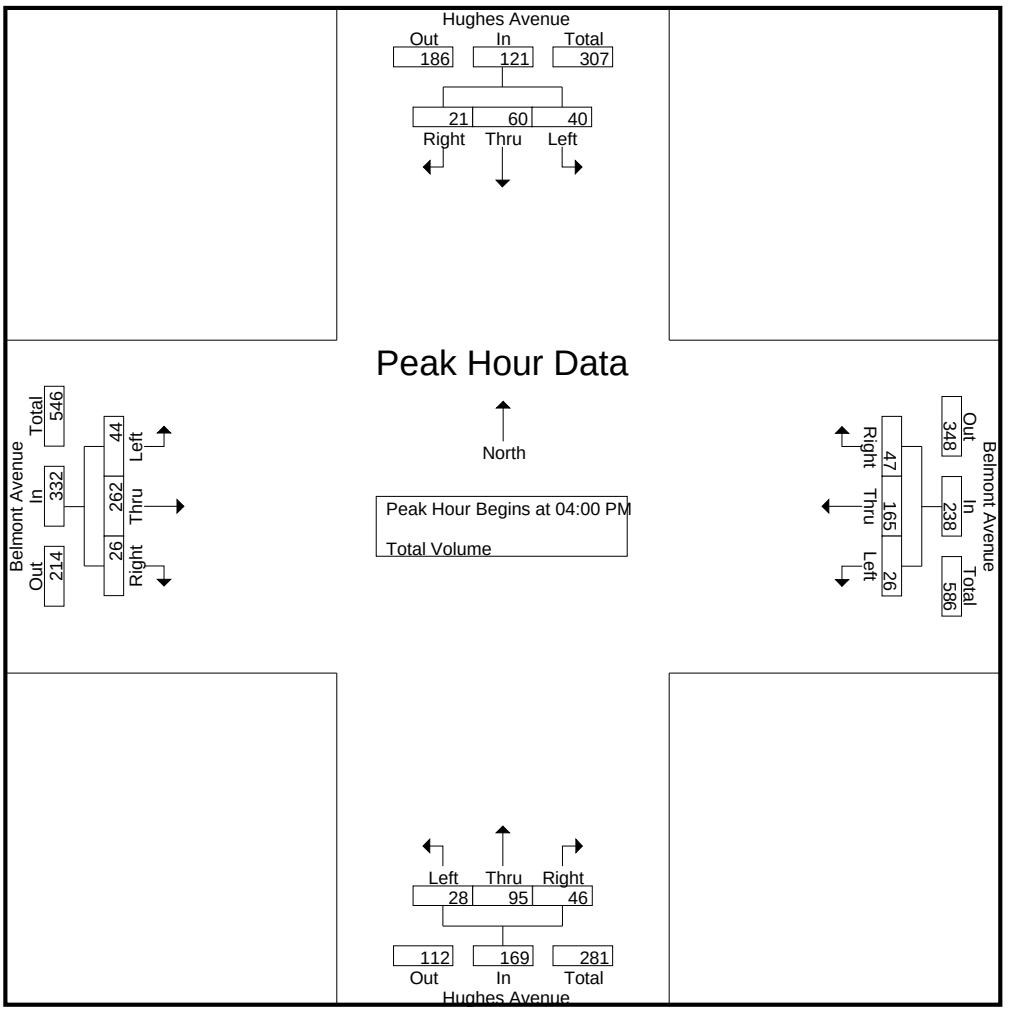
(951) 268-6268

City of Fresno
N/S: Hughes Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 07_FSO_Hughes_Bel PM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	10	16	**11**	**37**	5	40	14	59	6	21	9	36	10	74	**9**	**93**
+15 mins.	**11**	**23**	3	37	5	**46**	10	61	8	27	13	48	**14**	70	8	92
+30 mins.	10	15	6	31	2	39	8	49	4	**30**	15	**49**	10	59	6	75
+45 mins.	9	6	1	16	**14**	40	**15**	**69**	**10**	21	**16**	47	10	**77**	3	90
Total Volume	40	60	21	121	26	165	47	238	28	99	53	180	44	280	26	350
% App. Total	33.1	49.6	17.4		10.9	69.3	19.7		15.6	55	29.4		12.6	80	7.4	
PHF	.909	.652	.477	.818	.464	.897	.783	.862	.700	.825	.828	.918	.786	.909	.722	.941

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City of Fresno
N/S: Hughes Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 08_FSO_Hughes_Nie AM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Total Volume

	Hughes Avenue Southbound				W Nielsen Avenue Westbound				Hughes Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	10	4	17	0	3	3	6	5	8	2	15	3	16	6	25	63
07:15 AM	8	18	4	30	1	5	1	7	1	6	1	8	6	10	4	20	65
07:30 AM	6	30	2	38	1	3	1	5	2	22	0	24	1	6	5	12	79
07:45 AM	10	36	5	51	0	6	2	8	3	20	1	24	1	24	5	30	113
Total	27	94	15	136	2	17	7	26	11	56	4	71	11	56	20	87	320
08:00 AM	13	34	2	49	0	5	3	8	3	24	2	29	3	25	7	35	121
08:15 AM	13	17	3	33	0	9	9	18	3	27	0	30	4	16	4	24	105
08:30 AM	3	19	3	25	0	9	8	17	0	30	2	32	5	21	7	33	107
08:45 AM	6	17	3	26	2	11	6	19	3	14	0	17	1	14	3	18	80
Total	35	87	11	133	2	34	26	62	9	95	4	108	13	76	21	110	413
Grand Total	62	181	26	269	4	51	33	88	20	151	8	179	24	132	41	197	733
Apprch %	23	67.3	9.7		4.5	58	37.5		11.2	84.4	4.5		12.2	67	20.8		
Total %	8.5	24.7	3.5	36.7	0.5	7	4.5	12	2.7	20.6	1.1	24.4	3.3	18	5.6	26.9	

	Hughes Avenue Southbound				W Nielsen Avenue Westbound				Hughes Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	**36**	**5**	**51**	0	6	2	8	**3**	20	1	24	1	24	5	30	113
08:00 AM	**13**	34	2	49	0	5	3	8	3	24	**2**	29	3	**25**	**7**	**35**	**121**
08:15 AM	13	17	3	33	0	**9**	**9**	**18**	3	27	0	30	4	16	4	24	105
08:30 AM	3	19	3	25	0	9	8	17	0	**30**	2	**32**	**5**	21	7	33	107
Total Volume	39	106	13	158	0	29	22	51	9	101	5	115	13	86	23	122	446
% App. Total	24.7	67.1	8.2		0	56.9	43.1		7.8	87.8	4.3		10.7	70.5	18.9		
PHF	.750	.736	.650	.775	.000	.806	.611	.708	.750	.842	.625	.898	.650	.860	.821	.871	.921

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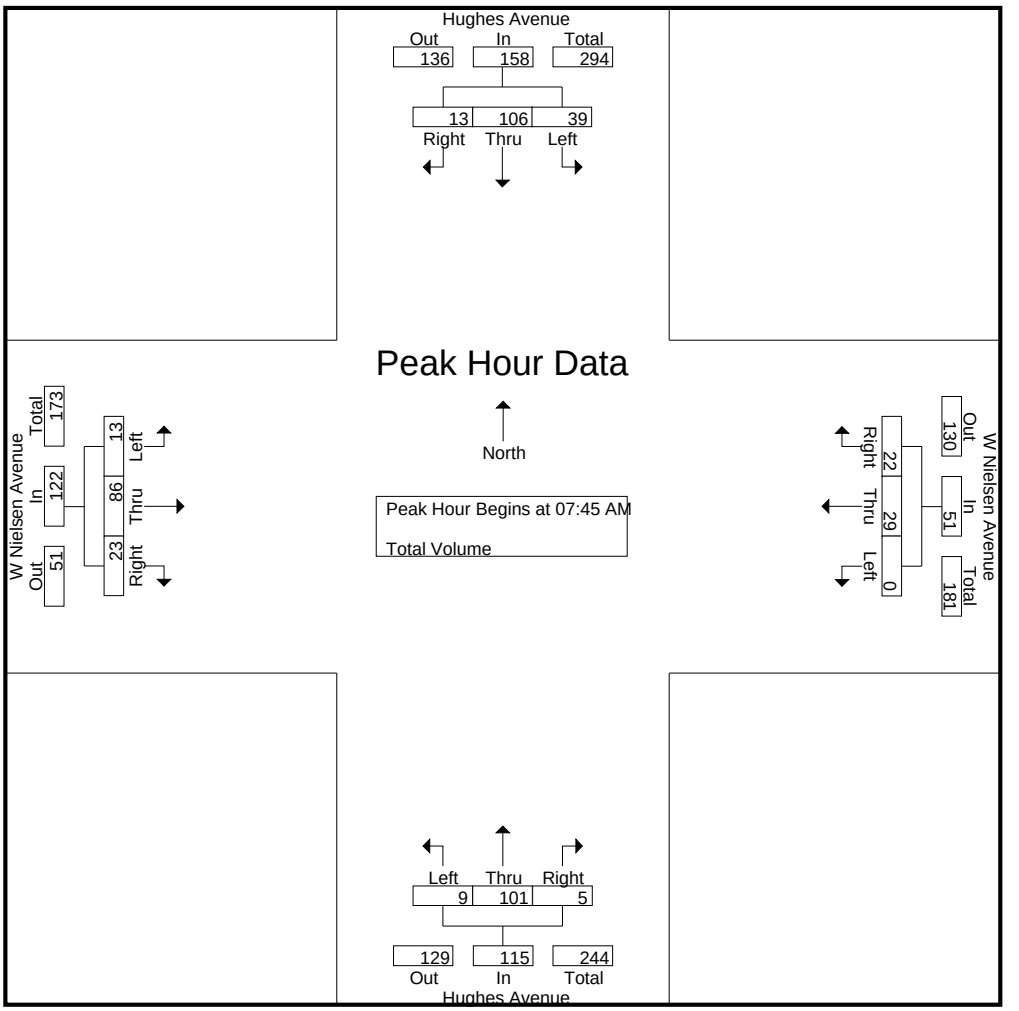
City of Fresno
N/S: Hughes Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 08_FSO_Hughes_Nie AM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:45 AM				07:45 AM			
+0 mins.	6	30	2	38	0	5	3	8	**3**	20	1	24	1	24	5	30
+15 mins.	10	**36**	**5**	**51**	0	9	**9**	18	3	24	**2**	29	3	**25**	**7**	**35**
+30 mins.	**13**	34	2	49	0	9	8	17	3	27	0	30	4	16	4	24
+45 mins.	13	17	3	33	**2**	**11**	6	**19**	0	**30**	2	**32**	**5**	21	7	33
Total Volume	42	117	12	171	2	34	26	62	9	101	5	115	13	86	23	122
% App. Total	24.6	68.4	7		3.2	54.8	41.9		7.8	87.8	4.3		10.7	70.5	18.9	
PHF	.808	.813	.600	.838	.250	.773	.722	.816	.750	.842	.625	.898	.650	.860	.821	.871

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City of Fresno
N/S: Hughes Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 08_FSO_Hughes_Nie PM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 1

Groups Printed- Total Volume

	Hughes Avenue Southbound				W Nielsen Avenue Westbound				Hughes Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	17	3	24	1	16	9	26	4	37	0	41	2	7	5	14	105
04:15 PM	5	28	1	34	0	8	8	16	4	26	0	30	4	5	2	11	91
04:30 PM	5	17	3	25	2	11	8	21	4	27	0	31	4	8	0	12	89
04:45 PM	5	18	5	28	1	6	9	16	2	29	0	31	1	12	2	15	90
Total	19	80	12	111	4	41	34	79	14	119	0	133	11	32	9	52	375
05:00 PM	4	23	10	37	1	18	4	23	3	32	0	35	3	2	0	5	100
05:15 PM	3	13	3	19	0	8	11	19	2	31	1	34	5	8	0	13	85
05:30 PM	2	21	2	25	0	6	2	8	5	25	2	32	2	8	3	13	78
05:45 PM	5	16	2	23	0	10	4	14	3	14	1	18	4	5	1	10	65
Total	14	73	17	104	1	42	21	64	13	102	4	119	14	23	4	41	328
Grand Total	33	153	29	215	5	83	55	143	27	221	4	252	25	55	13	93	703
Apprch %	15.3	71.2	13.5		3.5	58	38.5		10.7	87.7	1.6		26.9	59.1	14		
Total %	4.7	21.8	4.1	30.6	0.7	11.8	7.8	20.3	3.8	31.4	0.6	35.8	3.6	7.8	1.8	13.2	

	Hughes Avenue Southbound				W Nielsen Avenue Westbound				Hughes Avenue Northbound				W Nielsen Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	17	3	24	1	**16**	**9**	**26**	**4**	**37**	0	**41**	2	7	**5**	14	**105**
04:15 PM	**5**	**28**	1	**34**	0	8	8	16	4	26	0	30	**4**	5	2	11	91
04:30 PM	5	17	3	25	**2**	11	8	21	4	27	0	31	4	8	0	12	89
04:45 PM	5	18	**5**	28	1	6	9	16	2	29	0	31	1	**12**	2	**15**	90
Total Volume	19	80	12	111	4	41	34	79	14	119	0	133	11	32	9	52	375
% App. Total	17.1	72.1	10.8		5.1	51.9	43		10.5	89.5	0		21.2	61.5	17.3		
PHF	.950	.714	.600	.816	.500	.641	.944	.760	.875	.804	.000	.811	.688	.667	.450	.867	.893

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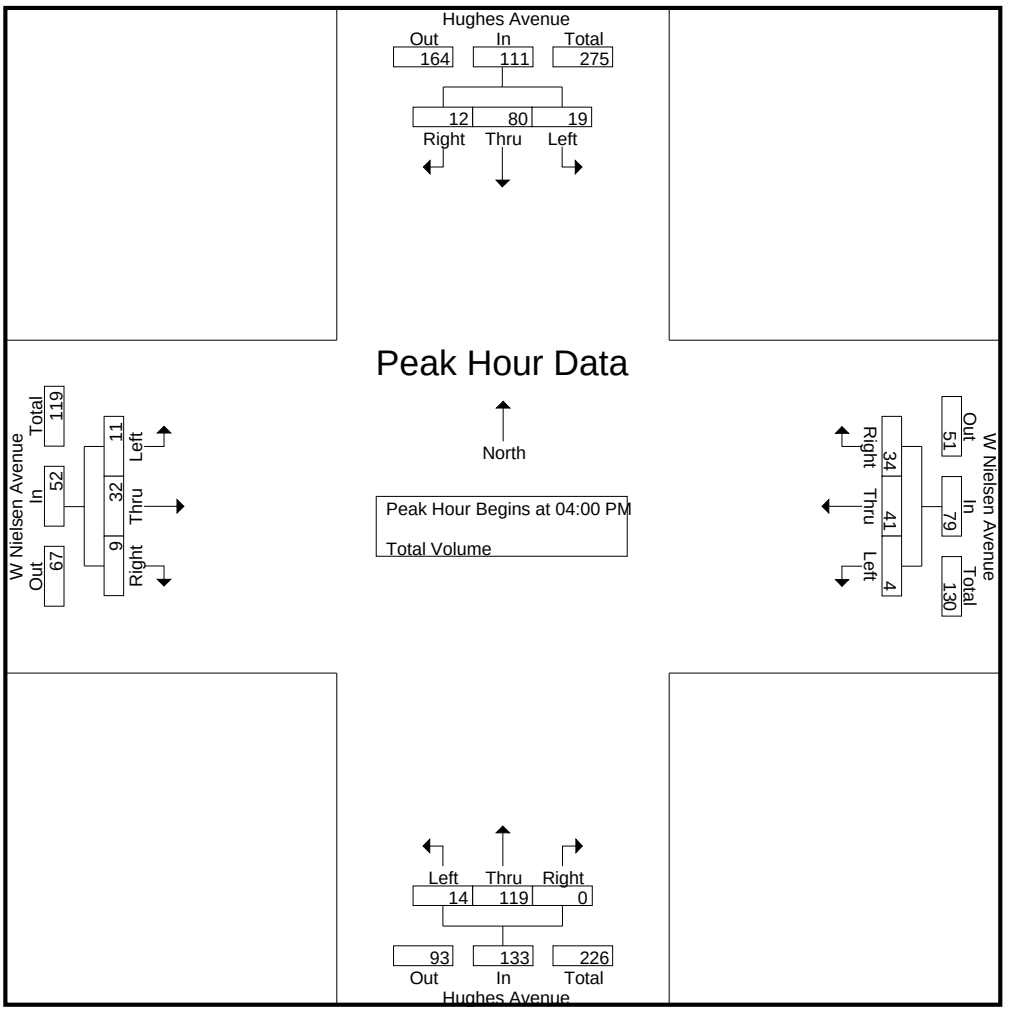
City of Fresno
N/S: Hughes Avenue
E/W: W Nielsen Avenue
Weather: Clear

File Name : 08_FSO_Hughes_Nie PM
Site Code : 00324843
Start Date : 9/25/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**5**	**28**	1	34	1	**16**	**9**	**26**	**4**	**37**	0	**41**	2	7	**5**	14
+15 mins.	5	17	3	25	0	8	8	16	4	26	0	30	**4**	5	2	11
+30 mins.	5	18	5	28	**2**	11	8	21	4	27	0	31	4	8	0	12
+45 mins.	4	23	**10**	**37**	1	6	9	16	2	29	0	31	1	**12**	2	**15**
Total Volume	19	86	19	124	4	41	34	79	14	119	0	133	11	32	9	52
% App. Total	15.3	69.4	15.3		5.1	51.9	43		10.5	89.5	0		21.2	61.5	17.3	
PHF	.950	.768	.475	.838	.500	.641	.944	.760	.875	.804	.000	.811	.688	.667	.450	.867

Counts Unimited, Inc.

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City of Fresno
Belmont Avenue
B/ Marks Avenue - Hughes Avenue
24 Hour Directional Volume Count

FSO009
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		3	38			2	45				
12:15		5	47			3	34				
12:30		2	40			1	47				
12:45		3	46	13	171	2	45	8	171	21	342
01:00		4	40			4	29				
01:15		7	41			4	32				
01:30		3	38			2	31				
01:45		3	56	17	175	2	28	12	120	29	295
02:00		3	37			3	43				
02:15		0	55			0	37				
02:30		2	52			5	27				
02:45		2	57	7	201	3	40	11	147	18	348
03:00		1	59			5	41				
03:15		2	67			3	41				
03:30		3	58			4	23				
03:45		5	59	11	243	2	40	14	145	25	388
04:00		6	73			5	48				
04:15		7	**83**			2	**41**				
04:30		6	**79**			5	**47**				
04:45		11	**59**	30	294	7	**44**	19	180	49	474
05:00		7	**78**			12	**50**				
05:15		11	77			21	38				
05:30		13	69			19	44				
05:45		26	60	57	284	15	25	67	157	124	441
06:00		4	24			19	31				
06:15		19	41			22	24				
06:30		26	29			24	30				
06:45		39	20	88	114	27	28	92	113	180	227
07:00		40	29			26	28				
07:15		51	18			26	19				
07:30		**59**	27			15	21				
07:45		**74**	21	224	95	20	22	87	90	311	185
08:00		**66**	23			16	13				
08:15		**66**	18			22	16				
08:30		52	11			29	16				
08:45		37	11	221	63	18	7	85	52	306	115
09:00		30	20			17	5				
09:15		37	9			31	5				
09:30		47	10			29	5				
09:45		38	9	152	48	35	18	112	33	264	81
10:00		22	14			20	7				
10:15		35	8			25	10				
10:30		43	11			26	7				
10:45		33	7	133	40	**28**	5	99	29	232	69
11:00		41	1			**26**	7				
11:15		40	2			**35**	4				
11:30		45	7			**37**	2				
11:45		40	7	166	17	25	3	123	16	289	33
Total		1119	1745	1119	1745	729	1253	729	1253	1848	2998
Combined Total		2864		2864		1982		1982		4846	
AM Peak	-	07:30	-	-	-	10:45	-	-	-	-	-
Vol.	-	265	-	-	-	126	-	-	-	-	-
P.H.F.		0.895				0.851					
PM Peak	-	-	04:15	-	-	-	04:15	-	-	-	-
Vol.	-	-	299	-	-	-	182	-	-	-	-
P.H.F.			0.901				0.910				
Percentage		39.1%	60.9%			36.8%	63.2%				
ADT/AADT		ADT 4,846		AADT 4,846							

Counts Unimited, Inc.

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City of Fresno
Belmont Avenue
E/ Hughes Avenue
24 Hour Directional Volume Count

FSO010
Site Code: 003-24843

Start	9/25/24	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	62			4	**65**				
12:15		7	52			8	**50**				
12:30		3	62			2	**68**				
12:45		4	68	22	244	6	**68**	20	251	42	495
01:00		6	56			7	38				
01:15		5	48			7	53				
01:30		5	64			4	46				
01:45		7	66	23	234	5	43	23	180	46	414
02:00		6	74			5	60				
02:15		3	55			4	53				
02:30		5	86			8	62				
02:45		3	87	17	302	3	58	20	233	37	535
03:00		1	83			6	46				
03:15		3	86			4	54				
03:30		5	75			11	35				
03:45		9	74	18	318	7	46	28	181	46	499
04:00		9	69			6	50				
04:15		8	**92**			7	53				
04:30		8	**87**			15	44				
04:45		16	**74**	41	322	13	63	41	210	82	532
05:00		12	**95**			18	45				
05:15		8	90			19	36				
05:30		24	76			24	60				
05:45		20	63	64	324	34	37	95	178	159	502
06:00		10	39			32	29				
06:15		19	45			28	34				
06:30		39	34			29	42				
06:45		44	37	112	155	34	35	123	140	235	295
07:00		35	33			35	29				
07:15		45	32			37	28				
07:30		**70**	39			31	32				
07:45		**72**	42	222	146	47	43	150	132	372	278
08:00		**66**	30			43	19				
08:15		**69**	21			40	23				
08:30		55	22			58	22				
08:45		38	11	228	84	43	11	184	75	412	159
09:00		44	27			45	10				
09:15		45	11			41	13				
09:30		54	17			48	16				
09:45		59	14	202	69	48	21	182	60	384	129
10:00		48	15			50	9				
10:15		46	9			60	13				
10:30		65	15			43	7				
10:45		52	7	211	46	**60**	6	213	35	424	81
11:00		54	6			**51**	11				
11:15		54	4			**50**	8				
11:30		60	7			**65**	10				
11:45		64	10	232	27	42	15	208	44	440	71
Total		1392	2271	1392	2271	1287	1719	1287	1719	2679	3990
Combined Total		3663		3663		3006		3006		6669	
AM Peak	-	07:30	-	-	-	10:45	-	-	-	-	-
Vol.	-	277	-	-	-	226	-	-	-	-	-
P.H.F.		0.962				0.869					
PM Peak	-	-	04:15	-	-	-	12:00	-	-	-	-
Vol.	-	-	348	-	-	-	251	-	-	-	-
P.H.F.			0.916				0.923				
Percentage		38.0%	62.0%			42.8%	57.2%				
ADT/AADT		ADT 6,669		AADT 6,669							

Counts Unimited, Inc.

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City of Fresno
Belmont Avenue
W/ Marks Avenue
24 Hour Directional Volume Count

FSO008
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		6	38			6	36				
12:15		8	35			6	37				
12:30		4	40			1	54				
12:45		4	51	22	164	2	40	15	167	37	331
01:00		3	50			4	31				
01:15		6	44			6	39				
01:30		2	36			1	40				
01:45		0	37	11	167	3	38	14	148	25	315
02:00		3	38			3	46				
02:15		2	55			1	39				
02:30		1	49			1	41				
02:45		3	48	9	190	1	65	6	191	15	381
03:00		2	44			4	56				
03:15		3	56			4	53				
03:30		1	56			4	37				
03:45		4	46	10	202	2	65	14	211	24	413
04:00		4	55			4	83				
04:15		6	56			4	61				
04:30		7	63			8	73				
04:45		19	50	36	224	8	**84**	24	301	60	525
05:00		9	**65**			13	**87**				
05:15		18	**52**			13	**92**				
05:30		29	**62**			23	**97**				
05:45		25	**59**	81	238	20	50	69	326	150	564
06:00		9	20			29	42				
06:15		39	35			34	32				
06:30		30	25			26	35				
06:45		32	30	110	110	35	38	124	147	234	257
07:00		59	38			20	29				
07:15		**80**	23			25	27				
07:30		**121**	31			28	29				
07:45		**118**	27	378	119	37	33	110	118	488	237
08:00		**90**	26			29	27				
08:15		63	23			32	11				
08:30		49	14			36	25				
08:45		38	9	240	72	37	15	134	78	374	150
09:00		35	20			26	11				
09:15		43	10			27	15				
09:30		46	18			**30**	8				
09:45		37	5	161	53	**38**	20	121	54	282	107
10:00		18	13			**30**	7				
10:15		32	8			**37**	8				
10:30		35	13			27	10				
10:45		34	8	119	42	26	3	120	28	239	70
11:00		38	4			29	3				
11:15		37	6			30	8				
11:30		33	6			37	2				
11:45		34	5	142	21	37	4	133	17	275	38
Total		1319	1602	1319	1602	884	1786	884	1786	2203	3388
Combined Total		2921		2921		2670		2670		5591	
AM Peak	-	07:15	-	-	-	09:30	-	-	-	-	-
Vol.	-	409	-	-	-	135	-	-	-	-	-
P.H.F.		0.845				0.888					
PM Peak	-	-	05:00	-	-	-	04:45	-	-	-	-
Vol.	-	-	238	-	-	-	360	-	-	-	-
P.H.F.			0.915				0.928				
Percentage		45.2%	54.8%			33.1%	66.9%				
ADT/AADT		ADT 5,591		AADT 5,591							

Counts Unimited, Inc.

PO Box 1178
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City of Fresno
Hughes Avenue
B/ Belmont Avenue - Nielsen Avenue
24 Hour Directional Volume Count

FSO015
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		7	28			1	15				
12:15		1	23			8	22				
12:30		4	30			0	23				
12:45		2	22	14	103	2	25	11	85	25	188
01:00		2	15			3	21				
01:15		0	16			4	24				
01:30		6	28			3	19				
01:45		3	21	11	80	1	33	11	97	22	177
02:00		3	27			1	20				
02:15		1	26			3	22				
02:30		5	41			2	**32**				
02:45		2	43	11	137	2	**31**	8	105	19	242
03:00		0	20			1	**27**				
03:15		2	27			2	**36**				
03:30		0	55			6	23				
03:45		4	24	6	126	4	35	13	121	19	247
04:00		1	43			5	22				
04:15		3	37			6	36				
04:30		2	**34**			8	24				
04:45		5	**47**	11	161	4	23	23	105	34	266
05:00		1	**48**			7	21				
05:15		2	**44**			10	20				
05:30		5	32			11	23				
05:45		4	22	12	146	19	26	47	90	59	236
06:00		8	30			13	11				
06:15		4	25			13	15				
06:30		4	23			5	14				
06:45		2	18	18	96	5	15	36	55	54	151
07:00		14	12			26	17				
07:15		9	22			25	9				
07:30		25	6			**39**	16				
07:45		**22**	21	70	61	**51**	11	141	53	211	114
08:00		**26**	10			**46**	4				
08:15		**35**	5			**30**	13				
08:30		**44**	14			24	6				
08:45		19	5	124	34	25	10	125	33	249	67
09:00		22	15			23	11				
09:15		20	6			23	6				
09:30		22	4			20	8				
09:45		27	2	91	27	21	9	87	34	178	61
10:00		22	7			17	4				
10:15		18	6			17	5				
10:30		22	1			15	0				
10:45		22	5	84	19	27	4	76	13	160	32
11:00		12	2			31	8				
11:15		39	4			21	3				
11:30		23	1			24	3				
11:45		21	2	95	9	21	3	97	17	192	26
Total		547	999	547	999	675	808	675	808	1222	1807
Combined Total		1546		1546		1483		1483		3029	
AM Peak	-	07:45	-	-	-	07:30	-	-	-	-	-
Vol.	-	127	-	-	-	166	-	-	-	-	-
P.H.F.		0.722				0.814					
PM Peak	-	-	04:30	-	-	-	02:30	-	-	-	-
Vol.	-	-	173	-	-	-	126	-	-	-	-
P.H.F.			0.901				0.875				
Percentage		35.4%	64.6%			45.5%	54.5%				
ADT/AADT		ADT 3,029		AADT 3,029							

Counts Unimited, Inc.

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City of Fresno
Hughes Avenue
N/ Belmont Avenue
24 Hour Directional Volume Count

FSO014
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		6	30			1	14				
12:15		2	30			5	25				
12:30		4	39			0	24				
12:45		4	25	16	124	2	33	8	96	24	220
01:00		3	13			3	21				
01:15		2	25			1	25				
01:30		3	26			0	26				
01:45		2	22	10	86	0	30	4	102	14	188
02:00		3	33			1	25				
02:15		2	26			2	26				
02:30		4	36			2	29				
02:45		1	48	10	143	1	**46**	6	126	16	269
03:00		1	26			1	**46**				
03:15		2	31			1	**41**				
03:30		2	53			4	**32**				
03:45		3	37	8	147	2	43	8	162	16	309
04:00		0	49			3	34				
04:15		5	38			7	36				
04:30		5	**40**			4	30				
04:45		5	**48**	15	175	3	15	17	115	32	290
05:00		6	**51**			8	22				
05:15		5	**44**			5	26				
05:30		4	39			10	21				
05:45		5	28	20	162	9	19	32	88	52	250
06:00		11	21			14	12				
06:15		8	26			14	18				
06:30		12	29			17	12				
06:45		9	18	40	94	21	23	66	65	106	159
07:00		16	10			21	12				
07:15		30	18			32	11				
07:30		26	10			**41**	17				
07:45		**35**	8	107	46	**47**	5	141	45	248	91
08:00		**36**	16			**52**	4				
08:15		**39**	7			**33**	14				
08:30		**51**	10			27	7				
08:45		25	7	151	40	21	9	133	34	284	74
09:00		19	12			20	8				
09:15		19	10			22	7				
09:30		15	9			16	5				
09:45		22	6	75	37	18	11	76	31	151	68
10:00		21	3			22	3				
10:15		17	8			12	3				
10:30		15	1			20	1				
10:45		26	6	79	18	20	3	74	10	153	28
11:00		25	3			31	8				
11:15		30	8			21	4				
11:30		35	5			20	1				
11:45		28	3	118	19	23	1	95	14	213	33
Total		649	1091	649	1091	660	888	660	888	1309	1979
Combined Total		1740		1740		1548		1548		3288	
AM Peak	-	07:45	-	-	-	07:30	-	-	-	-	-
Vol.	-	161	-	-	-	173	-	-	-	-	-
P.H.F.		0.789				0.832					
PM Peak	-	-	04:30	-	-	-	02:45	-	-	-	-
Vol.	-	-	183	-	-	-	165	-	-	-	-
P.H.F.			0.897				0.897				
Percentage		37.3%	62.7%			42.6%	57.4%				
ADT/AADT		ADT 3,288		AADT 3,288							

Counts Unimited, Inc.

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City of Fresno
Hughes Avenue
S/ Nielsen Avenue
24 Hour Directional Volume Count

FSO016
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	22			2	17				
12:15		1	19			7	7				
12:30		4	18			1	19				
12:45		2	14	8	73	3	17	13	60	21	133
01:00		3	14			2	17				
01:15		3	18			2	18				
01:30		5	23			3	17				
01:45		2	16	13	71	0	22	7	74	20	145
02:00		2	26			1	20				
02:15		1	22			2	18				
02:30		2	29			1	19				
02:45		0	31	5	108	0	22	4	79	9	187
03:00		0	15			1	**23**				
03:15		2	22			2	**32**				
03:30		0	**48**			1	**25**				
03:45		4	**18**	6	103	1	**30**	5	110	11	213
04:00		0	**39**			1	22				
04:15		1	**27**			1	29				
04:30		1	29			4	19				
04:45		2	29	4	124	0	21	6	91	10	215
05:00		4	34			5	21				
05:15		1	31			6	11				
05:30		5	30			2	23				
05:45		3	18	13	113	8	16	21	71	34	184
06:00		7	21			8	9				
06:15		4	21			6	10				
06:30		9	18			11	12				
06:45		11	13	31	73	9	12	34	43	65	116
07:00		15	14			16	20				
07:15		5	10			**22**	5				
07:30		24	8			**35**	11				
07:45		**21**	14	65	46	**41**	7	114	43	179	89
08:00		**28**	5			**40**	4				
08:15		**30**	4			18	12				
08:30		**31**	11			23	7				
08:45		15	4	104	24	22	9	103	32	207	56
09:00		20	15			19	9				
09:15		20	7			14	6				
09:30		18	1			7	9				
09:45		20	3	78	26	13	7	53	31	131	57
10:00		12	7			19	4				
10:15		16	7			14	4				
10:30		11	2			13	0				
10:45		18	3	57	19	13	3	59	11	116	30
11:00		9	2			11	8				
11:15		25	2			17	4				
11:30		14	0			18	1				
11:45		16	2	64	6	19	3	65	16	129	22
Total		448	786	448	786	484	661	484	661	932	1447
Combined Total		1234		1234		1145		1145		2379	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	110	-	-	-	138	-	-	-	-	-
P.H.F.		0.887				0.841					
PM Peak	-	-	03:30	-	-	-	03:00	-	-	-	-
Vol.	-	-	132	-	-	-	110	-	-	-	-
P.H.F.			0.688				0.859				
Percentage		36.3%	63.7%			42.3%	57.7%				
ADT/AADT		ADT 2,379		AADT 2,379							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
B/ Belmont Avenue - Nielsen Avenue
24 Hour Directional Volume Count

FSO002
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		14	55			13	43				
12:15		15	56			13	42				
12:30		7	53			6	42				
12:45		7	48	43	212	4	47	36	174	79	386
01:00		8	56			4	51				
01:15		10	71			4	41				
01:30		2	83			4	44				
01:45		6	92	26	302	1	38	13	174	39	476
02:00		5	58			1	44				
02:15		3	81			4	45				
02:30		2	106			4	44				
02:45		2	121	12	366	8	53	17	186	29	552
03:00		0	122			6	56				
03:15		4	124			7	56				
03:30		3	135			4	**86**				
03:45		5	164	12	545	4	**66**	21	264	33	809
04:00		5	166			8	**64**				
04:15		4	151			3	**67**				
04:30		6	151			7	81				
04:45		7	**171**	22	639	19	47	37	259	59	898
05:00		12	**186**			20	64				
05:15		15	**206**			29	51				
05:30		25	**186**			42	60				
05:45		20	126	72	704	37	48	128	223	200	927
06:00		31	86			29	30				
06:15		29	62			45	40				
06:30		39	62			53	28				
06:45		33	51	132	261	30	33	157	131	289	392
07:00		52	34			71	38				
07:15		66	45			**124**	36				
07:30		60	47			**178**	25				
07:45		**87**	53	265	179	**186**	19	559	118	824	297
08:00		**71**	40			**148**	26				
08:15		**80**	27			80	31				
08:30		**82**	26			65	16				
08:45		64	27	297	120	52	17	345	90	642	210
09:00		46	24			40	18				
09:15		39	23			41	15				
09:30		42	15			31	16				
09:45		62	31	189	93	40	10	152	59	341	152
10:00		52	30			28	14				
10:15		54	15			37	10				
10:30		35	15			28	7				
10:45		42	9	183	69	38	8	131	39	314	108
11:00		47	10			32	10				
11:15		48	8			41	9				
11:30		51	9			35	3				
11:45		57	14	203	41	30	12	138	34	341	75
Total		1456	3531	1456	3531	1734	1751	1734	1751	3190	5282
Combined Total		4987		4987		3485		3485		8472	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	320	-	-	-	636	-	-	-	-	-
P.H.F.		0.920				0.855					
PM Peak	-	-	04:45	-	-	-	03:30	-	-	-	-
Vol.	-	-	749	-	-	-	283	-	-	-	-
P.H.F.			0.909				0.823				
Percentage		29.2%	70.8%			49.8%	50.2%				
ADT/AADT		ADT 8,472		AADT 8,472							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
B/ Nielsen Avenue - Ray Johnson Drive
24 Hour Directional Volume Count

FSO003
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		12	61			14	48				
12:15		8	56			14	48				
12:30		7	52			8	51				
12:45		9	51	36	220	4	50	40	197	76	417
01:00		7	72			4	50				
01:15		9	80			3	45				
01:30		4	75			3	54				
01:45		6	99	26	326	1	41	11	190	37	516
02:00		8	68			3	49				
02:15		3	84			3	72				
02:30		9	98			2	67				
02:45		8	128	28	378	6	75	14	263	42	641
03:00		3	117			6	64				
03:15		7	120			8	57				
03:30		6	150			4	80				
03:45		11	149	27	536	7	**84**	25	285	52	821
04:00		9	163			7	**74**				
04:15		10	148			5	**81**				
04:30		11	152			10	**82**				
04:45		14	**173**	44	636	16	57	38	294	82	930
05:00		12	**173**			16	87				
05:15		19	**192**			25	60				
05:30		42	**171**			34	58				
05:45		35	122	108	658	31	49	106	254	214	912
06:00		50	95			28	44				
06:15		51	51			43	33				
06:30		62	64			33	39				
06:45		68	46	231	256	29	35	133	151	364	407
07:00		47	35			63	44				
07:15		79	48			**126**	37				
07:30		73	42			**173**	28				
07:45		**99**	52	298	177	**176**	18	538	127	836	304
08:00		**91**	39			**133**	24				
08:15		**105**	30			86	33				
08:30		**77**	23			60	21				
08:45		66	29	339	121	53	16	332	94	671	215
09:00		54	26			46	19				
09:15		36	19			41	17				
09:30		49	17			39	18				
09:45		71	35	210	97	38	10	164	64	374	161
10:00		67	23			39	16				
10:15		49	12			41	9				
10:30		48	14			36	8				
10:45		40	10	204	59	47	8	163	41	367	100
11:00		54	12			48	10				
11:15		44	8			52	3				
11:30		48	10			42	5				
11:45		69	12	215	42	36	14	178	32	393	74
Total		1766	3506	1766	3506	1742	1992	1742	1992	3508	5498
Combined Total		5272		5272		3734		3734		9006	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	372	-	-	-	608	-	-	-	-	-
P.H.F.		0.886				0.864					
PM Peak	-	-	04:45	-	-	-	03:45	-	-	-	-
Vol.	-	-	709	-	-	-	321	-	-	-	-
P.H.F.			0.923				0.955				
Percentage		33.5%	66.5%			46.7%	53.3%				
ADT/AADT		ADT 9,006		AADT 9,006							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
B/ Ray Johnson Drive - SR-180 Westbound Ramps
24 Hour Directional Volume Count

FSO004
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		12	56			14	50				
12:15		5	57			14	50				
12:30		6	54			12	49				
12:45		8	58	31	225	4	48	44	197	75	422
01:00		7	72			5	57				
01:15		10	80			2	41				
01:30		4	81			3	59				
01:45		6	98	27	331	1	47	11	204	38	535
02:00		9	67			4	59				
02:15		3	92			3	55				
02:30		9	99			3	69				
02:45		8	130	29	388	8	79	18	262	47	650
03:00		3	125			8	64				
03:15		8	118			8	59				
03:30		6	158			4	**96**				
03:45		12	158	29	559	8	**82**	28	301	57	860
04:00		11	163			7	**78**				
04:15		11	144			5	**82**				
04:30		12	152			10	81				
04:45		15	**176**	49	635	17	58	39	299	88	934
05:00		11	**181**			18	88				
05:15		21	**187**			25	63				
05:30		40	**170**			33	59				
05:45		41	122	113	660	31	49	107	259	220	919
06:00		48	93			33	44				
06:15		54	52			45	35				
06:30		61	67			37	41				
06:45		69	47	232	259	29	36	144	156	376	415
07:00		47	36			68	42				
07:15		81	48			**130**	39				
07:30		72	44			**180**	27				
07:45		**102**	52	302	180	**177**	20	555	128	857	308
08:00		**86**	41			**137**	25				
08:15		**106**	32			85	33				
08:30		**88**	24			64	23				
08:45		65	31	345	128	56	17	342	98	687	226
09:00		51	26			51	19				
09:15		37	20			44	17				
09:30		51	20			40	17				
09:45		72	36	211	102	39	10	174	63	385	165
10:00		69	23			41	20				
10:15		58	11			42	9				
10:30		51	14			48	8				
10:45		42	10	220	58	49	8	180	45	400	103
11:00		51	14			55	10				
11:15		48	8			55	11				
11:30		56	9			49	7				
11:45		64	7	219	38	40	16	199	44	418	82
Total		1807	3563	1807	3563	1841	2056	1841	2056	3648	5619
Combined Total		5370		5370		3897		3897		9267	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	382	-	-	-	624	-	-	-	-	-
P.H.F.		0.901				0.867					
PM Peak	-	-	04:45	-	-	-	03:30	-	-	-	-
Vol.	-	-	714	-	-	-	338	-	-	-	-
P.H.F.			0.955				0.880				
Percentage		33.6%	66.4%			47.2%	52.8%				
ADT/AADT		ADT 9,267		AADT 9,267							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
B/ SR-180 Eastbound Ramps - Whitesbridge Avenue
24 Hour Directional Volume Count

FSO006
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		10	73			17	66				
12:15		8	73			15	65				
12:30		6	68			11	62				
12:45		11	77	35	291	11	63	54	256	89	547
01:00		8	71			9	70				
01:15		14	70			5	77				
01:30		3	74			6	73				
01:45		7	70	32	285	4	95	24	315	56	600
02:00		4	66			3	67				
02:15		6	105			6	102				
02:30		5	148			10	61				
02:45		3	95	18	414	9	82	28	312	46	726
03:00		9	94			7	77				
03:15		4	102			5	81				
03:30		7	140			10	96				
03:45		11	**129**	31	465	11	100	33	354	64	819
04:00		5	**170**			24	97				
04:15		17	**120**			32	89				
04:30		15	**181**			32	94				
04:45		18	125	55	596	42	**82**	130	362	185	958
05:00		19	114			32	**115**				
05:15		26	133			34	**94**				
05:30		50	104			46	**107**				
05:45		40	114	135	465	68	79	180	395	315	860
06:00		45	78			52	72				
06:15		47	68			46	68				
06:30		61	86			62	64				
06:45		74	68	227	300	56	60	216	264	443	564
07:00		59	70			62	57				
07:15		92	61			82	55				
07:30		**114**	69			**113**	52				
07:45		**128**	67	393	267	**130**	61	387	225	780	492
08:00		**112**	70			**159**	54				
08:15		**148**	50			**123**	55				
08:30		110	45			76	55				
08:45		68	37	438	202	85	49	443	213	881	415
09:00		63	31			64	34				
09:15		59	34			62	38				
09:30		74	38			51	42				
09:45		80	27	276	130	70	40	247	154	523	284
10:00		70	33			36	22				
10:15		68	33			42	28				
10:30		68	33			51	20				
10:45		68	31	274	130	68	8	197	78	471	208
11:00		48	21			65	21				
11:15		78	9			67	13				
11:30		84	13			53	17				
11:45		67	10	277	53	65	19	250	70	527	123
Total		2191	3598	2191	3598	2189	2998	2189	2998	4380	6596
Combined Total		5789		5789		5187		5187		10976	
AM Peak	-	07:30	-	-	-	07:30	-	-	-	-	-
Vol.	-	502	-	-	-	525	-	-	-	-	-
P.H.F.		0.848				0.825					
PM Peak	-	-	03:45	-	-	-	04:45	-	-	-	-
Vol.	-	-	600	-	-	-	398	-	-	-	-
P.H.F.			0.829				0.865				
Percentage		37.8%	62.2%			42.2%	57.8%				
ADT/AADT		ADT 10,976		AADT 10,976							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
B/ SR-180 Westbound Ramps - SR-180 Eastbound Ramps
24 Hour Directional Volume Count

FSO005
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		6	25			23	97				
12:15		2	17			21	84				
12:30		3	25			18	95				
12:45		5	23	16	90	7	86	69	362	85	452
01:00		6	25			12	97				
01:15		7	26			6	96				
01:30		2	28			5	105				
01:45		5	26	20	105	4	110	27	408	47	513
02:00		4	27			5	105				
02:15		3	40			9	130				
02:30		3	43			11	118				
02:45		2	36	12	146	12	136	37	489	49	635
03:00		1	39			14	115				
03:15		2	37			8	110				
03:30		1	48			12	**157**				
03:45		2	59	6	183	17	**150**	51	532	57	715
04:00		4	61			25	**134**				
04:15		3	45			34	**146**				
04:30		4	**63**			29	130				
04:45		1	**55**	12	224	47	106	135	516	147	740
05:00		6	**55**			39	177				
05:15		11	**63**			40	135				
05:30		13	43			60	136				
05:45		8	35	38	196	82	112	221	560	259	756
06:00		14	34			72	90				
06:15		17	23			64	83				
06:30		15	29			82	84				
06:45		24	21	70	107	80	72	298	329	368	436
07:00		13	17			108	92				
07:15		22	22			**171**	70				
07:30		19	29			**235**	62				
07:45		**32**	33	86	101	**238**	61	752	285	838	386
08:00		**27**	24			**216**	63				
08:15		**47**	17			168	65				
08:30		**43**	15			105	62				
08:45		20	15	137	71	110	46	599	236	736	307
09:00		23	15			88	37				
09:15		27	13			72	42				
09:30		24	16			68	47				
09:45		41	18	115	62	86	45	314	171	429	233
10:00		35	15			62	37				
10:15		28	8			79	33				
10:30		24	7			74	26				
10:45		18	7	105	37	97	16	312	112	417	149
11:00		23	7			99	21				
11:15		26	4			94	18				
11:30		31	3			81	20				
11:45		32	2	112	16	81	24	355	83	467	99
Total		729	1338	729	1338	3170	4083	3170	4083	3899	5421
Combined Total		2067		2067		7253		7253		9320	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	149	-	-	-	860	-	-	-	-	-
P.H.F.		0.793				0.903					
PM Peak	-	-	04:30	-	-	-	03:30	-	-	-	-
Vol.	-	-	236	-	-	-	587	-	-	-	-
P.H.F.			0.937				0.935				
Percentage		35.3%	64.7%			43.7%	56.3%				
ADT/AADT		ADT 9,320		AADT 9,320							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
N/ Belmont Avenue
24 Hour Directional Volume Count

FSO001
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		10	54			10	33				
12:15		14	40			12	41				
12:30		7	44			4	40				
12:45		5	41	36	179	1	30	27	144	63	323
01:00		5	49			2	36				
01:15		6	60			3	34				
01:30		3	63			5	35				
01:45		2	70	16	242	1	45	11	150	27	392
02:00		5	42			1	30				
02:15		2	61			2	27				
02:30		4	76			3	31				
02:45		3	87	14	266	6	53	12	141	26	407
03:00		3	82			7	46				
03:15		1	90			4	45				
03:30		1	98			4	**65**				
03:45		3	109	8	379	3	**49**	18	205	26	584
04:00		2	95			6	**46**				
04:15		2	91			4	**54**				
04:30		3	90			6	62				
04:45		7	**105**	14	381	12	30	28	192	42	573
05:00		8	**117**			15	45				
05:15		17	**110**			16	34				
05:30		19	**105**			24	39				
05:45		7	84	51	416	30	32	85	150	136	566
06:00		20	60			23	19				
06:15		13	44			21	36				
06:30		22	48			34	23				
06:45		13	40	68	192	25	22	103	100	171	292
07:00		43	33			37	29				
07:15		45	29			**73**	23				
07:30		46	39			**115**	21				
07:45		**53**	44	187	145	**125**	15	350	88	537	233
08:00		**50**	26			**116**	23				
08:15		**49**	21			62	15				
08:30		**52**	19			45	15				
08:45		35	15	186	81	41	15	264	68	450	149
09:00		34	17			32	17				
09:15		39	16			31	17				
09:30		37	12			28	8				
09:45		56	24	166	69	38	9	129	51	295	120
10:00		38	25			28	10				
10:15		34	17			32	10				
10:30		36	14			38	7				
10:45		32	10	140	66	25	6	123	33	263	99
11:00		32	14			23	7				
11:15		38	6			29	7				
11:30		40	7			36	2				
11:45		41	4	151	31	32	5	120	21	271	52
Total		1037	2447	1037	2447	1270	1343	1270	1343	2307	3790
Combined Total		3484		3484		2613		2613		6097	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	204	-	-	-	429	-	-	-	-	-
P.H.F.		0.962				0.858					
PM Peak	-	-	04:45	-	-	-	03:30	-	-	-	-
Vol.	-	-	437	-	-	-	214	-	-	-	-
P.H.F.			0.934				0.823				
Percentage		29.8%	70.2%			48.6%	51.4%				
ADT/AADT		ADT 6,097		AADT 6,097							

Counts Unimited, Inc.

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City of Fresno
Marks Avenue
S/ Whitesbridge Avenue
24 Hour Directional Volume Count

FSO007
Site Code: 003-24843

Start Time	9/25/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		8	51			16	42				
12:15		2	58			19	52				
12:30		3	52			10	48				
12:45		10	60	23	221	7	41	52	183	75	404
01:00		4	54			4	64				
01:15		11	60			6	66				
01:30		2	74			7	54				
01:45		3	45	20	233	2	90	19	274	39	507
02:00		5	56			2	51				
02:15		5	78			2	81				
02:30		3	122			7	47				
02:45		2	72	15	328	5	67	16	246	31	574
03:00		4	82			7	56				
03:15		3	73			2	72				
03:30		4	109			4	75				
03:45		7	**105**	18	369	3	74	16	277	34	646
04:00		5	**135**			9	71				
04:15		17	**81**			10	70				
04:30		13	**124**			19	72				
04:45		17	85	52	425	13	**75**	51	288	103	713
05:00		15	82			19	**87**				
05:15		22	96			26	**87**				
05:30		41	72			37	**92**				
05:45		35	89	113	339	53	63	135	329	248	668
06:00		36	65			43	62				
06:15		35	57			40	52				
06:30		50	65			46	55				
06:45		57	48	178	235	38	41	167	210	345	445
07:00		48	58			42	52				
07:15		73	41			67	50				
07:30		**98**	61			**94**	35				
07:45		**106**	43	325	203	**100**	47	303	184	628	387
08:00		**103**	58			**135**	42				
08:15		**122**	37			**96**	49				
08:30		85	31			62	44				
08:45		52	23	362	149	62	39	355	174	717	323
09:00		47	24			46	29				
09:15		43	31			43	29				
09:30		54	22			37	34				
09:45		67	20	211	97	64	29	190	121	401	218
10:00		62	27			32	21				
10:15		47	31			31	23				
10:30		59	26			37	15				
10:45		54	24	222	108	50	5	150	64	372	172
11:00		34	13			47	16				
11:15		56	7			55	11				
11:30		57	11			35	13				
11:45		50	7	197	38	46	19	183	59	380	97
Total		1736	2745	1736	2745	1637	2409	1637	2409	3373	5154
Combined Total		4481		4481		4046		4046		8527	
AM Peak	-	07:30	-	-	-	07:30	-	-	-	-	-
Vol.	-	429	-	-	-	425	-	-	-	-	-
P.H.F.		0.879				0.787					
PM Peak	-	-	03:45	-	-	-	04:45	-	-	-	-
Vol.	-	-	445	-	-	-	341	-	-	-	-
P.H.F.			0.824				0.927				
Percentage		38.7%	61.3%			40.5%	59.5%				
ADT/AADT		ADT 8,527		AADT 8,527							

Counts Unimited, Inc.

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City of Fresno
Nielsen Avenue
B/ Marks Avenue - Hughes Avenue
24 Hour Directional Volume Count

FSO012
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	15			3	12				
12:15		0	12			3	12				
12:30		1	6			2	19				
12:45		1	11	3	44	1	20	9	63	12	107
01:00		0	15			1	9				
01:15		1	8			1	10				
01:30		1	**8**			0	19				
01:45		0	**12**	2	43	1	6	3	44	5	87
02:00		0	**17**			2	8				
02:15		0	**13**			2	**32**				
02:30		4	6			1	**21**				
02:45		1	10	5	46	3	**19**	8	80	13	126
03:00		0	13			1	**12**				
03:15		1	8			0	8				
03:30		3	14			2	19				
03:45		1	10	5	45	3	18	6	57	11	102
04:00		1	13			0	19				
04:15		3	10			1	14				
04:30		2	14			1	16				
04:45		5	12	11	49	2	13	4	62	15	111
05:00		2	6			1	30				
05:15		6	11			3	13				
05:30		9	14			2	8				
05:45		14	10	31	41	3	17	9	68	40	109
06:00		13	8			5	9				
06:15		12	6			9	2				
06:30		32	7			6	5				
06:45		29	2	86	23	15	8	35	24	121	47
07:00		21	5			10	8				
07:15		15	8			5	5				
07:30		12	5			6	7				
07:45		**25**	5	73	23	9	4	30	24	103	47
08:00		**28**	1			8	1				
08:15		**24**	1			9	3				
08:30		**24**	1			10	2				
08:45		15	0	91	3	13	0	40	6	131	9
09:00		18	2			14	1				
09:15		8	0			6	2				
09:30		10	2			8	2				
09:45		11	1	47	5	6	1	34	6	81	11
10:00		23	1			4	3				
10:15		13	2			9	3				
10:30		16	1			6	0				
10:45		16	0	68	4	**19**	0	38	6	106	10
11:00		5	0			**21**	1				
11:15		10	2			**24**	0				
11:30		13	1			**9**	3				
11:45		11	1	39	4	13	2	67	6	106	10
Total		461	330	461	330	283	446	283	446	744	776
Combined Total		791		791		729		729		1520	
AM Peak	-	07:45	-	-	-	10:45	-	-	-	-	-
Vol.	-	101	-	-	-	73	-	-	-	-	-
P.H.F.		0.871				0.760					
PM Peak	-	-	01:30	-	-	-	02:15	-	-	-	-
Vol.	-	-	50	-	-	-	84	-	-	-	-
P.H.F.			0.735				0.656				
Percentage		58.3%	41.7%			38.8%	61.2%				
ADT/AADT		ADT 1,520		AADT 1,520							

Counts Unimited, Inc.

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City of Fresno
Nielsen Avenue
E/ Hughes Avenue
24 Hour Directional Volume Count

FSO013
Site Code: 003-24843

Start	9/25/24	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	7			4	9				
12:15		2	**21**			4	14				
12:30		0	**11**			3	14				
12:45		0	**12**	3	51	0	20	11	57	14	108
01:00		0	**16**			0	7				
01:15		1	16			1	11				
01:30		1	9			1	23				
01:45		0	18	2	59	1	5	3	46	5	105
02:00		0	15			2	12				
02:15		0	10			2	10				
02:30		2	13			0	26				
02:45		2	13	4	51	1	9	5	57	9	108
03:00		0	17			1	13				
03:15		0	10			0	8				
03:30		4	14			1	16				
03:45		2	13	6	54	3	**20**	5	57	11	111
04:00		1	11			0	**23**				
04:15		4	10			2	**16**				
04:30		2	13			1	**21**				
04:45		4	12	11	46	1	16	4	76	15	122
05:00		2	6			0	22				
05:15		8	11			3	19				
05:30		11	12			0	6				
05:45		16	11	37	40	3	13	6	60	43	100
06:00		12	10			4	12				
06:15		5	6			4	4				
06:30		22	7			4	6				
06:45		20	4	59	27	5	10	17	32	76	59
07:00		20	4			4	13				
07:15		18	7			5	3				
07:30		11	9			5	5				
07:45		**32**	6	81	26	5	5	19	26	100	52
08:00		**35**	1			7	4				
08:15		**29**	2			14	3				
08:30		**24**	0			15	1				
08:45		17	2	105	5	17	0	53	8	158	13
09:00		19	1			11	2				
09:15		12	0			1	1				
09:30		15	1			13	1				
09:45		19	2	65	4	6	1	31	5	96	9
10:00		15	2			8	3				
10:15		11	1			8	1				
10:30		15	1			11	0				
10:45		15	0	56	4	**13**	2	40	6	96	10
11:00		14	1			**19**	3				
11:15		6	1			**24**	1				
11:30		11	0			**14**	5				
11:45		10	2	41	4	11	2	68	11	109	15
Total		470	371	470	371	262	441	262	441	732	812
Combined Total		841		841		703		703		1544	
AM Peak	-	07:45	-	-	-	10:45	-	-	-	-	-
Vol.	-	120	-	-	-	70	-	-	-	-	-
P.H.F.		0.857				0.729					
PM Peak	-	-	00:15	-	-	-	03:45	-	-	-	-
Vol.	-	-	60	-	-	-	80	-	-	-	-
P.H.F.			0.714				0.870				
Percentage		55.9%	44.1%			37.3%	62.7%				
ADT/AADT		ADT 1,544		AADT 1,544							

Counts Unimited, Inc.

PO Box 1178
Corona, CA 92878
(951) 268-6268
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City of Fresno
Nielsen Avenue
W/ Marks Avenue
24 Hour Directional Volume Count

FSO011
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	18			1	13				
12:15		0	16			1	15				
12:30		1	10			1	**14**				
12:45		1	14	3	58	1	**22**	4	64	7	122
01:00		0	14			0	**17**				
01:15		1	11			3	**18**				
01:30		1	10			0	12				
01:45		0	10	2	45	0	10	3	57	5	102
02:00		0	15			1	9				
02:15		0	**17**			4	13				
02:30		1	**23**			8	9				
02:45		1	**15**	2	70	11	7	24	38	26	108
03:00		2	**16**			5	10				
03:15		2	10			3	8				
03:30		0	6			2	7				
03:45		1	12	5	44	5	13	15	38	20	82
04:00		0	11			1	2				
04:15		1	18			3	8				
04:30		0	11			2	11				
04:45		1	7	2	47	6	10	12	31	14	78
05:00		3	27			4	5				
05:15		1	13			3	4				
05:30		2	11			14	5				
05:45		4	7	10	58	15	5	36	19	46	77
06:00		6	12			**15**	6				
06:15		4	10			**18**	2				
06:30		1	7			**19**	4				
06:45		11	2	22	31	**20**	5	72	17	94	48
07:00		3	4			10	3				
07:15		11	7			12	5				
07:30		9	4			8	3				
07:45		4	2	27	17	15	2	45	13	72	30
08:00		10	2			21	1				
08:15		13	2			16	5				
08:30		16	3			9	3				
08:45		12	1	51	8	11	4	57	13	108	21
09:00		19	0			17	1				
09:15		11	2			8	0				
09:30		15	1			10	0				
09:45		5	1	50	4	15	2	50	3	100	7
10:00		21	1			11	0				
10:15		18	0			5	1				
10:30		9	3			11	0				
10:45		**15**	0	63	4	10	0	37	1	100	5
11:00		**16**	0			12	2				
11:15		**15**	1			17	0				
11:30		**24**	1			14	0				
11:45		9	0	64	2	18	2	61	4	125	6
Total		301	388	301	388	416	298	416	298	717	686
Combined Total		689		689		714		714		1403	
AM Peak	-	10:45	-	-	-	06:00	-	-	-	-	-
Vol.	-	70	-	-	-	72	-	-	-	-	-
P.H.F.		0.729				0.900					
PM Peak	-	-	02:15	-	-	-	00:30	-	-	-	-
Vol.	-	-	71	-	-	-	71	-	-	-	-
P.H.F.			0.772				0.807				
Percentage		43.7%	56.3%			58.3%	41.7%				
ADT/AADT		ADT 1,403		AADT 1,403							

Counts Unimited, Inc.

PO Box 1178
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(951) 268-6268
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City of Fresno
Ray Johnson Drive
E/ Marks Avenue
24 Hour Directional Volume Count

FSO017
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	2			0	2				
12:15		0	2			1	4				
12:30		0	2			3	1				
12:45		0	**6**	1	12	1	1	5	8	6	20
01:00		1	**6**			2	7				
01:15		1	**3**			0	3				
01:30		1	**4**			0	3				
01:45		0	1	3	14	0	4	2	17	5	31
02:00		1	2			1	2				
02:15		0	4			0	**5**				
02:30		0	3			1	**4**				
02:45		0	4	1	13	0	**6**	2	17	3	30
03:00		0	5			2	**3**				
03:15		1	0			0	2				
03:30		0	3			0	1				
03:45		1	2	2	10	2	2	4	8	6	18
04:00		2	4			0	4				
04:15		0	2			0	4				
04:30		1	5			0	2				
04:45		2	4	5	15	0	2	0	12	5	27
05:00		0	2			2	1				
05:15		1	1			1	1				
05:30		1	0			2	2				
05:45		2	2	4	5	0	0	5	4	9	9
06:00		0	2			1	1				
06:15		3	3			5	4				
06:30		0	1			1	4				
06:45		4	3	7	9	5	1	12	10	19	19
07:00		0	1			2	1				
07:15		2	2			3	0				
07:30		**3**	2			3	0				
07:45		**5**	1	10	6	3	0	11	1	21	7
08:00		**4**	2			1	1				
08:15		**4**	3			4	1				
08:30		3	0			2	2				
08:45		3	1	14	6	1	1	8	5	22	11
09:00		1	0			2	0				
09:15		3	0			4	0				
09:30		4	3			2	0				
09:45		2	2	10	5	2	1	10	1	20	6
10:00		2	1			3	4				
10:15		3	0			**5**	0				
10:30		4	1			**4**	1				
10:45		3	0	12	2	**3**	0	15	5	27	7
11:00		3	2			**4**	0				
11:15		2	1			0	1				
11:30		2	0			3	3				
11:45		4	0	11	3	6	0	13	4	24	7
Total		80	100	80	100	87	92	87	92	167	192
Combined Total		180		180		179		179		359	
AM Peak	-	07:30	-	-	-	10:15	-	-	-	-	-
Vol.	-	16	-	-	-	16	-	-	-	-	-
P.H.F.		0.800				0.800					
PM Peak	-	-	00:45	-	-	-	02:15	-	-	-	-
Vol.	-	-	19	-	-	-	18	-	-	-	-
P.H.F.			0.792				0.750				
Percentage		44.4%	55.6%			48.6%	51.4%				
ADT/AADT		ADT 359		AADT 359							

Counts Unimited, Inc.

PO Box 1178
Corona, CA 92878
(951) 268-6268
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City of Fresno
State Route 180 Eastbound Ramps
W/ Marks Avenue
24 Hour Directional Volume Count

FSO021
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	6			2	30				
12:15		0	7			2	24				
12:30		0	8			5	34				
12:45		3	7	3	28	1	26	10	114	13	142
01:00		0	11			2	32				
01:15		0	5			0	25				
01:30		3	7			1	38				
01:45		3	8	6	31	2	23	5	118	11	149
02:00		1	12			2	39				
02:15		0	3			3	28				
02:30		3	**5**			3	60				
02:45		1	**7**	5	27	3	56	11	183	16	210
03:00		0	**13**			7	42				
03:15		1	**9**			4	36				
03:30		1	4			2	**66**				
03:45		1	6	3	32	6	**44**	19	188	22	220
04:00		1	11			1	**42**				
04:15		1	6			2	**57**				
04:30		5	6			3	49				
04:45		2	4	9	27	5	22	11	170	20	197
05:00		1	10			10	65				
05:15		1	8			7	35				
05:30		1	10			13	30				
05:45		2	5	5	33	15	29	45	159	50	192
06:00		4	8			19	25				
06:15		3	6			16	22				
06:30		3	8			14	22				
06:45		3	8	13	30	24	18	73	87	86	117
07:00		3	5			53	15				
07:15		5	3			**86**	19				
07:30		6	4			**119**	11				
07:45		**9**	4	23	16	**103**	4	361	49	384	65
08:00		**19**	4			**54**	11				
08:15		**13**	3			40	14				
08:30		**7**	3			34	8				
08:45		6	3	45	13	29	5	157	38	202	51
09:00		10	3			26	6				
09:15		7	2			15	5				
09:30		7	1			23	6				
09:45		10	2	34	8	25	6	89	23	123	31
10:00		7	2			29	15				
10:15		4	1			36	5				
10:30		5	0			29	6				
10:45		4	1	20	4	29	8	123	34	143	38
11:00		7	2			34	2				
11:15		7	2			28	6				
11:30		8	0			28	7				
11:45		11	0	33	4	23	6	113	21	146	25
Total		199	253	199	253	1017	1184	1017	1184	1216	1437
Combined Total		452		452		2201		2201		2653	
AM Peak	-	07:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	48	-	-	-	362	-	-	-	-	-
P.H.F.		0.632				0.761					
PM Peak	-	-	02:30	-	-	-	03:30	-	-	-	-
Vol.	-	-	34	-	-	-	209	-	-	-	-
P.H.F.			0.654				0.792				
Percentage		44.0%	56.0%			46.2%	53.8%				
ADT/AADT		ADT 2,653		AADT 2,653							

Counts Unimited, Inc.

PO Box 1178
Corona, CA 92878
(951) 268-6268
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City of Fresno
State Route 180 Westbound Ramps
E/ Marks Avenue
24 Hour Directional Volume Count

FSO020
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	2			11	84				
12:15		0	4			11	89				
12:30		1	1			11	81				
12:45		0	2	3	9	7	83	40	337	43	346
01:00		1	1			8	88				
01:15		1	1			7	113				
01:30		0	2			4	102				
01:45		1	3	3	7	6	146	25	449	28	456
02:00		0	2			7	86				
02:15		1	4			7	137				
02:30		0	9			15	105				
02:45		1	8	2	23	10	160	39	488	41	511
03:00		1	7			9	131				
03:15		0	1			6	138				
03:30		1	5			14	160				
03:45		0	3	2	16	20	166	49	595	51	611
04:00		0	**11**			26	175				
04:15		1	**8**			40	163				
04:30		1	**6**			28	154				
04:45		1	**5**	3	30	42	**183**	136	675	139	705
05:00		2	10			34	**201**				
05:15		3	9			31	**205**				
05:30		1	6			58	**210**				
05:45		2	4	8	29	85	154	208	770	216	799
06:00		4	4			76	110				
06:15		4	4			70	80				
06:30		3	3			95	82				
06:45		3	4	14	15	104	66	345	338	359	353
07:00		**6**	3			85	79				
07:15		**3**	4			115	66				
07:30		**3**	2			**117**	56				
07:45		**5**	2	17	11	**156**	65	473	266	490	277
08:00		3	2			**149**	58				
08:15		4	4			**132**	54				
08:30		4	3			102	54				
08:45		2	4	13	13	109	50	492	216	505	229
09:00		3	2			71	36				
09:15		2	2			52	33				
09:30		5	2			69	38				
09:45		4	0	14	6	94	53	286	160	300	166
10:00		2	3			61	30				
10:15		3	2			59	29				
10:30		1	2			62	24				
10:45		1	1	7	8	80	11	262	94	269	102
11:00		3	1			79	17				
11:15		4	1			77	13				
11:30		4	0			67	15				
11:45		4	0	15	2	81	22	304	67	319	69
Total		101	169	101	169	2659	4455	2659	4455	2760	4624
Combined Total		270		270		7114		7114		7384	
AM Peak	-	07:00	-	-	-	07:30	-	-	-	-	-
Vol.	-	17	-	-	-	554	-	-	-	-	-
P.H.F.		0.708				0.888					
PM Peak	-	-	04:00	-	-	-	04:45	-	-	-	-
Vol.	-	-	30	-	-	-	799	-	-	-	-
P.H.F.			0.682				0.951				
Percentage		37.4%	62.6%			37.4%	62.6%				
ADT/AADT		ADT 7,384		AADT 7,384							

Counts Unimited, Inc.

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City of Fresno
Whitesbridge Avenue
E/ Marks Avenue
24 Hour Directional Volume Count

FSO019
Site Code: 003-24843

Start	9/25/24	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		5	24			7	22				
12:15		1	18			5	20				
12:30		1	17			3	19				
12:45		3	18	10	77	1	18	16	79	26	156
01:00		3	14			4	23				
01:15		1	21			4	17				
01:30		0	19			3	27				
01:45		1	14	5	68	0	20	11	87	16	155
02:00		1	19			0	18				
02:15		2	19			0	23				
02:30		3	17			2	39				
02:45		2	14	8	69	1	21	3	101	11	170
03:00		0	18			4	15				
03:15		3	17			1	39				
03:30		6	**20**			4	32				
03:45		2	**21**	11	76	3	17	12	103	23	179
04:00		5	**22**			0	38				
04:15		7	**23**			2	28				
04:30		9	18			2	**46**				
04:45		17	12	38	75	6	**34**	10	146	48	221
05:00		9	29			6	**35**				
05:15		12	21			7	**41**				
05:30		8	14			11	33				
05:45		10	19	39	83	4	18	28	127	67	210
06:00		11	15			12	17				
06:15		8	17			12	15				
06:30		17	19			15	25				
06:45		15	15	51	66	14	19	53	76	104	142
07:00		16	9			12	12				
07:15		17	10			28	21				
07:30		**22**	14			16	9				
07:45		**30**	17	85	50	**15**	24	71	66	156	116
08:00		**32**	7			**19**	10				
08:15		**30**	7			**23**	11				
08:30		14	10			**27**	11				
08:45		25	11	101	35	15	15	84	47	185	82
09:00		14	4			12	9				
09:15		20	12			11	3				
09:30		18	7			24	14				
09:45		10	10	62	33	16	8	63	34	125	67
10:00		7	6			12	8				
10:15		10	5			19	4				
10:30		16	4			12	4				
10:45		16	3	49	18	18	6	61	22	110	40
11:00		15	4			15	6				
11:15		15	2			21	3				
11:30		16	3			26	1				
11:45		16	5	62	14	16	5	78	15	140	29
Total		521	664	521	664	490	903	490	903	1011	1567
Combined Total		1185		1185		1393		1393		2578	
AM Peak	-	07:30	-	-	-	07:45	-	-	-	-	-
Vol.	-	114	-	-	-	84	-	-	-	-	-
P.H.F.		0.891				0.778					
PM Peak	-	-	03:30	-	-	-	04:30	-	-	-	-
Vol.	-	-	86	-	-	-	156	-	-	-	-
P.H.F.			0.935				0.848				
Percentage		44.0%	56.0%			35.2%	64.8%				
ADT/AADT		ADT 2,578		AADT 2,578							

Counts Unimited, Inc.

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Corona, CA 92878
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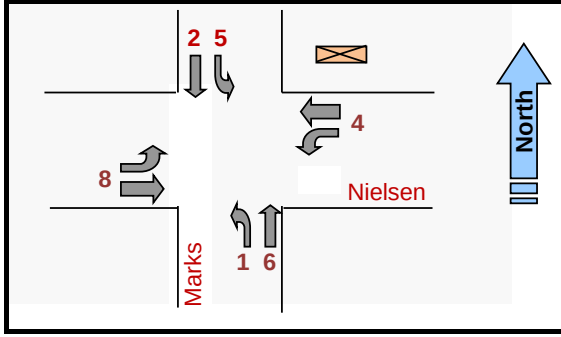
City of Fresno
Whitesbridge Avenue
W/ Marks Avenue
24 Hour Directional Volume Count

FSO018
Site Code: 003-24843

Start Time	9/25/24 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	5			2	3				
12:15		0	3			1	8				
12:30		0	5			0	3				
12:45		0	2	0	15	1	5	4	19	4	34
01:00		1	8			1	4				
01:15		1	4			1	3				
01:30		0	8			0	5				
01:45		1	8	3	28	1	3	3	15	6	43
02:00		1	2			1	1				
02:15		1	7			1	7				
02:30		0	8			1	9				
02:45		0	15	2	32	2	6	5	23	7	55
03:00		0	7			1	5				
03:15		0	9			0	4				
03:30		0	10			1	7				
03:45		0	10	0	36	7	6	9	22	9	58
04:00		2	**13**			**12**	11				
04:15		2	**15**			**20**	4				
04:30		0	**9**			**6**	**7**				
04:45		0	**17**	4	54	**16**	**5**	54	27	58	81
05:00		2	13			6	**11**				
05:15		2	9			0	**8**				
05:30		2	7			4	4				
05:45		2	4	8	33	6	6	16	29	24	62
06:00		3	3			1	5				
06:15		7	5			4	2				
06:30		4	3			6	1				
06:45		2	8	16	19	5	4	16	12	32	31
07:00		3	5			4	3				
07:15		4	2			7	3				
07:30		4	2			2	2				
07:45		6	4	17	13	5	2	18	10	35	23
08:00		3	2			4	3				
08:15		8	2			6	3				
08:30		3	3			4	1				
08:45		**6**	3	20	10	3	1	17	8	37	18
09:00		**11**	0			5	1				
09:15		**8**	0			4	0				
09:30		**4**	0			3	1				
09:45		2	1	25	1	2	1	14	3	39	4
10:00		4	2			3	2				
10:15		4	0			2	0				
10:30		3	2			5	2				
10:45		4	0	15	4	9	0	19	4	34	8
11:00		3	1			5	2				
11:15		7	0			5	0				
11:30		6	0			8	0				
11:45		1	1	17	2	5	0	23	2	40	4
Total		127	247	127	247	198	174	198	174	325	421
Combined Total		374		374		372		372		746	
AM Peak	-	08:45	-	-	-	04:00	-	-	-	-	-
Vol.	-	29	-	-	-	54	-	-	-	-	-
P.H.F.		0.659				0.675					
PM Peak	-	-	04:00	-	-	-	04:30	-	-	-	-
Vol.	-	-	54	-	-	-	31	-	-	-	-
P.H.F.			0.794				0.705				
Percentage		34.0%	66.0%			53.2%	46.8%				
ADT/AADT		ADT 746		AADT 746							

Movement	NL	ST		WT	SL	NT		ET		
Times [1.1.1]	1	2	3	4	5	6	7	8	9	10
Min Green	8	8	0	8	8	8		8		0
Gap, Ext	2	5.5	0	5.2	2	5.4		5.2		0
Max 1	20	35	0	48	20	35		48		0
Max 2	12	25	0	38	12	25		38		0
Yel Clearance	3.9	4.3	0	3.9	3.9	4.3		3.9		0
Red Clearance	1	1	0	2	1	1		2		0
Walk	0	5	0	5		5		5		0
Ped Clearance	0	22	0	28		21		28		0
Red Revert	2	2	0	2	2	2		2		0
Add Initial	0		0			0		0		0
Max Initial	0		0			0		0		0
Time B4 Reduct	0	8	0	8		8		8		0
Cars B4 Reduct	0		0			0		0		0
Time To Reduce	0	18	0	27		18		27		0
Reduce By	0		0			0		0		0
Min Gap	2	2	0	2	2	2		2		0
DyMaxLim	0		0			0		0		0
Max Step	0		0			0		0		0
Options [1.1.2]	1	2	3	4	5	6	7	8	9	10
Enable	X	X		X	X	X		X		
Min Recall										
Max Recall										
Ped Recall										
Soft Recall		X				X				
Lock Calls										
Auto Flash Entry										
Auto Flash Exit										
Dual Entry		X		X		X		X		
Enable Simul Gap										
Gaurantee Passage										
Rest In Walk										
Conditonal Service										
Non-Actuated 1										
Non-Actuated 2										
Add Init Calc										



Phase Options+ [1.1.3]

Options+	1	2	3	4	5	6	7	8	9	10
Reservice										
PedClr Thru Yel										
SkipRed-NoCall										
Red Rest										
Max II										
*Max III										
Max Inhibit										
Ped Delay										
Red Rest on Gap										
Conflicting Phase	0	0	0	0	0	0	0	0	0	0
Grn/Ped Delay										
Omit Yel, Yel P	0	0	0	0	0	0	0	0	0	0
Ped Out/Olp Ped										
StartYel, Next P	0	0	0	0	0	0	0	0	0	0
*StartupVehCall	1	2		4	5	6		8		
*StartupPedCall										

Phase Concurrency [1.1.4]

Phase	Ring	StartUp	Concurrent Phases							
1	1	RED	5	6	0	0				
2	1	GREEN	5	6	0	0				
3	1	RED	7	8	0	0				
4	1	RED	7	8	0	0				
5	2	RED	1	2	0	0				
6	2	GREEN	1	2	0	0				
7	2	RED	3	4	0	0				
8	2	RED	3	4	0	0				
9	0	RED	0	0	0	0				
10	0	RED	0	0	0	0				
11	0	RED	0	0	0	0				
12	0	RED	0	0	0	0				

Comm Ports [6.6]

Channel	Port	Echo	Mode
Async 1	SP1	NONE	0
Async 2	SP2	NONE	0
Async 3	SP8	NONE	0
Async 4	OFF	NONE	0
Sync 1	SP5S		
Sync 2	OFF		
TS2CVM	NONE		
Opticom	NONE		
GPS	NONE		

Unit Params [1.2.1]

Screen Size	8	Metric	OFF
Startup Flash	0	Red Revert	2
MCE Timeout	0	Auto Ped Clear	OFF
Loc Flsh Start	RSt	Display Time	60
Yellow < 3"	OFF	Tone Disable	ON
Allow Skip Yel	OFF	AudioPedTime	0
Start Red Tm	6	Phase Mode	STD8
Startup Calls	UseProg	CNA FreeTime	0
TOD Dimming	OFF	Diamond Mode	4Ph
ST over Prmpt	OFF	Free Ring Seq	1
Feature Profile	1	IO Mode	USER
Mx Seek TrkTm	0	Max Cyc Timer	0
Mx Seek Dwell	0	CycFlt Actn	ALARM
Prmpt/Ext Coor	EXT	Clrnc Decide	OFF
Aux Switch	STOPTM	LPAlt Srs	3-6
*InhFYA Red St	OFF	Security Delay	0
RingA1go	0		

* - 76.12B or newer

Times+ [1.1.7]

	1	2	3	4	5	6	7	8
Walk2	0	0	0	0	0	0	0	0
BikeClr	0	0	0	0	0	0	0	0
GrnFlash	0	0	0	0	0	0	0	0
SfClrMn	0	0	0	0	0	0	0	0
SfClrNoFlsh	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
NoPed Reserv								

Comm [6.2]

Port	Baud Rate	FCM
1	38400	6
2	9600	6
3	9600	6
4	9600	6

Comm [6.5]

					Host IPs			
IP Address:	0	0	0	77	ATMS			
Mask:	255	255	255	0	10	50	10	22
Gateway:	0	0	0	1	SG			
Port #:	5001				0	0	0	0

City of FRESNO

Phase Seq. (2 ring) Chart [1.2.4]

Seq #	Ring	Phases					
1	1	1	2	3	4	0	0
	2	5	6	7	8	0	0
2	1	1	2	3	4	0	0
	2	6	5	7	8	0	0
3	1	2	1	3	4	0	0
	2	5	6	7	8	0	0
4	1	2	1	3	4	0	0
	2	6	5	7	8	0	0
5	1	1	2	3	4	0	0
	2	5	6	8	7	0	0
6	1	1	2	3	4	0	0
	2	6	5	8	7	0	0
7	1	2	1	3	4	0	0
	2	5	6	8	7	0	0
8	1	2	1	3	4	0	0
	2	6	5	8	7	0	0
9	1	1	2	4	3	0	0
	2	5	6	7	8	0	0
10	1	1	2	4	3	0	0
	2	6	5	7	8	0	0
11	1	2	1	4	3	0	0
	2	5	6	7	8	0	0
12	1	2	1	4	3	0	0
	2	6	5	7	8	0	0
13	1	1	2	4	3	0	0
	2	5	6	8	7	0	0
14	1	1	2	4	3	0	0
	2	6	5	8	7	0	0
15	1	2	1	4	3	0	0
	2	5	6	8	7	0	0
16	1	2	1	4	3	0	0
	2	6	5	8	7	0	0

Advance Warning [1.1.9]

	Ph	Tm
Aux Out #1	0	0
Aux Out #2	0	0

NAME: Marks & Nielsen **ID:** 1342 **Configuration:** Standard File

Prepared by:	JT	**Date Installed / By:**	
Checked by:	PG	**Date Superseded:**	

V76.12/13
Updated 12/6/17

Date Printed: 12/4/20

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Split	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks & Nielsen

ID: 1342

Date Printed: 12/4/2020

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
1	0	0	1	1
2	0	0	2	1
3	0	0	3	1
4	0	0	4	1
5	0	0	5	1
6	0	0	6	1
7	0	0	7	1
8	0	0	8	1
9	0	0	9	1
10	0	0	10	1
11	0	0	0	1
12	0	0	0	1
13	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
1	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
1	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
2	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
3	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
4	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
5	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
6	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
7	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
8	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
9	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
10	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
11		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
12	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
13		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Splt	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks & Nielsen

ID: 1342

City of FRESNO

Date Printed: 12/4/2020

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
20	0	0	0	1
21	0	0	0	1
22	0	0	0	1
23	0	0	0	1
24	0	0	0	1
25	0	0	0	1
26	0	0	0	1
27	0	0	0	1
28	0	0	0	1
29	0	0	0	1
30	0	0	0	1
31	0	0	0	1
32	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
20	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
26	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
20		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
21	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
22		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
23	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
24		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
25	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
26		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
27	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
28		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
29	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
30		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
31	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
32		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.7.X.3] TSP Split Table

Pat#	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
1	0	0	1	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
2	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	2	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
3	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	3	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
4	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	4	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
5	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	5	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
6	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	6	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
9 - FREE	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	9	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						

[2.9.2.(1-8)] Strategy Tables

STRATEGY_1

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_2

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_3

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_4

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_5

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_6

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_7

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_8

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.8]

1	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
A	Conflict Olap									Red	1
	Conflict Ped										
2	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
B	Conflict Olap									Red	1
	Conflict Ped										
3	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
C	Conflict Olap									Red	1
	Conflict Ped										
4	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
D	Conflict Olap									Red	1
	Conflict Ped										
5	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
E	Conflict Olap									Red	1
	Conflict Ped										
6	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
F	Conflict Olap									Red	1
	Conflict Ped										
7	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
G	Conflict Olap									Red	1
	Conflict Ped										
8	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
H	Conflict Olap									Red	1
	Conflict Ped										

OLP GENERAL PARAMETERS [1.5.1]

Lock Inhibit	OFF
Conflict Lock Enable	OFF
Parent P Clearance	ON
Xtra Incl Phases	OFF
InhibitLockInterval	Always

Channel Parameters [1.8.3]

Pre Invert Rail Input	OFF

Preemption Options+ [3.Pre #.6]

Pre #	Enable	Type	Output	Pattern	Skip	Co+Pre	Flash	Max/Min
1	OFF	RAIL	TS2		OFF	OFF	OFF	MAX
2	OFF	RAIL	TS2	0	OFF	OFF	OFF	MAX
3	ON	EMERG	TS2		OFF	OFF	OFF	MAX
4	ON	EMERG	TS2	0	OFF	OFF	OFF	MAX
5	ON	EMERG	TS2		OFF	OFF	OFF	MAX
6	ON	EMERG	TS2	0	OFF	OFF	OFF	MAX

Preemption Times [3.#.1]

Pre #	Delay	MinDura	MaxPres	MinGrn	MinWlk	PedClr	Track Grn	Min Dwell
1								
2	0	0	0	0	0	0	0	0
3		10	60	6		25		10
4	0	10	60	6	0	25	0	10
5		10	60	6		25		10
6	0	10	60	6	0	25	0	10

Preemption, Options [3.#.3]

Pre #	Lock Input	Over-ride Auto Flash	Over-ride Higher Preempt	Flash Dwell	Link
1	OFF	OFF	OFF	ON	
2	OFF	OFF	OFF	OFF	0
3	OFF	OFF	OFF	OFF	
4	OFF	OFF	OFF	OFF	0
5	OFF	OFF	OFF	OFF	
6	OFF	OFF	OFF	OFF	0

Preemption, Times+ [3.#.4]

Pre No.	Extend Dwell	Return Max	Ped Clr	Yel	Red
1					
2	0	0	0	0	0
3		20	10	3.9	2
4	0	20	10	3.9	2
5		20	10	3.9	2
6	0	20	10	3.9	2

Pre 1 = RR1
Pre 2 = RR2
Pre 3 = EVA
Pre 4 = EVB
Pre 5 = EVC
Pre 6 = EVD

Prog Parms+ (MM>1>5>2>X>3)

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 1-A

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 2-B

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 3-C

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 4-D

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

Phases [3.#.2] - set the Dwell Phases

Pre #	Column	1	2	3	4	5	6	7	8	9	10
1	Dwell Veh										
	Peds										
2	Dwell Veh										
	Peds										
3	Dwell Veh	2	5								
	Peds										
4	Dwell Veh	4									
	Peds										
5	Dwell Veh	6	1								
	Peds										
6	Dwell Veh	8									
	Peds										

Phases [3.#.2] - Trk Veh

Pre #	Phases			
1				
2				
3				
4				
5				
6				

Exit Phases [3.#.2]

No.	Exit Phase			
1				
2				
3	2	5		
4	2	6		
5	1	6		
6	2	6		

Overlaps+ [3.#.5]

Pre #		Preempt Overlaps +									
1	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
2	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
3	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
4	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
5	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
6	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										

City of FRESNO

ID: 1342 **Name:** Marks & Nielsen **Date Printed:** 12/4/2020

CHANNEL SETTINGS [1.8] plus UNIT PARAMETERS [1.2.1]

CHANNEL SETTINGS [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase / Olap #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK
Flash 1-2 Hertz		X		X		X		X								
	Page 1								Page 2							

Chan Settings [1.8.2]

17	18	19	20	21	22	23	24
VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK

CHANNEL PARMETERS [1.8.3]

CH 17-24 Mapping:	DEFAULT
D-Conn Mapping:	NONE
Invert Rail Inputs:	OFF
C1-C11-ABC IO Mode:	USER

IO PARAMETERS [1.8.6]

C1-C11-ABC IO Mode:	USER
D-Conn Mapping:	NONE
T & F BIU Mapping	DEFAULT
Invert Rail Inputs:	OFF
EVP Ped Confirm	OFF

CHANNELS+ [1.8.4]

Channel	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
Flash Green	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Red	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Yellow	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Inh Red Fl in Preempt	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Olap Ovrd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Override Type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 1342 **NAME:** Marks & Nielsen

I/O LOGIC [1.8.7]

Prt Date: 12/4/2020

Row#	Result			Operand_1					Operand_2					Operand_3					Timer	
	I/O	Fcn	=	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Dly	Sec
1	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
2	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
3	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
4	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
5	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
6	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
7	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
8	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
9	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
10	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0

Ped Parms (MM>5>4)

Det#	Call	No Act	Max Pres	Err Cnt
1	0	0	0	0
2	2	0	0	0
3	0	0	0	0
4	4	0	0	0
5	0	0	0	0
6	6	0	0	0
7	0	0	0	0
8	8	0	0	0

Veh Par 1-32 [5.1]											Vehicle Options 1-32 [5.2]									Parameters+ 1-32 [5.3]								Info Only	
Det #	Input Slot	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol	Det #	Occupancy G	Y	R	Delay 1	2	Type	Src	Dir	Det #
1	1I1U	1					0	0	0	255	1	X	X	-	-	-	-	X	X	1	X	X	-			NORM		NBL1	1
2	2I2U	2	0	0	0	0	0	0	0	255	2	-	X	-	-	-	-	X	X	2	X	X	-	0	0	NORM	0		2
3	2I2L	2	0	0	2	0	0	0	0	255	3	X	-	-	-	-	-	X	X	3	X	X	-	0	0	STOPB	0		3
4	2I3U	2	0	0	2	0	0	0	0	255	4	X	-	-	-	-	-	X	X	4	X	X	-	0	0	STOPB	0		4
5	2I3L	2	0	0	2	0	0	0	0	255	5	X	-	-	-	-	-	X	X	5	X	X	-	0	0	STOPB	0	SBR1	5
6	2I4U	2	0	0	2	0	0	0	0	255	6	X	-	-	-	-	-	X	X	6	X	X	-	0	0	STOPB	0	SBT1	6
7	3I5U	8					0	0	0	255	7	X	X	-	-	-	-	X	X	7	X	X	-			NORM		EBL1	7
8	4I6U	4	0	0	0	0	0	0	0	255	8	-	X	-	-	-	-	X	X	8	X	X	-	0	0	NORM	0		8
9	4I6L	4	0	0	2	0	0	0	0	255	9	X	-	-	-	-	-	X	X	9	X	X	-	0	0	STOPB	0		9
10	4I7U	4	0	0	2	0	0	0	0	255	10	X	-	-	-	-	-	X	X	10	X	X	-	0	0	STOPB	0		10
11	4I7L	4		15	2		0	0	0	255	11	X	-	-	-	-	-	X	X	11	X	X	-			STOPB		WBR1	11
12	4I8U	4			2		0	0	0	255	12	X	-	-	-	-	-	X	X	12	X	X	-			STOPB		WBT1	12
13	1I9U	1	0	0	0	0	0	0	0	255	13	X	X	-	-	-	-	X	X	13	X	X	-	0	0	NORM	0		13
14	3I9L	8	0	0	0	0	0	0	0	255	14	X	X	-	-	-	-	X	X	14	X	X	-	0	0	NORM	0		14
15	5J1U	5	0	0	0	0	0	0	0	255	15	X	X	-	-	-	-	X	X	15	X	X	-	0	0	NORM	0	SBL1	15
16	6J2U	6					0	0	0	255	16	-	X	-	-	-	-	X	X	16	X	X	-			NORM			16
17	6J2L	6			2		0	0	0	255	17	X	-	-	-	-	-	X	X	17	X	X	-			STOPB			17
18	6J3U	6			2		0	0	0	255	18	X	-	-	-	-	-	X	X	18	X	X	-			STOPB			18
19	6J3L	6			2		0	0	0	255	19	X	-	-	-	-	-	X	X	19	X	X	-			STOPB		NBR1	19
20	6J4U	6			2		0	0	0	255	20	X	-	-	-	-	-	X	X	20	X	X	-			STOPB		NBT1	20
21	7J5U	4					0	0	0	255	21	X	X	-	-	-	-	X	X	21	X	X	-			NORM		WBL1	21
22	8J6U	8	0	0	0	0	0	0	0	255	22	-	X	-	-	-	-	X	X	22	X	X	-	0	0	NORM	0		22
23	8J6L	8	0	0	2	0	0	0	0	255	23	X	-	-	-	-	-	X	X	23	X	X	-	0	0	STOPB	0		23
24	8J7U	8	0	0	2	0	0	0	0	255	24	X	-	-	-	-	-	X	X	24	X	X	-	0	0	STOPB	0		24
25	8J7L	8	0	15	2	0	0	0	0	255	25	X	-	-	-	-	-	X	X	25	X	X	-	0	0	STOPB	0	EBR1	25
26	8J8U	8	0	0	2	0	0	0	0	255	26	X	-	-	-	-	-	X	X	26	X	X	-	0	0	STOPB	0	EBT1	26
27	5J9U	5					0	0	0	255	27	X	X	-	-	-	-	X	X	27	X	X	-			NORM			27
28	7J9L	4					0	0	0	255	28	X	X	-	-	-	-	X	X	28	X	X	-			NORM			28
29	2I11U	2	0	0	2	0	0	0	0	255	29	X	-	-	-	-	-	X	X	29	X	X	-	0	0	STOPB	0		29
30	4I11L	4	0	15	2	0	0	0	0	255	30	X	-	-	-	-	-	X	X	30	X	X	-	0	0	STOPB	0		30
31	6J11U	6			2		0	0	0	255	31	X	-	-	-	-	-	X	X	31	X	X	-			STOPB			31
32	8J11L	8		15	2		0	0	0	255	32	X	-	-	-	-	-	X	X	32	X	X	-			STOPB			32
33	1I1L	1	0	0	0	0	0	0	0	255	33	X	X	-	-	-	-	X	X	33	X	X	-	0	0	NORM	0		33
34	2I4L	2			2		0	0	0	255	34	X	-	-	-	-	-	X	X	34	X	X	-			STOPB		SBT2	34
35	3I5L	3	0	0	0	0	0	0	0	255	35	X	X	-	-	-	-	X	X	35	X	X	-	0	0	NORM	0		35
36	4I8L	4			2		0	0	0	255	36	X	-	-	-	-	-	X	X	36	X	X	-			STOPB			36
37	5J1L	5	0	0	0	0	0	0	0	255	37	X	X	-	-	-	-	X	X	37	X	X	-	0	0	NORM	0		37
38	6J4L	6			2		0	0	0	255	38	X	-	-	-	-	-	X	X	38	X	X	-			STOPB		NBT2	38
39	7J5L	7	0	0	0	0	0	0	0	255	39	X	X	-	-	-	-	X	X	39	X	X	-	0	0	NORM	0		39
40	8J8L	8			2		0	0	0	255	40	X	-	-	-	-	-	X	X	40	X	X	-			STOPB			40
41	4I10U	2					0	0	0	255	41	-	X	-	-	-	-	X	X	41	X	X	-			NORM			41
42	4I10L	2					0	0	0	255	42	-	X	-	-	-	-	X	X	42	X	X	-			NORM			42
43	8J10U	6					0	0	0	255	43	-	X	-	-	-	-	X	X	43	X	X	-			NORM			43
44	8J10L	6					0	0	0	255	44	-	X	-	-	-	-	X	X	44	X	X	-			NORM			44

ID: 1342 **Name:** Marks & Nielsen

Vol/Occ Period 0 Seconds 5 Minutes

12/4/2020

Alt# 1 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Guar Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 2 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 3 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 4 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alternate Tables [2.6]

Pat#	POpt	PTime	DetGrp	Call/Inh	Olp Off 1 2 3 4 5 6 7 8	ASC	CNA1	Max2	Dia
1	0	0	0	0		0	Off		DFT
2						0	Off		DFT
3	0	0	0	0		0	Off		DFT
4						0	Off		DFT
5	0	0	0	0		0	Off		DFT
6						0	Off		DFT
7	0	0	0	0		0	Off		DFT
8						0	Off		DFT
9	0	0	0	0		0	Off		DFT
10						0	Off		DFT
11	0	0	0	0		0	Off		DFT
12						0	Off		DFT
13	0	0	0	0		0	Off		DFT
14						0	Off		DFT
15	0	0	0	0		0	Off		DFT
16						0	Off		DFT
17	0	0	0	0		0	Off		DFT
18						0	Off		DFT
19	0	0	0	0		0	Off		DFT
20						0	Off		DFT
21	0	0	0	0		0	Off		DFT
22						0	Off		DFT
23	0	0	0	0		0	Off		DFT
24						0	Off		DFT

Time Base Parameters [4.6]

Daylight Savings Time	ENABLE	
Time Base Sync Ref	0	
GMT Offset	-	8
Daylight Savings	**Mon**	**Week**
Spring	3	2
Fall	11	1

NOTE: % and MI parameters are not used and are not shown above.

City of FRESNO

NAME: Marks & Nielsen

12/4/2020 **ID:** 1342

| Annual Schedule [4.3] | Month | | | | | | | | | | | | Day of Week | | | | | | | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Day Plan |
|---|---|---

#	Alarm	Ev	Alr
1	Power Up Alarm.	X	X
2	Stop Timing	X	X
3	Cabinet Door Activation	-	-
4	Coordination Failure	X	X
5	External Alarm # 1	-	-
6	External Alarm # 2	-	-
7	External Alarm # 3	-	-
8	External Alarm # 4	-	-
9	Closed Loop Disabled	-	-
10	External Alarm # 5	-	-
11	External Alarm # 6	-	-
12	Manual Control Enable	X	X
13	Coord Free Input	-	-
14	Local Flash Input	X	X
15	CMU/MMU Flash Input	-	-
16	MMU Fault	X	X
17	Cycle Fault	X	-
18	Cycle Failure	X	-
19	Coordination Fault	X	X
20	Controller Fault	X	X
25	EEPROM CRC Fault	X	X
30	Coord Diagnostic Fault	X	X
37	Download Request	X	X
38	Pattern Change	-	-
49	Preempt 1 Input	X	X
50	Preempt 2 Input	X	X
51	Preempt 3 Input	X	X
52	Preempt 4 Input	X	X
53	Preempt 5 Input	X	X
54	Preempt 6 Input	X	X
55	Preempt 7 Input	-	-
56	Preempt 8 Input	-	-
57	Preempt 9 Input	-	-
58	Preempt 10 Input	-	-
59	EEPROM Compare Fault	X	X
60	Coordination Failure	X	X
63	TSP Active Trigger	-	-
73	Controller Access	X	X
81	FIO Changed Status	X	X

#1 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#2 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#3 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#4 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

I/O INPUT TABLE

	1	2	3	4	5	6	7	8
1	2	16	8	22	3	17	9	23
2	6	20	12	26	198	199	30	31
3	15	1	21	7	27	13	28	14
4	189	189	189	189	4	18	10	24
5	130	134	132	136	200	201	202	203
6	32	5	19	11	25	29	208	207
7	33	34	35	36	37	38	39	40
8	41	42	43	44	189	189	189	189

ACTION Table [4.5]

Act	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8	P1	P2
1	1	-	-	-	-	-	-	-	-	-	-	-	0	0
2	2	-	-	-	-	-	-	-	-	-	-	-	0	0
3	3	-	-	-	-	-	-	-	-	-	-	-	0	0
4	4	-	-	-	-	-	-	-	-	-	-	-	0	0
5	5	-	-	-	-	-	-	-	-	-	-	-	0	0
6	6	-	-	-	-	-	-	-	-	-	-	-	0	0
7	7	-	-	-	-	-	-	-	-	-	-	-	0	0
8	8	-	-	-	-	-	-	-	-	-	-	-	0	0
9	9	-	-	-	-	-	-	-	-	-	-	-	0	0
10	10	-	-	-	-	-	-	-	-	-	-	-	0	0
11	11	-	-	-	-	-	-	-	-	-	-	-	0	0
12	12	-	-	-	-	-	-	-	-	-	-	-	0	0
13	13	-	-	-	-	-	-	-	-	-	-	-	0	0
14	14	-	-	-	-	-	-	-	-	-	-	-	0	0
15	15	-	-	-	-	-	-	-	-	-	-	-	0	0
16	0	-	-	-	-	-	-	-	-	-	-	-	0	0
54	254	-	-	-	-	-	-	-	-	-	-	-	0	0
55	0	-	-	-	-	-	-	-	-	-	-	-	0	0

Alarm Parameters [1.6.7.1]

Pattern Events:	ON
Local Txmt Alarms:	OFF
Reassign User Alarm #1 In (5):	0
Reassign User Alarm #2 In (6):	0
Preempt Events:	ON

City of FRESNO

Date Printed
12/4/2020

ID: 1342 **Name:** Marks & Nielsen

I/O Inputs - 1.8.9.1.5

C-1 PIN	I/O Source	Function	Input Name
39	I1-1	2	Veh Det 2
40	I1-2	16	Veh Det 16
41	I1-3	8	Veh Det 8
42	I1-4	22	Veh Det 22
43	I1-5	3	Veh Det 3
44	I1-6	17	Veh Det 17
45	I1-7	9	Veh Det 9
46	I1-8	23	Veh Det 23
47	I2-1	6	Veh Det 6
48	I2-2	20	Veh Det 20
49	I2-3	12	Veh Det 12
50	I2-4	26	Veh Det 26
51	I2-5	198	Pre 1 In
52	I2-6	199	Pre 2 In
53	I2-7	30	Veh Det 30
54	I2-8	31	Veh Det 31
55	I3-1	15	Veh Det 15
56	I3-2	1	Veh Det 1
57	I3-3	21	Veh Det 21
58	I3-4	7	Veh Det 7
59	I3-5	27	Veh Det 27
60	I3-6	13	Veh Det 13
61	I3-7	28	Veh Det 28
62	I3-8	14	Veh Det 14
63	I4-5	4	Veh Det 4
64	I4-6	18	Veh Det 18
65	I4-7	10	Veh Det 10
66	I4-8	24	Veh Det 24
67	I5-1	130	Ped Call 2
68	I5-2	134	Ped Call 6
69	I5-3	132	Ped Call 4
70	I5-4	136	Ped Call 8
71	I5-5	200	Pre 3 In
72	I5-6	201	Pre 4 In
73	I5-7	202	Pre 5 In
74	I5-8	203	Pre 6 In
75	I6-1	32	Veh Det 32
76	I6-2	5	Veh Det 5
77	I6-3	19	Veh Det 19
78	I6-4	11	Veh Det 11
79	I6-5	25	Veh Det 25
80	I6-6	29	Veh Det 29
81	I6-7	208	Local Flash
82	I6-8	207	Comp StopTm

I/O OUTPUTS - 1.8.9.2.5

C-1 PIN	I/O Source	Function	Output Name
1	Logic Grd		
2	O1-1	14	Red Ch 14
3	O1-2	62	Grn Chan 14
4	O1-3	4	Red Ch 4
5	O1-4	28	Yel Chan 4
6	O1-5	52	Grn Chan 4
7	O1-6	3	Red Ch 3
8	O1-7	27	Yel Chan 3
9	O1-8	51	Grn Chan 3
10	O2-1	13	Red Ch 13
11	O2-2	61	Grn Chan 13
12	O2-3	2	Red Ch 2
13	O2-4	26	Yel Chan 2
14	Logic Grd		
15	O2-5	50	Grn Chan 2
16	O2-6	1	Red Ch 1
17	O2-7	25	Yel Chan 1
18	O2-8	49	Grn Chan 1
19	O3-1	16	Red Ch 16
20	O3-2	64	Grn Chan 16
21	O3-3	8	Red Ch 8
22	O3-4	32	Yel Chan 8
23	O3-5	56	Grn Chan 8
24	O3-6	7	Red Ch 7
25	O3-7	31	Yel Chan 7
26	O3-8	55	Grn Chan 7
27	O4-1	15	Red Ch 15
28	O4-2	63	Grn Chan 15
29	O4-3	6	Red Ch 6
30	O4-4	30	Yel Chan 6
31	O4-5	54	Grn Chan 6
32	O4-6	5	Red Ch 5
33	O4-7	29	Yel Chan 5
34	O4-8	53	Grn Chan 5
35	O5-1	37	Yel Chan 13
36	O5-2	39	Yel Chan 15
37	O5-3	38	Yel Chan 14
38	O5-4	40	Yel Chan 16
100	O5-5	42	Yel Chan 18
101	O5-6	41	Yel Chan 17
102	O5-7	115	Not Used
103	O5-8	114	Watchdog

C-1 PIN	I/O Source	Function	Output Name
83	O6-1	18	Red Ch 18
84	O6-2	66	Grn Chan 18
85	O6-3	12	Red Ch 12
86	O6-4	36	Yel Chan 12
87	O6-5	60	Grn Chan 12
88	O6-6	11	Red Ch 11
89	O6-7	35	Yel Chan 11
90	O6-8	59	Grn Chan 11
91	O7-1	17	Red Ch 17
92	Logic Grd		
93	O7-2	65	Grn Chan 17
94	O7-3	10	Red Ch 10
95	O7-4	34	Yel Chan 10
96	O7-5	58	Grn Chan 10
97	O7-6	9	Red Ch 9
98	O7-7	33	Yel Chan 9
99	O7-8	57	Grn Chan 9

I/O Outputs - 1.8.9.2.5
C-11 OUTPUTS

1	O8-1	115	Not Used
2	O8-2	115	Not Used
3	O8-3	115	Not Used
4	O8-4	115	Not Used

I/O Inputs - 1.8.9.1.5
C-11 INPUTS

15	I7-1	33	Veh Det 33
16	I7-2	34	Veh Det 34
17	I7-3	35	Veh Det 35
18	I7-4	36	Veh Det 36
19	I7-5	37	Veh Det 37
20	I7-6	38	Veh Det 38
21	I7-7	39	Veh Det 39
22	I7-8	40	Veh Det 40
23	I8-1	41	Veh Det 41
24	I8-2	42	Veh Det 42
25	I8-3	43	Veh Det 43
26	I8-4	44	Veh Det 44
27	I8-5	189	Unused
28	I8-6	189	Unused
29	I8-7	189	Unused
30	I8-8	189	Unused

City of FRESNO

ID: 1342

NAME: Marks & Nielsen

Date Printed: 12/4/2020

ID Number: 1342

LOCATION: Marks & Nielsen

City of Fresno
332 Cabinet
44 Detector Plus Setup

DETECTOR ASSIGNMENTS

ISOLATORS

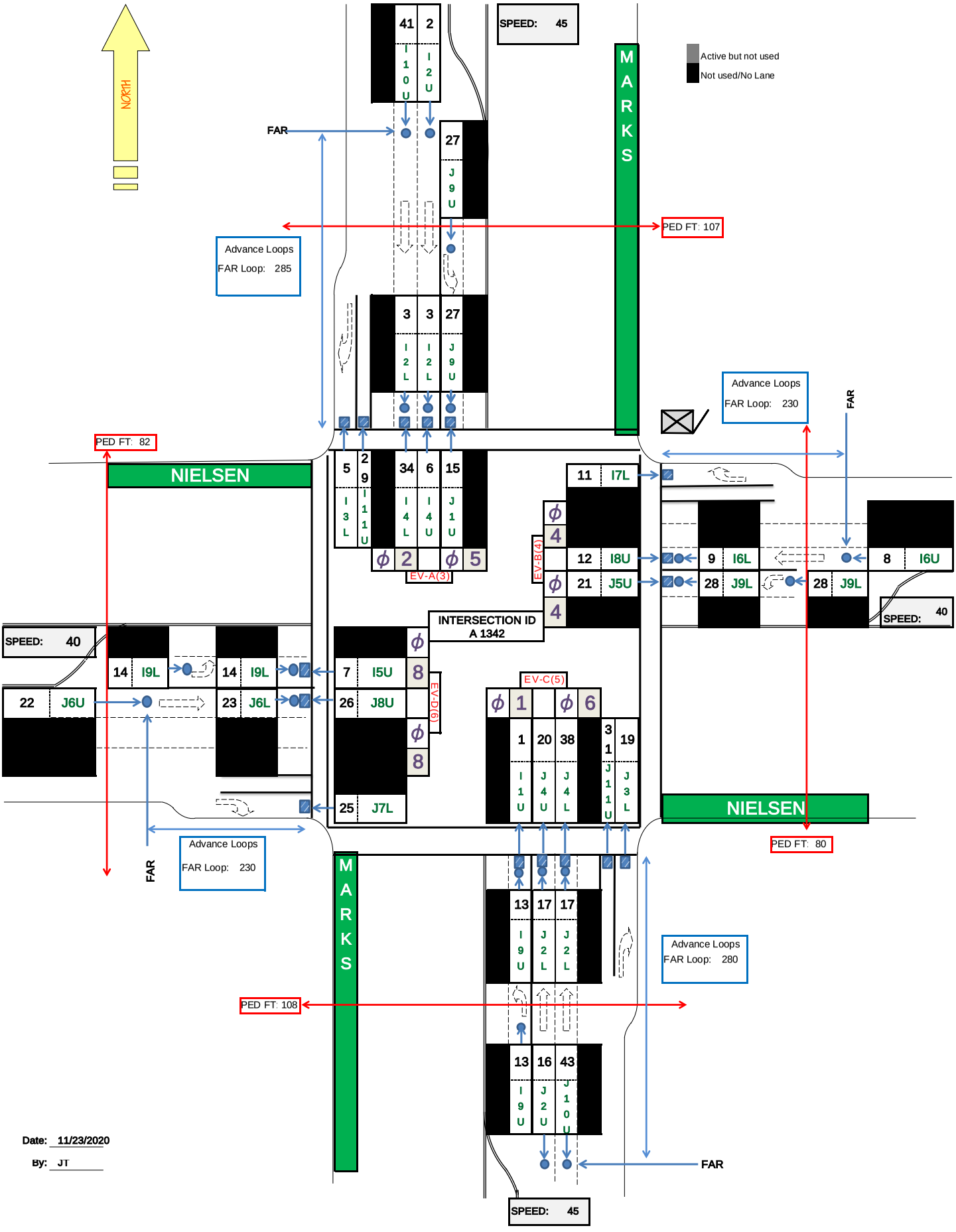
"I"	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
UPPER	Ph 1 Call&Ext T2-1&2 C1-56 Det 1 NBL1	Ph 2 Ext T2-5&6 C1-39 Det 2 SB Far	Ph 2 Call&TP3 T2-9&10 C1-63 Det 4 SB Mid	Ph 2 Call&TP3 T4-1&2 C1-47 Det 6 SBT1	Ph 3 Call&Ext T4-5&6 C1-58 Det 7 EBL1	Ph 4 Ext T4-9&10 C1-41 Det 8 WB Far	Ph 4 Call&TP3 T6-1&2 C1-65 Det 10 WB Mid	Ph 4 Call&TP3 T6-5&6 C1-49 Det 12 WBT1	Ph 1 Call&Ext T6-9&10 C1-60 Det 13 NBLt Bk	Ph 2/4 Ext T10-5&6 C11-23 Det 41	Ph 2 Call&Ext T8-1 C1-80 Det 29 BIKE	Ph 2 PPB T8-4 C1-67	Ph 6 PPB T8-7 C1-68	FLASH SENSE T8-10 C1-81
LOWER	Ph 1 Call&Ext T2-3&4 C11-15 Det 33 NBL2	Ph 2 Call&TP3 T2-7&8 C1-43 Det 3 SB Bk	Ph 2 Call&Ext T2-11&12 C1-76 Det 5 SBRt	Ph 2 Call&TP3 T4-3&4 C11-16 Det 34 SBT2	Ph 3 Call&Ext T4-7&8 C11-17 Det 35 EBL2	Ph 4 Call&TP3 T4-11&12 C1-45 Det 9 WB Bk	Ph 4 Call&Ext T6-3&4 C1-78 Det 11 WBRt	Ph 4 Call&TP3 T6-7&8 C11-18 Det 36 WBT2	Ph 3 Call&Ext T6-11&12 C1-62 Det 14 EBLt Bk	Ph 2/4 Ext T10-7&8 C11-24 Det 42	Ph 4 Call&Ext T8-2 C1-53 Det 30 BIKE	Ph 4 PPB T8-5 C1-69	Ph 8 PPB T8-8 C1-70	STOP TIMING T8-11 C1-82
"J"	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14
UPPER	Ph 5 Call&Ext T3-1&2 C1-55 Det 15 SBL1	Ph 6 Ext T3-5&6 C1-40 Det 16 NB Far	Ph 6 Call&TP3 T3-9&10 C1-64 Det 18 NB Mid	Ph 6 Call&TP3 T5-1&2 C1-48 Det 20 NBT1	Ph 7 Call&Ext T5-5&6 C1-57 Det 21 WBL1	Ph 8 Ext T5-9&10 C1-42 Det 22 EB Far	Ph 8 Call&TP3 T7-1&2 C1-66 Det 24 EB Mid	Ph 8 Call&TP3 T7-5&6 C1-50 Det 26 EBT1	Ph 5 Call&Ext T7-9&10 C1-59 Det 27 SBLt Bk	Ph 6/8 Ext T10-9&10 C11-25 Det 43	Ph 6 Call&Ext T9-1 C1-54 Det 31 BIKE	EMER A Ph 2 + 5 T9-4 C1-71	EMER B Ph 4 + 7 T9-5 C1-72	RR1 FLASH T9-10 C1-51
LOWER	Ph 5 Call&Ext T3-3&4 C11-19 Det 37 SBL2	Ph 6 Call&TP3 T3-7&8 C1-44 Det 17 NB Bk	Ph 6 Call&Ext T3-11&12 C1-77 Det 19 NBRt	Ph 6 Call&TP3 T5-3&4 C11-20 Det 38 NBT2	Ph 7 Call&Ext T5-7&8 C11-21 Det 39 WBL2	Ph 8 Call&TP3 T5-11&12 C1-46 Det 23 EB Bk	Ph 8 Call&Ext T7-3&4 C1-79 Det 25 EBRt	Ph 8 Call&TP3 T7-7&8 C11-22 Det 40 EBT2	Ph 7 Call&Ext T7-11&12 C1-61 Det 28 WBLt Bk	Ph 6/8 EXT T10-11&12 C11-26 Det 44	Ph 8 Call&Ext T9-2 C1-75 Det 32 BIKE	EMER C Ph 1 + 6 T9-7 C1-73	EMER D Ph 3 + 8 T9-8 C1-74	RR2 LTD OP T9-11 C1-52

COMMENTS:

TIMING UPDATES AND MODIFICATIONS

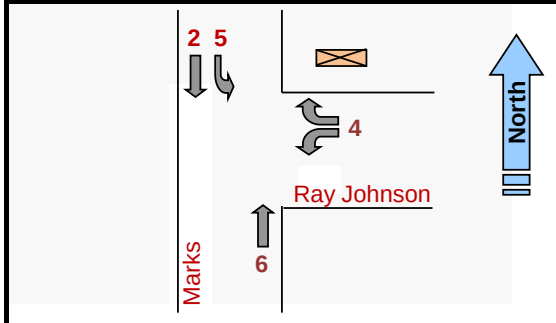
ID: 1342 **NAME:** Marks & Nielsen

DATE	CHANGES MADE	ATMS or CABINET	BY
12/4/2020	New Intersection - Created timing calculations, FDW, & detector attributes per plan specifications.	ATMS	JT



Detector Layout for the intersection of: MARKS & NIELSEN

Movement		ST		WT	SL	NT				
Times [1.1.1]	1	2	3	4	5	6	7	8	9	10
Min Green	0	8	0	6	6	8		0		0
Gap, Ext	0	4.3	0	5	2	4.3		0		0
Max 1	0	30	0	30	20	30		0		0
Max 2	0	20	0	20	15	20		0		0
Yel Clearance	0	4.3	0	3	3	4.3		0		0
Red Clearance	0	1	0	1	1	1		0		0
Walk	0		0	7		7		0		0
Ped Clearance	0		0	12		12		0		0
Red Revert	0	2	0	2	2	2		0		0
Add Initial	0		0			0		0		0
Max Initial	0		0			0		0		0
Time B4 Reduct	0	8	0	8		8		0		0
Cars B4 Reduct	0		0			0		0		0
Time To Reduce	0	15	0	15		15		0		0
Reduce By	0	0.6	0			0.6		0		0
Min Gap	0	2	0	2	2	2		0		0
DyMaxLim	0		0			0		0		0
Max Step	0		0			0		0		0
Options [1.1.2]	1	2	3	4	5	6	7	8	9	10
Enable		X		X	X	X				
Min Recall										
Max Recall										
Ped Recall										
Soft Recall		X				X				
Lock Calls										
Auto Flash Entry										
Auto Flash Exit										
Dual Entry		X				X				
Enable Simul Gap										
Gaurantee Passage										
Rest In Walk										
Conditonal Service										
Non-Actuated 1										
Non-Actuated 2										
Add Init Calc										



Phase Options+ [1.1.3]

Options+	1	2	3	4	5	6	7	8	9	10
Reservice										
PedClr Thru Yel										
SkipRed-NoCall										
Red Rest										
Max II										
*Max III										
Max Inhibit										
Ped Delay										
Red Rest on Gap										
Conflicting Phase	0	0	0	0	0	0	0	0	0	0
Grn/Ped Delay										
Omit Yel, Yel P	0	0	0	0	0	0	0	0	0	0
Ped Out/Olp Ped										
StartYel, Next P	0	0	0	0	0	0	0	0	0	0
*StartupVehCall		2		4	5	6				
*StartupPedCall										

Phase Concurrency [1.1.4]

Phase	Ring	StartUp	Concurrent Phases							
1	1	RED	5	6	0	0				
2	1	GREEN	5	6	0	0				
3	1	RED	7	8	0	0				
4	1	RED	7	8	0	0				
5	2	RED	1	2	0	0				
6	2	GREEN	1	2	0	0				
7	2	RED	3	4	0	0				
8	2	RED	3	4	0	0				
9	0	RED	0	0	0	0				
10	0	RED	0	0	0	0				
11	0	RED	0	0	0	0				
12	0	RED	0	0	0	0				

Comm Ports [6.6]

Channel	Port	Echo	Mode
Async 1	SP1	NONE	0
Async 2	SP2	NONE	0
Async 3	SP8	NONE	0
Async 4	OFF	NONE	0
Sync 1	SP5S		
Sync 2	OFF		
TS2CVM	NONE		
Opticom	NONE		
GPS	NONE		

Unit Params [1.2.1]

Screen Size	8	Metric	OFF
Startup Flash	0	Red Revert	2
MCE Timeout	0	Auto Ped Clear	OFF
Loc Flsh Start	RSt	Display Time	60
Yellow < 3"	OFF	Tone Disable	ON
Allow Skip Yel	OFF	AudioPedTime	0
Start Red Tm	6	Phase Mode	STD8
Startup Calls	UseProg	CNA FreeTime	0
TOD Dimming	OFF	Diamond Mode	4Ph
ST over Prmpt	OFF	Free Ring Seq	1
Feature Profile	1	IO Mode	USER
Mx Seek TrkTm	0	Max Cyc Timer	0
Mx Seek Dwell	0	CycFlt Actn	ALARM
Prmpt/Ext Coor	EXT	Clrnc Decide	OFF
Aux Switch	STOPTM	LPAlt Srs	3-6
*InhFYA Red St	OFF	Security Delay	0
RingA1go	0		

* - 76.12B or newer

Times+ [1.1.7]

	1	2	3	4	5	6	7	8
Walk2	0	0	0	0	0	0	0	0
BikeClr	0	0	0	0	0	0	0	0
GrnFlash	0	0	0	0	0	0	0	0
SfClrMn	0	0	0	0	0	0	0	0
SfClrNoFlsh	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
NoPed Reserv								

Comm [6.2]

Port	Baud Rate	FCM
1	38400	6
2	9600	6
3	9600	6
4	9600	6

Comm [6.5] — Host IPs

					ATMS			
IP Address:	10	50	20	32				
Mask:	255	255	255	0	10	50	10	22
Gateway:	10	50	20	1	SG			
Port #:	5003				0	0	0	0

City of FRESNO

Phase Seq. (2 ring) Chart [1.2.4]

Seq #	Ring	Phases					
1	1	1	2	3	4	0	0
	2	5	6	7	8	0	0
2	1	1	2	3	4	0	0
	2	6	5	7	8	0	0
3	1	2	1	3	4	0	0
	2	5	6	7	8	0	0
4	1	2	1	3	4	0	0
	2	6	5	7	8	0	0
5	1	1	2	3	4	0	0
	2	5	6	8	7	0	0
6	1	1	2	3	4	0	0
	2	6	5	8	7	0	0
7	1	2	1	3	4	0	0
	2	5	6	8	7	0	0
8	1	2	1	3	4	0	0
	2	6	5	8	7	0	0
9	1	1	2	4	3	0	0
	2	5	6	7	8	0	0
10	1	1	2	4	3	0	0
	2	6	5	7	8	0	0
11	1	2	1	4	3	0	0
	2	5	6	7	8	0	0
12	1	2	1	4	3	0	0
	2	6	5	7	8	0	0
13	1	1	2	4	3	0	0
	2	5	6	8	7	0	0
14	1	1	2	4	3	0	0
	2	6	5	8	7	0	0
15	1	2	1	4	3	0	0
	2	5	6	8	7	0	0
16	1	2	1	4	3	0	0
	2	6	5	8	7	0	0

Advance Warning [1.1.9]

	Ph	Tm
Aux Out #1	0	0
Aux Out #2	0	0

NAME: Marks @ Ray Johnson **ID:** 1337 **Configuration:** Standard File

V76.12/13
Updated 12/6/17

Prepared by:	JT	Date Installed / By:	3/1/2021 (JT)
Checked by:	JT	Date Superseded:	

Date Printed: 2/23/21

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Split	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks @ Ray Johnson

ID: 1337

City of FRESNO

Date Printed: 2/23/2021

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
1	0	0	1	1
2	0	0	2	1
3	0	0	3	1
4	0	0	4	1
5	0	0	5	1
6	0	0	6	1
7	0	0	7	1
8	0	0	8	1
9	0	0	9	1
10	0	0	10	1
11	0	0	0	1
12	0	0	0	1
13	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
1	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
1	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
2	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
3	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
4	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
5	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
6	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
7	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
8	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
9	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
10	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
11		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
12	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
13		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Splt	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks @ Ray Johnson

ID: 1337

City of FRESNO

Date Printed: 2/23/2021

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
20	0	0	0	1
21	0	0	0	1
22	0	0	0	1
23	0	0	0	1
24	0	0	0	1
25	0	0	0	1
26	0	0	0	1
27	0	0	0	1
28	0	0	0	1
29	0	0	0	1
30	0	0	0	1
31	0	0	0	1
32	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
20	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
26	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
20		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
21	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
22		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
23	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
24		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
25	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
26		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
27	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
28		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
29	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
30		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
31	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
32		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.7.X.3] TSP Split Table

Pat#	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
1	0	0	1	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
2	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	2	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
3	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	3	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
4	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	4	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
5	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	5	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
6	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	6	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
9 - FREE	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	9	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						

[2.9.2.(1-8)] Strategy Tables

STRATEGY_1

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_2

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_3

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_4

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_5

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_6

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_7

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_8

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.8]

1	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
A	Conflict Olap									Red	1
	Conflict Ped										
2	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
B	Conflict Olap									Red	1
	Conflict Ped										
3	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
C	Conflict Olap									Red	1
	Conflict Ped										
4	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
D	Conflict Olap									Red	1
	Conflict Ped										
5	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
E	Conflict Olap									Red	1
	Conflict Ped										
6	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
F	Conflict Olap									Red	1
	Conflict Ped										
7	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
G	Conflict Olap									Red	1
	Conflict Ped										
8	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
H	Conflict Olap									Red	1
	Conflict Ped										

OLP GENERAL PARAMETERS [1.5.1]

Lock Inhibit	OFF
Conflict Lock Enable	OFF
Parent P Clearance	ON
Xtra Incl Phases	OFF
InhibitLockInterval	Always

Channel Parameters [1.8.3]

Pre Invert Rail Input	OFF

Preemption Options+ [3.Pre #.6]

Pre #	Enable	Type	Output	Pattern	Skip	Co+Pre	Flash	Max/Min
1	OFF	RAIL	TS2		OFF	OFF	OFF	MAX
2	OFF	RAIL	TS2	0	OFF	OFF	OFF	MAX
3	ON	EMERG	TS2		OFF	OFF	OFF	MAX
4	ON	EMERG	TS2	0	OFF	OFF	OFF	MAX
5	ON	EMERG	TS2		OFF	OFF	OFF	MAX
6	OFF	EMERG	TS2	0	OFF	OFF	OFF	MAX

Preemption Times [3.#.1]

Pre #	Delay	MinDura	MaxPres	MinGrn	MinWlk	PedClr	Track Grn	Min Dwell
1								
2	0	0	0	0	0	0	0	0
3		10	60	6		10		10
4	0	10	60	6	0	10	0	10
5		10	60	6		10		10
6	0	10	60	6	0	10	0	10

Preemption, Options [3.#.3]

Pre #	Lock Input	Over-ride Auto Flash	Over-ride Higher Preempt	Flash Dwell	Link
1	OFF	OFF	OFF	ON	
2	OFF	OFF	OFF	OFF	0
3	OFF	OFF	OFF	OFF	
4	OFF	OFF	OFF	OFF	0
5	OFF	OFF	OFF	OFF	
6	OFF	OFF	OFF	OFF	0

Preemption, Times+ [3.#.4]

Pre No.	Extend Dwell	Return Max	Ped Clr	Yel	Red
1					
2	0	0	0	0	0
3		20	10	3.6	1
4	0	20	10	3.6	1
5		20	10	3.6	1
6	0	20	10	3.6	1

Pre 1 = RR1
Pre 2 = RR2
Pre 3 = EVA
Pre 4 = EVB
Pre 5 = EVC
Pre 6 = EVD

Prog Parms+ (MM>1>5>2>X>3)

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 1-A

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 2-B

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 3-C

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 4-D

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

Phases [3.#.2] - set the Dwell Phases

Pre #	Column	1	2	3	4	5	6	7	8	9	10
1	Dwell Veh										
	Peds										
2	Dwell Veh										
	Peds										
3	Dwell Veh	2	5								
	Peds										
4	Dwell Veh	4									
	Peds										
5	Dwell Veh	6									
	Peds										
6	Dwell Veh										
	Peds										

Phases [3.#.2] - Trk Veh

Pre #	Phases			
1				
2				
3				
4				
5				
6				

Exit Phases [3.#.2]

No.	Exit Phase			
1				
2				
3	2	5		
4	4			
5	6			
6				

Overlaps+ [3.#.5]

Pre #		Preempt Overlaps +									
1	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
2	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
3	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
4	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
5	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
6	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										

City of FRESNO

ID: 1337 **Name:** Marks @ Ray Johnson **Date Printed:** 2/23/2021

CHANNEL SETTINGS [1.8] plus UNIT PARAMETERS [1.2.1]

CHANNEL SETTINGS [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase / Olap #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK
Flash 1-2 Hertz		X		X		X		X								
	Page 1								Page 2							

Chan Settings [1.8.2]

17	18	19	20	21	22	23	24
VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK

CHANNEL PARMETERS [1.8.3]

CH 17-24 Mapping:	DEFAULT
D-Conn Mapping:	NONE
Invert Rail Inputs:	OFF
C1-C11-ABC IO Mode:	USER

IO PARAMETERS [1.8.6]

C1-C11-ABC IO Mode:	USER
D-Conn Mapping:	NONE
T & F BIU Mapping	DEFAULT
Invert Rail Inputs:	OFF
EVP Ped Confirm	OFF

CHANNELS+ [1.8.4]

Channel	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
Flash Green	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Red	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Yellow	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Inh Red Fl in Preempt	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Olap Ovrd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Override Type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 1337 **NAME:** Marks @ Ray Johnson

I/O LOGIC [1.8.7]

Prt Date: 2/23/2021

Row#	Result			Operand_1					Operand_2					Operand_3					Timer	
	I/O	Fcn	=	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Dly	Sec
1	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
2	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
3	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
4	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
5	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
6	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
7	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
8	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
9	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
10	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0

Ped Parms (MM>5>4)

Det#	Call	No Act	Max Pres	Err Cnt
1	0	0	0	0
2	2	0	0	0
3	0	0	0	0
4	4	0	0	0
5	0	0	0	0
6	6	0	0	0
7	0	0	0	0
8	8	0	0	0

Veh Par 1-32 [5.1]											Vehicle Options 1-32 [5.2]									Parameters+ 1-32 [5.3]								Info Only	
Det #	Input Slot	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol	Det #	Occupancy G	Y	R	Delay 1	2	Type	Src	Dir	Det #
1	1I1U	1					0	0	0	255	1	X	X	-	-	-	-	X	X	1	X	X	-			NORM			1
2	2I2U	2	0	0	0	0	0	0	0	255	2	-	X	-	-	-	-	X	X	2	X	X	-	0	0	NORM	0		2
3	2I2L	2	0	0	0	0	0	0	0	255	3	X	X	-	-	-	-	X	X	3	X	X	-	0	0	NORM	0		3
4	2I3U	2	0	0	2	20	0	0	0	255	4	X	-	X	-	-	-	X	X	4	X	X	-	0	0	NORM	0		4
5	2I3L	2	0	0	2	10	0	0	0	255	5	X	-	X	-	-	-	X	X	5	X	X	-	0	0	NORM	0		5
6	2I4U	2	0	0	2	20	0	0	0	255	6	X	-	X	-	-	-	X	X	6	X	X	-	0	0	NORM	0	SBT1	6
7	3I5U	3					0	0	0	255	7	X	X	-	-	-	-	X	X	7	X	X	-			NORM			7
8	4I6U	4	0	0	0	0	0	0	0	255	8	-	X	-	-	-	-	X	X	8	X	X	-	0	0	NORM	0		8
9	4I6L	4	0	0	0	0	0	0	0	255	9	X	X	-	-	-	-	X	X	9	X	X	-	0	0	NORM	0		9
10	4I7U	4	0	0	2	20	0	0	0	255	10	X	-	X	-	-	-	X	X	10	X	X	-	0	0	NORM	0		10
11	4I7L	4		15	2	10	0	0	0	255	11	X	-	X	-	-	-	X	X	11	X	X	-			NORM		WBT2	11
12	4I8U	4			2	20	0	0	0	255	12	X	-	X	-	-	-	X	X	12	X	X	-			NORM		WBT1	12
13	1I9U	1	0	0	0	0	0	0	0	255	13	X	X	-	-	-	-	X	X	13	X	X	-	0	0	NORM	0		13
14	3I9L	3	0	0	0	0	0	0	0	255	14	X	X	-	-	-	-	X	X	14	X	X	-	0	0	NORM	0		14
15	5J1U	5	0	0	0	0	0	0	0	255	15	X	X	-	-	-	-	X	X	15	X	X	-	0	0	NORM	0	SBL1	15
16	6J2U	6					0	0	0	255	16	-	X	-	-	-	-	X	X	16	X	X	-			NORM			16
17	6J2L	6					0	0	0	255	17	X	X	-	-	-	-	X	X	17	X	X	-			NORM			17
18	6J3U	6			2	20	0	0	0	255	18	X	-	X	-	-	-	X	X	18	X	X	-			NORM			18
19	6J3L	6			2	10	0	0	0	255	19	X	-	X	-	-	-	X	X	19	X	X	-			NORM			19
20	6J4U	6			2	20	0	0	0	255	20	X	-	X	-	-	-	X	X	20	X	X	-			NORM		NBT1	20
21	7J5U	7					0	0	0	255	21	X	X	-	-	-	-	X	X	21	X	X	-			NORM			21
22	8J6U	8	0	0	0	0	0	0	0	255	22	-	X	-	-	-	-	X	X	22	X	X	-	0	0	NORM	0		22
23	8J6L	8	0	0	2	20	0	0	0	255	23	X	-	X	-	-	-	X	X	23	X	X	-	0	0	NORM	0		23
24	8J7U	8	0	0	2	20	0	0	0	255	24	X	-	X	-	-	-	X	X	24	X	X	-	0	0	NORM	0		24
25	8J7L	8	0	0	2	10	0	0	0	255	25	X	-	X	-	-	-	X	X	25	X	X	-	0	0	NORM	0		25
26	8J8U	8	0	0	2	20	0	0	0	255	26	X	-	X	-	-	-	X	X	26	X	X	-	0	0	NORM	0		26
27	5J9U	5					0	0	0	255	27	X	X	-	-	-	-	X	X	27	X	X	-			NORM			27
28	7J9L	7					0	0	0	255	28	X	X	-	-	-	-	X	X	28	X	X	-			NORM			28
29	2I11U	2	0	0	0	0	0	0	0	255	29	X	-	-	X	-	-	X	X	29	X	X	-	0	0	BIKE	0		29
30	4I11L	4	0	0	0	0	0	0	0	255	30	X	-	-	X	-	-	X	X	30	X	X	-	0	0	BIKE	0	SBT3	30
31	6J11U	6					0	0	0	255	31	X	-	-	X	-	-	X	X	31	X	X	-			BIKE		NBR1	31
32	8J11L	8					0	0	0	255	32	X	-	-	X	-	-	X	X	32	X	X	-			BIKE			32
33	1I1L	1	0	0	0	0	0	0	0	255	33	X	X	-	-	-	-	X	X	33	X	X	-	0	0	NORM	0		33
34	2I4L	2			2	20	0	0	0	255	34	X	-	X	-	-	-	X	X	34	X	X	-			NORM		SBT2	34
35	3I5L	3	0	0	0	0	0	0	0	255	35	X	X	-	-	-	-	X	X	35	X	X	-	0	0	NORM	0		35
36	4I8L	4			2	20	0	0	0	255	36	X	-	X	-	-	-	X	X	36	X	X	-			NORM			36
37	5J1L	5	0	0	0	0	0	0	0	255	37	X	X	-	-	-	-	X	X	37	X	X	-	0	0	NORM	0		37
38	6J4L	6			2	20	0	0	0	255	38	X	-	X	-	-	-	X	X	38	X	X	-			NORM		NBT2	38
39	7J5L	7	0	0	0	0	0	0	0	255	39	X	X	-	-	-	-	X	X	39	X	X	-	0	0	NORM	0		39
40	8J8L	8			2	20	0	0	0	255	40	X	-	X	-	-	-	X	X	40	X	X	-			NORM			40
41	4I10U	4					0	0	0	255	41	-	X	-	-	-	-	X	X	41	X	X	-			NORM			41
42	4I10L	4					0	0	0	255	42	-	X	-	-	-	-	X	X	42	X	X	-			NORM			42
43	8J10U	8					0	0	0	255	43	-	X	-	-	-	-	X	X	43	X	X	-			NORM			43
44	8J10L	8					0	0	0	255	44	-	X	-	-	-	-	X	X	44	X	X	-			NORM			44

ID: 1337 **Name:** Marks @ Ray Johnson

Vol/Occ Period 0 Seconds 5 Minutes

2/23/2021

Alt# 1 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Guar Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 2 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 3 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 4 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alternate Tables [2.6]

Pat#	POpt	PTime	DetGrp	Call/Inh	Olp Off 1	2	3	4	5	6	7	8	ASC	CNA1	Max2	Dia
1	0	0	0	0									0	Off		DFT
2													0	Off		DFT
3	0	0	0	0									0	Off		DFT
4													0	Off		DFT
5	0	0	0	0									0	Off		DFT
6													0	Off		DFT
7	0	0	0	0									0	Off		DFT
8													0	Off		DFT
9	0	0	0	0									0	Off		DFT
10													0	Off		DFT
11	0	0	0	0									0	Off		DFT
12													0	Off		DFT
13	0	0	0	0									0	Off		DFT
14													0	Off		DFT
15	0	0	0	0									0	Off		DFT
16													0	Off		DFT
17	0	0	0	0									0	Off		DFT
18													0	Off		DFT
19	0	0	0	0									0	Off		DFT
20													0	Off		DFT
21	0	0	0	0									0	Off		DFT
22													0	Off		DFT
23	0	0	0	0									0	Off		DFT
24													0	Off		DFT

Time Base Parameters [4.6]

Daylight Savings Time	ENABLE	
Time Base Sync Ref	0	
GMT Offset	-	8
Daylight Savings	**Mon**	**Week**
Spring	3	2
Fall	11	1

NOTE: % and MI parameters are not used and are not shown above.

City of FRESNO

NAME: Marks @ Ray Johnson

2/23/2021 **ID:** 1337

| Annual Schedule [4.3] | Month | | | | | | | | | | | | Day of Week | | | | | | | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Day Plan |
|---|---|---

#	Alarm	Ev	Alr
1	Power Up Alarm.	X	X
2	Stop Timing	X	X
3	Cabinet Door Activation	-	-
4	Coordination Failure	X	X
5	External Alarm # 1	-	-
6	External Alarm # 2	-	-
7	External Alarm # 3	-	-
8	External Alarm # 4	-	-
9	Closed Loop Disabled	-	-
10	External Alarm # 5	-	-
11	External Alarm # 6	-	-
12	Manual Control Enable	X	X
13	Coord Free Input	-	-
14	Local Flash Input	X	X
15	CMU/MMU Flash Input	-	-
16	MMU Fault	X	X
17	Cycle Fault	X	-
18	Cycle Failure	X	-
19	Coordination Fault	X	X
20	Controller Fault	X	X
25	EEPROM CRC Fault	X	X
30	Coord Diagnostic Fault	X	X
37	Download Request	X	X
38	Pattern Change	-	-
49	Preempt 1 Input	X	X
50	Preempt 2 Input	X	X
51	Preempt 3 Input	X	X
52	Preempt 4 Input	X	X
53	Preempt 5 Input	X	X
54	Preempt 6 Input	X	X
55	Preempt 7 Input	-	-
56	Preempt 8 Input	-	-
57	Preempt 9 Input	-	-
58	Preempt 10 Input	-	-
59	EEPROM Compare Fault	X	X
60	Coordination Failure	X	X
63	TSP Active Trigger	-	-
73	Controller Access	X	X
81	FIO Changed Status	X	X

#1 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#2 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#3 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#4 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

I/O INPUT TABLE

	1	2	3	4	5	6	7	8
1	2	16	8	22	3	17	9	23
2	6	20	12	26	198	199	30	31
3	15	1	21	7	27	13	28	14
4	189	189	189	189	4	18	10	24
5	130	134	132	136	200	201	202	203
6	32	5	19	11	25	29	208	207
7	33	34	35	36	37	38	39	40
8	41	42	43	44	189	189	189	189

ACTION Table [4.5]

Act	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8	P1	P2
1	1	-	-	-	-	-	-	-	-	-	-	-	0	0
2	2	-	-	-	-	-	-	-	-	-	-	-	0	0
3	3	-	-	-	-	-	-	-	-	-	-	-	0	0
4	4	-	-	-	-	-	-	-	-	-	-	-	0	0
5	5	-	-	-	-	-	-	-	-	-	-	-	0	0
6	6	-	-	-	-	-	-	-	-	-	-	-	0	0
7	7	-	-	-	-	-	-	-	-	-	-	-	0	0
8	8	-	-	-	-	-	-	-	-	-	-	-	0	0
9	9	-	-	-	-	-	-	-	-	-	-	-	0	0
10	10	-	-	-	-	-	-	-	-	-	-	-	0	0
11	11	-	-	-	-	-	-	-	-	-	-	-	0	0
12	12	-	-	-	-	-	-	-	-	-	-	-	0	0
13	13	-	-	-	-	-	-	-	-	-	-	-	0	0
14	14	-	-	-	-	-	-	-	-	-	-	-	0	0
15	15	-	-	-	-	-	-	-	-	-	-	-	0	0
16	0	-	-	-	-	-	-	-	-	-	-	-	0	0
54	254	-	-	-	-	-	-	-	-	-	-	-	0	0
55	0	-	-	-	-	-	-	-	-	-	-	-	0	0

Alarm Parameters [1.6.7.1]

Pattern Events:	ON
Local Txmt Alarms:	OFF
Reassign User Alarm #1 In (5):	0
Reassign User Alarm #2 In (6):	0
Preempt Events:	ON

City of FRESNO

Date Printed
2/23/2021

ID: 1337 **Name:** Marks @ Ray Johnson

I/O Inputs - 1.8.9.1.5

C-1 PIN	I/O Source	Function	Input Name
39	I1-1	2	Veh Det 2
40	I1-2	16	Veh Det 16
41	I1-3	8	Veh Det 8
42	I1-4	22	Veh Det 22
43	I1-5	3	Veh Det 3
44	I1-6	17	Veh Det 17
45	I1-7	9	Veh Det 9
46	I1-8	23	Veh Det 23
47	I2-1	6	Veh Det 6
48	I2-2	20	Veh Det 20
49	I2-3	12	Veh Det 12
50	I2-4	26	Veh Det 26
51	I2-5	198	Pre 1 In
52	I2-6	199	Pre 2 In
53	I2-7	30	Veh Det 30
54	I2-8	31	Veh Det 31
55	I3-1	15	Veh Det 15
56	I3-2	1	Veh Det 1
57	I3-3	21	Veh Det 21
58	I3-4	7	Veh Det 7
59	I3-5	27	Veh Det 27
60	I3-6	13	Veh Det 13
61	I3-7	28	Veh Det 28
62	I3-8	14	Veh Det 14
63	I4-5	4	Veh Det 4
64	I4-6	18	Veh Det 18
65	I4-7	10	Veh Det 10
66	I4-8	24	Veh Det 24
67	I5-1	130	Ped Call 2
68	I5-2	134	Ped Call 6
69	I5-3	132	Ped Call 4
70	I5-4	136	Ped Call 8
71	I5-5	200	Pre 3 In
72	I5-6	201	Pre 4 In
73	I5-7	202	Pre 5 In
74	I5-8	203	Pre 6 In
75	I6-1	32	Veh Det 32
76	I6-2	5	Veh Det 5
77	I6-3	19	Veh Det 19
78	I6-4	11	Veh Det 11
79	I6-5	25	Veh Det 25
80	I6-6	29	Veh Det 29
81	I6-7	208	Local Flash
82	I6-8	207	Comp StopTm

I/O OUTPUTS - 1.8.9.2.5

C-1 PIN	I/O Source	Function	Output Name
1	Logic Grd		
2	O1-1	14	Red Ch 14
3	O1-2	62	Grn Chan 14
4	O1-3	4	Red Ch 4
5	O1-4	28	Yel Chan 4
6	O1-5	52	Grn Chan 4
7	O1-6	3	Red Ch 3
8	O1-7	27	Yel Chan 3
9	O1-8	51	Grn Chan 3
10	O2-1	13	Red Ch 13
11	O2-2	61	Grn Chan 13
12	O2-3	2	Red Ch 2
13	O2-4	26	Yel Chan 2
14	Logic Grd		
15	O2-5	50	Grn Chan 2
16	O2-6	1	Red Ch 1
17	O2-7	25	Yel Chan 1
18	O2-8	49	Grn Chan 1
19	O3-1	16	Red Ch 16
20	O3-2	64	Grn Chan 16
21	O3-3	8	Red Ch 8
22	O3-4	32	Yel Chan 8
23	O3-5	56	Grn Chan 8
24	O3-6	7	Red Ch 7
25	O3-7	31	Yel Chan 7
26	O3-8	55	Grn Chan 7
27	O4-1	15	Red Ch 15
28	O4-2	63	Grn Chan 15
29	O4-3	6	Red Ch 6
30	O4-4	30	Yel Chan 6
31	O4-5	54	Grn Chan 6
32	O4-6	5	Red Ch 5
33	O4-7	29	Yel Chan 5
34	O4-8	53	Grn Chan 5
35	O5-1	37	Yel Chan 13
36	O5-2	39	Yel Chan 15
37	O5-3	38	Yel Chan 14
38	O5-4	40	Yel Chan 16
100	O5-5	42	Yel Chan 18
101	O5-6	41	Yel Chan 17
102	O5-7	115	Not Used
103	O5-8	114	Watchdog

C-1 PIN	I/O Source	Function	Output Name
83	O6-1	18	Red Ch 18
84	O6-2	66	Grn Chan 18
85	O6-3	12	Red Ch 12
86	O6-4	36	Yel Chan 12
87	O6-5	60	Grn Chan 12
88	O6-6	11	Red Ch 11
89	O6-7	35	Yel Chan 11
90	O6-8	59	Grn Chan 11
91	O7-1	17	Red Ch 17
92	Logic Grd		
93	O7-2	65	Grn Chan 17
94	O7-3	10	Red Ch 10
95	O7-4	34	Yel Chan 10
96	O7-5	58	Grn Chan 10
97	O7-6	9	Red Ch 9
98	O7-7	33	Yel Chan 9
99	O7-8	57	Grn Chan 9

I/O Outputs - 1.8.9.2.5
C-11 OUTPUTS

1	O8-1	115	Not Used
2	O8-2	115	Not Used
3	O8-3	115	Not Used
4	O8-4	115	Not Used

I/O Inputs - 1.8.9.1.5
C-11 INPUTS

15	I7-1	33	Veh Det 33
16	I7-2	34	Veh Det 34
17	I7-3	35	Veh Det 35
18	I7-4	36	Veh Det 36
19	I7-5	37	Veh Det 37
20	I7-6	38	Veh Det 38
21	I7-7	39	Veh Det 39
22	I7-8	40	Veh Det 40
23	I8-1	41	Veh Det 41
24	I8-2	42	Veh Det 42
25	I8-3	43	Veh Det 43
26	I8-4	44	Veh Det 44
27	I8-5	189	Unused
28	I8-6	189	Unused
29	I8-7	189	Unused
30	I8-8	189	Unused

City of FRESNO

ID: 1337

NAME: Marks @ Ray Johnson

Date Printed: 2/23/2021

ID Number: 1337

LOCATION: Marks @ Ray Johnson

City of Fresno
332 Cabinet
44 Detector Plus Setup

DETECTOR ASSIGNMENTS

ISOLATORS

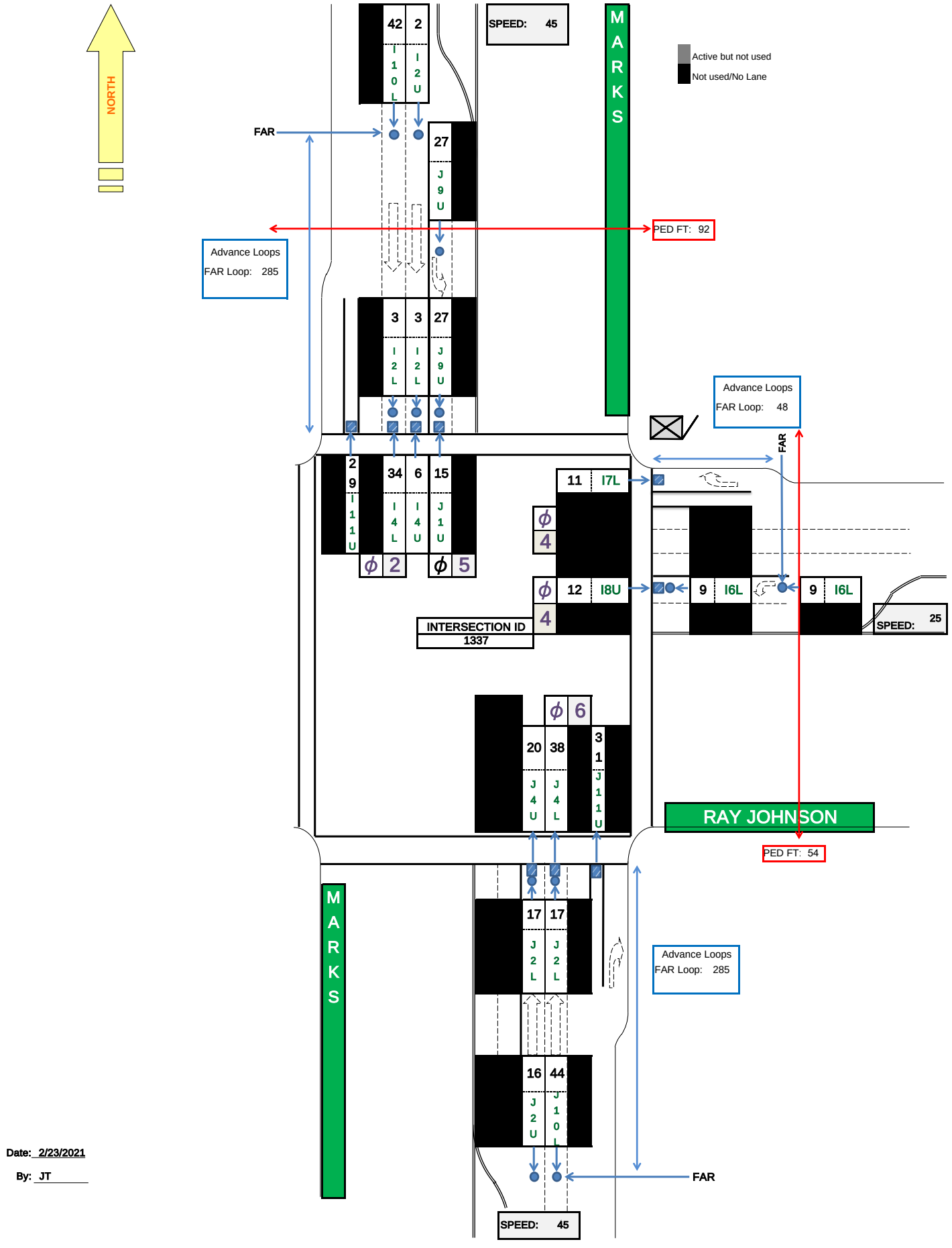
"I"	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
UPPER	Ph 1 Call&Ext T2-1&2 C1-56 Det 1 NBL1	Ph 2 Ext T2-5&6 C1-39 Det 2 SB Far	Ph 2 Call&TP3 T2-9&10 C1-63 Det 4 SB Mid	Ph 2 Call&TP3 T4-1&2 C1-47 Det 6 SBT1	Ph 3 Call&Ext T4-5&6 C1-58 Det 7 EBL1	Ph 4 Ext T4-9&10 C1-41 Det 8 WB Far	Ph 4 Call&TP3 T6-1&2 C1-65 Det 10 WB Mid	Ph 4 Call&TP3 T6-5&6 C1-49 Det 12 WBT1	Ph 1 Call&Ext T6-9&10 C1-60 Det 13 NBLt Bk	Ph 2/4 Ext T10-5&6 C11-23 Det 41	Ph 2 Call&Ext T8-1 C1-80 Det 29 BIKE	Ph 2 PPB T8-4 C1-67	Ph 6 PPB T8-7 C1-68	FLASH SENSE T8-10 C1-81
LOWER	Ph 1 Call&Ext T2-3&4 C11-15 Det 33 NBL2	Ph 2 Call&TP3 T2-7&8 C1-43 Det 3 SB Bk	Ph 2 Call&Ext T2-11&12 C1-76 Det 5 SBRt	Ph 2 Call&TP3 T4-3&4 C11-16 Det 34 SBT2	Ph 3 Call&Ext T4-7&8 C11-17 Det 35 EBL2	Ph 4 Call&TP3 T4-11&12 C1-45 Det 9 WB Bk	Ph 4 Call&Ext T6-3&4 C1-78 Det 11 WBRt	Ph 4 Call&TP3 T6-7&8 C11-18 Det 36 WBT2	Ph 3 Call&Ext T6-11&12 C1-62 Det 14 EBLt Bk	Ph 2/4 Ext T10-7&8 C11-24 Det 42	Ph 4 Call&Ext T8-2 C1-53 Det 30 BIKE	Ph 4 PPB T8-5 C1-69	Ph 8 PPB T8-8 C1-70	STOP TIMING T8-11 C1-82
"J"	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14
UPPER	Ph 5 Call&Ext T3-1&2 C1-55 Det 15 SBL1	Ph 6 Ext T3-5&6 C1-40 Det 16 NB Far	Ph 6 Call&TP3 T3-9&10 C1-64 Det 18 NB Mid	Ph 6 Call&TP3 T5-1&2 C1-48 Det 20 NBT1	Ph 7 Call&Ext T5-5&6 C1-57 Det 21 WBL1	Ph 8 Ext T5-9&10 C1-42 Det 22 EB Far	Ph 8 Call&TP3 T7-1&2 C1-66 Det 24 EB Mid	Ph 8 Call&TP3 T7-5&6 C1-50 Det 26 EBT1	Ph 5 Call&Ext T7-9&10 C1-59 Det 27 SBLt Bk	Ph 6/8 Ext T10-9&10 C11-25 Det 43	Ph 6 Call&Ext T9-1 C1-54 Det 31 BIKE	EMER A Ph 2 + 5 T9-4 C1-71	EMER B Ph 4 + 7 T9-5 C1-72	RR1 FLASH T9-10 C1-51
LOWER	Ph 5 Call&Ext T3-3&4 C11-19 Det 37 SBL2	Ph 6 Call&TP3 T3-7&8 C1-44 Det 17 NB Bk	Ph 6 Call&Ext T3-11&12 C1-77 Det 19 NBRt	Ph 6 Call&TP3 T5-3&4 C11-20 Det 38 NBT2	Ph 7 Call&Ext T5-7&8 C11-21 Det 39 WBL2	Ph 8 Call&TP3 T5-11&12 C1-46 Det 23 EB Bk	Ph 8 Call&Ext T7-3&4 C1-79 Det 25 EBRt	Ph 8 Call&TP3 T7-7&8 C11-22 Det 40 EBT2	Ph 7 Call&Ext T7-11&12 C1-61 Det 28 WBLt Bk	Ph 6/8 EXT T10-11&12 C11-26 Det 44	Ph 8 Call&Ext T9-2 C1-75 Det 32 BIKE	EMER C Ph 1 + 6 T9-7 C1-73	EMER D Ph 3 + 8 T9-8 C1-74	RR2 LTD OP T9-11 C1-52

COMMENTS:

TIMING UPDATES AND MODIFICATIONS

ID: 1337 **NAME:** Marks @ Ray Johnson

DATE	CHANGES MADE	ATMS or CABINET	BY
2/23/2021	Updated First Phases Ø2 & Ø6 to start green with a 6 second All Red-Start and removed Yellow Start from phases Ø4 & Ø8.		
	Also updated the Advanced Schedule, Console Parameters, and turned ON the Occupancy & Volume attributes for all 44 detectors.	ATMS	JT



Date: 2/23/2021

By: JT

Detector Layout for the intersection of: MARKS & RAY JOHNSON

2070 Controller Timing Chart

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Caltrans TSCP Ver 1.01

Location:			Designed By:
System:	District:		Intalled By:
Master At:	I/C:		Service Info:

Timing Change:	By:	Date Start:	Date End:	Designed:	Installed:

		FLASH
PHASE	1)	[ ]
	2)	[ ]
	3)	[ ]
	4)	[ ]
	5)	[ ]
	6)	[ ]
	7)	[ ]
	8)	[ ]
OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:

RAM Checksum

Page 2:	99E7	Page 8:	85AF
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Page 4:	F29E	Page 10:	7E2B
Page 5:	191A	Page 11:	B4AA
Page 6:	191A	Page 12:	6C28
Page 7:	421E	Page 13:	86F7

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CONFIGURATION PHASE FLAGS

Cabinet (9-3)	
Type	332
Configuration	CALTRANS

Phases (2-1-1-1)	
Permitted	- 2 - - - 6 - 8
Restricted	- - - - - - - -

Phase Features (2-1-1-4)	
Double Entry	- - - - - - - -
Rest In Walk	- - - - - - - -
Rest In Red	- - - - - - - -
Walk2	- - - - - - - -
Max Green 2	- - - - - - - -
Max Green 3	- - - - - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - - - - -
Vehicle Calls	- 2 - - - 6 - 8
Pedestrian Calls	- 2 - - - - - -
Yellow Start Overlaps	- - - - - -
Startup All-Red	6.0

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - - - - -
Pedestrian	- - - - - - - -
Bicyle	- - - - - - - -

Phase Locks (2-1-1-3)	
Red	- - - - - - - -
Yellow	- - - - - - - -
Force/Max	- - - - - - - -

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - - - - -	1	- - - - - - - -
2	- - - - - - - -	2	- - - - - - - -
3	- - - - - - - -	3	- - - - - - - -
4	- - - - - - - -	4	- - - - - - - -
5	- - - - - - - -	5	- - - - - - - -
6	- - - - - - - -	6	- - - - - - - -
7	- - - - - - - -	7	- - - - - - - -
8	- - - - - - - -	8	- - - - - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - - - - -
Yellow Flash Overlap	- - - - - - - -
Flash In Red Phases	- - - - - - - -
Flash In Red Overlap	- - - - - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - - - - -
Driveway Signal Phases	- - - - - - - -
Driveway Signal Overlaps	- - - - - - - -
Leading Ped Phases	- 2 - - - - - -

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - - - - -

Pedestrian (2-1-3)	
P1	- - - - - - - -
P2	- 2 - - - - - -
P3	- - - - - - - -
P4	- - - - - - - -
P5	- - - - - - - -
P6	- - - - - - - -
P7	- - - - - - - -
P8	- - - - - - - -

Overlap (2-1-4)

Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
B [Arrow B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
C [OL A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
D [OL B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
E [OL C]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
F [OL D]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only

PAGE 2 **CHECKSUM:** 99E7

© 2017 California Department of Transportation, All Rights Reserved Location: SR 180 @ N Marks Ave WB Ramp TSCP 3.10

PHASE TIMING

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	0	0	0
Flash Don't Walk	0	24	0	0	0	0	0	0
Minimum Green	0	10	0	0	0	10	0	8
Det Limit	0	20	0	0	0	20	0	20
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	25	0	0	0	25	0	25
Max Green 2	0	35	0	0	0	35	0	35
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	3.5	0.0	0.0	0.0	3.5	0.0	5.2
Maximum Gap	0.0	4.8	0.0	0.0	0.0	4.8	0.0	6.9
Minimum Gap	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Reduce Every	1.0	0.9	1.0	1.0	1.0	0.9	1.0	0.5
Yellow	3.0	4.8	3.0	3.0	3.0	4.8	3.0	4.4
All-Red	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	3	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-5)	
Time	5.0

Red To Se (2-6)	
Red To Sec	OFF

Max/Gap Out (2-7)	
Max Cnt	2
Gap Cnt	3

 CHECKSUM: 2CF8

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Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

		Cycle	Multi	Lag Gap	[Offsets] A	B	C	Green Factors or Press [F] to Select -1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor		0.0	- - - - - - - -											
Plan 2	Green Factor		0.0	- - - - - - - -											
Plan 3	Green Factor		0.0	- - - - - - - -											
Plan 4	Green Factor		0.0	- - - - - - - -											
Plan 5	Green Factor		0.0	- - - - - - - -											
Plan 6	Green Factor		0.0	- - - - - - - -											
Plan 7	Green Factor		0.0	- - - - - - - -											
Plan 8	Green Factor		0.0	- - - - - - - -											
Plan 9	Green Factor		0.0	- - - - - - - -											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	- - - - - - - - -
11-19	- - - - - - - - -
21-29	- - - - - - - - -

Master Sub Master	
Input	0.0
Output	0

(7-E) Free	
Lag	Omit
- 2 - 4 - 6 - 8	- - - - - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - - - - -
Ped	Bike
- - - - - - - -	- - - - - - - -
Cond	Cond Grn
- - - - - - - -	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 2	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 3	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 4	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 5	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 6	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 7	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 8	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 9	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	Offset
0	A

Plan: 1-29
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

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Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select Force-Off							
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - - - - -											
Plan 12	Green Factor		0.0	- - - - - - - -											
Plan 13	Green Factor		0.0	- - - - - - - -											
Plan 14	Green Factor		0.0	- - - - - - - -											
Plan 15	Green Factor		0.0	- - - - - - - -											
Plan 16	Green Factor		0.0	- - - - - - - -											
Plan 17	Green Factor		0.0	- - - - - - - -											
Plan 18	Green Factor		0.0	- - - - - - - -											
Plan 19	Green Factor		0.0	- - - - - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 12	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 13	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 14	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan15	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 16	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 17	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 18	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 19	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

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Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select Force-Off							
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - - - - -											
Plan 22	Green Factor		0.0	- - - - - - - -											
Plan 23	Green Factor		0.0	- - - - - - - -											
Plan 24	Green Factor		0.0	- - - - - - - -											
Plan 25	Green Factor		0.0	- - - - - - - -											
Plan 26	Green Factor		0.0	- - - - - - - -											
Plan 27	Green Factor		0.0	- - - - - - - -											
Plan 28	Green Factor		0.0	- - - - - - - -											
Plan 29	Green Factor		0.0	- - - - - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 22	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 23	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 24	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 25	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 26	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 27	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 28	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 29	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

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DETECTORS

Detector Attributes (5-1)				Slot
Det	Type	Phases	Lock	
1	Count+Call+Extend	1 - - - - - - -	NO	I1U
2	Count+Call+Extend	1 - - - - - - -	NO	I1L
3	Extend	- 2 - - - - - -	NO	I2U
4	Extend	- 2 - - - - - -	NO	I2L
5	Call+Extend	- 2 - - - - - -	NO	I3U
6	Limited	- 2 - - - - - -	NO	I3L
7	Limited	- 2 - - - - - -	NO	I4U
8	Limited	- 2 - - - - - -	NO	I4L
9	Count+Call+Extend	- - 3 - - - - -	NO	I5U
10	Count+Call+Extend	- - 3 - - - - -	NO	I5L
11	Extend	- - - 4 - - - -	NO	I6U
12	Extend	- - - 4 - - - -	NO	I6L
13	Call+Extend	- - - 4 - - - -	NO	I7U
14	Limited	- - - 4 - - - -	NO	I7L
15	Limited	- - - 4 - - - -	NO	I8U
16	Limited	- - - 4 - - - -	NO	I8L
17	Call+Extend	1 - - - - - - -	NO	I9U
18	Call+Extend	- - 3 - - - - -	NO	I9L
19	Count+Call	- 2 - - - - - -	NO	I10U
20	Count+Call	- - - 4 - - - -	NO	I10L
21	Count+Call+Extend	- - - - 5 - - -	NO	J1U
22	Count+Call+Extend	- - - - 5 - - -	NO	J1L
23	Extend	- - - - - 6 - -	NO	J2U
24	Extend	- - - - - 6 - -	NO	J2L
25	Call+Extend	- - - - - 6 - -	NO	J3U
26	Limited	- - - - - 6 - -	NO	J3L
27	Limited	- - - - - 6 - -	NO	J4U
28	Limited	- - - - - 6 - -	NO	J4L
29	Count+Call+Extend	- - - - - - 7 -	NO	J5U
30	Count+Call+Extend	- - - - - - 7 -	NO	J5L
31	Extend	- - - - - - - 8	NO	J6U
32	Extend	- - - - - - - 8	NO	J6L
33	Call+Extend	- - - - - - - 8	NO	J7U
34	Limited	- - - - - - - 8	NO	J7L
35	Limited	- - - - - - - 8	NO	J8U
36	Limited	- - - - - - - 8	NO	J8L
37	Call+Extend	- - - - 5 - - -	NO	J9U
38	Call+Extend	- - - - - - 7 -	NO	J9L
39	Count+Call	- - - - - 6 - -	NO	J10U
40	Count+Call	- - - - - - - 8	NO	J10L
41	Pedestrian	- 2 - - - - - -	NO	I12U
42	Pedestrian	- - - 4 - - - -	NO	I12L
43	Pedestrian	- - - - - 6 - -	NO	I13U
44	Pedestrian	- - - - - - - 8	NO	I13L

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1	0	0.0	10	3.2
2	0	0.0	10	7.2
3	0	0.0	10	1.1
4	0	0.0	10	1.5
5	0	0.0	10	4.5
6	0	0.0	10	6.2
7	0	2.0	10	2.1
8	0	2.0	10	7.4
9	0	0.0	10	3.4
10	0	0.0	10	7.6
11	0	0.0	10	1.3
12	0	0.0	10	1.7
13	0	0.0	10	4.7
14	15	0.0	10	6.4
15	0	0.0	10	2.3
16	0	0.0	10	7.8
17	0	0.0	10	3.6
18	0	0.0	10	3.8
19	0	0.0	10	4.1
20	0	0.0	10	4.2
21	0	0.0	10	3.1
22	0	0.0	10	7.1
23	0	0.0	10	1.2
24	0	0.0	10	1.6
25	0	0.0	10	4.6
26	0	0.0	10	6.3
27	0	2.0	10	2.2
28	0	2.0	10	7.3
29	0	0.0	10	3.3
30	0	0.0	10	7.5
31	0	1.0	10	1.4
32	2	1.0	10	1.8
33	15	0.0	10	4.8
34	15	0.0	10	6.5
35	0	0.0	10	2.4
36	0	0.0	10	7.7
37	0	0.0	10	3.5
38	0	0.0	10	3.7
39	0	0.0	10	4.3
40	0	0.0	10	4.4
41	0	0.0	10	5.1
42	0	0.0	10	5.3
43	0	0.0	10	5.2
44	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	0
Fail Reset Time	0

Failure Override (5-4)	
Detectors 1-8	- - - - - - - -
Detectors 9-16	- - - - - - - -
Detectors 17-24	- - - - - - - -
Detectors 25-32	- - - - - - - -
Detectors 33-40	- - - - - - - -
Detectors 41-44	- - - - - - - -

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - - - - -

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.0	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

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TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 2 (8-2-2)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 3 (8-2-3)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 4 (8-2-4)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 5 (8-2-5)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 6 (8-2-6)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

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HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Daylight Saving (8-6)

Enable	YES		
		Month	Sunday
	Start	None	None
	End	None	None

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	- - - - - - - -
Holiday	- - - - - - - -

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0530	2100	1 2 3 4 5 6 7	27	- 2 - - - 6 - 8
2	0000	0000	- - - - - - - -	0	- - - - - - - -
3	0000	0000	- - - - - - - -	0	- - - - - - - -
4	0000	0000	- - - - - - - -	0	- - - - - - - -
5	0000	0000	- - - - - - - -	0	- - - - - - - -
6	0000	0000	- - - - - - - -	0	- - - - - - - -
7	0000	0000	- - - - - - - -	0	- - - - - - - -
8	0000	0000	- - - - - - - -	0	- - - - - - - -
9	0000	0000	- - - - - - - -	0	- - - - - - - -
10	0000	0000	- - - - - - - -	0	- - - - - - - -
11	0000	0000	- - - - - - - -	0	- - - - - - - -
12	0000	0000	- - - - - - - -	0	- - - - - - - -
13	0000	0000	- - - - - - - -	0	- - - - - - - -
14	0000	0000	- - - - - - - -	0	- - - - - - - -
15	0000	0000	- - - - - - - -	0	- - - - - - - -
16	0000	0000	- - - - - - - -	0	- - - - - - - -

Action Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11.Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed
200+Action Code = Phases replaced

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COMMUNICATIONS

	C2 (6-1-1)	C20 (6-1-2)	C21 (6-1-3)
Address	0	0	0
Protocol	AB3418	AB3418	AB3418
Baud	1200	1200	1200
Parity	None	None	None
Data Bits	8 data bits	8 data bits	8 data bits
Stop Bits	1 stop bit	1 stop bit	1 stop bit
RTS On Time	20	20	20
RTS Off Time	20	20	20
Handshaking	Normal	Normal	Normal
Access Level	None	None	None

CALLBACK NUMBERS

Callback Numbers (6-3...3)			
Line Out	0	0	0
Local Toll	0	0	0
Long Distance	0	0	0
Delay	10	10	10
Area Code	0	0	0
Phone Number	0 - 0	0 - 0	0 - 0

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

***Refer to User's Manual for Data and OP Codes**

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
IP Mode	Static IP
Central Access	0
Field Access	0
ATSPM	Disabled

IP Address	10	53	52	17
Netmask	255	255	255	0
Broadcast	10	53	52	255
Gateway	10	53	52	254

SPAT Network (6-5)				
SPAT	1		2	
Protocol	None		None	
Port	0		0	
Address	0	0	0	0

Access Levels

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

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RAILROAD PREEMPTION

RR 1

Timing (3-1-1)	
Clear 1	10
Clear 2	0
Clear 3	0
Hold	0
Min Grn	0
Delay	0
Exit	5
Ped Clr	0

Phase Flags (3-1-2)		
Grn Hold	Yel Flash	Red Flash
- 2 - - 5 - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	1 2 3 4 5 6 7 8

Pedestrian Flags (3-1-3)		
Walk	Flash DW	Solid DW
- - - - - - - -	- - - - - - - -	- 2 - 4 - 6 - 8
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Overlap Flags (3-1-4)		
Grn Hold	Yel Flash	Red Flash
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	A B C D E F

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Veh Permit/Call	Ped Permit/Call
- - - - - - - -	- - - - - - -	1 2 3 4 5 6 7	- 2 - 4 - 6 -

Configuration (3-1-6)									
	PR	XR	Gate	Isld	APP	Sign 1	Sign 2	Max On	Latching
1	0.0	0.0	0.0	0.0	0.0	00.0	00.0	1	Yes
2	0.0	0.0							

Valid Inputs: 1.x, 2.x, 3.x, 4.x, 5.x, 6.x, 7.x, 8.x x=1 to 8
Valid Outputs: 11.x,12.x,13.x,14.x,15.x,16.x,17.x,18.x x=1 to 8

RR 2

Timing (3-2-1)	
Clear 1	10
Clear 2	0
Clear 3	0
Hold	0
Min Grn	0
Delay	0
Exit	0
Ped Clr	0

Phase Flags (3-2-2)		
Grn Hold	Yel Flash	Red Flash
- - - 4 - - 7 -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
1 2 3 - - 6 - -	- - - - - - - -	- - - - - - - -

Pedestrian Flags (3-2-3)		
Walk	Flash DW	Solid DW
- - - - - - - -	- - - - - - - -	- 2 - 4 - 6 - 8
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- 2 - - - 6 - -	- - - - - - - -	- - - 4 - - - 8

Overlap Flags (3-2-4)		
Grn Hold	Yel Flash	Red Flash
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Veh Permit/Call	Ped Permit/Call
- - - - - - - -	- - - - - - -	- - - 4 - - 7	- - - - - - -

Configuration (3-2-6)									
	PR	XR	Gate	Isld	APP	Sign 1	Sign 2	Max On	Latching
1	0.0	0.0	0.0	0.0	0.0	00.0	00.0	1	Yes
2	0.0	0.0							

Valid Inputs: 1.x, 2.x, 3.x, 4.x, 5.x, 6.x, 7.x, 8.x x=1 to 8
Valid Outputs: 11.x,12.x,13.x,14.x,15.x,16.x,17.x,18.x x=1 to 8

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- 2 - - 5 - - -	- - - - - - - -

Port	Latching	Phase Termination
5.5	No	Advance

EVB (3-B)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - - 4 - - 7 -	- - - - - - - -

Port	Latching	Phase Termination
5.6	No	Advance

EVC (3-C)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	1 - - - - 6 - -	- - - - - - - -

Port	Latching	Phase Termination
5.7	No	Advance

EVD (3-D)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - 3 - - - - 8	- - - - - - - -

Port	Latching	Phase Termination
5.8	No	Advance

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INPUTS

Enable	No
Max ON	0
Max OFF	0

7 Wire I/C(2-1-5-1)			
Input	Port	Input	Port
R1	3.8	Free	3.6
R2	3.5	D2	2.8
R3	3.7	D3	6.1

Manual Control(2-1-5-2)	
Input	Port
Manual Adv	0.0
Adv Enable	0.0

Cabinet Staus (2-1-5-3)	
Input	Port
Flash Bus	0.0
Door Ajar	0.0
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Battery Backup (2-1-5-5)	
Port	Operation
2.7	Flashing

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:
0 Unused (no output)
1- 8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C + middle output of loadswitches 3 and 6 Channel 9 and 10

INTERVAL CONTROL

Interval Control	
(3-3-1)	Time
Step 1	0
Step 2	0
Step 3	0
Step 4	0
Step 5	0
Step 6	0
Step 7	0
Step 8	0

Phase Control (3-3-2)		
Hold	Force	Advance
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Phase Recalls (3-3-3)		
Veh Call	Ped Call	Int Call
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Phase Permissions (3-3-4)		
Phs Permit	Ped Permit	Overlap
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
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- - - - - - - -	- - - - - - - -	- - - - - -

Configuration (3-3-5)		
Input	Port	Delay
1	0.0	0
2	0.0	0

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TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable in Local Plans (3-E-3)	
Plan 1-9	- - - - - - - -
Plan 11-19	- - - - - - - -

Queue Jump (3-E-4)	
Grn Hold	Hold Phase
0	- - - - - - - -
0	- - - - - - - -

Input	
Type	Port
OPT	0.0
OPT	0.0

Output	
Stop	Go
0	0
0	0

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	1	2	3	4	5	6	7	8	Coord	Lag	Min Recall	Restricted
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - - - - -	0.0	0.0	0.0	0	0.0	0

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CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 1.01
Model ID	Model 2070LX
Protocol Revision ID	AB3418

2070 Controller Timing Chart

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Caltrans TSCP Ver 1.01

Location:			Designed By:
System:	District:		Intalled By:
Master At:	I/C:		Service Info:

Timing Change:	By:	Date Start:	Date End:	Designed:	Installed:

		FLASH
PHASE	1)	[ ]
	2)	[ ]
	3)	[ ]
	4)	[ ]
	5)	[ ]
	6)	[ ]
	7)	[ ]
	8)	[ ]
OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:

RAM Checksum

Page 2:	F217	Page 8:	85AF
Page 3:	190E	Page 9:	46BF
Page 4:	F29E	Page 10:	D315
Page 5:	191A	Page 11:	4B57
Page 6:	191A	Page 12:	23DF
Page 7:	D8B5	Page 13:	86F7

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CONFIGURATION PHASE FLAGS

Cabinet (9-3)	
Type	332
Configuration	CALTRANS

Phases (2-1-1-1)	
Permitted	- 2 - 4 - 6 - -
Restricted	- - - - - - - -

Phase Features (2-1-1-4)	
Double Entry	- 2 - - - 6 - -
Rest In Walk	- - - - - - - -
Rest In Red	- - - - - - - -
Walk2	- - - - - - - -
Max Green 2	- 2 - 4 - 6 - -
Max Green 3	- - - - - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - - - - -
Vehicle Calls	- 2 - 4 - 6 - -
Pedestrian Calls	- 2 - 4 - 6 - -
Yellow Start Overlaps	- - - - - -
Startup All-Red	6.0

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - - - - -
Pedestrian	- - - - - - - -
Bicyle	- - - - - - - -

Phase Locks (2-1-1-3)	
Red	- - - - - - - -
Yellow	- - - - - - - -
Force/Max	- - - - - - - -

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - - - - -	1	- - - - - - - -
2	- - - - - - - -	2	- - - - - - - -
3	- - - - - - - -	3	- - - - - - - -
4	- - - - - - - -	4	- - - - - - - -
5	- - - - - - - -	5	- - - - - - - -
6	- - - - - - - -	6	- - - - - - - -
7	- - - - - - - -	7	- - - - - - - -
8	- - - - - - - -	8	- - - - - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - - - - -
Yellow Flash Overlap	- - - - - - - -
Flash In Red Phases	- - - - - - - -
Flash In Red Overlap	- - - - - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - - - - -
Driveway Signal Phases	- - - - - - - -
Driveway Signal Overlaps	- - - - - - - -
Leading Ped Phases	- - - - - 6 - -

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - - - - -

Pedestrian (2-1-3)	
P1	- - - - - - - -
P2	- - - - - - - -
P3	- - - - - - - -
P4	- - - - - - - -
P5	- - - - - - - -
P6	- - - - - 6 - -
P7	- - - - - - - -
P8	- - - - - - - -

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
B [Arrow B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
C [OL A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
D [OL B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
E [OL C]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
F [OL D]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only

 CHECKSUM: F217

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PHASE TIMING

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	7	0	0
Flash Don't Walk	0	0	0	0	0	19	0	0
Minimum Green	0	10	0	8	0	10	0	0
Det Limit	0	20	0	20	0	20	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	25	0	20	0	25	0	0
Max Green 2	0	35	0	30	0	35	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	3.5	0.0	3.5	0.0	3.5	0.0	0.0
Maximum Gap	0.0	4.8	0.0	4.8	0.0	4.8	0.0	0.0
Minimum Gap	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Reduce Every	0.0	0.9	0.0	0.7	0.0	0.9	0.0	0.0
Yellow	3.0	4.8	3.0	4.8	3.0	4.8	3.0	3.0
All-Red	0.0	2.1	0.0	2.0	0.0	2.1	0.0	0.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	3	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-5)	
Time	5.0

Red To Se (2-6)	
Red To Sec	OFF

Max/Gap Out (2-7)	
Max Cnt	2
Gap Cnt	3

 CHECKSUM: 190E

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Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select							
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor		0.0	- - - - - - - -											
Plan 2	Green Factor		0.0	- - - - - - - -											
Plan 3	Green Factor		0.0	- - - - - - - -											
Plan 4	Green Factor		0.0	- - - - - - - -											
Plan 5	Green Factor		0.0	- - - - - - - -											
Plan 6	Green Factor		0.0	- - - - - - - -											
Plan 7	Green Factor		0.0	- - - - - - - -											
Plan 8	Green Factor		0.0	- - - - - - - -											
Plan 9	Green Factor		0.0	- - - - - - - -											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	- - - - - - - - -
11-19	- - - - - - - - -
21-29	- - - - - - - - -

Master Sub Master	
Input	0.0
Output	0

(7-E) Free	
Lag	Omit
- 2 - 4 - 6 - 8	- - - - - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - - - - -
Ped	Bike
- - - - - - - -	- - - - - - - -
Cond	Cond Grn
- - - - - - - -	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 2	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 3	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 4	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 5	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 6	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 7	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 8	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 9	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	Offset
0	A

Plan: 1-29
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

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Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select Force-Off							
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - - - - -											
Plan 12	Green Factor		0.0	- - - - - - - -											
Plan 13	Green Factor		0.0	- - - - - - - -											
Plan 14	Green Factor		0.0	- - - - - - - -											
Plan 15	Green Factor		0.0	- - - - - - - -											
Plan 16	Green Factor		0.0	- - - - - - - -											
Plan 17	Green Factor		0.0	- - - - - - - -											
Plan 18	Green Factor		0.0	- - - - - - - -											
Plan 19	Green Factor		0.0	- - - - - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 12	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 13	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 14	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan15	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 16	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 17	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 18	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 19	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

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Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select Force-Off							
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - - - - -											
Plan 22	Green Factor		0.0	- - - - - - - -											
Plan 23	Green Factor		0.0	- - - - - - - -											
Plan 24	Green Factor		0.0	- - - - - - - -											
Plan 25	Green Factor		0.0	- - - - - - - -											
Plan 26	Green Factor		0.0	- - - - - - - -											
Plan 27	Green Factor		0.0	- - - - - - - -											
Plan 28	Green Factor		0.0	- - - - - - - -											
Plan 29	Green Factor		0.0	- - - - - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 22	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 23	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 24	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 25	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 26	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 27	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 28	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 29	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

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DETECTORS

Detector Attributes (5-1)

Det	Type	Phases	Lock	Slot
1	Count+Call+Extend	1 - - - - - - -	NO	I1U
2	Count+Call+Extend	1 - - - - - - -	NO	I1L
3	Extend	- 2 - - - - - -	NO	I2U
4	Extend	- 2 - - - - - -	NO	I2L
5	Call+Extend	- 2 - - - - - -	NO	I3U
6	Limited	- 2 - - - - - -	NO	I3L
7	Limited	- 2 - - - - - -	NO	I4U
8	Limited	- 2 - - - - - -	NO	I4L
9	Count+Call+Extend	- - 3 - - - - -	NO	I5U
10	Count+Call+Extend	- - 3 - - - - -	NO	I5L
11	Count+Call+Extend	- - - 4 - - - -	NO	I6U
12	Count+Call+Extend	- - - 4 - - - -	NO	I6L
13	Call+Extend	- - - 4 - - - -	NO	I7U
14	Limited	- - - 4 - - - -	NO	I7L
15	Limited	- - - 4 - - - -	NO	I8U
16	Limited	- - - 4 - - - -	NO	I8L
17	Call+Extend	1 - - - - - - -	NO	I9U
18	Call+Extend	- - 3 - - - - -	NO	I9L
19	Count+Call	- 2 - - - - - -	NO	I10U
20	Count+Call	- - - 4 - - - -	NO	I10L
21	Count+Call+Extend	- - - - 5 - - -	NO	J1U
22	Count+Call+Extend	- - - - 5 - - -	NO	J1L
23	Extend	- - - - - 6 - -	NO	J2U
24	Extend	- - - - - 6 - -	NO	J2L
25	Call+Extend	- - - - - 6 - -	NO	J3U
26	Limited	- - - - - 6 - -	NO	J3L
27	Limited	- - - - - 6 - -	NO	J4U
28	Limited	- - - - - 6 - -	NO	J4L
29	Count+Call+Extend	- - - - - - 7 -	NO	J5U
30	Count+Call+Extend	- - - - - - 7 -	NO	J5L
31	Extend	- - - - - - - 8	NO	J6U
32	Extend	- - - - - - - 8	NO	J6L
33	Call+Extend	- - - - - - - 8	NO	J7U
34	Limited	- - - - - - - 8	NO	J7L
35	Limited	- - - - - - - 8	NO	J8U
36	Limited	- - - - - - - 8	NO	J8L
37	Call+Extend	- - - - 5 - - -	NO	J9U
38	Call+Extend	- - - - - - 7 -	NO	J9L
39	Count+Call	- - - - - 6 - -	NO	J10U
40	Count+Call	- - - - - - - 8	NO	J10L
41	Pedestrian	- 2 - - - - - -	NO	I12U
42	Pedestrian	- - - 4 - - - -	NO	I12L
43	Pedestrian	- - - - - 6 - -	NO	I13U
44	Pedestrian	- - - - - - - 8	NO	I13L

Detector Configuration (5-2)

Det	Delay	Extend	Recall	Port
1	0	0.0	10	3.2
2	0	0.0	10	7.2
3	0	0.0	10	1.1
4	0	0.0	10	1.5
5	0	0.0	10	4.5
6	0	0.0	10	6.2
7	0	2.0	10	2.1
8	0	2.0	10	7.4
9	0	0.0	10	3.4
10	0	0.0	10	7.6
11	2	0.0	10	1.3
12	2	0.0	10	1.7
13	0	0.0	10	4.7
14	15	2.0	10	6.4
15	0	2.0	10	2.3
16	0	0.0	10	7.8
17	0	0.0	10	3.6
18	0	0.0	10	3.8
19	0	0.0	10	4.1
20	0	0.0	10	4.2
21	0	0.0	10	3.1
22	0	0.0	10	7.1
23	0	0.0	10	1.2
24	0	0.0	10	1.6
25	0	0.0	10	4.6
26	0	0.0	10	6.3
27	0	0.0	10	2.2
28	0	0.0	10	7.3
29	0	0.0	10	3.3
30	0	0.0	10	7.5
31	0	2.0	10	1.4
32	0	2.0	10	1.8
33	0	0.0	10	4.8
34	0	0.0	10	6.5
35	0	0.0	10	2.4
36	0	0.0	10	7.7
37	0	0.0	10	3.5
38	0	0.0	10	3.7
39	0	0.0	10	4.3
40	0	0.0	10	4.4
41	0	0.0	10	5.1
42	0	0.0	10	5.3
43	0	0.0	10	5.2
44	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	0
Fail Reset Time	0

Failure Override (5-4)	
Detectors 1-8	- - - - - - - -
Detectors 9-16	- - - - - - - -
Detectors 17-24	- - - - - - - -
Detectors 25-32	- - - - - - - -
Detectors 33-40	- - - - - - - -
Detectors 41-44	- - - - - - - -

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - - - - -

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.0	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

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TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 2 (8-2-2)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 3 (8-2-3)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 4 (8-2-4)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 5 (8-2-5)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 6 (8-2-6)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

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HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Daylight Saving (8-6)

Enable	YES		
		Month	Sunday
	Start	None	None
	End	None	None

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	- - - - - - - -
Holiday	- - - - - - - -

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0530	2100	1 2 3 4 5 6 7	27	- 2 - 4 - 6 - -
2	0000	0000	- - - - - - - -	0	- - - - - - - -
3	0000	0000	- - - - - - - -	0	- - - - - - - -
4	0000	0000	- - - - - - - -	0	- - - - - - - -
5	0000	0000	- - - - - - - -	0	- - - - - - - -
6	0000	0000	- - - - - - - -	0	- - - - - - - -
7	0000	0000	- - - - - - - -	0	- - - - - - - -
8	0000	0000	- - - - - - - -	0	- - - - - - - -
9	0000	0000	- - - - - - - -	0	- - - - - - - -
10	0000	0000	- - - - - - - -	0	- - - - - - - -
11	0000	0000	- - - - - - - -	0	- - - - - - - -
12	0000	0000	- - - - - - - -	0	- - - - - - - -
13	0000	0000	- - - - - - - -	0	- - - - - - - -
14	0000	0000	- - - - - - - -	0	- - - - - - - -
15	0000	0000	- - - - - - - -	0	- - - - - - - -
16	0000	0000	- - - - - - - -	0	- - - - - - - -

Action Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11.Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed
200+Action Code = Phases replaced

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COMMUNICATIONS

	C2 (6-1-1)	C20 (6-1-2)	C21 (6-1-3)
Address	0	0	0
Protocol	AB3418	AB3418	AB3418
Baud	1200	1200	1200
Parity	None	None	None
Data Bits	8 data bits	8 data bits	8 data bits
Stop Bits	1 stop bit	1 stop bit	1 stop bit
RTS On Time	20	20	20
RTS Off Time	20	20	20
Handshaking	Normal	Normal	Normal
Access Level	None	None	None

CALLBACK NUMBERS

Callback Numbers (6-3...3)			
Line Out	0	0	0
Local Toll	0	0	0
Long Distance	0	0	0
Delay	10	10	10
Area Code	0	0	0
Phone Number	0 - 0	0 - 0	0 - 0

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

***Refer to User's Manual for Data and OP Codes**

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
IP Mode	Static IP
Central Access	0
Field Access	0
ATSPM	Enabled

IP Address	192	168	13	1
Netmask	255	255	255	0
Broadcast	192	168	13	255
Gateway	192	168	13	254

SPAT Network (6-5)				
SPAT	1		2	
Protocol	255		None	
Port	301989888		0	
Address	0	10	0	0

Access Levels

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

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RAILROAD PREEMPTION

RR 1

Timing (3-1-1)	
Clear 1	10
Clear 2	0
Clear 3	0
Hold	0
Min Grn	0
Delay	0
Exit	5
Ped Clr	0

Phase Flags (3-1-2)		
Grn Hold	Yel Flash	Red Flash
- 2 - - 5 - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	1 2 3 4 5 6 7 8

Pedestrian Flags (3-1-3)		
Walk	Flash DW	Solid DW
- - - - - - - -	- - - - - - - -	- 2 - 4 - 6 - 8
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Overlap Flags (3-1-4)		
Grn Hold	Yel Flash	Red Flash
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	A B C D E F

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Veh Permit/Call	Ped Permit/Call
- - - - - - - -	- - - - - - -	1 2 3 4 5 6 7	- 2 - 4 - 6 -

Configuration (3-1-6)									
	PR	XR	Gate	Isld	APP	Sign 1	Sign 2	Max On	Latching
1	0.0	0.0	0.0	0.0	0.0	00.0	FF.0	0	No
2	0.0	0.0							

Valid Inputs: 1.x, 2.x, 3.x, 4.x, 5.x, 6.x, 7.x, 8.x x=1 to 8
Valid Outputs: 11.x,12.x,13.x,14.x,15.x,16.x,17.x,18.x x=1 to 8

RR 2

Timing (3-2-1)	
Clear 1	10
Clear 2	0
Clear 3	0
Hold	0
Min Grn	0
Delay	0
Exit	0
Ped Clr	0

Phase Flags (3-2-2)		
Grn Hold	Yel Flash	Red Flash
- - - 4 - - 7 -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
1 2 3 - - 6 - -	- - - - - - - -	- - - - - - - -

Pedestrian Flags (3-2-3)		
Walk	Flash DW	Solid DW
- - - - - - - -	- - - - - - - -	- 2 - 4 - 6 - 8
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- 2 - - - 6 - -	- - - - - - - -	- - - 4 - - - 8

Overlap Flags (3-2-4)		
Grn Hold	Yel Flash	Red Flash
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -
- - - - - -	- - - - - -	- - - - - -

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Veh Permit/Call	Ped Permit/Call
- - - - - - - -	- - - - - - -	- - - 4 - - 7	- - - - - - - -

Configuration (3-2-6)									
	PR	XR	Gate	Isld	APP	Sign 1	Sign 2	Max On	Latching
1	13.6	0.0	0.0	0.0	0.0		00.0	55	No
2	0.0	0.0							

Valid Inputs: 1.x, 2.x, 3.x, 4.x, 5.x, 6.x, 7.x, 8.x x=1 to 8
Valid Outputs: 11.x,12.x,13.x,14.x,15.x,16.x,17.x,18.x x=1 to 8

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- 2 - - 5 - - -	- - - - - - - -

Port	Latching	Phase Termination
5.5	No	Advance

EVB (3-B)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - - 4 - - 7 -	- - - - - - - -

Port	Latching	Phase Termination
5.6	No	Advance

EVC (3-C)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	1 - - - - 6 - -	- - - - - - - -

Port	Latching	Phase Termination
5.7	No	Advance

EVD (3-D)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - 3 - - - - 8	- - - - - - - -

Port	Latching	Phase Termination
5.8	No	Advance

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INPUTS

Enable	No
Max ON	0
Max OFF	0

7 Wire I/C(2-1-5-1)

Input	Port	Input	Port
R1	3.8	Free	3.6
R2	3.5	D2	2.8
R3	3.7	D3	6.1

Manual Control(2-1-5-2)

Input	Port
Manual Adv	6.6
Adv Enable	6.6

Cabinet Staus (2-1-5-3)

Input	Port
Flash Bus	0.0
Door Ajar	0.0
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)

Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Battery Backup (2-1-5-5)

Port	Operation
2.7	Flashing

Y-Coordination (2-1-5-6)

Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)

A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:
0 Unused (no output)
1- 8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C + middle output of loadswitches 3 and 6 Channel 9 and 10

INTERVAL CONTROL

Interval Control (3-3-1)	Time
Step 1	0
Step 2	0
Step 3	0
Step 4	0
Step 5	0
Step 6	0
Step 7	0
Step 8	0

Phase Control (3-3-2)

Hold	Force	Advance
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Phase Recalls (3-3-3)

Veh Call	Ped Call	Int Call
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -
- - - - - - - -	- - - - - - - -	- - - - - - - -

Phase Permissions (3-3-4)

Phs Permit	Ped Permit	Overlap
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -
- - - - - - - -	- - - - - - - -	- - - - - -

Configuration (3-3-5)

Input	Port	Delay
1	0.0	0
2	0.0	0

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TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable in Local Plans (3-E-3)	
Plan 1-9	- - - - - - - -
Plan 11-19	- - - - - - - -

Queue Jump (3-E-4)	
Grn Hold	Hold Phase
0	- - - - - - - -
0	- - - - - - - -

Input	
Type	Port
OPT	0.0
OPT	0.0

Output	
Stop	Go
0	0
0	0

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	1	2	3	4	5	6	7	8	Coord	Lag	Min Recall	Restricted
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - - - - -	0.0	0.0	0.0	0	0.0	0

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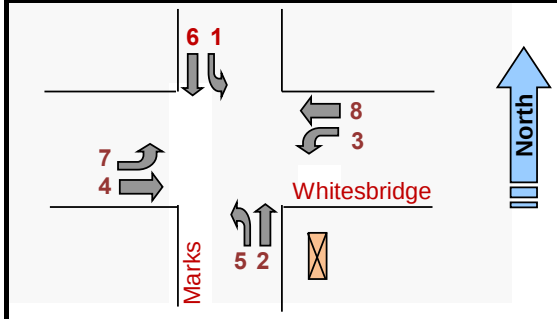
CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 1.01
Model ID	Model 2070LX
Protocol Revision ID	AB3418

Movement	SL	NT	WL	ET	NL	ST	EL	WT		
Times [1.1.1]	1	2	3	4	5	6	7	8	9	10
Min Green	8	8	8	8	8	8	8	8		0
Gap, Ext	2	5.4	2	4.2	2	5.5	2	4.2		0
Max 1	20	30	20	25	20	30	20	25		0
Max 2	12	20	12	15	12	20	12	15		0
Yel Clearance	3.9	4.7	4.3	4.7	4.3	4.3	4.3	4.7		0
Red Clearance	1	1	1	1	1	1	1	1		0
Walk	0	5	0	5		5		5		0
Ped Clearance	0	24	0	26		26		31		0
Red Revert	2	2	2	2	2	2	2	2		0
Add Initial	0		0			0		0		0
Max Initial	0		0			0		0		0
Time B4 Reduct	0	8	0	8		8		8		0
Cars B4 Reduct	0		0			0		0		0
Time To Reduce	0	15	0	11		15		11		0
Reduce By	0		0			0		0		0
Min Gap	2	2	2	2	2	2	2	2		0
DyMaxLim	0		0			0		0		0
Max Step	0		0			0		0		0
Options [1.1.2]	1	2	3	4	5	6	7	8	9	10
Enable	X	X	X	X	X	X	X	X		
Min Recall										
Max Recall										
Ped Recall										
Soft Recall		X				X				
Lock Calls										
Auto Flash Entry										
Auto Flash Exit										
Dual Entry		X		X		X		X		
Enable Simul Gap										
Gaurantee Passage										
Rest In Walk										
Conditonal Service										
Non-Actuated 1										
Non-Actuated 2										
Add Init Calc										



Phase Options+ [1.1.3]

Options+	1	2	3	4	5	6	7	8	9	10
Reservice										
PedClr Thru Yel										
SkipRed-NoCall										
Red Rest										
Max II										
*Max III										
Max Inhibit										
Ped Delay										
Red Rest on Gap										
Conflicting Phase	0	0	0	0	0	0	0	0	0	0
Grn/Ped Delay										
Omit Yel, Yel P	0	0	0	0	0	0	0	0	0	0
Ped Out/Olp Ped										
StartYel, Next P	0	0	0	0	0	0	0	0	0	0
*StartupVehCall	1	2	3	4	5	6	7	8		
*StartupPedCall										

Phase Concurrency [1.1.4]

Phase	Ring	StartUp	Concurrent Phases							
1	1	RED	5	6	0	0				
2	1	GREEN	5	6	0	0				
3	1	RED	7	8	0	0				
4	1	RED	7	8	0	0				
5	2	RED	1	2	0	0				
6	2	GREEN	1	2	0	0				
7	2	RED	3	4	0	0				
8	2	RED	3	4	0	0				
9	0	RED	0	0	0	0				
10	0	RED	0	0	0	0				
11	0	RED	0	0	0	0				
12	0	RED	0	0	0	0				

Comm Ports [6.6]

Channel	Port	Echo	Mode
Async 1	SP1	NONE	0
Async 2	SP2	NONE	0
Async 3	SP8	NONE	0
Async 4	OFF	NONE	0
Sync 1	SP5S		
Sync 2	OFF		
TS2CVM	NONE		
Opticom	NONE		
GPS	NONE		

Unit Params [1.2.1]

Screen Size	8	Metric	OFF
Startup Flash	0	Red Revert	2
MCE Timeout	0	Auto Ped Clear	OFF
Loc Flsh Start	RSt	Display Time	60
Yellow < 3"	OFF	Tone Disable	ON
Allow Skip Yel	OFF	AudioPedTime	0
Start Red Tm	6	Phase Mode	STD8
Startup Calls	UseProg	CNA FreeTime	0
TOD Dimming	OFF	Diamond Mode	4Ph
ST over Prmpt	OFF	Free Ring Seq	1
Feature Profile	1	IO Mode	USER
Mx Seek TrkTm	0	Max Cyc Timer	0
Mx Seek Dwell	0	CycFlt Actn	ALARM
Prmpt/Ext Coor	EXT	Clrnc Decide	OFF
Aux Switch	STOPTM	LPAlt Srs	3-6
*InhFYA Red St	OFF	Security Delay	0
RingA1go	0		

* - 76.12B or newer

Times+ [1.1.7]

	1	2	3	4	5	6	7	8
Walk2	0	0	0	0	0	0	0	0
BikeClr	0	0	0	0	0	0	0	0
GrnFlash	0	0	0	0	0	0	0	0
SfClrMn	0	0	0	0	0	0	0	0
SfClrNoFlsh	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
NoPed Reserv								

Comm [6.2]

Port	Baud Rate	FCM
1	38400	6
2	9600	6
3	9600	6
4	9600	6

Comm [6.5] — **Host IPs**

IP Address:	0	0	0	100	ATMS			
Mask:	255	255	255	0	10	50	10	22
Gateway:	0	0	0	1	SG			
Port #:	5001				0	0	0	0

City of FRESNO

Phase Seq. (2 ring) Chart [1.2.4]

Seq #	Ring	Phases					
1	1	1	2	3	4	0	0
	2	5	6	7	8	0	0
2	1	1	2	3	4	0	0
	2	6	5	7	8	0	0
3	1	2	1	3	4	0	0
	2	5	6	7	8	0	0
4	1	2	1	3	4	0	0
	2	6	5	7	8	0	0
5	1	1	2	3	4	0	0
	2	5	6	8	7	0	0
6	1	1	2	3	4	0	0
	2	6	5	8	7	0	0
7	1	2	1	3	4	0	0
	2	5	6	8	7	0	0
8	1	2	1	3	4	0	0
	2	6	5	8	7	0	0
9	1	1	2	4	3	0	0
	2	5	6	7	8	0	0
10	1	1	2	4	3	0	0
	2	6	5	7	8	0	0
11	1	2	1	4	3	0	0
	2	5	6	7	8	0	0
12	1	2	1	4	3	0	0
	2	6	5	7	8	0	0
13	1	1	2	4	3	0	0
	2	5	6	8	7	0	0
14	1	1	2	4	3	0	0
	2	6	5	8	7	0	0
15	1	2	1	4	3	0	0
	2	5	6	8	7	0	0
16	1	2	1	4	3	0	0
	2	6	5	8	7	0	0

Advance Warning [1.1.9]

	Ph	Tm
Aux Out #1	0	0
Aux Out #2	0	0

NAME: Marks & Whitesbridge **ID:** 1338 **Configuration:** Standard File

V76.12/13/15
Updated 7/28/21

Prepared by:	JT	**Date Installed / By:**	4/17/2023 (JT)
Checked by:	AN	**Date Superseded:**	

Date Printed: 3/6/23

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Split	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks & Whitesbridge

ID: 1338

Date Printed: 3/6/2023

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
1	0	0	1	1
2	0	0	2	1
3	0	0	3	1
4	0	0	4	1
5	0	0	5	1
6	0	0	6	1
7	0	0	7	1
8	0	0	8	1
9	0	0	9	1
10	0	0	10	1
11	0	0	0	1
12	0	0	0	1
13	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
1	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
1	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
2	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
3	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
4	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
5	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
6	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
7	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
8	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
9	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
10	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
11		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
12	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
13		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Splt	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Marks & Whitesbridge

ID: 1338

Date Printed: 3/6/2023

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
20	0	0	0	1
21	0	0	0	1
22	0	0	0	1
23	0	0	0	1
24	0	0	0	1
25	0	0	0	1
26	0	0	0	1
27	0	0	0	1
28	0	0	0	1
29	0	0	0	1
30	0	0	0	1
31	0	0	0	1
32	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
20	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
26	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
20		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
21	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
22		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
23	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
24		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
25	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
26		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
27	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
28		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
29	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
30		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
31	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
32		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.7.X.3] TSP Split Table

Pat#	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
1	0	0	1	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
2	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	2	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
3	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	3	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
4	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	4	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
5	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	5	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
6	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	6	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
9 - FREE	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	9	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						

[2.9.2.(1-8)] Strategy Tables

STRATEGY_1

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_2

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_3

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_4

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_5

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_6

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_7

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_8

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.8]

1	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
A	Conflict Olap									Red	1	
	Conflict Ped											
2	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
B	Conflict Olap									Red	1	
	Conflict Ped											
3	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
C	Conflict Olap									Red	1	
	Conflict Ped											
4	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
D	Conflict Olap									Red	1	
	Conflict Ped											
5	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
E	Conflict Olap									Red	1	
	Conflict Ped											
6	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
F	Conflict Olap									Red	1	
	Conflict Ped											
7	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
G	Conflict Olap									Red	1	
	Conflict Ped											
8	Included Ø									NORMAL		
	Modifier Ø									Grn		
	Conflict Ø									Yel	3	
H	Conflict Olap									Red	1	
	Conflict Ped											

OLP GENERAL PARAMETERS [1.5.1]

Lock Inhibit	OFF
Conflict Lock Enable	OFF
Parent P Clearance	ON
Xtra Incl Phases	OFF
InhibitLockInterval	Always

Channel Parameters [1.8.3]

Pre Invert Rail Input	OFF

Preemption Options+ [3.Pre #.6]

Pre #	Enable	Type	Output	Pattern	Skip	Co+Pre	Flash	Max/Min
1	OFF	RAIL	TS2		OFF	OFF	OFF	MAX
2	OFF	RAIL	TS2	0	OFF	OFF	OFF	MAX
3	ON	EMERG	TS2		OFF	OFF	OFF	MAX
4	ON	EMERG	TS2	0	OFF	OFF	OFF	MAX
5	ON	EMERG	TS2		OFF	OFF	OFF	MAX
6	ON	EMERG	TS2	0	OFF	OFF	OFF	MAX

Preemption Times [3.#.1]

Pre #	Delay	MinDura	MaxPres	MinGrn	MinWlk	PedClr	Track Grn	Min Dwell
1								
2	0	0	0	0	0	0	0	0
3		10	60	6		28		10
4	0	10	60	6	0	28	0	10
5		10	60	6		28		10
6	0	10	60	6	0	28	0	10

Preemption, Options [3.#.3]

Pre #	Lock Input	Over-ride Auto Flash	Over-ride Higher Preempt	Flash Dwell	Link
1	OFF	OFF	OFF	ON	
2	OFF	OFF	OFF	OFF	0
3	OFF	OFF	OFF	OFF	
4	OFF	OFF	OFF	OFF	0
5	OFF	OFF	OFF	OFF	
6	OFF	OFF	OFF	OFF	0

Preemption, Times+ [3.#.4]

Pre No.	Extend Dwell	Return Max	Ped Clr	Yel	Red
1					
2	0	0	0	0	0
3		20	10	3.9	2
4	0	20	10	3.9	2
5		20	10	3.9	2
6	0	20	10	3.9	2

Pre 1 = RR1
Pre 2 = RR2
Pre 3 = EVA
Pre 4 = EVB
Pre 5 = EVC
Pre 6 = EVD

Prog Parms+ (MM>1>5>2>X>3)

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 1-A

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 2-B

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 3-C

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 4-D

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

Phases [3.#.2] - set the Dwell Phases

Pre #	Column	1	2	3	4	5	6	7	8	9	10
1	Dwell Veh										
	Peds										
2	Dwell Veh										
	Peds										
3	Dwell Veh	2	5								
	Peds										
4	Dwell Veh	4	7								
	Peds										
5	Dwell Veh	6	1								
	Peds										
6	Dwell Veh	8	3								
	Peds										

Phases [3.#.2] - Trk Veh

Pre #	Phases			
1				
2				
3				
4				
5				
6				

Exit Phases [3.#.2]

No.	Exit Phase			
1				
2				
3	2	5		
4	4	7		
5	1	6		
6	3	8		

Overlaps+ [3.#.5]

Pre #		Preempt Overlaps +									
1	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
2	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
3	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
4	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
5	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
6	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										

City of FRESNO

ID: 1338 **Name:** Marks & Whitesbridge **Date Printed:** 3/6/2023

CHANNEL SETTINGS [1.8] plus UNIT PARAMETERS [1.2.1]

CHANNEL SETTINGS [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase / Olap #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK
Flash 1-2 Hertz		X		X		X		X								
	Page 1								Page 2							

Chan Settings [1.8.2]

17	18	19	20	21	22	23	24
VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK

CHANNEL PARMETERS [1.8.3]

CH 17-24 Mapping:	DEFAULT
D-Conn Mapping:	NONE
Invert Rail Inputs:	OFF
C1-C11-ABC IO Mode:	USER

IO PARAMETERS [1.8.6]

C1-C11-ABC IO Mode:	USER
D-Conn Mapping:	NONE
T & F BIU Mapping	DEFAULT
Invert Rail Inputs:	OFF
EVP Ped Confirm	OFF

CHANNELS+ [1.8.4]

Channel	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
Flash Green	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
Flash Red	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
Flash Yellow	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
Inh Red Fl in Preempt	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*	*Off*
Olap Ovrd	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Override Type	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

ID: 1338 **NAME:** Marks & Whitesbridge

Prt Date: 3/6/2023

I/O LOGIC [1.8.7]

Row#	Result			Operand_1					Operand_2					Operand_3					Timer	
	I/O	Fcn	=	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Dly	Sec
1	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
2	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
3	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
4	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
5	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
6	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
7	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
8	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
9	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
10	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0

Ped Parms (MM>5>4)

Det#	Call	No Act	Max Pres	Err Cnt
1	0	0	0	0
2	2	0	60	0
3	0	0	0	0
4	4	0	60	0
5	0	0	0	0
6	6	0	60	0
7	0	0	0	0
8	8	0	60	0

Veh Par 1-32 [5.1]											Vehicle Options 1-32 [5.2]									Parameters+ 1-32 [5.3]								Info Only	
Det #	Input Slot	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol	Det #	Occupancy G	Y	R	Delay 1	2	Type	Src	Dir	Det #
1	1I1U	1					0	0	0	255	1	X	X	-	-	-	-	X	X	1	X	X	-			NORM			1
2	2I2U	2	0	0	0	0	0	0	0	255	2	-	X	-	-	-	-	X	X	2	X	X	-	0	0	NORM	0	NBT2	2
3	2I2L	2	0	0	2	0	0	0	0	255	3	X	-	-	-	-	-	X	X	3	X	X	-	0	0	STOPB	0		3
4	2I3U	2	0	0	2	0	0	0	0	255	4	X	-	-	-	-	-	X	X	4	X	X	-	0	0	STOPB	0		4
5	2I3L	2	0	0	2	0	0	0	0	255	5	X	-	-	-	-	-	X	X	5	X	X	-	0	0	STOPB	0	NBR1	5
6	2I4U	2	0	0	2	0	0	0	0	255	6	X	-	-	-	-	-	X	X	6	X	X	-	0	0	STOPB	0		6
7	3I5U	3					0	0	0	255	7	X	X	-	-	-	-	X	X	7	X	X	-			NORM			7
8	4I6U	4	0	0	0	0	0	0	0	255	8	-	X	-	-	-	-	X	X	8	X	X	-	0	0	NORM	0		8
9	4I6L	4	0	0	2.6	0	0	0	0	255	9	-	X	-	-	-	-	X	X	9	X	X	-	0	0	NORM	0	EBT1	9
10	4I7U	4	0	0	2	0	0	0	0	255	10	X	-	-	-	-	-	X	X	10	X	X	-	0	0	STOPB	0		10
11	4I7L	4		15	2		0	0	0	255	11	X	-	-	-	-	-	X	X	11	X	X	-			STOPB		EBR1	11
12	4I8U	4			2		0	0	0	255	12	X	-	-	-	-	-	X	X	12	X	X	-			STOPB			12
13	1I9U	1	0	0	0	0	0	0	0	255	13	X	X	-	-	-	-	X	X	13	X	X	-	0	0	NORM	0	SBL1	13
14	3I9L	3	0	0	0	0	0	0	0	255	14	X	X	-	-	-	-	X	X	14	X	X	-	0	0	NORM	0	WBL1	14
15	5J1U	5	0	0	0	0	0	0	0	255	15	X	X	-	-	-	-	X	X	15	X	X	-	0	0	NORM	0		15
16	6J2U	6					0	0	0	255	16	-	X	-	-	-	-	X	X	16	X	X	-			NORM		SBT2	16
17	6J2L	6			2		0	0	0	255	17	X	-	-	-	-	-	X	X	17	X	X	-			STOPB			17
18	6J3U	6			2		0	0	0	255	18	X	-	-	-	-	-	X	X	18	X	X	-			STOPB			18
19	6J3L	6			2		0	0	0	255	19	X	-	-	-	-	-	X	X	19	X	X	-			STOPB		SBR1	19
20	6J4U	6			2		0	0	0	255	20	X	-	-	-	-	-	X	X	20	X	X	-			STOPB			20
21	7J5U	7					0	0	0	255	21	X	X	-	-	-	-	X	X	21	X	X	-			NORM			21
22	8J6U	8	0	0	0	0	0	0	0	255	22	-	X	-	-	-	-	X	X	22	X	X	-	0	0	NORM	0		22
23	8J6L	8	0	0	2.2	0	0	0	0	255	23	-	X	-	-	-	-	X	X	23	X	X	-	0	0	NORM	0	WBT1	23
24	8J7U	8	0	0	2	0	0	0	0	255	24	X	-	-	-	-	-	X	X	24	X	X	-	0	0	STOPB	0		24
25	8J7L	8	0	15	2	0	0	0	0	255	25	X	-	-	-	-	-	X	X	25	X	X	-	0	0	STOPB	0	WBR1	25
26	8J8U	8	0	0	2	0	0	0	0	255	26	X	-	-	-	-	-	X	X	26	X	X	-	0	0	STOPB	0		26
27	5J9U	5					0	0	0	255	27	X	X	-	-	-	-	X	X	27	X	X	-			NORM		NBL1	27
28	7J9L	7					0	0	0	255	28	X	X	-	-	-	-	X	X	28	X	X	-			NORM		EBL1	28
29	2I11U	2	0	15	2	0	0	0	0	255	29	X	-	-	-	-	-	X	X	29	X	X	-	0	0	STOPB	0		29
30	4I11L	4	0	15	2	0	0	0	0	255	30	X	-	-	-	-	-	X	X	30	X	X	-	0	0	STOPB	0		30
31	6J11U	6		15	2		0	0	0	255	31	X	-	-	-	-	-	X	X	31	X	X	-			STOPB			31
32	8J11L	8		15	2		0	0	0	255	32	X	-	-	-	-	-	X	X	32	X	X	-			STOPB			32
33	1I1L	1	0	0	0	0	0	0	0	255	33	X	X	-	-	-	-	X	X	33	X	X	-	0	0	NORM	0		33
34	2I4L	2			2		0	0	0	255	34	X	-	-	-	-	-	X	X	34	X	X	-			STOPB			34
35	3I5L	3	0	0	0	0	0	0	0	255	35	X	X	-	-	-	-	X	X	35	X	X	-	0	0	NORM	0		35
36	4I8L	4			2		0	0	0	255	36	X	-	-	-	-	-	X	X	36	X	X	-			STOPB			36
37	5J1L	5	0	0	0	0	0	0	0	255	37	X	X	-	-	-	-	X	X	37	X	X	-	0	0	NORM	0		37
38	6J4L	6			2		0	0	0	255	38	X	-	-	-	-	-	X	X	38	X	X	-			STOPB			38
39	7J5L	7	0	0	0	0	0	0	0	255	39	X	X	-	-	-	-	X	X	39	X	X	-	0	0	NORM	0		39
40	8J8L	8			2		0	0	0	255	40	X	-	-	-	-	-	X	X	40	X	X	-			STOPB			40
41	4I10U	4					0	0	0	255	41	-	X	-	-	-	-	X	X	41	X	X	-			NORM			41
42	4I10L	4					0	0	0	255	42	-	X	-	-	-	-	X	X	42	X	X	-			NORM			42
43	8J10U	8					0	0	0	255	43	-	X	-	-	-	-	X	X	43	X	X	-			NORM			43
44	8J10L	8					0	0	0	255	44	-	X	-	-	-	-	X	X	44	X	X	-			NORM			44

ID: 1338 Name: Marks & Whitesbridge

Vol/Occ Period 0 **Seconds** 5 **Minutes**

3/6/2023

Alt# 1 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Guar Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 2 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 3 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 4 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alternate Tables [2.6]

Pat#	POpt	PTime	DetGrp	Call/Inh	Olp Off 1	2	3	4	5	6	7	8	ASC	CNA1	Max2	Dia
1	0	0	0	0									0	Off		DFT
2													0	Off		DFT
3	0	0	0	0									0	Off		DFT
4													0	Off		DFT
5	0	0	0	0									0	Off		DFT
6													0	Off		DFT
7	0	0	0	0									0	Off		DFT
8													0	Off		DFT
9	0	0	0	0									0	Off		DFT
10													0	Off		DFT
11	0	0	0	0									0	Off		DFT
12													0	Off		DFT
13	0	0	0	0									0	Off		DFT
14													0	Off		DFT
15	0	0	0	0									0	Off		DFT
16													0	Off		DFT
17	0	0	0	0									0	Off		DFT
18													0	Off		DFT
19	0	0	0	0									0	Off		DFT
20													0	Off		DFT
21	0	0	0	0									0	Off		DFT
22													0	Off		DFT
23	0	0	0	0									0	Off		DFT
24													0	Off		DFT

Time Base Parameters [4.6]

Daylight Savings Time	ENABLE	
Time Base Sync Ref	0	
GMT Offset	-	8
Daylight Savings	Mon	Week
Spring	3	2
Fall	11	1

NOTE: % and MI parameters are not used and are not shown above.

City of FRESNO

NAME: Marks & Whitesbridge

3/6/2023 **ID:** 1338

| Annual Schedule [4.3] | Month | | | | | | | | | | | | Day of Week | | | | | | | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Day Plan |
|---|---|---

#	Alarm	Ev	Alr
1	Power Up Alarm.	X	X
2	Stop Timing	X	X
3	Cabinet Door Activation	-	-
4	Coordination Failure	X	X
5	External Alarm # 1	-	-
6	External Alarm # 2	-	-
7	External Alarm # 3	-	-
8	External Alarm # 4	-	-
9	Closed Loop Disabled	-	-
10	External Alarm # 5	-	-
11	External Alarm # 6	-	-
12	Manual Control Enable	X	X
13	Coord Free Input	-	-
14	Local Flash Input	X	X
15	CMU/MMU Flash Input	-	-
16	MMU Fault	X	X
17	Cycle Fault	X	-
18	Cycle Failure	X	-
19	Coordination Fault	X	X
20	Controller Fault	X	X
25	EEPROM CRC Fault	X	X
30	Coord Diagnostic Fault	X	X
37	Download Request	X	X
38	Pattern Change	-	-
49	Preempt 1 Input	X	X
50	Preempt 2 Input	X	X
51	Preempt 3 Input	X	X
52	Preempt 4 Input	X	X
53	Preempt 5 Input	X	X
54	Preempt 6 Input	X	X
55	Preempt 7 Input	-	-
56	Preempt 8 Input	-	-
57	Preempt 9 Input	-	-
58	Preempt 10 Input	-	-
59	EEPROM Compare Fault	X	X
60	Coordination Failure	X	X
63	TSP Active Trigger	-	-
73	Controller Access	X	X
81	FIO Changed Status	X	X

#1 Bus Preempt

				Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0		
Coor+Pre	OFF	Max	0	---TSP---					
Lock Mode	MAX	Lock	0	Headway	0				
No Skip	OFF	Alt Table	0	GrpLock	OFF				
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF				

#2 Bus Preempt

				Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0		
Coor+Pre	OFF	Max	0	---TSP---					
Lock Mode	MAX	Lock	0	Headway	0				
No Skip	OFF	Alt Table	0	GrpLock	OFF				
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF				

#3 Bus Preempt

				Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0		
Coor+Pre	OFF	Max	0	---TSP---					
Lock Mode	MAX	Lock	0	Headway	0				
No Skip	OFF	Alt Table	0	GrpLock	OFF				
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF				

#4 Bus Preempt

				Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0		
Coor+Pre	OFF	Max	0	---TSP---					
Lock Mode	MAX	Lock	0	Headway	0				
No Skip	OFF	Alt Table	0	GrpLock	OFF				
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF				

I/O INPUT TABLE

	1	2	3	4	5	6	7	8
1	2	16	8	22	3	17	9	23
2	6	20	12	26	198	199	30	31
3	15	1	21	7	27	13	28	14
4	189	189	189	189	4	18	10	24
5	130	134	132	136	200	201	202	203
6	32	5	19	11	25	29	208	207
7	33	34	35	36	37	38	39	40
8	41	42	43	44	189	189	189	189

ACTION Table [4.5]

Act	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8	P1	P2
1	1	-	-	-	-	-	-	-	-	-	-	-	0	0
2	2	-	-	-	-	-	-	-	-	-	-	-	0	0
3	3	-	-	-	-	-	-	-	-	-	-	-	0	0
4	4	-	-	-	-	-	-	-	-	-	-	-	0	0
5	5	-	-	-	-	-	-	-	-	-	-	-	0	0
6	6	-	-	-	-	-	-	-	-	-	-	-	0	0
7	7	-	-	-	-	-	-	-	-	-	-	-	0	0
8	8	-	-	-	-	-	-	-	-	-	-	-	0	0
9	9	-	-	-	-	-	-	-	-	-	-	-	0	0
10	10	-	-	-	-	-	-	-	-	-	-	-	0	0
11	11	-	-	-	-	-	-	-	-	-	-	-	0	0
12	12	-	-	-	-	-	-	-	-	-	-	-	0	0
13	13	-	-	-	-	-	-	-	-	-	-	-	0	0
14	14	-	-	-	-	-	-	-	-	-	-	-	0	0
15	15	-	-	-	-	-	-	-	-	-	-	-	0	0
16	0	-	-	-	-	-	-	-	-	-	-	-	0	0
54	254	-	-	-	-	-	-	-	-	-	-	-	0	0
55	0	-	-	-	-	-	-	-	-	-	-	-	0	0

Alarm Parameters [1.6.7.1]	
Pattern Events:	ON
Local Txmt Alarms:	OFF
Reassign User Alarm #1 In (5):	0
Reassign User Alarm #2 In (6):	0
Preempt Events:	ON

City of FRESNO

Date Printed
3/6/2023

ID: 1338 Name: **Marks & Whitesbridge**

I/O Inputs - 1.8.9.1.5

C-1 PIN	I/O Source	Function	Input Name
39	I1-1	2	Veh Det 2
40	I1-2	16	Veh Det 16
41	I1-3	8	Veh Det 8
42	I1-4	22	Veh Det 22
43	I1-5	3	Veh Det 3
44	I1-6	17	Veh Det 17
45	I1-7	9	Veh Det 9
46	I1-8	23	Veh Det 23
47	I2-1	6	Veh Det 6
48	I2-2	20	Veh Det 20
49	I2-3	12	Veh Det 12
50	I2-4	26	Veh Det 26
51	I2-5	198	Pre 1 In
52	I2-6	199	Pre 2 In
53	I2-7	30	Veh Det 30
54	I2-8	31	Veh Det 31
55	I3-1	15	Veh Det 15
56	I3-2	1	Veh Det 1
57	I3-3	21	Veh Det 21
58	I3-4	7	Veh Det 7
59	I3-5	27	Veh Det 27
60	I3-6	13	Veh Det 13
61	I3-7	28	Veh Det 28
62	I3-8	14	Veh Det 14
63	I4-5	4	Veh Det 4
64	I4-6	18	Veh Det 18
65	I4-7	10	Veh Det 10
66	I4-8	24	Veh Det 24
67	I5-1	130	Ped Call 2
68	I5-2	134	Ped Call 6
69	I5-3	132	Ped Call 4
70	I5-4	136	Ped Call 8
71	I5-5	200	Pre 3 In
72	I5-6	201	Pre 4 In
73	I5-7	202	Pre 5 In
74	I5-8	203	Pre 6 In
75	I6-1	32	Veh Det 32
76	I6-2	5	Veh Det 5
77	I6-3	19	Veh Det 19
78	I6-4	11	Veh Det 11
79	I6-5	25	Veh Det 25
80	I6-6	29	Veh Det 29
81	I6-7	208	Local Flash
82	I6-8	207	Comp StopTm

I/O OUTPUTS - 1.8.9.2.5

C-1 PIN	I/O Source	Function	Output Name
1	Logic Grd		
2	O1-1	14	Red Ch 14
3	O1-2	62	Grn Chan 14
4	O1-3	4	Red Ch 4
5	O1-4	28	Yel Chan 4
6	O1-5	52	Grn Chan 4
7	O1-6	3	Red Ch 3
8	O1-7	27	Yel Chan 3
9	O1-8	51	Grn Chan 3
10	O2-1	13	Red Ch 13
11	O2-2	61	Grn Chan 13
12	O2-3	2	Red Ch 2
13	O2-4	26	Yel Chan 2
14	Logic Grd		
15	O2-5	50	Grn Chan 2
16	O2-6	1	Red Ch 1
17	O2-7	25	Yel Chan 1
18	O2-8	49	Grn Chan 1
19	O3-1	16	Red Ch 16
20	O3-2	64	Grn Chan 16
21	O3-3	8	Red Ch 8
22	O3-4	32	Yel Chan 8
23	O3-5	56	Grn Chan 8
24	O3-6	7	Red Ch 7
25	O3-7	31	Yel Chan 7
26	O3-8	55	Grn Chan 7
27	O4-1	15	Red Ch 15
28	O4-2	63	Grn Chan 15
29	O4-3	6	Red Ch 6
30	O4-4	30	Yel Chan 6
31	O4-5	54	Grn Chan 6
32	O4-6	5	Red Ch 5
33	O4-7	29	Yel Chan 5
34	O4-8	53	Grn Chan 5
35	O5-1	37	Yel Chan 13
36	O5-2	39	Yel Chan 15
37	O5-3	38	Yel Chan 14
38	O5-4	40	Yel Chan 16
100	O5-5	42	Yel Chan 18
101	O5-6	41	Yel Chan 17
102	O5-7	115	Not Used
103	O5-8	114	Watchdog

C-1 PIN	I/O Source	Function	Output Name
83	O6-1	18	Red Ch 18
84	O6-2	66	Grn Chan 18
85	O6-3	12	Red Ch 12
86	O6-4	36	Yel Chan 12
87	O6-5	60	Grn Chan 12
88	O6-6	11	Red Ch 11
89	O6-7	35	Yel Chan 11
90	O6-8	59	Grn Chan 11
91	O7-1	17	Red Ch 17
92	Logic Grd		
93	O7-2	65	Grn Chan 17
94	O7-3	10	Red Ch 10
95	O7-4	34	Yel Chan 10
96	O7-5	58	Grn Chan 10
97	O7-6	9	Red Ch 9
98	O7-7	33	Yel Chan 9
99	O7-8	57	Grn Chan 9

I/O Outputs - 1.8.9.2.5
C-11 OUTPUTS

1	O8-1	115	Not Used
2	O8-2	115	Not Used
3	O8-3	115	Not Used
4	O8-4	115	Not Used

I/O Inputs - 1.8.9.1.5
C-11 INPUTS

15	I7-1	33	Veh Det 33
16	I7-2	34	Veh Det 34
17	I7-3	35	Veh Det 35
18	I7-4	36	Veh Det 36
19	I7-5	37	Veh Det 37
20	I7-6	38	Veh Det 38
21	I7-7	39	Veh Det 39
22	I7-8	40	Veh Det 40
23	I8-1	41	Veh Det 41
24	I8-2	42	Veh Det 42
25	I8-3	43	Veh Det 43
26	I8-4	44	Veh Det 44
27	I8-5	189	Unused
28	I8-6	189	Unused
29	I8-7	189	Unused
30	I8-8	189	Unused

City of FRESNO

ID: 1338

NAME: Marks & Whitesbridge

Date Printed: 3/6/2023

ID Number: 1338

LOCATION: Marks & Whitesbridge

City of Fresno
332 Cabinet
44 Detector Plus Setup

DETECTOR ASSIGNMENTS

ISOLATORS

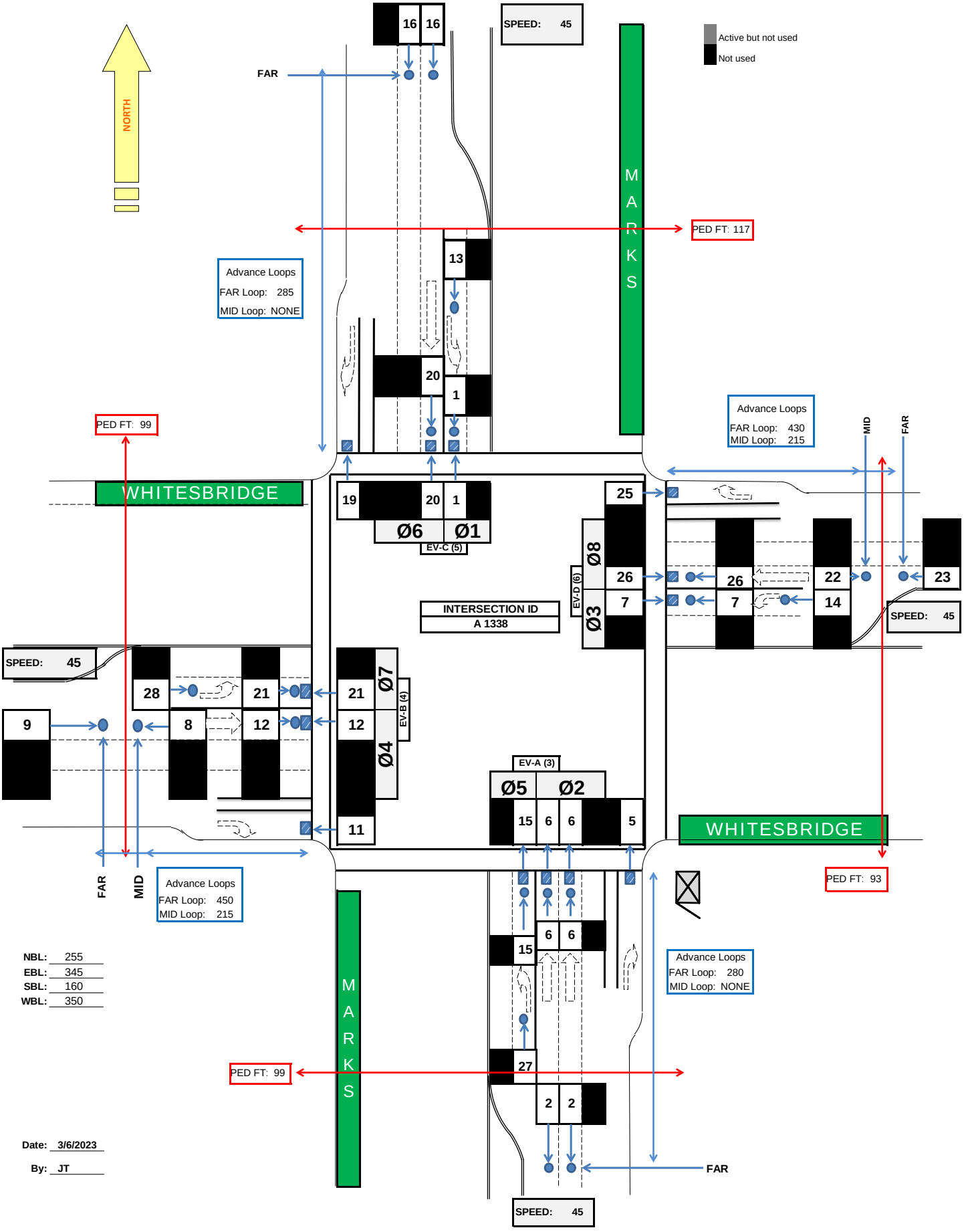
"I"	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
UPPER	Ph 1 Call&Ext T2-1&2 C1-56 Det 1 NBL1	Ph 2 Ext T2-5&6 C1-39 Det 2 SB Far	Ph 2 Call&TP3 T2-9&10 C1-63 Det 4 SB Mid	Ph 2 Call&TP3 T4-1&2 C1-47 Det 6 SBT1	Ph 3 Call&Ext T4-5&6 C1-58 Det 7 EBL1	Ph 4 Ext T4-9&10 C1-41 Det 8 WB Far	Ph 4 Call&TP3 T6-1&2 C1-65 Det 10 WB Mid	Ph 4 Call&TP3 T6-5&6 C1-49 Det 12 WBT1	Ph 1 Call&Ext T6-9&10 C1-60 Det 13 NBLt Bk	Ph 2/4 Ext T10-5&6 C11-23 Det 41	Ph 2 Call&Ext T8-1 C1-80 Det 29 BIKE	Ph 2 PPB T8-4 C1-67	Ph 6 PPB T8-7 C1-68	FLASH SENSE T8-10 C1-81
LOWER	Ph 1 Call&Ext T2-3&4 C11-15 Det 33 NBL2	Ph 2 Call&TP3 T2-7&8 C1-43 Det 3 SB Bk	Ph 2 Call&Ext T2-11&12 C1-76 Det 5 SBRt	Ph 2 Call&TP3 T4-3&4 C11-16 Det 34 SBT2	Ph 3 Call&Ext T4-7&8 C11-17 Det 35 EBL2	Ph 4 Call&TP3 T4-11&12 C1-45 Det 9 WB Bk	Ph 4 Call&Ext T6-3&4 C1-78 Det 11 WBRt	Ph 4 Call&TP3 T6-7&8 C11-18 Det 36 WBT2	Ph 3 Call&Ext T6-11&12 C1-62 Det 14 EBLt Bk	Ph 2/4 Ext T10-7&8 C11-24 Det 42	Ph 4 Call&Ext T8-2 C1-53 Det 30 BIKE	Ph 4 PPB T8-5 C1-69	Ph 8 PPB T8-8 C1-70	STOP TIMING T8-11 C1-82
"J"	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14
UPPER	Ph 5 Call&Ext T3-1&2 C1-55 Det 15 SBL1	Ph 6 Ext T3-5&6 C1-40 Det 16 NB Far	Ph 6 Call&TP3 T3-9&10 C1-64 Det 18 NB Mid	Ph 6 Call&TP3 T5-1&2 C1-48 Det 20 NBT1	Ph 7 Call&Ext T5-5&6 C1-57 Det 21 WBL1	Ph 8 Ext T5-9&10 C1-42 Det 22 EB Far	Ph 8 Call&TP3 T7-1&2 C1-66 Det 24 EB Mid	Ph 8 Call&TP3 T7-5&6 C1-50 Det 26 EBT1	Ph 5 Call&Ext T7-9&10 C1-59 Det 27 SBLt Bk	Ph 6/8 Ext T10-9&10 C11-25 Det 43	Ph 6 Call&Ext T9-1 C1-54 Det 31 BIKE	EMER A Ph 2 + 5 T9-4 C1-71	EMER B Ph 4 + 7 T9-5 C1-72	RR1 FLASH T9-10 C1-51
LOWER	Ph 5 Call&Ext T3-3&4 C11-19 Det 37 SBL2	Ph 6 Call&TP3 T3-7&8 C1-44 Det 17 NB Bk	Ph 6 Call&Ext T3-11&12 C1-77 Det 19 NBRt	Ph 6 Call&TP3 T5-3&4 C11-20 Det 38 NBT2	Ph 7 Call&Ext T5-7&8 C11-21 Det 39 WBL2	Ph 8 Call&TP3 T5-11&12 C1-46 Det 23 EB Bk	Ph 8 Call&Ext T7-3&4 C1-79 Det 25 EBRt	Ph 8 Call&TP3 T7-7&8 C11-22 Det 40 EBT2	Ph 7 Call&Ext T7-11&12 C1-61 Det 28 WBLt Bk	Ph 6/8 EXT T10-11&12 C11-26 Det 44	Ph 8 Call&Ext T9-2 C1-75 Det 32 BIKE	EMER C Ph 1 + 6 T9-7 C1-73	EMER D Ph 3 + 8 T9-8 C1-74	RR2 LTD OP T9-11 C1-52

COMMENTS:

TIMING UPDATES AND MODIFICATIONS

ID: 1338 **NAME:** Marks & Whitesbridge

DATE	CHANGES MADE	ATMS or CABINET	BY
3/6/2023	Upgraded 170E to 2070 controller, updated timing calculations, FDW, detector attributes, and FDW for the EVP.	ATMS	JT

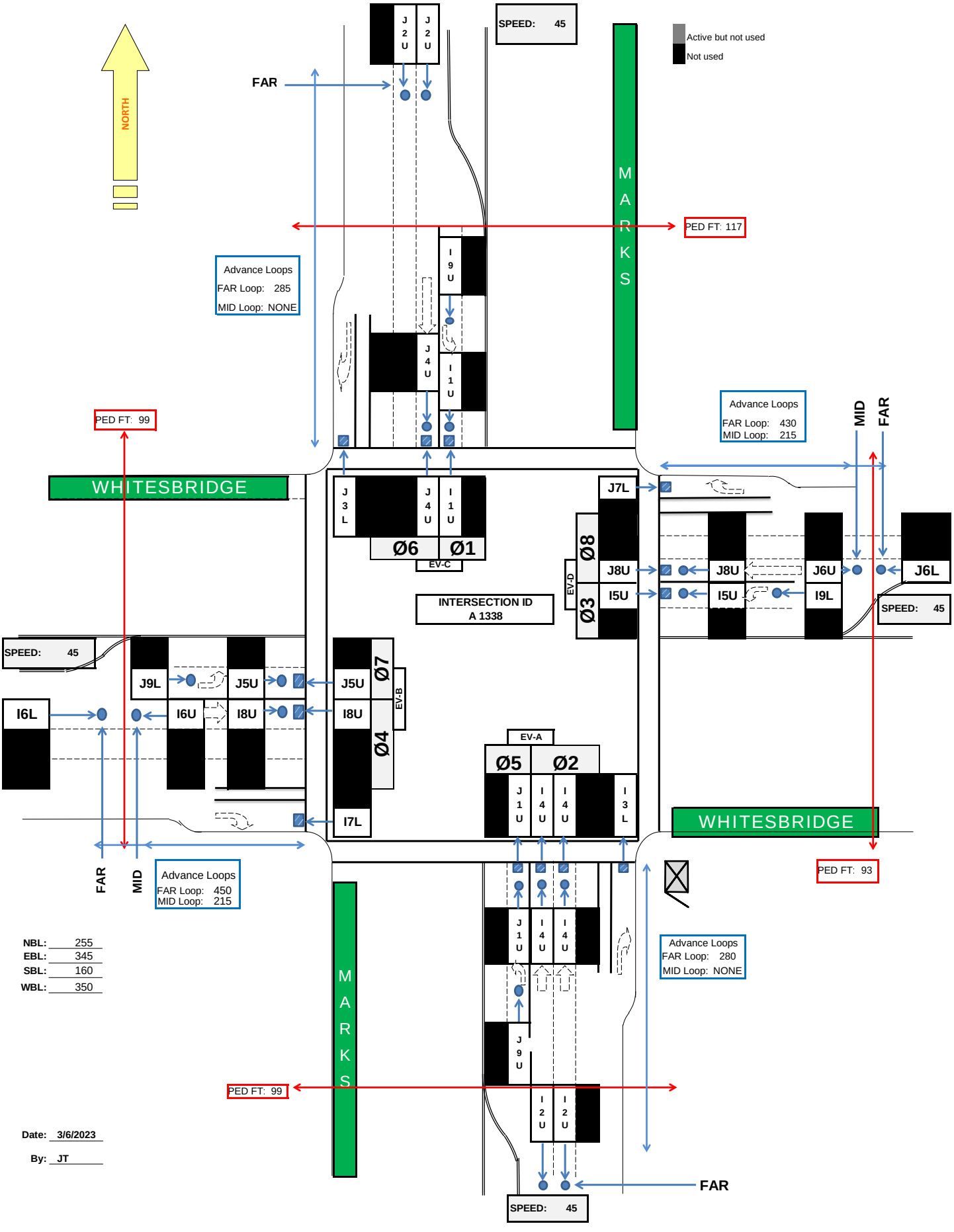


NBL: 255
EBL: 345
SBL: 160
WBL: 350

Date: 3/6/2023

By: JT

Detector Layout for the intersection of: MARKS & WHITESBRIDGE



Detector Layout for the intersection of: MARKS & WHITESBRIDGE

APPENDIX B

VOLUME DEVELOPMENT WORKSHEETS

LSA

Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
1 Marks Avenue/Belmont Avenue						
NBL	72	6	78	282	16	298
NBT	184	2	186	413	5	418
NBR	88	0	88	170	0	170
SBL	60	0	60	20	0	20
SBT	401	6	407	130	2	132
SBR	22	0	22	17	0	17
EBL	20	0	20	22	0	22
EBT	193	0	193	149	0	149
EBR	291	18	309	87	8	95
WBL	35	0	35	40	0	40
WBT	69	0	69	123	0	123
WBR	18	0	18	45	0	45
North Leg						
Approach	483	6	489	167	2	169
Departure	222	2	224	480	5	485
Total	705	8	713	647	7	654
South Leg						
Approach	344	8	352	865	21	886
Departure	727	24	751	257	10	267
Total	1,071	32	1,103	1,122	31	1,153
East Leg						
Approach	122	0	122	208	0	208
Departure	341	0	341	339	0	339
Total	463	0	463	547	0	547
West Leg						
Approach	504	18	522	258	8	266
Departure	163	6	169	422	16	438
Total	667	24	691	680	24	704
Total Approaches						
Approach	1,453	32	1,485	1,498	31	1,529
Departure	1,453	32	1,485	1,498	31	1,529
Total	2,906	64	2,970	2,996	62	3,058

LSA

Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
2 Marks Avenue/Nielsen Avenue						
NBL	34	0	34	23	0	23
NBT	295	14	309	769	4	773
NBR	60	101	161	42	52	94
SBL	29	5	34	11	5	16
SBT	664	2	666	242	12	254
SBR	22	0	22	36	1	37
EBL	12	2	14	13	0	13
EBT	16	1	17	10	1	11
EBR	38	0	38	40	0	40
WBL	33	54	87	37	94	131
WBT	9	1	10	10	1	11
WBR	9	5	14	32	6	38
North Leg						
Approach	715	7	722	289	18	307
Departure	316	21	337	814	10	824
Total	1,031	28	1,059	1,103	28	1,131
South Leg						
Approach	389	115	504	834	56	890
Departure	735	56	791	319	106	425
Total	1,124	171	1,295	1,153	162	1,315
East Leg						
Approach	51	60	111	79	101	180
Departure	105	107	212	63	58	121
Total	156	167	323	142	159	301
West Leg						
Approach	66	3	69	63	1	64
Departure	65	1	66	69	2	71
Total	131	4	135	132	3	135
Total Approaches						
Approach	1,221	185	1,406	1,265	176	1,441
Departure	1,221	185	1,406	1,265	176	1,441
Total	2,442	370	2,812	2,530	352	2,882

LSA

Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
3 Marks Avenue/Ray Johnson Drive						
NBL	0	0	0	0	0	0
NBT	389	115	504	843	56	899
NBR	16	0	16	13	0	13
SBL	7	0	7	5	0	5
SBT	701	56	757	319	106	425
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	23	0	23	13	0	13
WBT	0	0	0	0	0	0
WBR	2	0	2	2	0	2
North Leg						
Approach	708	56	764	324	106	430
Departure	391	115	506	845	56	901
Total	1,099	171	1,270	1,169	162	1,331
South Leg						
Approach	405	115	520	856	56	912
Departure	724	56	780	332	106	438
Total	1,129	171	1,300	1,188	162	1,350
East Leg						
Approach	25	0	25	15	0	15
Departure	23	0	23	18	0	18
Total	48	0	48	33	0	33
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,138	171	1,309	1,195	162	1,357
Departure	1,138	171	1,309	1,195	162	1,357
Total	2,276	342	2,618	2,390	324	2,714

LSA

Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
4 Marks Avenue/SR-180 Westbound Ramps						
NBL	0	0	0	0	0	0
NBT	150	15	165	204	9	213
NBR	18	0	18	30	0	30
SBL	0	0	0	0	0	0
SBT	670	51	721	327	99	426
SBR	42	5	47	15	7	22
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	318	0	318	326	0	326
WBT	0	0	0	0	0	0
WBR	310	100	410	664	47	711
North Leg						
Approach	712	56	768	342	106	448
Departure	460	115	575	868	56	924
Total	1,172	171	1,343	1,210	162	1,372
South Leg						
Approach	168	15	183	234	9	243
Departure	988	51	1,039	653	99	752
Total	1,156	66	1,222	887	108	995
East Leg						
Approach	628	100	728	990	47	1,037
Departure	18	0	18	30	0	30
Total	646	100	746	1,020	47	1,067
West Leg						
Approach	0	0	0	0	0	0
Departure	42	5	47	15	7	22
Total	42	5	47	15	7	22
Total Approaches						
Approach	1,508	171	1,679	1,566	162	1,728
Departure	1,508	171	1,679	1,566	162	1,728
Total	3,016	342	3,358	3,132	324	3,456

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Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
5 Marks Avenue/SR-180 Eastbound Ramps						
NBL	0	0	0	0	0	0
NBT	145	8	153	216	4	220
NBR	452	0	452	395	0	395
SBL	0	0	0	0	0	0
SBT	570	4	574	451	7	458
SBR	418	46	464	202	92	294
EBL	23	7	30	18	5	23
EBT	0	0	0	0	0	0
EBR	35	0	35	19	0	19
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	988	50	1,038	653	99	752
Departure	168	15	183	234	9	243
Total	1,156	65	1,221	887	108	995
South Leg						
Approach	597	8	605	611	4	615
Departure	605	4	609	470	7	477
Total	1,202	12	1,214	1,081	11	1,092
East Leg						
Approach	0	0	0	0	0	0
Departure	452	0	452	395	0	395
Total	452	0	452	395	0	395
West Leg						
Approach	58	7	65	37	5	42
Departure	418	46	464	202	92	294
Total	476	53	529	239	97	336
Total Approaches						
Approach	1,643	65	1,708	1,301	108	1,409
Departure	1,643	65	1,708	1,301	108	1,409
Total	3,286	130	3,416	2,602	216	2,818

LSA

Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
6 Marks Avenue/Whitesbridge Avenue						
NBL	0	0	0	6	0	6
NBT	479	8	487	455	4	459
NBR	8	0	8	5	0	5
SBL	128	0	128	105	0	105
SBT	456	4	460	325	7	332
SBR	21	0	21	38	0	38
EBL	19	0	19	49	0	49
EBT	4	0	4	4	0	4
EBR	5	0	5	3	0	3
WBL	15	0	15	15	0	15
WBT	1	0	1	7	0	7
WBR	99	0	99	147	0	147
North Leg						
Approach	605	4	609	468	7	475
Departure	597	8	605	651	4	655
Total	1,202	12	1,214	1,119	11	1,130
South Leg						
Approach	487	8	495	466	4	470
Departure	476	4	480	343	7	350
Total	963	12	975	809	11	820
East Leg						
Approach	115	0	115	169	0	169
Departure	140	0	140	114	0	114
Total	255	0	255	283	0	283
West Leg						
Approach	28	0	28	56	0	56
Departure	22	0	22	51	0	51
Total	50	0	50	107	0	107
Total Approaches						
Approach	1,235	12	1,247	1,159	11	1,170
Departure	1,235	12	1,247	1,159	11	1,170
Total	2,470	24	2,494	2,318	22	2,340

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Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
7 Hughes Avenue/Belmont Avenue						
NBL	19	0	19	28	0	28
NBT	76	25	101	95	51	146
NBR	42	13	55	46	20	66
SBL	57	0	57	40	0	40
SBT	97	56	153	60	25	85
SBR	18	0	18	21	0	21
EBL	42	0	42	44	0	44
EBT	208	0	208	262	0	262
EBR	36	0	36	26	0	26
WBL	27	22	49	26	12	38
WBT	127	0	127	165	0	165
WBR	58	0	58	47	0	47
North Leg						
Approach	172	56	228	121	25	146
Departure	176	25	201	186	51	237
Total	348	81	429	307	76	383
South Leg						
Approach	137	38	175	169	71	240
Departure	160	78	238	112	37	149
Total	297	116	413	281	108	389
East Leg						
Approach	212	22	234	238	12	250
Departure	307	13	320	348	20	368
Total	519	35	554	586	32	618
West Leg						
Approach	286	0	286	332	0	332
Departure	164	0	164	214	0	214
Total	450	0	450	546	0	546
Total Approaches						
Approach	807	116	923	860	108	968
Departure	807	116	923	860	108	968
Total	1,614	232	1,846	1,720	216	1,936

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Table B.1: Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project	Balanced Existing w/o Project	Net Project Trips	Existing Plus Project
8 Hughes Avenue/Nielsen Avenue						
NBL	9	29	38	17	18	35
NBT	101	3	104	119	1	120
NBR	5	0	5	0	0	0
SBL	39	7	46	19	11	30
SBT	106	20	126	80	23	103
SBR	13	40	53	14	10	24
EBL	13	7	20	11	34	45
EBT	86	1	87	32	3	35
EBR	23	2	25	9	8	17
WBL	0	0	0	4	0	4
WBT	29	9	38	48	6	54
WBR	22	5	27	34	1	35
North Leg						
Approach	158	67	225	113	44	157
Departure	136	15	151	164	36	200
Total	294	82	376	277	80	357
South Leg						
Approach	115	32	147	136	19	155
Departure	129	22	151	93	31	124
Total	244	54	298	229	50	279
East Leg						
Approach	51	14	65	86	7	93
Departure	130	8	138	51	14	65
Total	181	22	203	137	21	158
West Leg						
Approach	122	10	132	52	45	97
Departure	51	78	129	79	34	113
Total	173	88	261	131	79	210
Total Approaches						
Approach	446	123	569	387	115	502
Departure	446	123	569	387	115	502
Total	892	246	1,138	774	230	1,004

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
1 Marks Avenue/Belmont Avenue										
NBL	72	1	73	6	79	282	2	284	16	300
NBT	184	3	187	2	189	413	6	419	5	424
NBR	88	0	88	0	88	170	0	170	0	170
SBL	60	19	79	0	79	20	16	36	0	36
SBT	401	4	405	6	411	130	6	136	2	138
SBR	22	0	22	0	22	17	0	17	0	17
EBL	20	0	20	0	20	22	0	22	0	22
EBT	193	30	223	0	223	149	25	174	0	174
EBR	291	1	292	18	310	87	1	88	8	96
WBL	35	0	35	0	35	40	0	40	0	40
WBT	69	27	96	0	96	123	28	151	0	151
WBR	18	15	33	0	33	45	19	64	0	64
North Leg										
Approach	483	23	506	6	512	167	22	189	2	191
Departure	222	18	240	2	242	480	25	505	5	510
Total	705	41	746	8	754	647	47	694	7	701
South Leg										
Approach	344	4	348	8	356	865	8	873	21	894
Departure	727	5	732	24	756	257	7	264	10	274
Total	1,071	9	1,080	32	1,112	1,122	15	1,137	31	1,168
East Leg										
Approach	122	42	164	0	164	208	47	255	0	255
Departure	341	49	390	0	390	339	41	380	0	380
Total	463	91	554	0	554	547	88	635	0	635
West Leg										
Approach	504	31	535	18	553	258	26	284	8	292
Departure	163	28	191	6	197	422	30	452	16	468
Total	667	59	726	24	750	680	56	736	24	760
Total Approaches										
Approach	1,453	100	1,553	32	1,585	1,498	103	1,601	31	1,632
Departure	1,453	100	1,553	32	1,585	1,498	103	1,601	31	1,632
Total	2,906	200	3,106	64	3,170	2,996	206	3,202	62	3,264

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
2 Marks Avenue/Nielsen Avenue										
NBL	34	0	34	0	34	23	0	23	0	23
NBT	295	4	299	14	313	769	8	777	4	781
NBR	60	0	60	101	161	42	0	42	52	94
SBL	29	0	29	5	34	11	0	11	5	16
SBT	664	6	670	2	672	242	7	249	12	261
SBR	22	0	22	0	22	36	0	36	1	37
EBL	12	0	12	2	14	13	0	13	0	13
EBT	16	0	16	1	17	10	0	10	1	11
EBR	38	0	38	0	38	40	0	40	0	40
WBL	33	0	33	54	87	37	0	37	94	131
WBT	9	0	9	1	10	10	0	10	1	11
WBR	9	0	9	5	14	32	0	32	6	38
North Leg										
Approach	715	6	721	7	728	289	7	296	18	314
Departure	316	4	320	21	341	814	8	822	10	832
Total	1,031	10	1,041	28	1,069	1,103	15	1,118	28	1,146
South Leg										
Approach	389	4	393	115	508	834	8	842	56	898
Departure	735	6	741	56	797	319	7	326	106	432
Total	1,124	10	1,134	171	1,305	1,153	15	1,168	162	1,330
East Leg										
Approach	51	0	51	60	111	79	0	79	101	180
Departure	105	0	105	107	212	63	0	63	58	121
Total	156	0	156	167	323	142	0	142	159	301
West Leg										
Approach	66	0	66	3	69	63	0	63	1	64
Departure	65	0	65	1	66	69	0	69	2	71
Total	131	0	131	4	135	132	0	132	3	135
Total Approaches										
Approach	1,221	10	1,231	185	1,416	1,265	15	1,280	176	1,456
Departure	1,221	10	1,231	185	1,416	1,265	15	1,280	176	1,456
Total	2,442	20	2,462	370	2,832	2,530	30	2,560	352	2,912

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
3 Marks Avenue/Ray Johnson Drive										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	389	4	393	115	508	843	8	851	56	907
NBR	16	0	16	0	16	13	0	13	0	13
SBL	7	0	7	0	7	5	0	5	0	5
SBT	701	6	707	56	763	319	7	326	106	432
SBR	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0
WBL	23	0	23	0	23	13	0	13	0	13
WBT	0	0	0	0	0	0	0	0	0	0
WBR	2	0	2	0	2	2	0	2	0	2
North Leg										
Approach	708	6	714	56	770	324	7	331	106	437
Departure	391	4	395	115	510	845	8	853	56	909
Total	1,099	10	1,109	171	1,280	1,169	15	1,184	162	1,346
South Leg										
Approach	405	4	409	115	524	856	8	864	56	920
Departure	724	6	730	56	786	332	7	339	106	445
Total	1,129	10	1,139	171	1,310	1,188	15	1,203	162	1,365
East Leg										
Approach	25	0	25	0	25	15	0	15	0	15
Departure	23	0	23	0	23	18	0	18	0	18
Total	48	0	48	0	48	33	0	33	0	33
West Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Total Approaches										
Approach	1,138	10	1,148	171	1,319	1,195	15	1,210	162	1,372
Departure	1,138	10	1,148	171	1,319	1,195	15	1,210	162	1,372
Total	2,276	20	2,296	342	2,638	2,390	30	2,420	324	2,744

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
4 Marks Avenue/SR-180 Westbound Ramps										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	150	2	152	15	167	204	3	207	9	216
NBR	18	3	21	0	21	30	3	33	0	33
SBL	0	0	0	0	0	0	0	0	0	0
SBT	670	6	676	51	727	327	7	334	99	433
SBR	42	0	42	5	47	15	0	15	7	22
EBL	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0
WBL	318	7	325	0	325	326	19	345	0	345
WBT	0	0	0	0	0	0	0	0	0	0
WBR	310	2	312	100	412	664	5	669	47	716
North Leg										
Approach	712	6	718	56	774	342	7	349	106	455
Departure	460	4	464	115	579	868	8	876	56	932
Total	1,172	10	1,182	171	1,353	1,210	15	1,225	162	1,387
South Leg										
Approach	168	5	173	15	188	234	6	240	9	249
Departure	988	13	1,001	51	1,052	653	26	679	99	778
Total	1,156	18	1,174	66	1,240	887	32	919	108	1,027
East Leg										
Approach	628	9	637	100	737	990	24	1,014	47	1,061
Departure	18	3	21	0	21	30	3	33	0	33
Total	646	12	658	100	758	1,020	27	1,047	47	1,094
West Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	42	0	42	5	47	15	0	15	7	22
Total	42	0	42	5	47	15	0	15	7	22
Total Approaches										
Approach	1,508	20	1,528	171	1,699	1,566	37	1,603	162	1,765
Departure	1,508	20	1,528	171	1,699	1,566	37	1,603	162	1,765
Total	3,016	40	3,056	342	3,398	3,132	74	3,206	324	3,530

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
5 Marks Avenue/SR-180 Eastbound Ramps										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	145	6	151	8	159	216	5	221	4	225
NBR	452	16	468	0	468	395	12	407	0	407
SBL	0	0	0	0	0	0	0	0	0	0
SBT	570	9	579	4	583	451	22	473	7	480
SBR	418	4	422	46	468	202	3	205	92	297
EBL	23	0	23	7	30	18	0	18	5	23
EBT	0	0	0	0	0	0	0	0	0	0
EBR	35	2	37	0	37	19	4	23	0	23
WBL	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0
North Leg										
Approach	988	13	1,001	50	1,051	653	25	678	99	777
Departure	168	6	174	15	189	234	5	239	9	248
Total	1,156	19	1,175	65	1,240	887	30	917	108	1,025
South Leg										
Approach	597	22	619	8	627	611	17	628	4	632
Departure	605	11	616	4	620	470	26	496	7	503
Total	1,202	33	1,235	12	1,247	1,081	43	1,124	11	1,135
East Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	452	16	468	0	468	395	12	407	0	407
Total	452	16	468	0	468	395	12	407	0	407
West Leg										
Approach	58	2	60	7	67	37	4	41	5	46
Departure	418	4	422	46	468	202	3	205	92	297
Total	476	6	482	53	535	239	7	246	97	343
Total Approaches										
Approach	1,643	37	1,680	65	1,745	1,301	46	1,347	108	1,455
Departure	1,643	37	1,680	65	1,745	1,301	46	1,347	108	1,455
Total	3,286	74	3,360	130	3,490	2,602	92	2,694	216	2,910

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
6 Marks Avenue/Whitesbridge Avenue										
NBL	0	0	0	0	0	6	0	6	0	6
NBT	479	10	489	8	497	455	7	462	4	466
NBR	8	0	8	0	8	5	0	5	0	5
SBL	128	3	131	0	131	105	11	116	0	116
SBT	456	4	460	4	464	325	12	337	7	344
SBR	21	4	25	0	25	38	3	41	0	41
EBL	19	3	22	0	22	49	4	53	0	53
EBT	4	0	4	0	4	4	0	4	0	4
EBR	5	0	5	0	5	3	0	3	0	3
WBL	15	0	15	0	15	15	0	15	0	15
WBT	1	0	1	0	1	7	0	7	0	7
WBR	99	10	109	0	109	147	6	153	0	153
North Leg										
Approach	605	11	616	4	620	468	26	494	7	501
Departure	597	23	620	8	628	651	17	668	4	672
Total	1,202	34	1,236	12	1,248	1,119	43	1,162	11	1,173
South Leg										
Approach	487	10	497	8	505	466	7	473	4	477
Departure	476	4	480	4	484	343	12	355	7	362
Total	963	14	977	12	989	809	19	828	11	839
East Leg										
Approach	115	10	125	0	125	169	6	175	0	175
Departure	140	3	143	0	143	114	11	125	0	125
Total	255	13	268	0	268	283	17	300	0	300
West Leg										
Approach	28	3	31	0	31	56	4	60	0	60
Departure	22	4	26	0	26	51	3	54	0	54
Total	50	7	57	0	57	107	7	114	0	114
Total Approaches										
Approach	1,235	34	1,269	12	1,281	1,159	43	1,202	11	1,213
Departure	1,235	34	1,269	12	1,281	1,159	43	1,202	11	1,213
Total	2,470	68	2,538	24	2,562	2,318	86	2,404	22	2,426

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
7 Hughes Avenue/Belmont Avenue										
NBL	19	0	19	0	19	28	0	28	0	28
NBT	76	1	77	25	102	95	3	98	51	149
NBR	42	0	42	13	55	46	0	46	20	66
SBL	57	0	57	0	57	40	0	40	0	40
SBT	97	3	100	56	156	60	2	62	25	87
SBR	18	0	18	0	18	21	0	21	0	21
EBL	42	0	42	0	42	44	0	44	0	44
EBT	208	49	257	0	257	262	41	303	0	303
EBR	36	0	36	0	36	26	0	26	0	26
WBL	27	0	27	22	49	26	0	26	12	38
WBT	127	42	169	0	169	165	47	212	0	212
WBR	58	0	58	0	58	47	0	47	0	47
North Leg										
Approach	172	3	175	56	231	121	2	123	25	148
Departure	176	1	177	25	202	186	3	189	51	240
Total	348	4	352	81	433	307	5	312	76	388
South Leg										
Approach	137	1	138	38	176	169	3	172	71	243
Departure	160	3	163	78	241	112	2	114	37	151
Total	297	4	301	116	417	281	5	286	108	394
East Leg										
Approach	212	42	254	22	276	238	47	285	12	297
Departure	307	49	356	13	369	348	41	389	20	409
Total	519	91	610	35	645	586	88	674	32	706
West Leg										
Approach	286	49	335	0	335	332	41	373	0	373
Departure	164	42	206	0	206	214	47	261	0	261
Total	450	91	541	0	541	546	88	634	0	634
Total Approaches										
Approach	807	95	902	116	1,018	860	93	953	108	1,061
Departure	807	95	902	116	1,018	860	93	953	108	1,061
Total	1,614	190	1,804	232	2,036	1,720	186	1,906	216	2,122

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Table B.2: Near Term Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes	Existing w/o Project Volumes	Cumulative Project Trips	Near Term w/o Project Volumes	Net Project Trips	Near Term w/ Project Volumes
8 Hughes Avenue/Nielsen Avenue										
NBL	9	0	9	29	38	17	0	17	18	35
NBT	101	1	102	3	105	119	3	122	1	123
NBR	5	0	5	0	5	0	0	0	0	0
SBL	39	0	39	7	46	19	0	19	11	30
SBT	106	3	109	20	129	80	2	82	23	105
SBR	13	0	13	40	53	14	0	14	10	24
EBL	13	0	13	7	20	11	0	11	34	45
EBT	86	0	86	1	87	32	0	32	3	35
EBR	23	0	23	2	25	9	0	9	8	17
WBL	0	0	0	0	0	4	0	4	0	4
WBT	29	0	29	9	38	48	0	48	6	54
WBR	22	0	22	5	27	34	0	34	1	35
North Leg										
Approach	158	3	161	67	228	113	2	115	44	159
Departure	136	1	137	15	152	164	3	167	36	203
Total	294	4	298	82	380	277	5	282	80	362
South Leg										
Approach	115	1	116	32	148	136	3	139	19	158
Departure	129	3	132	22	154	93	2	95	31	126
Total	244	4	248	54	302	229	5	234	50	284
East Leg										
Approach	51	0	51	14	65	86	0	86	7	93
Departure	130	0	130	8	138	51	0	51	14	65
Total	181	0	181	22	203	137	0	137	21	158
West Leg										
Approach	122	0	122	10	132	52	0	52	45	97
Departure	51	0	51	78	129	79	0	79	34	113
Total	173	0	173	88	261	131	0	131	79	210
Total Approaches										
Approach	446	4	450	123	573	387	5	392	115	507
Departure	446	4	450	123	573	387	5	392	115	507
Total	892	8	900	246	1,146	774	10	784	230	1,014

LSA

Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
1 Marks Avenue/Belmont Avenue						
NBL	90	6	96	342	16	358
NBT	196	2	198	440	5	445
NBR	96	0	96	177	0	177
SBL	83	0	83	38	0	38
SBT	425	6	431	143	2	145
SBR	25	0	25	18	0	18
EBL	21	0	21	23	0	23
EBT	247	0	247	183	0	183
EBR	363	18	381	91	8	99
WBL	37	0	37	42	0	42
WBT	101	0	101	159	0	159
WBR	35	0	35	67	0	67
North Leg						
Approach	533	6	539	199	2	201
Departure	252	2	254	530	5	535
Total	785	8	793	729	7	736
South Leg						
Approach	382	8	390	959	21	980
Departure	825	24	849	276	10	286
Total	1,207	32	1,239	1,235	31	1,266
East Leg						
Approach	173	0	173	268	0	268
Departure	426	0	426	398	0	398
Total	599	0	599	666	0	666
West Leg						
Approach	631	18	649	297	8	305
Departure	216	6	222	519	16	535
Total	847	24	871	816	24	840
Total Approaches						
Approach	1,719	32	1,751	1,723	31	1,754
Departure	1,719	32	1,751	1,723	31	1,754
Total	3,438	64	3,502	3,446	62	3,508

LSA

Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

		AM Peak Hour			PM Peak Hour		
		Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
2	**Marks Avenue/Nielsen Avenue**						
NBL		41	0	41	24	0	24
NBT		300	14	314	825	4	829
NBR		70	101	171	44	52	96
SBL		36	5	41	12	5	17
SBT		709	2	711	261	12	273
SBR		28	0	28	49	1	50
EBL		13	2	15	23	0	23
EBT		21	1	22	11	1	12
EBR		43	0	43	42	0	42
WBL		35	54	89	41	94	135
WBT		9	1	10	13	1	14
WBR		9	5	14	41	6	47
North Leg							
	Approach	773	7	780	322	18	340
	Departure	322	21	343	889	10	899
	Total	1,095	28	1,123	1,211	28	1,239
South Leg							
	Approach	411	115	526	893	56	949
	Departure	787	56	843	344	106	450
	Total	1,198	171	1,369	1,237	162	1,399
East Leg							
	Approach	53	60	113	95	101	196
	Departure	127	107	234	67	58	125
	Total	180	167	347	162	159	321
West Leg							
	Approach	77	3	80	76	1	77
	Departure	78	1	79	86	2	88
	Total	155	4	159	162	3	165
Total Approaches							
	Approach	1,314	185	1,499	1,386	176	1,562
	Departure	1,314	185	1,499	1,386	176	1,562
	Total	2,628	370	2,998	2,772	352	3,124

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Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

		AM Peak Hour			PM Peak Hour		
		Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
3	**Marks Avenue/Ray Johnson Drive**						
NBL		0	0	0	0	0	0
NBT		407	115	522	862	56	918
NBR		17	0	17	14	0	14
SBL		7	0	7	5	0	5
SBT		735	56	791	342	106	448
SBR		0	0	0	0	0	0
EBL		0	0	0	0	0	0
EBT		0	0	0	0	0	0
EBR		0	0	0	0	0	0
WBL		24	0	24	14	0	14
WBT		0	0	0	0	0	0
WBR		2	0	2	2	0	2
North Leg							
	Approach	742	56	798	347	106	453
	Departure	409	115	524	864	56	920
	Total	1,151	171	1,322	1,211	162	1,373
South Leg							
	Approach	424	115	539	876	56	932
	Departure	759	56	815	356	106	462
	Total	1,183	171	1,354	1,232	162	1,394
East Leg							
	Approach	26	0	26	16	0	16
	Departure	24	0	24	19	0	19
	Total	50	0	50	35	0	35
West Leg							
	Approach	0	0	0	0	0	0
	Departure	0	0	0	0	0	0
	Total	0	0	0	0	0	0
Total Approaches							
	Approach	1,192	171	1,363	1,239	162	1,401
	Departure	1,192	171	1,363	1,239	162	1,401
	Total	2,384	342	2,726	2,478	324	2,802

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Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

		AM Peak Hour			PM Peak Hour		
		Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
4	**Marks Avenue/SR-180 Westbound Ramps**						
NBL		0	0	0	0	0	0
NBT		159	15	174	271	9	280
NBR		42	0	42	76	0	76
SBL		0	0	0	0	0	0
SBT		750	51	801	351	99	450
SBR		44	5	49	16	7	23
EBL		0	0	0	0	0	0
EBT		0	0	0	0	0	0
EBR		0	0	0	0	0	0
WBL		371	0	371	407	0	407
WBT		0	0	0	0	0	0
WBR		330	100	430	702	47	749
North Leg							
	Approach	794	56	850	367	106	473
	Departure	489	115	604	973	56	1,029
	Total	1,283	171	1,454	1,340	162	1,502
South Leg							
	Approach	201	15	216	347	9	356
	Departure	1,121	51	1,172	758	99	857
	Total	1,322	66	1,388	1,105	108	1,213
East Leg							
	Approach	701	100	801	1,109	47	1,156
	Departure	42	0	42	76	0	76
	Total	743	100	843	1,185	47	1,232
West Leg							
	Approach	0	0	0	0	0	0
	Departure	44	5	49	16	7	23
	Total	44	5	49	16	7	23
Total Approaches							
	Approach	1,696	171	1,867	1,823	162	1,985
	Departure	1,696	171	1,867	1,823	162	1,985
	Total	3,392	342	3,734	3,646	324	3,970

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Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
5 Marks Avenue/SR-180 Eastbound Ramps						
NBL	0	0	0	0	0	0
NBT	170	8	178	364	4	368
NBR	594	0	594	477	0	477
SBL	0	0	0	0	0	0
SBT	679	4	683	504	7	511
SBR	442	46	488	215	92	307
EBL	31	7	38	30	5	35
EBT	0	0	0	0	0	0
EBR	73	0	73	39	0	39
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	1,121	50	1,171	719	99	818
Departure	201	15	216	394	9	403
Total	1,322	65	1,387	1,113	108	1,221
South Leg						
Approach	764	8	772	841	4	845
Departure	752	4	756	543	7	550
Total	1,516	12	1,528	1,384	11	1,395
East Leg						
Approach	0	0	0	0	0	0
Departure	594	0	594	477	0	477
Total	594	0	594	477	0	477
West Leg						
Approach	104	7	111	69	5	74
Departure	442	46	488	215	92	307
Total	546	53	599	284	97	381
Total Approaches						
Approach	1,989	65	2,054	1,629	108	1,737
Departure	1,989	65	2,054	1,629	108	1,737
Total	3,978	130	4,108	3,258	216	3,474

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Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

		AM Peak Hour			PM Peak Hour		
		Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
6	**Marks Avenue/Whitesbridge Avenue**						
NBL		0	0	0	6	0	6
NBT		588	8	596	485	4	489
NBR		18	0	18	6	0	6
SBL		239	0	239	145	0	145
SBT		483	4	487	354	7	361
SBR		30	0	30	44	0	44
EBL		23	0	23	56	0	56
EBT		6	0	6	5	0	5
EBR		5	0	5	3	0	3
WBL		22	0	22	29	0	29
WBT		2	0	2	15	0	15
WBR		153	0	153	300	0	300
North Leg							
	Approach	752	4	756	543	7	550
	Departure	764	8	772	841	4	845
	Total	1,516	12	1,528	1,384	11	1,395
South Leg							
	Approach	606	8	614	497	4	501
	Departure	510	4	514	386	7	393
	Total	1,116	12	1,128	883	11	894
East Leg							
	Approach	177	0	177	344	0	344
	Departure	263	0	263	156	0	156
	Total	440	0	440	500	0	500
West Leg							
	Approach	34	0	34	64	0	64
	Departure	32	0	32	65	0	65
	Total	66	0	66	129	0	129
Total Approaches							
	Approach	1,569	12	1,581	1,448	11	1,459
	Departure	1,569	12	1,581	1,448	11	1,459
	Total	3,138	24	3,162	2,896	22	2,918

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Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
7 Hughes Avenue/Belmont Avenue						
NBL	27	0	27	29	0	29
NBT	111	25	136	103	51	154
NBR	50	13	63	48	20	68
SBL	61	0	61	47	0	47
SBT	117	56	173	113	25	138
SBR	24	0	24	30	0	30
EBL	59	0	59	69	0	69
EBT	270	0	270	318	0	318
EBR	46	0	46	40	0	40
WBL	28	22	50	29	12	41
WBT	177	0	177	223	0	223
WBR	58	0	58	54	0	54
North Leg						
Approach	202	56	258	190	25	215
Departure	228	25	253	226	51	277
Total	430	81	511	416	76	492
South Leg						
Approach	188	38	226	180	71	251
Departure	191	78	269	182	37	219
Total	379	116	495	362	108	470
East Leg						
Approach	263	22	285	306	12	318
Departure	381	13	394	413	20	433
Total	644	35	679	719	32	751
West Leg						
Approach	375	0	375	427	0	427
Departure	228	0	228	282	0	282
Total	603	0	603	709	0	709
Total Approaches						
Approach	1,028	116	1,144	1,103	108	1,211
Departure	1,028	116	1,144	1,103	108	1,211
Total	2,056	232	2,288	2,206	216	2,422

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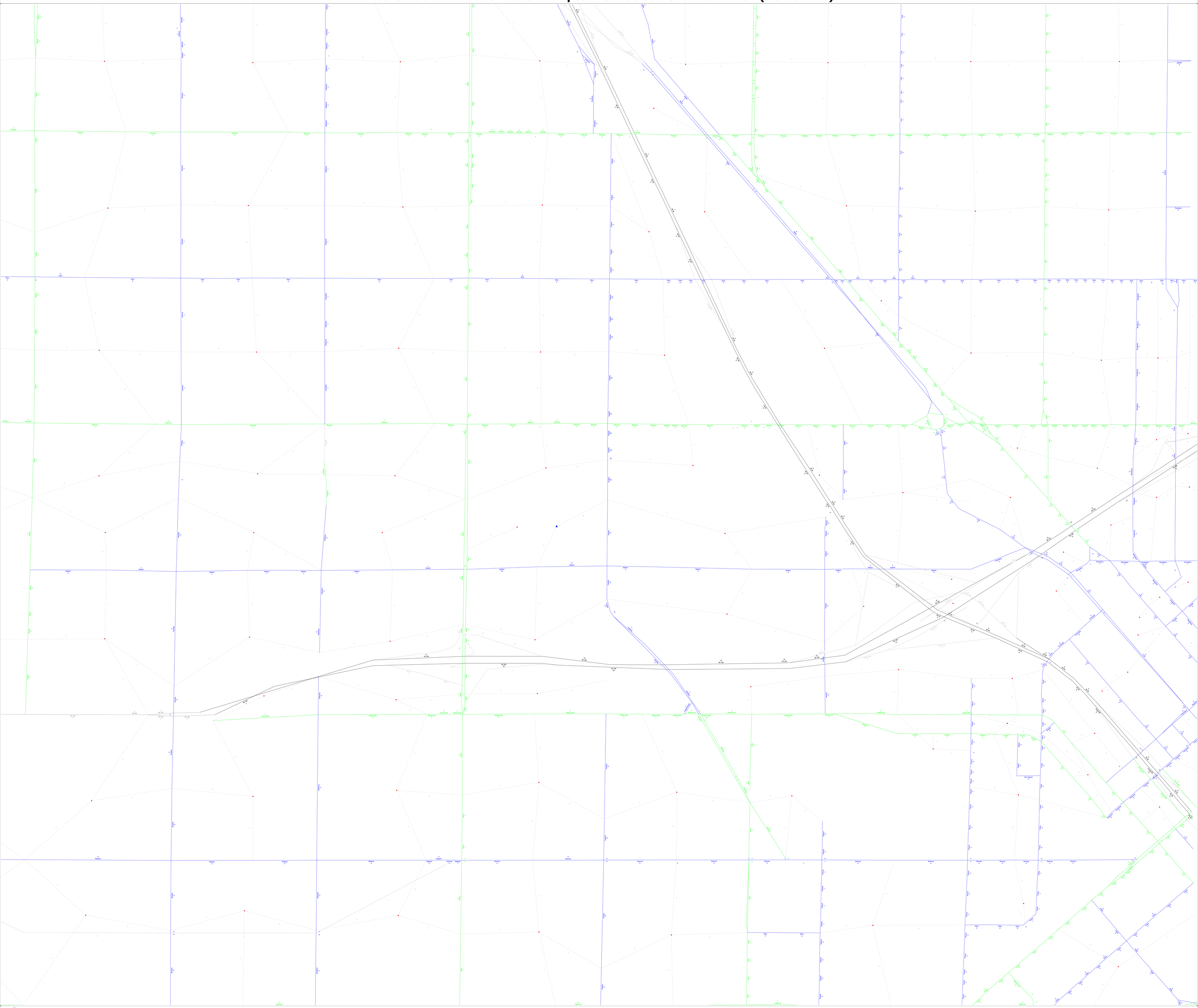
Table B.3: Cumulative Year (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes	Cumulative w/o Project Volumes	Net Project Trips	Cumulative w/ Project Volumes
8 Hughes Avenue/Nielsen Avenue						
NBL	9	29	38	29	18	47
NBT	163	3	166	128	1	129
NBR	9	0	9	0	0	0
SBL	44	7	51	46	11	57
SBT	139	20	159	155	23	178
SBR	14	40	54	15	10	25
EBL	14	7	21	12	34	46
EBT	102	1	103	34	3	37
EBR	31	2	33	9	8	17
WBL	0	0	0	26	0	26
WBT	30	9	39	50	6	56
WBR	35	5	40	36	1	37
North Leg						
Approach	197	67	264	216	44	260
Departure	212	15	227	176	36	212
Total	409	82	491	392	80	472
South Leg						
Approach	181	32	213	157	19	176
Departure	170	22	192	190	31	221
Total	351	54	405	347	50	397
East Leg						
Approach	65	14	79	112	7	119
Departure	155	8	163	80	14	94
Total	220	22	242	192	21	213
West Leg						
Approach	147	10	157	55	45	100
Departure	53	78	131	94	34	128
Total	200	88	288	149	79	228
Total Approaches						
Approach	590	123	713	540	115	655
Departure	590	123	713	540	115	655
Total	1,180	246	1,426	1,080	230	1,310

APPENDIX C
SELECT ZONE MODEL PLOTS

Fresno COG 2046 Travel Model - PM peak hour select zone distribution (Neilsen WH)



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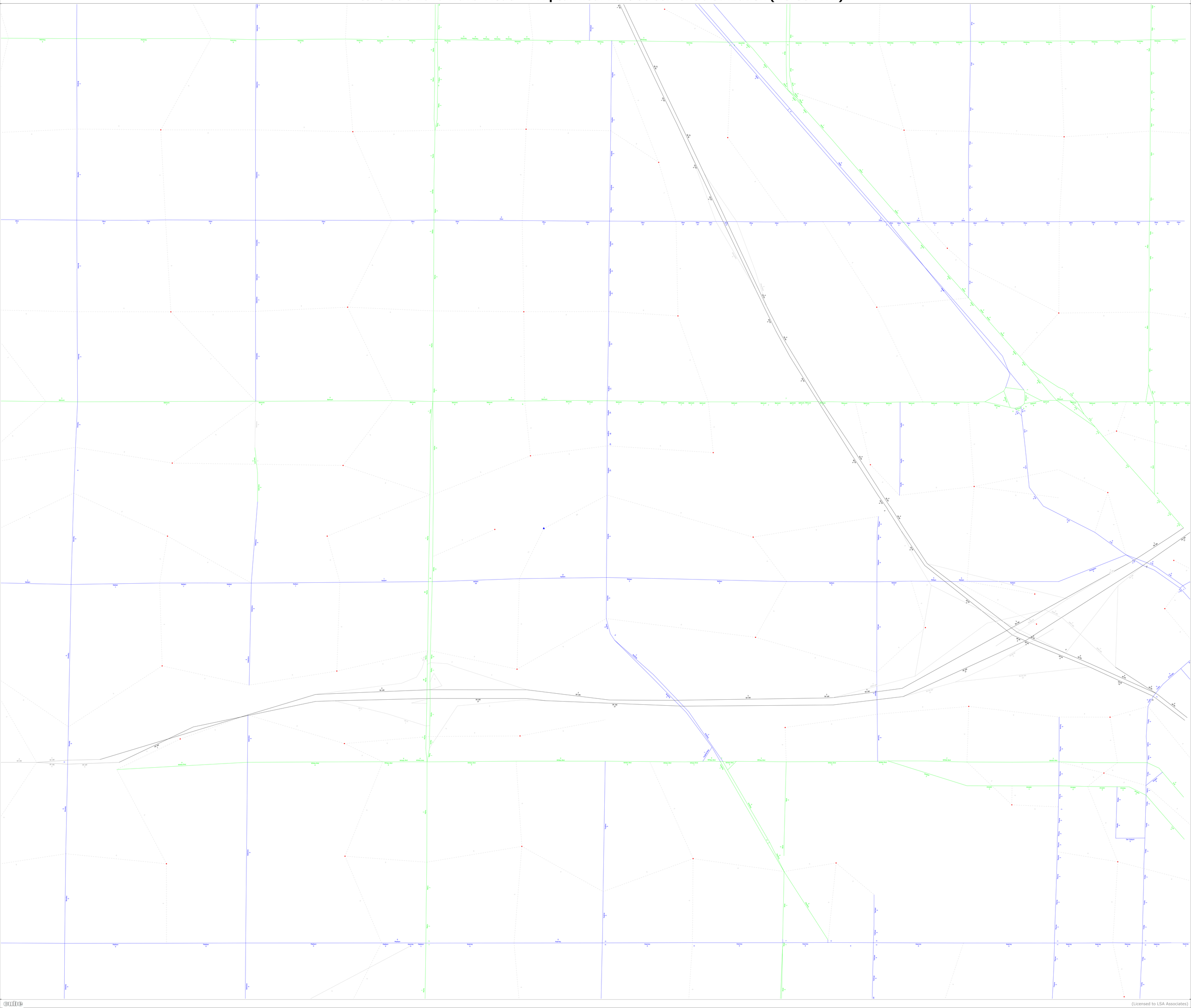
Fresno COG 2046 Travel Model - PM peak hour Auto select zone distribution (Neilsen WH)



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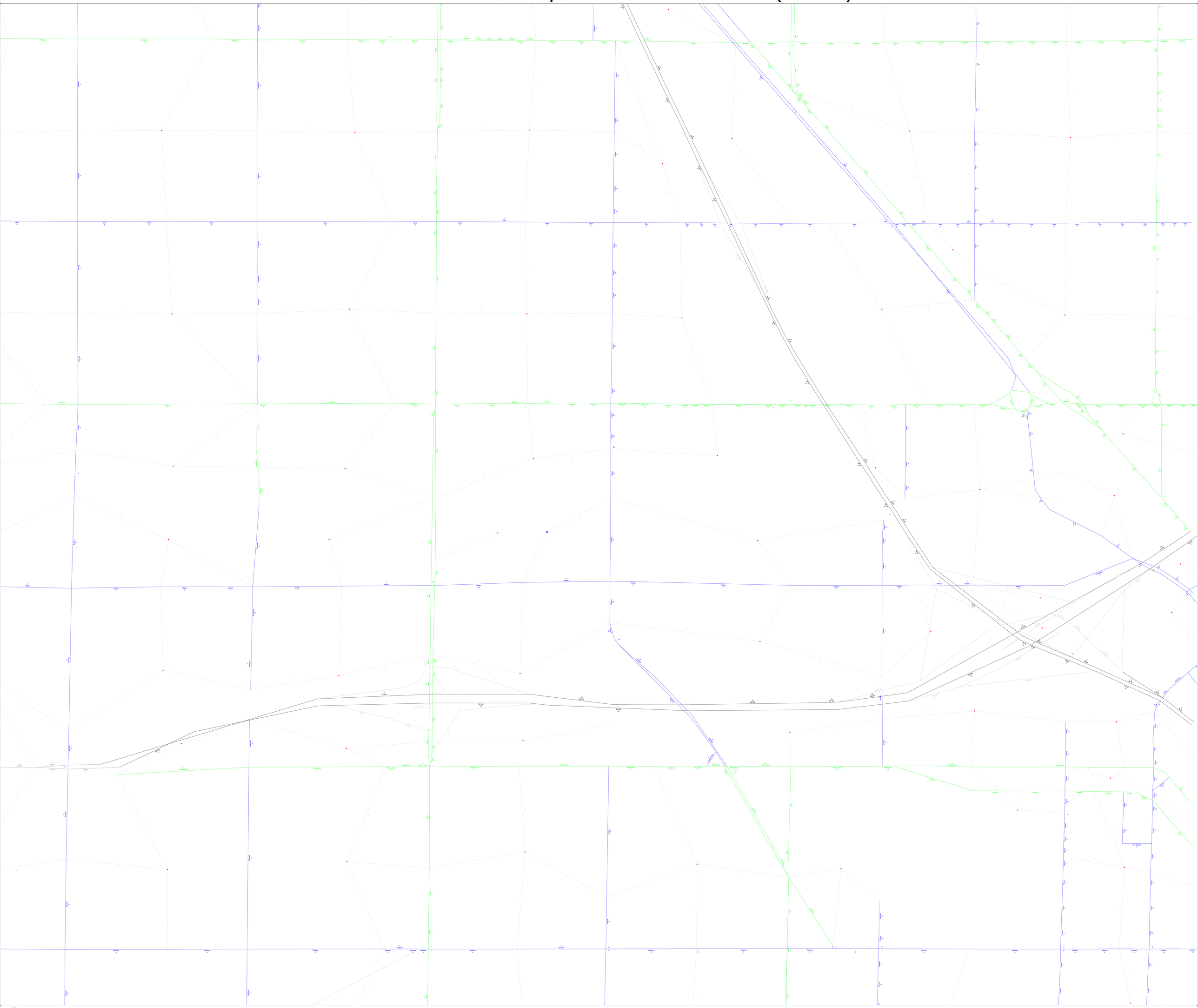
Fresno COG 2046 Travel Model - PM peak hour Truck select zone distribution (Neilsen WH)



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APPENDIX D

LEVEL OF SERVICE WORKSHEETS

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.2	1.7	0.1	0.3	0.0	0.1	0.7	0.1	0.1	0.9	0.4
Total Del/Veh (s)	6.0	10.6	14.1	8.4	10.7	2.4	6.7	13.7	5.7	6.7	12.7	8.9
Stop Delay (hr)	0.0	0.1	1.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.4	0.2
Stop Del/Veh (s)	4.7	5.8	9.6	3.3	4.9	3.0	5.0	4.6	3.2	4.0	5.5	5.7

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.3
Denied Del/Veh (s)		0.8
Total Delay (hr)	0.0	4.7
Total Del/Veh (s)	3.1	11.2
Stop Delay (hr)	0.0	2.6
Stop Del/Veh (s)	3.6	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	16	38	33	9	9	34	295	60	29	664	22
Future Volume (veh/h)	12	16	38	33	9	9	34	295	60	29	664	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	19	44	38	10	10	40	343	70	34	772	26
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	278	235	349	278	235	127	1550	692	112	1520	678
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.07	0.43	0.43	0.06	0.42	0.42
Sat Flow, veh/h	1414	1900	1610	1360	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	14	19	44	38	10	10	40	343	70	34	772	26
Grp Sat Flow(s),veh/h/ln	1414	1900	1610	1360	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.4	1.1	1.1	0.2	0.2	0.9	2.7	1.2	0.8	7.0	0.4
Cycle Q Clear(g_c), s	0.6	0.4	1.1	1.5	0.2	0.2	0.9	2.7	1.2	0.8	7.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	278	235	349	278	235	127	1550	692	112	1520	678
V/C Ratio(X)	0.04	0.07	0.19	0.11	0.04	0.04	0.32	0.22	0.10	0.30	0.51	0.04
Avail Cap(c_a), veh/h	1497	1802	1527	1441	1802	1527	616	2415	1077	616	2415	1077
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	1.00	1.00
Uniform Delay (d), s/veh	16.5	16.3	16.6	17.0	16.3	16.3	19.6	8.0	7.6	19.9	9.5	7.6
Incr Delay (d2), s/veh	0.1	0.2	0.9	0.3	0.1	0.2	0.5	0.2	0.2	0.6	0.7	0.1
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	0.1	0.2	0.4	0.3	0.1	0.1	0.3	0.7	0.3	0.3	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.6	16.6	17.5	17.3	16.4	16.5	20.1	8.2	7.7	20.5	10.2	7.6
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	B	A
Approach Vol, veh/h		77			58			453			832	
Approach Delay, s/veh		17.1			17.0			9.2			10.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	24.0		12.4	7.6	24.4		12.4
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1
Max Q Clear Time (g_c+I1), s	2.9	9.0		3.5	2.8	4.7		3.1
Green Ext Time (p_c), s	0.0	9.7		0.4	0.0	4.8		0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	10.7	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	2	389	16	7	701
Future Volume (veh/h)	23	2	389	16	7	701
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	2	452	19	8	815
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	80	71	1302	581	24	1981
Arrive On Green	0.04	0.04	0.36	0.36	0.01	0.55
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	27	2	452	19	8	815
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.3	0.0	2.1	0.2	0.1	3.0
Cycle Q Clear(g_c), s	0.3	0.0	2.1	0.2	0.1	3.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	80	71	1302	581	24	1981
V/C Ratio(X)	0.34	0.03	0.35	0.03	0.34	0.41
Avail Cap(c_a), veh/h	2059	1832	3903	1741	1267	3903
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.6	10.4	5.3	4.7	11.2	3.0
Incr Delay (d2), s/veh	5.2	0.3	0.3	0.0	3.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.8	10.8	5.6	4.8	14.3	3.2
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	29		471			823
Approach Delay, s/veh	15.5		5.6			3.3
Approach LOS	B		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	17.8		5.0	4.3	13.5
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	5.0		2.3	2.1	4.1
Green Ext Time (p_c), s	7.5		0.1	0.0	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	4.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	318	0	310	0	150	18	0	670	42
Future Volume (veh/h)	0	0	0	318	0	310	0	150	18	0	670	42
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				370	0	360	0	174	0	0	779	0
Peak Hour Factor				0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1075	0	868	0	1296		0	1296	
Arrive On Green				0.31	0.00	0.31	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				370	0	360	0	174	0	0	779	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.2	0.0	4.0	0.0	1.3	0.0	0.0	7.0	0.0
Cycle Q Clear(g_c), s				3.2	0.0	4.0	0.0	1.3	0.0	0.0	7.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1075	0	868	0	1296		0	1296	
V/C Ratio(X)				0.34	0.00	0.41	0.00	0.13		0.00	0.60	
Avail Cap(c_a), veh/h				2226	0	1797	0	2290		0	2290	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				10.6	0.0	10.9	0.0	8.5	0.0	0.0	10.3	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.7	0.0	0.1	0.0	0.0	0.5	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.0	0.0	1.0	0.0	0.3	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				11.1	0.0	11.6	0.0	8.6	0.0	0.0	10.9	0.0
LnGrp LOS				B		B		A			B	
Approach Vol, veh/h					730			174			779	
Approach Delay, s/veh					11.3			8.6			10.9	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		6	8
Phs Duration (G+Y+Rc), s	20.9		20.9	18.5
Change Period (Y+Rc), s	6.8		6.8	6.4
Max Green Setting (Gmax), s	25.0		25.0	25.0
Max Q Clear Time (g_c+I1), s	3.3		9.0	6.0
Green Ext Time (p_c), s	1.0		5.2	6.1

Intersection Summary	
HCM 7th Control Delay, s/veh	10.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	35	0	0	0	0	145	452	0	570	418
Future Volume (veh/h)	23	0	35	0	0	0	0	145	452	0	570	418
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	24	0	37				0	153	0	0	600	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	197	0	176				0	1357		0	1357	
Arrive On Green	0.11	0.00	0.11				0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	24	0	37				0	153	0	0	600	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.3	0.0	0.6				0.0	0.7	0.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.6				0.0	0.7	0.0	0.0	3.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	197	0	176				0	1357		0	1357	
V/C Ratio(X)	0.12	0.00	0.21				0.00	0.11		0.00	0.44	
Avail Cap(c_a), veh/h	1360	0	1211				0	3392		0	3392	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	0.0	10.8				0.0	5.4	0.0	0.0	6.2	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.7				0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				0.0	0.1	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	0.0	11.5				0.0	5.5	0.0	0.0	6.5	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		61						153			600	
Approach Delay, s/veh		11.3						5.5			6.5	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	9.7	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	2.7	2.6	5.3
Green Ext Time (p_c), s	0.9	0.1	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	4	5	15	1	99	0	479	8	128	456	21
Future Volume (veh/h)	19	4	5	15	1	99	0	479	8	128	456	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	4	5	16	1	108	0	521	9	139	496	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	269	228	58	253	215	4	968	432	244	948	804
Arrive On Green	0.04	0.14	0.14	0.03	0.13	0.13	0.00	0.27	0.27	0.13	0.50	0.50
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	21	4	5	16	1	108	0	521	9	139	496	23
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	0.6	0.1	0.1	0.4	0.0	3.2	0.0	6.3	0.2	3.7	9.0	0.4
Cycle Q Clear(g_c), s	0.6	0.1	0.1	0.4	0.0	3.2	0.0	6.3	0.2	3.7	9.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	269	228	58	253	215	4	968	432	244	948	804
V/C Ratio(X)	0.29	0.01	0.02	0.28	0.00	0.50	0.00	0.54	0.02	0.57	0.52	0.03
Avail Cap(c_a), veh/h	521	718	609	521	718	609	521	1719	767	535	948	804
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	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	18.8	18.9	24.1	19.2	20.5	0.0	16.0	13.7	20.7	8.7	6.5
Incr Delay (d2), s/veh	0.8	0.0	0.1	1.0	0.0	2.8	0.0	1.2	0.1	0.8	1.3	0.0
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	0.2	0.0	0.0	0.2	0.0	1.2	0.0	2.2	0.1	1.4	2.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.6	18.9	18.9	25.1	19.2	23.3	0.0	17.2	13.8	21.5	9.9	6.5
LnGrp LOS	C	B	B	C	B	C		B	B	C	A	A
Approach Vol, veh/h		30			125			530			658	
Approach Delay, s/veh		22.9			23.5			17.1			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	19.4	6.9	12.9	0.0	31.2	7.4	12.5
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.7	8.3	2.4	2.1	0.0	11.0	2.6	5.2
Green Ext Time (p_c), s	0.1	5.4	0.0	0.0	0.0	4.9	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	208	36	27	127	58	19	76	42	57	97	18
Future Vol, veh/h	42	208	36	27	127	58	19	76	42	57	97	18
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	221	38	29	135	62	20	81	45	61	103	19
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	10.1	9.6	10.7	11.7
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	14%	100%	0%	0%	100%	0%	0%	33%
Vol Thru, %	55%	0%	100%	66%	0%	100%	42%	56%
Vol Right, %	31%	0%	0%	34%	0%	0%	58%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	42	139	105	27	85	100	172
LT Vol	19	42	0	0	27	0	0	57
Through Vol	76	0	139	69	0	85	42	97
RT Vol	42	0	0	36	0	0	58	18
Lane Flow Rate	146	45	148	112	29	90	107	183
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.243	0.079	0.241	0.175	0.052	0.15	0.165	0.314
Departure Headway (Hd)	6.006	6.378	5.87	5.627	6.488	5.98	5.568	6.169
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	598	562	612	638	552	599	644	584
Service Time	3.746	4.115	3.607	3.363	4.229	3.72	3.308	3.906
HCM Lane V/C Ratio	0.244	0.08	0.242	0.176	0.053	0.15	0.166	0.313
HCM Control Delay, s/veh	10.7	9.7	10.5	9.6	9.6	9.8	9.4	11.7
HCM Lane LOS	B	A	B	A	A	A	A	B
HCM 95th-tile Q	0.9	0.3	0.9	0.6	0.2	0.5	0.6	1.3

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	86	23	0	29	22	9	101	5	39	106	13
Future Vol, veh/h	13	86	23	0	29	22	9	101	5	39	106	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	93	25	0	32	24	10	110	5	42	115	14
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9	8.3	8.9	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	8%	0%	100%	0%	0%	0%	27%	0%
Vol Thru, %	92%	0%	0%	79%	100%	57%	73%	0%
Vol Right, %	0%	100%	0%	21%	0%	43%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	5	13	109	0	51	145	13
LT Vol	9	0	13	0	0	0	39	0
Through Vol	101	0	0	86	0	29	106	0
RT Vol	0	5	0	23	0	22	0	13
Lane Flow Rate	120	5	14	118	0	55	158	14
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.173	0.007	0.023	0.17	0	0.079	0.23	0.017
Departure Headway (Hd)	5.201	4.456	5.815	5.164	5.407	5.103	5.248	4.409
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	689	801	615	693	0	700	684	810
Service Time	2.94	2.194	3.555	2.904	3.154	2.849	2.984	2.145
HCM Lane V/C Ratio	0.174	0.006	0.023	0.17	0	0.079	0.231	0.017
HCM Control Delay, s/veh	9	7.2	8.7	9	8.2	8.3	9.6	7.2
HCM Lane LOS	A	A	A	A	N	A	A	A
HCM 95th-tile Q	0.6	0	0.1	0.6	0	0.3	0.9	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.1	0.5	0.2	0.5	0.0	0.9	3.3	0.5	0.0	0.2	0.1
Total Del/Veh (s)	9.4	9.6	8.9	13.1	14.2	3.5	11.1	28.1	8.8	7.9	12.6	8.4
Stop Delay (hr)	0.0	0.0	0.3	0.1	0.2	0.0	0.7	1.4	0.2	0.0	0.1	0.1
Stop Del/Veh (s)	8.1	5.4	4.7	5.4	7.0	4.1	8.2	11.6	3.4	5.7	6.9	5.4

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.2
Denied Del/Veh (s)		0.4
Total Delay (hr)	0.0	6.4
Total Del/Veh (s)	4.8	15.3
Stop Delay (hr)	0.0	3.2
Stop Del/Veh (s)	5.3	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	10	40	37	10	32	23	769	42	11	242	36
Future Volume (veh/h)	13	10	40	37	10	32	23	769	42	11	242	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	10	42	39	10	33	24	801	44	11	252	38
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	378	295	250	377	295	250	84	1599	713	41	1514	675
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.44	0.44	0.02	0.42	0.42
Sat Flow, veh/h	1385	1900	1610	1374	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	14	10	42	39	10	33	24	801	44	11	252	38
Grp Sat Flow(s),veh/h/ln	1385	1900	1610	1374	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.2	1.0	1.1	0.2	0.8	0.5	6.8	0.7	0.3	1.9	0.6
Cycle Q Clear(g_c), s	0.6	0.2	1.0	1.2	0.2	0.8	0.5	6.8	0.7	0.3	1.9	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	295	250	377	295	250	84	1599	713	41	1514	675
V/C Ratio(X)	0.04	0.03	0.17	0.10	0.03	0.13	0.29	0.50	0.06	0.27	0.17	0.06
Avail Cap(c_a), veh/h	1535	1882	1595	1524	1882	1595	643	2522	1125	643	2522	1125
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	1.00	1.00
Uniform Delay (d), s/veh	15.5	15.2	15.6	15.8	15.2	15.5	19.6	8.5	6.8	20.4	7.7	7.3
Incr Delay (d2), s/veh	0.1	0.1	0.7	0.3	0.1	0.6	0.7	0.6	0.1	1.3	0.1	0.1
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	0.1	0.1	0.3	0.3	0.1	0.3	0.2	1.7	0.2	0.1	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	15.4	16.3	16.1	15.4	16.0	20.3	9.1	6.9	21.7	7.8	7.4
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		66			82			869			301	
Approach Delay, s/veh		16.0			16.0			9.3			8.3	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	23.1		12.5	5.9	24.1		12.5
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1
Max Q Clear Time (g_c+I1), s	2.5	3.9		3.2	2.3	8.8		3.0
Green Ext Time (p_c), s	0.0	3.4		0.6	0.0	10.1		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	2	843	13	5	319
Future Volume (veh/h)	13	2	843	13	5	319
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	2	897	14	5	339
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	45	40	1835	818	15	2362
Arrive On Green	0.03	0.03	0.51	0.51	0.01	0.65
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	14	2	897	14	5	339
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.2	0.0	4.7	0.1	0.1	1.0
Cycle Q Clear(g_c), s	0.2	0.0	4.7	0.1	0.1	1.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	45	40	1835	818	15	2362
V/C Ratio(X)	0.31	0.05	0.49	0.02	0.34	0.14
Avail Cap(c_a), veh/h	1622	1443	3074	1371	998	3074
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.9	13.8	4.7	3.5	14.3	1.9
Incr Delay (d2), s/veh	8.0	1.1	0.3	0.0	4.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.9	14.9	5.0	3.6	19.2	2.0
LnGrp LOS	C	B	A	A	B	A
Approach Vol, veh/h	16		911			344
Approach Delay, s/veh	21.0		5.0			2.2
Approach LOS	C		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	24.3		4.7	4.2	20.0
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	3.0		2.2	2.1	6.7
Green Ext Time (p_c), s	2.9		0.0	0.0	8.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	326	0	664	0	204	30	0	327	15
Future Volume (veh/h)	0	0	0	326	0	664	0	204	30	0	327	15
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				347	0	706	0	217	0	0	348	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1517	0	1225	0	884		0	884	
Arrive On Green				0.43	0.00	0.43	0.00	0.24	0.00	0.00	0.24	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				347	0	706	0	217	0	0	348	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				2.5	0.0	7.7	0.0	2.0	0.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s				2.5	0.0	7.7	0.0	2.0	0.0	0.0	3.3	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1517	0	1225	0	884		0	884	
V/C Ratio(X)				0.23	0.00	0.58	0.00	0.25		0.00	0.39	
Avail Cap(c_a), veh/h				2148	0	1734	0	2209		0	2209	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				7.3	0.0	8.8	0.0	12.4	0.0	0.0	12.9	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.0	0.0	0.2	0.0	0.0	0.3	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	1.7	0.0	0.6	0.0	0.0	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.5	0.0	9.8	0.0	12.6	0.0	0.0	13.2	0.0
LnGrp LOS				A		A		B			B	
Approach Vol, veh/h					1053			217			348	
Approach Delay, s/veh					9.0			12.6			13.2	
Approach LOS					A			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	16.8		16.8		24.1			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	4.0		5.3		9.7			
Green Ext Time (p_c), s	1.3		2.3		8.0			

Intersection Summary		
HCM 7th Control Delay, s/veh	10.4	
HCM 7th LOS	B	

Notes
User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	0	19	0	0	0	0	216	395	0	451	202
Future Volume (veh/h)	18	0	19	0	0	0	0	216	395	0	451	202
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	20	0	21				0	243	0	0	507	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	143	0	127				0	1403		0	1403	
Arrive On Green	0.08	0.00	0.08				0.00	0.39	0.00	0.00	0.39	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	20	0	21				0	243	0	0	507	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.3	0.0	0.3				0.0	1.1	0.0	0.0	2.6	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.3				0.0	1.1	0.0	0.0	2.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	143	0	127				0	1403		0	1403	
V/C Ratio(X)	0.14	0.00	0.17				0.00	0.17		0.00	0.36	
Avail Cap(c_a), veh/h	1406	0	1251				0	3507		0	3507	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	11.1				0.0	5.2	0.0	0.0	5.6	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.7				0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1				0.0	0.1	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.6	0.0	11.8				0.0	5.2	0.0	0.0	5.8	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		41						243			507	
Approach Delay, s/veh		11.7						5.2			5.8	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	8.8	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	3.1	2.3	4.6
Green Ext Time (p_c), s	1.6	0.1	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	4	3	15	7	147	6	455	5	105	325	38
Future Volume (veh/h)	49	4	3	15	7	147	6	455	5	105	325	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	5	3	17	8	169	7	523	6	121	374	44
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	151	366	310	60	270	229	27	932	416	222	682	578
Arrive On Green	0.08	0.19	0.19	0.03	0.14	0.14	0.01	0.26	0.26	0.12	0.36	0.36
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	56	5	3	17	8	169	7	523	6	121	374	44
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	1.6	0.1	0.1	0.5	0.2	5.5	0.2	6.9	0.2	3.5	8.6	1.0
Cycle Q Clear(g_c), s	1.6	0.1	0.1	0.5	0.2	5.5	0.2	6.9	0.2	3.5	8.6	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	366	310	60	270	229	27	932	416	222	682	578
V/C Ratio(X)	0.37	0.01	0.01	0.28	0.03	0.74	0.26	0.56	0.01	0.54	0.55	0.08
Avail Cap(c_a), veh/h	484	668	566	484	668	566	484	1598	713	498	855	724
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	1.00	1.00
Uniform Delay (d), s/veh	23.8	17.9	17.9	25.9	20.3	22.6	26.8	17.7	15.2	22.6	14.1	11.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.1	6.9	1.9	1.4	0.0	0.8	1.9	0.2
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	0.6	0.0	0.0	0.2	0.1	2.2	0.1	2.5	0.1	1.3	3.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.3	18.0	18.0	26.8	20.4	29.5	28.7	19.1	15.2	23.4	16.0	11.8
LnGrp LOS	C	B	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		64			194			536			539	
Approach Delay, s/veh		23.5			28.9			19.1			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	19.9	7.1	16.3	6.1	25.4	9.9	13.5
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.5	8.9	2.5	2.1	2.2	10.6	3.6	7.5
Green Ext Time (p_c), s	0.1	5.3	0.0	0.0	0.0	3.8	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	20.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	262	26	26	165	47	28	95	46	40	60	21
Future Vol, veh/h	44	262	26	26	165	47	28	95	46	40	60	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	279	28	28	176	50	30	101	49	43	64	22
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	10.5	9.9	11.6	11
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	17%	100%	0%	0%	100%	0%	0%	33%
Vol Thru, %	56%	0%	100%	77%	0%	100%	54%	50%
Vol Right, %	27%	0%	0%	23%	0%	0%	46%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	169	44	175	113	26	110	102	121
LT Vol	28	44	0	0	26	0	0	40
Through Vol	95	0	175	87	0	110	55	60
RT Vol	46	0	0	26	0	0	47	21
Lane Flow Rate	180	47	186	121	28	117	109	129
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.306	0.083	0.303	0.191	0.05	0.195	0.171	0.228
Departure Headway (Hd)	6.137	6.374	5.866	5.703	6.51	6.001	5.673	6.379
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	584	562	613	629	550	598	632	563
Service Time	3.881	4.111	3.603	3.439	4.251	3.742	3.414	4.125
HCM Lane V/C Ratio	0.308	0.084	0.303	0.192	0.051	0.196	0.172	0.229
HCM Control Delay, s/veh	11.6	9.7	11.1	9.8	9.6	10.2	9.6	11
HCM Lane LOS	B	A	B	A	A	B	A	B
HCM 95th-tile Q	1.3	0.3	1.3	0.7	0.2	0.7	0.6	0.9

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	32	9	4	48	34	17	119	0	19	80	14
Future Vol, veh/h	11	32	9	4	48	34	17	119	0	19	80	14
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	36	10	4	54	38	19	134	0	21	90	16
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.4	8.5	9.2	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	13%	0%	100%	0%	100%	0%	19%	0%
Vol Thru, %	88%	100%	0%	78%	0%	59%	81%	0%
Vol Right, %	0%	0%	0%	22%	0%	41%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	0	11	41	4	82	99	14
LT Vol	17	0	11	0	4	0	19	0
Through Vol	119	0	0	32	0	48	80	0
RT Vol	0	0	0	9	0	34	0	14
Lane Flow Rate	153	0	12	46	4	92	111	16
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.215	0	0.02	0.066	0.007	0.128	0.159	0.019
Departure Headway (Hd)	5.074	5.012	5.823	5.165	5.785	4.989	5.133	4.334
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	708	0	615	693	619	719	699	826
Service Time	2.803	2.74	3.556	2.897	3.515	2.719	2.862	2.062
HCM Lane V/C Ratio	0.216	0	0.02	0.066	0.006	0.128	0.159	0.019
HCM Control Delay, s/veh	9.2	7.7	8.7	8.3	8.6	8.5	8.8	7.1
HCM Lane LOS	A	N	A	A	A	A	A	A
HCM 95th-tile Q	0.8	0	0.1	0.2	0	0.4	0.6	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.1	1.7	0.2	0.3	0.0	0.2	0.8	0.2	0.1	1.0	0.5
Total Del/Veh (s)	6.2	9.8	13.6	7.8	11.1	3.1	7.4	14.9	6.7	7.2	13.2	9.5
Stop Delay (hr)	0.0	0.1	1.2	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.4	0.3
Stop Del/Veh (s)	4.9	5.2	9.3	3.3	5.2	3.7	5.6	5.2	3.8	4.4	5.7	6.2

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.4
Denied Del/Veh (s)		0.8
Total Delay (hr)	0.0	5.1
Total Del/Veh (s)	3.2	11.4
Stop Delay (hr)	0.0	2.9
Stop Del/Veh (s)	3.7	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	17	38	87	10	14	34	309	161	34	666	22
Future Volume (veh/h)	14	17	38	87	10	14	34	309	161	34	666	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	20	44	101	12	16	40	359	187	40	774	26
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	379	309	262	367	309	262	126	1497	668	126	1497	668
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.07	0.41	0.41	0.07	0.41	0.41
Sat Flow, veh/h	1404	1900	1610	1359	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	16	20	44	101	12	16	40	359	187	40	774	26
Grp Sat Flow(s),veh/h/ln	1404	1900	1610	1359	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.4	1.1	3.1	0.2	0.4	1.0	3.0	3.5	1.0	7.3	0.4
Cycle Q Clear(g_c), s	0.7	0.4	1.1	3.5	0.2	0.4	1.0	3.0	3.5	1.0	7.3	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	379	309	262	367	309	262	126	1497	668	126	1497	668
V/C Ratio(X)	0.04	0.06	0.17	0.28	0.04	0.06	0.32	0.24	0.28	0.32	0.52	0.04
Avail Cap(c_a), veh/h	1445	1752	1485	1399	1752	1485	599	2349	1048	599	2349	1048
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	1.00	1.00
Uniform Delay (d), s/veh	16.4	16.2	16.4	17.6	16.1	16.2	20.2	8.7	8.8	20.2	10.0	7.9
Incr Delay (d2), s/veh	0.1	0.2	0.7	0.9	0.1	0.2	0.5	0.2	0.6	0.5	0.8	0.1
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	0.1	0.2	0.4	0.9	0.1	0.1	0.4	0.8	0.9	0.4	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	16.4	17.1	18.6	16.2	16.4	20.7	8.9	9.4	20.7	10.7	8.0
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	B	A
Approach Vol, veh/h		80			129			586			840	
Approach Delay, s/veh		16.8			18.1			9.9			11.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	24.2		13.3	8.1	24.2		13.3				
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9				
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1				
Max Q Clear Time (g_c+I1), s	3.0	9.3		5.5	3.0	5.5		3.1				
Green Ext Time (p_c), s	0.0	9.6		1.0	0.0	6.1		0.6				

Intersection Summary		
HCM 7th Control Delay, s/veh	11.5	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	2	504	16	7	757
Future Volume (veh/h)	23	2	504	16	7	757
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	2	586	19	8	880
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	79	71	1478	659	23	2104
Arrive On Green	0.04	0.04	0.41	0.41	0.01	0.58
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	27	2	586	19	8	880
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.4	0.0	2.9	0.2	0.1	3.3
Cycle Q Clear(g_c), s	0.4	0.0	2.9	0.2	0.1	3.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	79	71	1478	659	23	2104
V/C Ratio(X)	0.34	0.03	0.40	0.03	0.34	0.42
Avail Cap(c_a), veh/h	1888	1680	3579	1596	1162	3579
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.6	11.4	5.2	4.4	12.2	2.9
Incr Delay (d2), s/veh	5.3	0.3	0.3	0.0	3.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.9	11.7	5.5	4.4	15.3	3.1
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	29		605			888
Approach Delay, s/veh	16.5		5.4			3.2
Approach LOS	B		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	19.8		5.1	4.3	15.5
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	5.3		2.4	2.1	4.9
Green Ext Time (p_c), s	8.1		0.1	0.0	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	318	0	410	0	165	18	0	721	47
Future Volume (veh/h)	0	0	0	318	0	410	0	165	18	0	721	47
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				370	0	477	0	192	0	0	838	0
Peak Hour Factor				0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1179	0	952	0	1305		0	1305	
Arrive On Green				0.34	0.00	0.34	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				370	0	477	0	192	0	0	838	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.4	0.0	5.9	0.0	1.6	0.0	0.0	8.4	0.0
Cycle Q Clear(g_c), s				3.4	0.0	5.9	0.0	1.6	0.0	0.0	8.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1179	0	952	0	1305		0	1305	
V/C Ratio(X)				0.31	0.00	0.50	0.00	0.15		0.00	0.64	
Avail Cap(c_a), veh/h				2011	0	1624	0	2068		0	2068	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				10.8	0.0	11.6	0.0	9.4	0.0	0.0	11.6	0.0
Incr Delay (d2), s/veh				0.4	0.0	1.0	0.0	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	1.5	0.0	0.4	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				11.1	0.0	12.5	0.0	9.5	0.0	0.0	12.2	0.0
LnGrp LOS				B		B		A			B	
Approach Vol, veh/h					847			192			838	
Approach Delay, s/veh					11.9			9.5			12.2	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		6	8
Phs Duration (G+Y+Rc), s	22.6		22.6	21.1
Change Period (Y+Rc), s	6.8		6.8	6.4
Max Green Setting (Gmax), s	25.0		25.0	25.0
Max Q Clear Time (g_c+I1), s	3.6		10.4	7.9
Green Ext Time (p_c), s	1.2		5.4	6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	11.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	35	0	0	0	0	153	452	0	574	464
Future Volume (veh/h)	30	0	35	0	0	0	0	153	452	0	574	464
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	32	0	37				0	161	0	0	604	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	217	0	193				0	1341		0	1341	
Arrive On Green	0.12	0.00	0.12				0.00	0.37	0.00	0.00	0.37	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	32	0	37				0	161	0	0	604	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.4	0.0	0.6				0.0	0.8	0.0	0.0	3.4	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.6				0.0	0.8	0.0	0.0	3.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	217	0	193				0	1341		0	1341	
V/C Ratio(X)	0.15	0.00	0.19				0.00	0.12		0.00	0.45	
Avail Cap(c_a), veh/h	1344	0	1196				0	3352		0	3352	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	0.0	10.7				0.0	5.6	0.0	0.0	6.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6				0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				0.0	0.1	0.0	0.0	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	0.0	11.3				0.0	5.6	0.0	0.0	6.7	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		69						161			604	
Approach Delay, s/veh		11.1						5.6			6.7	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	10.0	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	2.8	2.6	5.4
Green Ext Time (p_c), s	1.0	0.2	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	4	5	15	1	99	0	487	8	128	460	21
Future Volume (veh/h)	19	4	5	15	1	99	0	487	8	128	460	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	4	5	16	1	108	0	529	9	139	500	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	269	228	58	253	214	4	977	436	243	952	806
Arrive On Green	0.04	0.14	0.14	0.03	0.13	0.13	0.00	0.27	0.27	0.13	0.50	0.50
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	21	4	5	16	1	108	0	529	9	139	500	23
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	0.6	0.1	0.1	0.4	0.0	3.2	0.0	6.4	0.2	3.7	9.1	0.4
Cycle Q Clear(g_c), s	0.6	0.1	0.1	0.4	0.0	3.2	0.0	6.4	0.2	3.7	9.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	269	228	58	253	214	4	977	436	243	952	806
V/C Ratio(X)	0.29	0.01	0.02	0.28	0.00	0.50	0.00	0.54	0.02	0.57	0.53	0.03
Avail Cap(c_a), veh/h	519	716	606	519	716	606	519	1712	764	533	952	806
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	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	18.9	18.9	24.2	19.3	20.6	0.0	16.0	13.7	20.8	8.7	6.5
Incr Delay (d2), s/veh	0.8	0.0	0.1	1.0	0.0	2.8	0.0	1.2	0.0	0.8	1.3	0.0
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	0.2	0.0	0.0	0.2	0.0	1.2	0.0	2.3	0.1	1.4	2.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.7	19.0	19.0	25.2	19.3	23.4	0.0	17.2	13.8	21.6	9.9	6.5
LnGrp LOS	C	B	B	C	B	C		B	B	C	A	A
Approach Vol, veh/h		30			125			538			662	
Approach Delay, s/veh		23.0			23.6			17.1			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	19.6	6.9	12.9	0.0	31.4	7.4	12.5
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.7	8.4	2.4	2.1	0.0	11.1	2.6	5.2
Green Ext Time (p_c), s	0.1	5.5	0.0	0.0	0.0	4.9	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	208	36	49	127	58	19	101	55	57	153	18
Future Vol, veh/h	42	208	36	49	127	58	19	101	55	57	153	18
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	221	38	52	135	62	20	107	59	61	163	19
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	10.7	10.2	12	13.9
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	11%	100%	0%	0%	100%	0%	0%	25%
Vol Thru, %	58%	0%	100%	66%	0%	100%	42%	67%
Vol Right, %	31%	0%	0%	34%	0%	0%	58%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	175	42	139	105	49	85	100	228
LT Vol	19	42	0	0	49	0	0	57
Through Vol	101	0	139	69	0	85	42	153
RT Vol	55	0	0	36	0	0	58	18
Lane Flow Rate	186	45	148	112	52	90	107	243
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.323	0.085	0.259	0.189	0.1	0.16	0.177	0.429
Departure Headway (Hd)	6.251	6.82	6.309	6.064	6.909	6.397	5.983	6.369
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	524	568	589	517	558	597	563
Service Time	4.016	4.583	4.071	3.826	4.677	4.165	3.751	4.13
HCM Lane V/C Ratio	0.325	0.086	0.261	0.19	0.101	0.161	0.179	0.432
HCM Control Delay, s/veh	12	10.2	11.3	10.2	10.5	10.4	10	13.9
HCM Lane LOS	B	B	B	B	B	B	A	B
HCM 95th-tile Q	1.4	0.3	1	0.7	0.3	0.6	0.6	2.1

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	87	25	0	38	27	38	104	5	46	126	53
Future Vol, veh/h	20	87	25	0	38	27	38	104	5	46	126	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	95	27	0	41	29	41	113	5	50	137	58
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.4	8.8	9.8	9.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	100%	0%	0%	0%	27%	0%
Vol Thru, %	73%	0%	0%	78%	100%	58%	73%	0%
Vol Right, %	0%	100%	0%	22%	0%	42%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	5	20	112	0	65	172	53
LT Vol	38	0	20	0	0	0	46	0
Through Vol	104	0	0	87	0	38	126	0
RT Vol	0	5	0	25	0	27	0	53
Lane Flow Rate	154	5	22	122	0	71	187	58
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.234	0.007	0.037	0.184	0	0.106	0.279	0.073
Departure Headway (Hd)	5.46	4.62	6.101	5.44	5.701	5.408	5.379	4.54
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	654	769	584	656	0	658	666	784
Service Time	3.225	2.384	3.867	3.205	3.476	3.183	3.137	2.297
HCM Lane V/C Ratio	0.235	0.007	0.038	0.186	0	0.108	0.281	0.074
HCM Control Delay, s/veh	9.9	7.4	9.1	9.4	8.5	8.8	10.2	7.7
HCM Lane LOS	A	A	A	A	N	A	B	A
HCM 95th-tile Q	0.9	0	0.1	0.7	0	0.4	1.1	0.2

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.1	0.1	0.7	0.2	0.5	0.1	1.7	3.7	0.6	0.1	0.3	0.1
Total Del/Veh (s)	8.8	10.5	12.0	13.3	14.3	4.3	17.8	31.2	11.9	8.6	13.3	10.1
Stop Delay (hr)	0.0	0.1	0.4	0.1	0.3	0.1	1.4	1.5	0.2	0.0	0.1	0.1
Stop Del/Veh (s)	7.8	6.1	7.1	6.1	6.9	4.8	15.3	12.6	4.6	6.0	7.5	7.4

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.2
Denied Del/Veh (s)		0.5
Total Delay (hr)	0.0	8.1
Total Del/Veh (s)	4.6	18.0
Stop Delay (hr)	0.0	4.4
Stop Del/Veh (s)	5.1	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	11	40	131	11	38	23	773	94	16	254	37
Future Volume (veh/h)	13	11	40	131	11	38	23	773	94	16	254	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	11	42	136	11	40	24	805	98	17	265	39
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	388	324	275	388	324	275	83	1578	704	62	1535	685
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.44	0.44	0.03	0.43	0.43
Sat Flow, veh/h	1375	1900	1610	1373	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	14	11	42	136	11	40	24	805	98	17	265	39
Grp Sat Flow(s),veh/h/ln	1375	1900	1610	1373	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.2	1.0	4.1	0.2	0.9	0.6	7.3	1.6	0.4	2.0	0.6
Cycle Q Clear(g_c), s	0.6	0.2	1.0	4.3	0.2	0.9	0.6	7.3	1.6	0.4	2.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	324	275	388	324	275	83	1578	704	62	1535	685
V/C Ratio(X)	0.04	0.03	0.15	0.35	0.03	0.15	0.29	0.51	0.14	0.28	0.17	0.06
Avail Cap(c_a), veh/h	1442	1780	1508	1439	1780	1508	608	2386	1064	608	2386	1064
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	1.00	1.00
Uniform Delay (d), s/veh	15.8	15.6	15.9	17.4	15.6	15.9	20.7	9.2	7.6	21.2	8.0	7.6
Incr Delay (d2), s/veh	0.1	0.1	0.6	1.3	0.1	0.6	0.7	0.7	0.2	0.9	0.1	0.1
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	0.1	0.1	0.3	1.2	0.1	0.3	0.2	1.9	0.4	0.2	0.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	15.6	16.5	18.6	15.6	16.4	21.4	9.8	7.8	22.1	8.2	7.7
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		67			187			927			321	
Approach Delay, s/veh		16.2			18.0			9.9			8.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	24.4		13.6	6.4	24.9		13.6
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1
Max Q Clear Time (g_c+I1), s	2.6	4.0		6.3	2.4	9.3		3.0
Green Ext Time (p_c), s	0.0	3.6		1.5	0.0	10.4		0.5

Intersection Summary		
HCM 7th Control Delay, s/veh	11.0	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	2	899	13	5	425
Future Volume (veh/h)	13	2	899	13	5	425
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	2	956	14	5	452
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	45	40	1884	840	15	2397
Arrive On Green	0.02	0.02	0.52	0.52	0.01	0.66
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	14	2	956	14	5	452
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.2	0.0	5.1	0.1	0.1	1.4
Cycle Q Clear(g_c), s	0.2	0.0	5.1	0.1	0.1	1.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	45	40	1884	840	15	2397
V/C Ratio(X)	0.31	0.05	0.51	0.02	0.34	0.19
Avail Cap(c_a), veh/h	1574	1401	2983	1331	969	2983
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.3	14.2	4.6	3.4	14.7	1.9
Incr Delay (d2), s/veh	8.1	1.1	0.3	0.0	4.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.4	15.3	5.0	3.5	19.7	2.0
LnGrp LOS	C	B	A	A	B	A
Approach Vol, veh/h	16		970			457
Approach Delay, s/veh	21.5		5.0			2.2
Approach LOS	C		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	25.1		4.7	4.2	20.9
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	3.4		2.2	2.1	7.1
Green Ext Time (p_c), s	4.0		0.0	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	326	0	711	0	213	30	0	426	22
Future Volume (veh/h)	0	0	0	326	0	711	0	213	30	0	426	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				347	0	756	0	227	0	0	453	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1557	0	1257	0	866		0	866	
Arrive On Green				0.44	0.00	0.44	0.00	0.24	0.00	0.00	0.24	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				347	0	756	0	227	0	0	453	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				2.5	0.0	8.4	0.0	2.1	0.0	0.0	4.5	0.0
Cycle Q Clear(g_c), s				2.5	0.0	8.4	0.0	2.1	0.0	0.0	4.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1557	0	1257	0	866		0	866	
V/C Ratio(X)				0.22	0.00	0.60	0.00	0.26		0.00	0.52	
Avail Cap(c_a), veh/h				2105	0	1699	0	2164		0	2164	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				7.2	0.0	8.8	0.0	12.9	0.0	0.0	13.8	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.1	0.0	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	1.9	0.0	0.7	0.0	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.3	0.0	9.9	0.0	13.0	0.0	0.0	14.4	0.0
LnGrp LOS				A		A		B			B	
Approach Vol, veh/h					1103			227			453	
Approach Delay, s/veh					9.1			13.0			14.4	
Approach LOS					A			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	16.8		16.8		24.9			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	4.1		6.5		10.4			
Green Ext Time (p_c), s	1.4		3.0		8.1			

Intersection Summary		
HCM 7th Control Delay, s/veh	10.9	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	19	0	0	0	0	220	395	0	458	294
Future Volume (veh/h)	23	0	19	0	0	0	0	220	395	0	458	294
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	26	0	21				0	247	0	0	515	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	160	0	143				0	1388		0	1388	
Arrive On Green	0.09	0.00	0.09				0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	26	0	21				0	247	0	0	515	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.3	0.0	0.3				0.0	1.2	0.0	0.0	2.7	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.3				0.0	1.2	0.0	0.0	2.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	160	0	143				0	1388		0	1388	
V/C Ratio(X)	0.16	0.00	0.15				0.00	0.18		0.00	0.37	
Avail Cap(c_a), veh/h	1392	0	1238				0	3471		0	3471	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	10.9				0.0	5.3	0.0	0.0	5.7	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.6				0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1				0.0	0.1	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.5	0.0	11.5				0.0	5.4	0.0	0.0	5.9	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		47						247			515	
Approach Delay, s/veh		11.5						5.4			5.9	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	9.1	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	3.2	2.3	4.7
Green Ext Time (p_c), s	1.6	0.1	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.1
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	4	3	15	7	147	6	459	5	105	332	38
Future Volume (veh/h)	49	4	3	15	7	147	6	459	5	105	332	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	5	3	17	8	169	7	528	6	121	382	44
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	151	365	310	60	270	229	27	937	418	222	684	580
Arrive On Green	0.08	0.19	0.19	0.03	0.14	0.14	0.01	0.26	0.26	0.12	0.36	0.36
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	56	5	3	17	8	169	7	528	6	121	382	44
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	1.6	0.1	0.1	0.5	0.2	5.5	0.2	7.0	0.2	3.5	8.9	1.0
Cycle Q Clear(g_c), s	1.6	0.1	0.1	0.5	0.2	5.5	0.2	7.0	0.2	3.5	8.9	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	365	310	60	270	229	27	937	418	222	684	580
V/C Ratio(X)	0.37	0.01	0.01	0.28	0.03	0.74	0.26	0.56	0.01	0.55	0.56	0.08
Avail Cap(c_a), veh/h	483	666	564	483	666	564	483	1593	711	496	852	722
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	1.00	1.00
Uniform Delay (d), s/veh	23.9	18.0	18.0	26.0	20.3	22.6	26.8	17.7	15.1	22.7	14.1	11.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.1	7.0	1.9	1.4	0.0	0.8	2.0	0.2
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	0.6	0.0	0.0	0.2	0.1	2.2	0.1	2.6	0.1	1.3	3.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	18.0	18.0	26.9	20.4	29.6	28.7	19.1	15.2	23.5	16.1	11.7
LnGrp LOS	C	B	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		64			194			541			547	
Approach Delay, s/veh		23.6			29.0			19.2			17.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	20.0	7.1	16.3	6.1	25.5	9.9	13.5
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	6.7	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.5	9.0	2.5	2.1	2.2	10.9	3.6	7.5
Green Ext Time (p_c), s	0.1	5.3	0.0	0.0	0.0	3.8	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	262	26	38	165	47	28	146	66	40	85	21
Future Vol, veh/h	44	262	26	38	165	47	28	146	66	40	85	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	279	28	40	176	50	30	155	70	43	90	22
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	11.3	10.6	14.1	12.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	12%	100%	0%	0%	100%	0%	0%	27%
Vol Thru, %	61%	0%	100%	77%	0%	100%	54%	58%
Vol Right, %	28%	0%	0%	23%	0%	0%	46%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	44	175	113	38	110	102	146
LT Vol	28	44	0	0	38	0	0	40
Through Vol	146	0	175	87	0	110	55	85
RT Vol	66	0	0	26	0	0	47	21
Lane Flow Rate	255	47	186	121	40	117	109	155
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.446	0.089	0.325	0.206	0.078	0.209	0.184	0.287
Departure Headway (Hd)	6.293	6.812	6.301	6.136	6.948	6.436	6.106	6.651
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	569	524	569	582	513	555	584	537
Service Time	4.059	4.58	4.068	3.904	4.722	4.21	3.879	4.426
HCM Lane V/C Ratio	0.448	0.09	0.327	0.208	0.078	0.211	0.187	0.289
HCM Control Delay, s/veh	14.1	10.3	12.1	10.5	10.3	10.9	10.3	12.1
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	2.3	0.3	1.4	0.8	0.3	0.8	0.7	1.2

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	35	17	4	54	35	35	120	0	30	103	24
Future Vol, veh/h	45	35	17	4	54	35	35	120	0	30	103	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	51	39	19	4	61	39	39	135	0	34	116	27
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9	8.9	10	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	23%	0%	100%	0%	100%	0%	23%	0%
Vol Thru, %	77%	100%	0%	67%	0%	61%	77%	0%
Vol Right, %	0%	0%	0%	33%	0%	39%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	0	45	52	4	89	133	24
LT Vol	35	0	45	0	4	0	30	0
Through Vol	120	0	0	35	0	54	103	0
RT Vol	0	0	0	17	0	35	0	24
Lane Flow Rate	174	0	51	58	4	100	149	27
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.259	0	0.085	0.086	0.008	0.147	0.222	0.034
Departure Headway (Hd)	5.358	5.245	6.043	5.307	6.058	5.275	5.36	4.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	667	0	591	672	589	677	666	784
Service Time	3.113	2.999	3.803	3.067	3.816	3.033	3.115	2.297
HCM Lane V/C Ratio	0.261	0	0.086	0.086	0.007	0.148	0.224	0.034
HCM Control Delay, s/veh	10	8	9.4	8.6	8.9	8.9	9.7	7.5
HCM Lane LOS	A	N	A	A	A	A	A	A
HCM 95th-tile Q	1	0	0.3	0.3	0	0.5	0.8	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.2	2.9	0.2	0.4	0.0	0.2	0.9	0.2	0.2	1.2	0.5
Total Del/Veh (s)	5.4	11.4	22.6	9.1	12.3	3.2	7.7	16.3	7.2	7.3	16.2	10.1
Stop Delay (hr)	0.0	0.1	2.3	0.1	0.2	0.0	0.1	0.3	0.1	0.1	0.7	0.3
Stop Del/Veh (s)	4.2	6.4	17.8	3.8	5.7	3.8	5.9	5.6	3.5	4.3	8.5	7.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.4
Denied Del/Veh (s)		0.8
Total Delay (hr)	0.0	6.9
Total Del/Veh (s)	3.4	14.7
Stop Delay (hr)	0.0	4.4
Stop Del/Veh (s)	3.8	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	17	38	87	10	14	34	313	161	34	672	22
Future Volume (veh/h)	14	17	38	87	10	14	34	313	161	34	672	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	20	44	101	12	16	40	364	187	40	781	26
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	378	309	262	366	309	262	126	1503	671	126	1503	671
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.07	0.42	0.42	0.07	0.42	0.42
Sat Flow, veh/h	1404	1900	1610	1359	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	16	20	44	101	12	16	40	364	187	40	781	26
Grp Sat Flow(s),veh/h/ln	1404	1900	1610	1359	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.4	1.1	3.1	0.2	0.4	1.0	3.0	3.5	1.0	7.4	0.4
Cycle Q Clear(g_c), s	0.7	0.4	1.1	3.5	0.2	0.4	1.0	3.0	3.5	1.0	7.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	309	262	366	309	262	126	1503	671	126	1503	671
V/C Ratio(X)	0.04	0.06	0.17	0.28	0.04	0.06	0.32	0.24	0.28	0.32	0.52	0.04
Avail Cap(c_a), veh/h	1440	1746	1480	1394	1746	1480	596	2340	1044	596	2340	1044
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	1.00	1.00
Uniform Delay (d), s/veh	16.5	16.2	16.5	17.7	16.2	16.2	20.3	8.7	8.8	20.3	10.0	7.9
Incr Delay (d2), s/veh	0.1	0.2	0.7	1.0	0.1	0.2	0.5	0.2	0.6	0.5	0.8	0.1
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	0.1	0.2	0.4	0.9	0.1	0.1	0.4	0.8	0.9	0.4	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.6	16.4	17.2	18.7	16.3	16.5	20.8	8.9	9.4	20.8	10.7	8.0
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	B	A
Approach Vol, veh/h		80			129			591			847	
Approach Delay, s/veh		16.9			18.2			9.9			11.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	24.4		13.3	8.1	24.4		13.3				
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9				
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1				
Max Q Clear Time (g_c+I1), s	3.0	9.4		5.5	3.0	5.5		3.1				
Green Ext Time (p_c), s	0.0	9.7		1.0	0.0	6.2		0.6				

Intersection Summary		
HCM 7th Control Delay, s/veh	11.5	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	2	508	16	7	763
Future Volume (veh/h)	23	2	508	16	7	763
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	2	591	19	8	887
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	79	70	1484	662	23	2109
Arrive On Green	0.04	0.04	0.41	0.41	0.01	0.58
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	27	2	591	19	8	887
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.4	0.0	2.9	0.2	0.1	3.4
Cycle Q Clear(g_c), s	0.4	0.0	2.9	0.2	0.1	3.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	79	70	1484	662	23	2109
V/C Ratio(X)	0.34	0.03	0.40	0.03	0.34	0.42
Avail Cap(c_a), veh/h	1882	1675	3568	1591	1158	3568
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.6	11.4	5.2	4.4	12.2	2.9
Incr Delay (d2), s/veh	5.3	0.3	0.3	0.0	3.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.9	11.8	5.5	4.4	15.4	3.1
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	29		610			895
Approach Delay, s/veh	16.6		5.4			3.2
Approach LOS	B		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	19.9		5.1	4.3	15.6
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	5.4		2.4	2.1	4.9
Green Ext Time (p_c), s	8.2		0.1	0.0	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	325	0	412	0	167	21	0	727	47
Future Volume (veh/h)	0	0	0	325	0	412	0	167	21	0	727	47
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				378	0	479	0	194	0	0	845	0
Peak Hour Factor				0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1182	0	954	0	1310		0	1310	
Arrive On Green				0.34	0.00	0.34	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				378	0	479	0	194	0	0	845	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.5	0.0	5.9	0.0	1.6	0.0	0.0	8.6	0.0
Cycle Q Clear(g_c), s				3.5	0.0	5.9	0.0	1.6	0.0	0.0	8.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1182	0	954	0	1310		0	1310	
V/C Ratio(X)				0.32	0.00	0.50	0.00	0.15		0.00	0.65	
Avail Cap(c_a), veh/h				1999	0	1613	0	2055		0	2055	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				10.8	0.0	11.6	0.0	9.4	0.0	0.0	11.6	0.0
Incr Delay (d2), s/veh				0.4	0.0	1.0	0.0	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	1.6	0.0	0.4	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				11.2	0.0	12.6	0.0	9.5	0.0	0.0	12.3	0.0
LnGrp LOS				B		B		A			B	
Approach Vol, veh/h					857			194			845	
Approach Delay, s/veh					12.0			9.5			12.3	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		6	8
Phs Duration (G+Y+Rc), s	22.7		22.7	21.2
Change Period (Y+Rc), s	6.8		6.8	6.4
Max Green Setting (Gmax), s	25.0		25.0	25.0
Max Q Clear Time (g_c+I1), s	3.6		10.6	7.9
Green Ext Time (p_c), s	1.2		5.4	6.9

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	37	0	0	0	0	159	468	0	583	468
Future Volume (veh/h)	30	0	37	0	0	0	0	159	468	0	583	468
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	32	0	39				0	167	0	0	614	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	221	0	197				0	1337		0	1337	
Arrive On Green	0.12	0.00	0.12				0.00	0.37	0.00	0.00	0.37	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	32	0	39				0	167	0	0	614	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.4	0.0	0.6				0.0	0.8	0.0	0.0	3.5	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.6				0.0	0.8	0.0	0.0	3.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	221	0	197				0	1337		0	1337	
V/C Ratio(X)	0.14	0.00	0.20				0.00	0.12		0.00	0.46	
Avail Cap(c_a), veh/h	1340	0	1193				0	3342		0	3342	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	0.0	10.7				0.0	5.6	0.0	0.0	6.5	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6				0.0	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				0.0	0.1	0.0	0.0	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.9	0.0	11.2				0.0	5.7	0.0	0.0	6.7	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		71						167			614	
Approach Delay, s/veh		11.1						5.7			6.7	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	10.1	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	2.8	2.6	5.5
Green Ext Time (p_c), s	1.0	0.2	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	4	5	15	1	109	0	497	8	131	464	25
Future Volume (veh/h)	22	4	5	15	1	109	0	497	8	131	464	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	4	5	16	1	118	0	540	9	142	504	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	281	238	57	255	216	3	983	438	242	950	805
Arrive On Green	0.05	0.15	0.15	0.03	0.13	0.13	0.00	0.27	0.27	0.13	0.50	0.50
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	24	4	5	16	1	118	0	540	9	142	504	27
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	0.7	0.1	0.1	0.5	0.0	3.6	0.0	6.7	0.2	3.8	9.4	0.4
Cycle Q Clear(g_c), s	0.7	0.1	0.1	0.5	0.0	3.6	0.0	6.7	0.2	3.8	9.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	281	238	57	255	216	3	983	438	242	950	805
V/C Ratio(X)	0.29	0.01	0.02	0.28	0.00	0.55	0.00	0.55	0.02	0.59	0.53	0.03
Avail Cap(c_a), veh/h	510	704	596	510	704	596	510	1683	751	524	950	805
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	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	19.0	19.0	24.6	19.5	21.1	0.0	16.2	13.9	21.2	8.9	6.6
Incr Delay (d2), s/veh	0.7	0.0	0.1	1.0	0.0	3.2	0.0	1.3	0.0	0.8	1.3	0.0
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	0.3	0.0	0.0	0.2	0.0	1.3	0.0	2.4	0.1	1.4	2.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.8	19.0	19.0	25.6	19.5	24.3	0.0	17.5	13.9	22.1	10.2	6.7
LnGrp LOS	C	B	B	C	B	C		B	B	C	B	A
Approach Vol, veh/h		33			135			549			673	
Approach Delay, s/veh		23.2			24.4			17.4			12.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	19.9	7.0	13.4	0.0	31.8	7.6	12.7
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.8	8.7	2.5	2.1	0.0	11.4	2.7	5.6
Green Ext Time (p_c), s	0.1	5.5	0.0	0.0	0.0	4.9	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	257	36	49	169	58	19	102	55	57	156	18
Future Vol, veh/h	42	257	36	49	169	58	19	102	55	57	156	18
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	273	38	52	180	62	20	109	59	61	166	19
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	11.6	10.9	12.7	14.9
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	11%	100%	0%	0%	100%	0%	0%	25%
Vol Thru, %	58%	0%	100%	70%	0%	100%	49%	68%
Vol Right, %	31%	0%	0%	30%	0%	0%	51%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	42	171	122	49	113	114	231
LT Vol	19	42	0	0	49	0	0	57
Through Vol	102	0	171	86	0	113	56	156
RT Vol	55	0	0	36	0	0	58	18
Lane Flow Rate	187	45	182	129	52	120	122	246
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.341	0.087	0.327	0.225	0.103	0.219	0.21	0.454
Departure Headway (Hd)	6.559	6.979	6.467	6.254	7.08	6.568	6.203	6.657
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	510	552	570	503	543	574	538
Service Time	4.347	4.764	4.252	4.039	4.87	4.356	3.992	4.44
HCM Lane V/C Ratio	0.343	0.088	0.33	0.226	0.103	0.221	0.213	0.457
HCM Control Delay, s/veh	12.7	10.4	12.4	10.9	10.7	11.2	10.7	14.9
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	1.5	0.3	1.4	0.9	0.3	0.8	0.8	2.3

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	87	25	0	38	27	38	105	5	46	129	53
Future Vol, veh/h	20	87	25	0	38	27	38	105	5	46	129	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	95	27	0	41	29	41	114	5	50	140	58
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.4	8.8	9.8	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	100%	0%	0%	0%	26%	0%
Vol Thru, %	73%	0%	0%	78%	100%	58%	74%	0%
Vol Right, %	0%	100%	0%	22%	0%	42%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	143	5	20	112	0	65	175	53
LT Vol	38	0	20	0	0	0	46	0
Through Vol	105	0	0	87	0	38	129	0
RT Vol	0	5	0	25	0	27	0	53
Lane Flow Rate	155	5	22	122	0	71	190	58
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.236	0.007	0.037	0.184	0	0.106	0.284	0.073
Departure Headway (Hd)	5.465	4.626	6.112	5.451	5.713	5.42	5.379	4.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	653	768	583	654	0	656	666	784
Service Time	3.228	2.388	3.879	3.218	3.489	3.196	3.136	2.298
HCM Lane V/C Ratio	0.237	0.007	0.038	0.187	0	0.108	0.285	0.074
HCM Control Delay, s/veh	9.9	7.4	9.1	9.5	8.5	8.8	10.3	7.7
HCM Lane LOS	A	A	A	A	N	A	B	A
HCM 95th-tile Q	0.9	0	0.1	0.7	0	0.4	1.2	0.2

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.1	0.9	0.2	0.6	0.1	1.2	4.1	0.6	0.1	0.3	0.2
Total Del/Veh (s)	6.5	11.1	13.3	13.8	16.5	4.3	14.2	35.2	12.0	6.8	12.4	9.5
Stop Delay (hr)	0.0	0.1	0.6	0.1	0.3	0.1	0.9	2.1	0.3	0.1	0.1	0.1
Stop Del/Veh (s)	5.3	6.6	8.2	6.6	7.6	4.8	11.4	18.1	5.6	5.0	6.2	6.5

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.2
Denied Del/Veh (s)		0.5
Total Delay (hr)	0.0	8.3
Total Del/Veh (s)	5.8	18.0
Stop Delay (hr)	0.0	4.8
Stop Del/Veh (s)	6.2	10.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	11	40	131	11	38	23	781	94	16	261	37
Future Volume (veh/h)	13	11	40	131	11	38	23	781	94	16	261	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	11	42	136	11	40	24	814	98	17	272	39
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	387	323	274	386	323	274	83	1586	707	62	1543	688
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.44	0.44	0.03	0.43	0.43
Sat Flow, veh/h	1375	1900	1610	1373	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	14	11	42	136	11	40	24	814	98	17	272	39
Grp Sat Flow(s),veh/h/ln	1375	1900	1610	1373	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.2	1.0	4.1	0.2	1.0	0.6	7.4	1.6	0.4	2.1	0.6
Cycle Q Clear(g_c), s	0.6	0.2	1.0	4.4	0.2	1.0	0.6	7.4	1.6	0.4	2.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	387	323	274	386	323	274	83	1586	707	62	1543	688
V/C Ratio(X)	0.04	0.03	0.15	0.35	0.03	0.15	0.29	0.51	0.14	0.28	0.18	0.06
Avail Cap(c_a), veh/h	1436	1772	1502	1433	1772	1502	605	2376	1060	605	2376	1060
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	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.6	16.0	17.5	15.6	15.9	20.8	9.2	7.6	21.3	8.0	7.6
Incr Delay (d2), s/veh	0.1	0.1	0.6	1.3	0.1	0.6	0.7	0.7	0.2	0.9	0.1	0.1
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	0.1	0.1	0.3	1.2	0.1	0.3	0.2	2.0	0.4	0.2	0.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	15.7	16.6	18.7	15.7	16.5	21.5	9.8	7.8	22.1	8.2	7.7
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		67			187			936			328	
Approach Delay, s/veh		16.3			18.1			9.9			8.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	24.6		13.6	6.4	25.1		13.6				
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9				
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1				
Max Q Clear Time (g_c+I1), s	2.6	4.1		6.4	2.4	9.4		3.0				
Green Ext Time (p_c), s	0.0	3.7		1.5	0.0	10.5		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	11.0	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	2	907	13	5	432
Future Volume (veh/h)	13	2	907	13	5	432
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	2	965	14	5	460
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	45	40	1891	844	15	2402
Arrive On Green	0.02	0.02	0.52	0.52	0.01	0.67
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	14	2	965	14	5	460
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.2	0.0	5.2	0.1	0.1	1.5
Cycle Q Clear(g_c), s	0.2	0.0	5.2	0.1	0.1	1.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	45	40	1891	844	15	2402
V/C Ratio(X)	0.31	0.05	0.51	0.02	0.34	0.19
Avail Cap(c_a), veh/h	1567	1394	2970	1325	964	2970
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.4	14.3	4.6	3.4	14.8	1.9
Incr Delay (d2), s/veh	8.1	1.1	0.3	0.0	4.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.5	15.4	5.0	3.4	19.7	2.0
LnGrp LOS	C	B	A	A	B	A
Approach Vol, veh/h	16		979			465
Approach Delay, s/veh	21.6		5.0			2.2
Approach LOS	C		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	25.3		4.7	4.2	21.0
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	3.5		2.2	2.1	7.2
Green Ext Time (p_c), s	4.1		0.0	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	345	0	716	0	216	33	0	433	22
Future Volume (veh/h)	0	0	0	345	0	716	0	216	33	0	433	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				367	0	762	0	230	0	0	461	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1567	0	1265	0	861		0	861	
Arrive On Green				0.45	0.00	0.45	0.00	0.24	0.00	0.00	0.24	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				367	0	762	0	230	0	0	461	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				2.7	0.0	8.5	0.0	2.2	0.0	0.0	4.7	0.0
Cycle Q Clear(g_c), s				2.7	0.0	8.5	0.0	2.2	0.0	0.0	4.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1567	0	1265	0	861		0	861	
V/C Ratio(X)				0.23	0.00	0.60	0.00	0.27		0.00	0.54	
Avail Cap(c_a), veh/h				2094	0	1690	0	2153		0	2153	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				7.2	0.0	8.8	0.0	13.0	0.0	0.0	13.9	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.1	0.0	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	1.9	0.0	0.7	0.0	0.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.3	0.0	9.9	0.0	13.2	0.0	0.0	14.6	0.0
LnGrp LOS				A		A		B			B	
Approach Vol, veh/h					1129			230			461	
Approach Delay, s/veh					9.1			13.2			14.6	
Approach LOS					A			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	16.8		16.8		25.1			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	4.2		6.7		10.5			
Green Ext Time (p_c), s	1.4		3.0		8.2			

Intersection Summary		
HCM 7th Control Delay, s/veh	11.0	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	23	0	0	0	0	225	407	0	480	297
Future Volume (veh/h)	23	0	23	0	0	0	0	225	407	0	480	297
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	26	0	26				0	253	0	0	539	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	174	0	155				0	1377		0	1377	
Arrive On Green	0.10	0.00	0.10				0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	26	0	26				0	253	0	0	539	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.3	0.0	0.4				0.0	1.2	0.0	0.0	2.8	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.4				0.0	1.2	0.0	0.0	2.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	174	0	155				0	1377		0	1377	
V/C Ratio(X)	0.15	0.00	0.17				0.00	0.18		0.00	0.39	
Avail Cap(c_a), veh/h	1380	0	1228				0	3442		0	3442	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.9	0.0	10.9				0.0	5.4	0.0	0.0	5.9	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6				0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1				0.0	0.1	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.3	0.0	11.5				0.0	5.5	0.0	0.0	6.1	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		52						253			539	
Approach Delay, s/veh		11.4						5.5			6.1	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	9.3	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	3.2	2.4	4.8
Green Ext Time (p_c), s	1.6	0.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	6.3
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	4	3	15	7	153	6	466	5	116	344	41
Future Volume (veh/h)	53	4	3	15	7	153	6	466	5	116	344	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	5	3	17	8	176	7	536	6	133	395	47
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	158	381	323	60	278	236	27	935	417	225	687	582
Arrive On Green	0.09	0.20	0.20	0.03	0.15	0.15	0.01	0.26	0.26	0.12	0.36	0.36
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	61	5	3	17	8	176	7	536	6	133	395	47
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	1.8	0.1	0.1	0.5	0.2	5.9	0.2	7.3	0.2	3.9	9.5	1.1
Cycle Q Clear(g_c), s	1.8	0.1	0.1	0.5	0.2	5.9	0.2	7.3	0.2	3.9	9.5	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	381	323	60	278	236	27	935	417	225	687	582
V/C Ratio(X)	0.39	0.01	0.01	0.28	0.03	0.75	0.26	0.57	0.01	0.59	0.58	0.08
Avail Cap(c_a), veh/h	472	650	551	472	650	551	472	1556	694	485	832	705
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	1.00	1.00
Uniform Delay (d), s/veh	24.3	18.1	18.1	26.6	20.6	23.1	27.5	18.2	15.5	23.3	14.5	11.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.1	7.0	1.9	1.5	0.0	0.9	2.1	0.2
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	0.7	0.0	0.0	0.2	0.1	2.4	0.1	2.7	0.1	1.5	3.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	18.1	18.1	27.6	20.7	30.1	29.4	19.6	15.6	24.3	16.6	12.0
LnGrp LOS	C	B	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		69			201			549			575	
Approach Delay, s/veh		24.1			29.5			19.7			18.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	20.3	7.2	17.0	6.1	26.1	10.2	14.0
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	5.9	9.3	2.5	2.1	2.2	11.5	3.8	7.9
Green Ext Time (p_c), s	0.1	5.3	0.0	0.0	0.0	3.9	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	303	26	38	212	47	28	149	66	40	87	21
Future Vol, veh/h	44	303	26	38	212	47	28	149	66	40	87	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	322	28	40	226	50	30	159	70	43	93	22
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	12.2	11.3	15.2	12.8
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	12%	100%	0%	0%	100%	0%	0%	27%
Vol Thru, %	61%	0%	100%	80%	0%	100%	60%	59%
Vol Right, %	27%	0%	0%	20%	0%	0%	40%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	243	44	202	127	38	141	118	148
LT Vol	28	44	0	0	38	0	0	40
Through Vol	149	0	202	101	0	141	71	87
RT Vol	66	0	0	26	0	0	47	21
Lane Flow Rate	259	47	215	135	40	150	125	157
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.472	0.091	0.386	0.237	0.08	0.275	0.219	0.304
Departure Headway (Hd)	6.567	6.98	6.468	6.321	7.106	6.593	6.306	6.948
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	510	552	563	500	540	565	513
Service Time	4.353	4.769	4.257	4.11	4.902	4.389	4.102	4.746
HCM Lane V/C Ratio	0.475	0.092	0.389	0.24	0.08	0.278	0.221	0.306
HCM Control Delay, s/veh	15.2	10.5	13.3	11.1	10.5	11.9	10.9	12.8
HCM Lane LOS	C	B	B	B	B	B	B	B
HCM 95th-tile Q	2.5	0.3	1.8	0.9	0.3	1.1	0.8	1.3

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	35	17	4	54	35	35	123	0	30	105	24
Future Vol, veh/h	45	35	17	4	54	35	35	123	0	30	105	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	51	39	19	4	61	39	39	138	0	34	118	27
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9	9	10	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	22%	0%	100%	0%	100%	0%	22%	0%
Vol Thru, %	78%	100%	0%	67%	0%	61%	78%	0%
Vol Right, %	0%	0%	0%	33%	0%	39%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	158	0	45	52	4	89	135	24
LT Vol	35	0	45	0	4	0	30	0
Through Vol	123	0	0	35	0	54	105	0
RT Vol	0	0	0	17	0	35	0	24
Lane Flow Rate	178	0	51	58	4	100	152	27
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.264	0	0.085	0.086	0.008	0.147	0.226	0.034
Departure Headway (Hd)	5.358	5.247	6.056	5.32	6.071	5.288	5.361	4.545
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	0	589	670	587	674	667	783
Service Time	3.114	3.003	3.82	3.083	3.834	3.05	3.117	2.301
HCM Lane V/C Ratio	0.266	0	0.087	0.087	0.007	0.148	0.228	0.034
HCM Control Delay, s/veh	10	8	9.4	8.6	8.9	9	9.7	7.5
HCM Lane LOS	A	N	A	A	A	A	A	A
HCM 95th-tile Q	1.1	0	0.3	0.3	0	0.5	0.9	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.4	3.6	0.2	0.4	0.0	0.2	0.9	0.1	0.2	1.1	0.5
Total Del/Veh (s)	7.0	13.2	24.2	8.9	11.8	3.2	8.7	15.7	5.9	7.8	14.8	10.6
Stop Delay (hr)	0.0	0.2	2.8	0.1	0.2	0.0	0.2	0.4	0.1	0.1	0.5	0.3
Stop Del/Veh (s)	5.7	8.0	19.0	4.0	5.6	3.6	7.0	6.5	3.6	5.5	7.1	7.3

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.4
Denied Del/Veh (s)		0.9
Total Delay (hr)	0.0	7.7
Total Del/Veh (s)	4.0	15.1
Stop Delay (hr)	0.0	5.1
Stop Del/Veh (s)	4.4	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	21	43	35	9	9	41	300	70	36	709	28
Future Volume (veh/h)	13	21	43	35	9	9	41	300	70	36	709	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	22	45	37	9	9	43	316	74	38	746	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	366	280	237	349	280	237	134	1516	676	122	1491	665
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.07	0.42	0.42	0.07	0.41	0.41
Sat Flow, veh/h	1417	1900	1610	1355	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	14	22	45	37	9	9	43	316	74	38	746	29
Grp Sat Flow(s),veh/h/ln	1417	1900	1610	1355	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.4	1.1	1.1	0.2	0.2	1.0	2.5	1.2	0.9	6.7	0.5
Cycle Q Clear(g_c), s	0.6	0.4	1.1	1.5	0.2	0.2	1.0	2.5	1.2	0.9	6.7	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	280	237	349	280	237	134	1516	676	122	1491	665
V/C Ratio(X)	0.04	0.08	0.19	0.11	0.03	0.04	0.32	0.21	0.11	0.31	0.50	0.04
Avail Cap(c_a), veh/h	1512	1816	1539	1445	1816	1539	620	2434	1085	620	2434	1085
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	1.00	1.00
Uniform Delay (d), s/veh	16.3	16.2	16.5	16.9	16.1	16.1	19.3	8.1	7.8	19.6	9.6	7.7
Incr Delay (d2), s/veh	0.1	0.3	0.9	0.3	0.1	0.2	0.5	0.2	0.2	0.5	0.7	0.1
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	0.1	0.2	0.4	0.3	0.1	0.1	0.4	0.6	0.3	0.3	1.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.4	16.5	17.4	17.2	16.2	16.3	19.8	8.3	8.0	20.1	10.3	7.8
LnGrp LOS	B	B	B	B	B	B	B	A	A	C	B	A
Approach Vol, veh/h		81			55			433			813	
Approach Delay, s/veh		17.0			16.9			9.4			10.7	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	23.5		12.4	7.9	23.8		12.4
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1
Max Q Clear Time (g_c+I1), s	3.0	8.7		3.5	2.9	4.5		3.1
Green Ext Time (p_c), s	0.0	9.5		0.4	0.0	4.5		0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	10.9	
HCM 7th LOS	B	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	2	407	17	7	735
Future Volume (veh/h)	24	2	407	17	7	735
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	25	2	428	18	7	774
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	75	67	1284	573	21	1968
Arrive On Green	0.04	0.04	0.36	0.36	0.01	0.55
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	25	2	428	18	7	774
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.3	0.0	1.9	0.2	0.1	2.8
Cycle Q Clear(g_c), s	0.3	0.0	1.9	0.2	0.1	2.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	75	67	1284	573	21	1968
V/C Ratio(X)	0.33	0.03	0.33	0.03	0.34	0.39
Avail Cap(c_a), veh/h	2092	1862	3965	1769	1287	3965
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.5	10.3	5.3	4.7	11.0	3.0
Incr Delay (d2), s/veh	5.5	0.4	0.2	0.0	3.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.9	10.7	5.5	4.8	14.6	3.2
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	27		446			781
Approach Delay, s/veh	15.6		5.5			3.3
Approach LOS	B		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	17.6		4.9	4.3	13.3
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	4.8		2.3	2.1	3.9
Green Ext Time (p_c), s	7.2		0.1	0.0	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	371	0	330	0	159	42	0	750	44
Future Volume (veh/h)	0	0	0	371	0	330	0	159	42	0	750	44
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				391	0	347	0	167	0	0	789	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1067	0	861	0	1307		0	1307	
Arrive On Green				0.30	0.00	0.30	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				391	0	347	0	167	0	0	789	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.4	0.0	3.8	0.0	1.2	0.0	0.0	7.1	0.0
Cycle Q Clear(g_c), s				3.4	0.0	3.8	0.0	1.2	0.0	0.0	7.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1067	0	861	0	1307		0	1307	
V/C Ratio(X)				0.37	0.00	0.40	0.00	0.13		0.00	0.60	
Avail Cap(c_a), veh/h				2221	0	1793	0	2284		0	2284	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				10.8	0.0	10.9	0.0	8.4	0.0	0.0	10.3	0.0
Incr Delay (d2), s/veh				0.5	0.0	0.7	0.0	0.1	0.0	0.0	0.5	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	1.0	0.0	0.3	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				11.3	0.0	11.6	0.0	8.5	0.0	0.0	10.8	0.0
LnGrp LOS				B		B		A			B	
Approach Vol, veh/h					738			167			789	
Approach Delay, s/veh					11.4			8.5			10.8	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	21.1		21.1		18.4			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	3.2		9.1		5.8			
Green Ext Time (p_c), s	1.0		5.3		6.2			

Intersection Summary		
HCM 7th Control Delay, s/veh	10.9	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	73	0	0	0	0	170	594	0	679	442
Future Volume (veh/h)	31	0	73	0	0	0	0	170	594	0	679	442
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	33	0	77				0	179	0	0	715	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	289	0	257				0	1391		0	1391	
Arrive On Green	0.16	0.00	0.16				0.00	0.39	0.00	0.00	0.39	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	33	0	77				0	179	0	0	715	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.5	0.0	1.3				0.0	1.0	0.0	0.0	4.6	0.0
Cycle Q Clear(g_c), s	0.5	0.0	1.3				0.0	1.0	0.0	0.0	4.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	289	0	257				0	1391		0	1391	
V/C Ratio(X)	0.11	0.00	0.30				0.00	0.13		0.00	0.51	
Avail Cap(c_a), veh/h	1202	0	1069				0	2997		0	2997	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	11.2				0.0	6.0	0.0	0.0	7.1	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.8				0.0	0.0	0.0	0.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4				0.0	0.2	0.0	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	0.0	11.9				0.0	6.0	0.0	0.0	7.5	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		110						179			715	
Approach Delay, s/veh		11.7						6.0			7.5	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	18.5	11.6	18.5
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	3.0	3.3	6.6
Green Ext Time (p_c), s	1.1	0.3	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	6	5	22	2	153	0	588	18	239	483	30
Future Volume (veh/h)	23	6	5	22	2	153	0	588	18	239	483	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	6	5	23	2	161	0	619	19	252	508	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	80	258	219	77	256	217	3	1022	456	305	1018	862
Arrive On Green	0.04	0.14	0.14	0.04	0.13	0.13	0.00	0.28	0.28	0.17	0.54	0.54
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	24	6	5	23	2	161	0	619	19	252	508	32
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	0.8	0.2	0.2	0.7	0.1	5.6	0.0	8.7	0.5	7.9	9.9	0.6
Cycle Q Clear(g_c), s	0.8	0.2	0.2	0.7	0.1	5.6	0.0	8.7	0.5	7.9	9.9	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	258	219	77	256	217	3	1022	456	305	1018	862
V/C Ratio(X)	0.30	0.02	0.02	0.30	0.01	0.74	0.00	0.61	0.04	0.83	0.50	0.04
Avail Cap(c_a), veh/h	455	628	532	455	628	532	455	1501	670	468	1018	862
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	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	21.9	21.9	27.1	21.9	24.3	0.0	18.1	15.2	23.5	8.6	6.4
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.8	0.0	7.5	0.0	1.5	0.1	4.0	1.0	0.0
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	0.3	0.1	0.1	0.3	0.0	2.3	0.0	3.2	0.2	3.2	3.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.8	21.9	21.9	27.9	21.9	31.8	0.0	19.7	15.3	27.5	9.7	6.5
LnGrp LOS	C	C	C	C	C	C		B	B	C	A	A
Approach Vol, veh/h		35			186			638			792	
Approach Delay, s/veh		26.0			31.2			19.5			15.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	22.2	7.8	13.6	0.0	37.0	7.9	13.6
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	9.9	10.7	2.7	2.2	0.0	11.9	2.8	7.6
Green Ext Time (p_c), s	0.2	5.9	0.0	0.0	0.0	4.9	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	270	46	28	177	58	27	111	50	61	117	24
Future Vol, veh/h	59	270	46	28	177	58	27	111	50	61	117	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	62	284	48	29	186	61	28	117	53	64	123	25
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	11.5	10.8	13.1	13.9
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	14%	100%	0%	0%	100%	0%	0%	30%
Vol Thru, %	59%	0%	100%	66%	0%	100%	50%	58%
Vol Right, %	27%	0%	0%	34%	0%	0%	50%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	188	59	180	136	28	118	117	202
LT Vol	27	59	0	0	28	0	0	61
Through Vol	111	0	180	90	0	118	59	117
RT Vol	50	0	0	46	0	0	58	24
Lane Flow Rate	198	62	189	143	29	124	123	213
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.361	0.119	0.335	0.243	0.058	0.226	0.212	0.396
Departure Headway (Hd)	6.57	6.874	6.362	6.12	7.053	6.541	6.185	6.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	544	519	563	583	505	545	576	534
Service Time	4.353	4.651	4.139	3.897	4.838	4.325	3.969	4.492
HCM Lane V/C Ratio	0.364	0.119	0.336	0.245	0.057	0.228	0.214	0.399
HCM Control Delay, s/veh	13.1	10.6	12.3	10.9	10.3	11.2	10.6	13.9
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	1.6	0.4	1.5	0.9	0.2	0.9	0.8	1.9

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	102	31	0	30	35	9	163	9	44	139	14
Future Vol, veh/h	14	102	31	0	30	35	9	163	9	44	139	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	107	33	0	32	37	9	172	9	46	146	15
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.6	8.7	10	10.2
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	0%	100%	0%	0%	0%	24%	0%
Vol Thru, %	95%	0%	0%	77%	100%	46%	76%	0%
Vol Right, %	0%	100%	0%	23%	0%	54%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	9	14	133	0	65	183	14
LT Vol	9	0	14	0	0	0	44	0
Through Vol	163	0	0	102	0	30	139	0
RT Vol	0	9	0	31	0	35	0	14
Lane Flow Rate	181	9	15	140	0	68	193	15
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.269	0.012	0.025	0.211	0	0.102	0.29	0.019
Departure Headway (Hd)	5.341	4.609	6.102	5.434	5.722	5.342	5.414	4.588
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	770	583	657	0	665	661	774
Service Time	3.107	2.375	3.872	3.204	3.502	3.122	3.18	2.353
HCM Lane V/C Ratio	0.271	0.012	0.026	0.213	0	0.102	0.292	0.019
HCM Control Delay, s/veh	10.1	7.4	9	9.7	8.5	8.7	10.4	7.4
HCM Lane LOS	B	A	A	A	N	A	B	A
HCM 95th-tile Q	1.1	0	0.1	0.8	0	0.3	1.2	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.0	0.1	0.7	0.2	0.8	0.1	1.9	4.8	0.5	0.1	0.3	0.2
Total Del/Veh (s)	8.1	10.9	11.5	15.4	15.2	5.1	20.5	36.1	10.4	8.5	14.1	10.4
Stop Delay (hr)	0.0	0.1	0.4	0.1	0.4	0.1	1.7	2.7	0.2	0.1	0.2	0.1
Stop Del/Veh (s)	7.0	6.4	6.7	6.5	7.4	5.5	18.3	20.1	4.3	6.6	7.6	7.4

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.2
Denied Del/Veh (s)		0.4
Total Delay (hr)	0.0	9.8
Total Del/Veh (s)	4.5	19.8
Stop Delay (hr)	0.0	6.1
Stop Del/Veh (s)	5.0	12.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	11	42	41	13	41	24	825	44	12	261	49
Future Volume (veh/h)	23	11	42	41	13	41	24	825	44	12	261	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	11	44	43	14	43	25	859	46	12	272	51
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	373	304	258	375	304	258	86	1634	729	45	1551	692
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1368	1900	1610	1370	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	24	11	44	43	14	43	25	859	46	12	272	51
Grp Sat Flow(s),veh/h/ln	1368	1900	1610	1370	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.7	0.2	1.0	1.2	0.3	1.0	0.6	7.6	0.7	0.3	2.1	0.8
Cycle Q Clear(g_c), s	0.9	0.2	1.0	1.4	0.3	1.0	0.6	7.6	0.7	0.3	2.1	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	304	258	375	304	258	86	1634	729	45	1551	692
V/C Ratio(X)	0.06	0.04	0.17	0.11	0.05	0.17	0.29	0.53	0.06	0.27	0.18	0.07
Avail Cap(c_a), veh/h	1449	1800	1525	1453	1800	1525	615	2412	1076	615	2412	1076
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	1.00	1.00
Uniform Delay (d), s/veh	16.2	15.8	16.1	16.4	15.8	16.1	20.4	8.7	6.9	21.3	7.8	7.5
Incr Delay (d2), s/veh	0.2	0.1	0.7	0.3	0.1	0.7	0.7	0.7	0.1	1.2	0.1	0.1
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	0.2	0.1	0.4	0.3	0.1	0.4	0.2	2.0	0.2	0.1	0.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.4	15.9	16.8	16.7	15.9	16.8	21.1	9.4	6.9	22.4	8.0	7.6
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		79			100			930			335	
Approach Delay, s/veh		16.6			16.6			9.6			8.4	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	24.4		13.0	6.0	25.4		13.0
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1
Max Q Clear Time (g_c+I1), s	2.6	4.1		3.4	2.3	9.6		3.0
Green Ext Time (p_c), s	0.0	3.8		0.8	0.0	10.5		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	10.2
HCM 7th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	2	862	14	5	342
Future Volume (veh/h)	14	2	862	14	5	342
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	2	907	15	5	360
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	48	43	1842	821	15	2365
Arrive On Green	0.03	0.03	0.51	0.51	0.01	0.66
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	15	2	907	15	5	360
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.2	0.0	4.8	0.1	0.1	1.1
Cycle Q Clear(g_c), s	0.2	0.0	4.8	0.1	0.1	1.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	48	43	1842	821	15	2365
V/C Ratio(X)	0.31	0.05	0.49	0.02	0.34	0.15
Avail Cap(c_a), veh/h	1610	1433	3052	1361	991	3052
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.0	13.9	4.7	3.5	14.4	1.9
Incr Delay (d2), s/veh	7.7	1.0	0.3	0.0	4.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.7	14.8	5.0	3.6	19.3	2.0
LnGrp LOS	C	B	A	A	B	A
Approach Vol, veh/h	17		922			365
Approach Delay, s/veh	20.9		5.0			2.2
Approach LOS	C		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	24.4		4.8	4.2	20.2
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	3.1		2.2	2.1	6.8
Green Ext Time (p_c), s	3.1		0.0	0.0	8.1

Intersection Summary	
HCM 7th Control Delay, s/veh	4.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	407	0	702	0	271	76	0	351	16
Future Volume (veh/h)	0	0	0	407	0	702	0	271	76	0	351	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				428	0	739	0	285	0	0	369	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1567	0	1265	0	861		0	861	
Arrive On Green				0.45	0.00	0.45	0.00	0.24	0.00	0.00	0.24	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				428	0	739	0	285	0	0	369	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.2	0.0	8.2	0.0	2.7	0.0	0.0	3.6	0.0
Cycle Q Clear(g_c), s				3.2	0.0	8.2	0.0	2.7	0.0	0.0	3.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1567	0	1265	0	861		0	861	
V/C Ratio(X)				0.27	0.00	0.58	0.00	0.33		0.00	0.43	
Avail Cap(c_a), veh/h				2094	0	1691	0	2154		0	2154	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				7.3	0.0	8.7	0.0	13.2	0.0	0.0	13.5	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.0	0.0	0.3	0.0	0.0	0.4	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	1.8	0.0	0.9	0.0	0.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.5	0.0	9.7	0.0	13.5	0.0	0.0	13.9	0.0
LnGrp LOS				A		A		B			B	
Approach Vol, veh/h					1167			285			369	
Approach Delay, s/veh					8.9			13.5			13.9	
Approach LOS					A			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	16.8		16.8		25.1			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	4.7		5.6		10.2			
Green Ext Time (p_c), s	1.8		2.4		8.5			

Intersection Summary		
HCM 7th Control Delay, s/veh	10.6	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	39	0	0	0	0	364	477	0	504	215
Future Volume (veh/h)	30	0	39	0	0	0	0	364	477	0	504	215
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	32	0	41				0	383	0	0	531	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	226	0	201				0	1333		0	1333	
Arrive On Green	0.12	0.00	0.12				0.00	0.37	0.00	0.00	0.37	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	32	0	41				0	383	0	0	531	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.4	0.0	0.6				0.0	2.0	0.0	0.0	2.9	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.6				0.0	2.0	0.0	0.0	2.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	226	0	201				0	1333		0	1333	
V/C Ratio(X)	0.14	0.00	0.20				0.00	0.29		0.00	0.40	
Avail Cap(c_a), veh/h	1336	0	1189				0	3333		0	3333	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	0.0	10.6				0.0	6.0	0.0	0.0	6.3	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6				0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				0.0	0.3	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.9	0.0	11.2				0.0	6.2	0.0	0.0	6.5	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		73						383			531	
Approach Delay, s/veh		11.1						6.2			6.5	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	10.2	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	4.0	2.6	4.9
Green Ext Time (p_c), s	2.6	0.2	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	5	3	29	15	300	6	485	6	145	354	44
Future Volume (veh/h)	56	5	3	29	15	300	6	485	6	145	354	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	5	3	31	16	316	6	511	6	153	373	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	147	494	419	96	440	373	23	844	377	211	630	534
Arrive On Green	0.08	0.26	0.26	0.05	0.23	0.23	0.01	0.23	0.23	0.12	0.33	0.33
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	59	5	3	31	16	316	6	511	6	153	373	46
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	2.0	0.1	0.1	1.1	0.4	12.0	0.2	8.1	0.2	5.2	10.5	1.3
Cycle Q Clear(g_c), s	2.0	0.1	0.1	1.1	0.4	12.0	0.2	8.1	0.2	5.2	10.5	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	147	494	419	96	440	373	23	844	377	211	630	534
V/C Ratio(X)	0.40	0.01	0.01	0.32	0.04	0.85	0.26	0.61	0.02	0.73	0.59	0.09
Avail Cap(c_a), veh/h	415	572	484	415	572	484	415	1368	610	426	732	620
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	1.00	1.00
Uniform Delay (d), s/veh	28.0	17.6	17.6	29.3	19.1	23.6	31.4	21.9	18.9	27.3	17.8	14.8
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	0.1	12.1	2.2	1.8	0.0	1.8	2.5	0.2
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	0.8	0.0	0.0	0.4	0.2	5.2	0.1	3.2	0.1	2.1	4.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	17.6	17.6	30.0	19.1	35.7	33.6	23.8	18.9	29.1	20.3	14.9
LnGrp LOS	C	B	B	C	B	D	C	C	B	C	C	B
Approach Vol, veh/h		67			363			523			572	
Approach Delay, s/veh		27.3			34.5			23.8			22.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	20.7	8.7	22.4	6.1	27.0	10.5	20.6
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	7.2	10.1	3.1	2.1	2.2	12.5	4.0	14.0
Green Ext Time (p_c), s	0.1	4.9	0.0	0.0	0.0	3.5	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	318	40	29	223	54	29	103	48	47	113	30
Future Vol, veh/h	69	318	40	29	223	54	29	103	48	47	113	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	73	335	42	31	235	57	31	108	51	49	119	32
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	12.2	11.4	13.4	14
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	16%	100%	0%	0%	100%	0%	0%	25%
Vol Thru, %	57%	0%	100%	73%	0%	100%	58%	59%
Vol Right, %	27%	0%	0%	27%	0%	0%	42%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	69	212	146	29	149	128	190
LT Vol	29	69	0	0	29	0	0	47
Through Vol	103	0	212	106	0	149	74	113
RT Vol	48	0	0	40	0	0	54	30
Lane Flow Rate	189	73	223	154	31	156	135	200
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.358	0.139	0.397	0.265	0.06	0.286	0.236	0.383
Departure Headway (Hd)	6.808	6.914	6.403	6.206	7.103	6.59	6.288	6.895
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	525	516	558	575	501	541	566	518
Service Time	4.601	4.7	4.188	3.992	4.896	4.383	4.081	4.687
HCM Lane V/C Ratio	0.36	0.141	0.4	0.268	0.062	0.288	0.239	0.386
HCM Control Delay, s/veh	13.4	10.8	13.4	11.2	10.4	12	11	14
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	1.6	0.5	1.9	1.1	0.2	1.2	0.9	1.8

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	34	9	26	50	36	29	128	0	46	155	15
Future Vol, veh/h	12	34	9	26	50	36	29	128	0	46	155	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	36	9	27	53	38	31	135	0	48	163	16
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	8.8	8.9	9.7	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	18%	0%	100%	0%	100%	0%	23%	0%
Vol Thru, %	82%	100%	0%	79%	0%	58%	77%	0%
Vol Right, %	0%	0%	0%	21%	0%	42%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	157	0	12	43	26	86	201	15
LT Vol	29	0	12	0	26	0	46	0
Through Vol	128	0	0	34	0	50	155	0
RT Vol	0	0	0	9	0	36	0	15
Lane Flow Rate	165	0	13	45	27	91	212	16
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.242	0	0.022	0.069	0.046	0.133	0.308	0.019
Departure Headway (Hd)	5.281	5.188	6.168	5.515	6.091	5.29	5.244	4.426
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	678	0	578	646	586	674	683	805
Service Time	3.032	2.939	3.931	3.278	3.847	3.046	2.992	2.173
HCM Lane V/C Ratio	0.243	0	0.022	0.07	0.046	0.135	0.31	0.02
HCM Control Delay, s/veh	9.7	7.9	9.1	8.7	9.1	8.9	10.3	7.3
HCM Lane LOS	A	N	A	A	A	A	B	A
HCM 95th-tile Q	0.9	0	0.1	0.2	0.1	0.5	1.3	0.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.1	0.4	3.6	0.2	0.4	0.0	0.3	1.0	0.2	0.1	1.1	0.6
Total Del/Veh (s)	10.4	13.6	24.7	8.6	11.1	2.8	9.4	17.0	7.4	7.3	14.8	11.3
Stop Delay (hr)	0.1	0.3	2.8	0.1	0.2	0.0	0.2	0.4	0.1	0.1	0.5	0.4
Stop Del/Veh (s)	9.1	8.6	18.7	3.7	5.0	3.4	7.4	6.9	4.1	4.8	6.9	8.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.4
Denied Del/Veh (s)		0.9
Total Delay (hr)	0.0	8.0
Total Del/Veh (s)	3.3	15.5
Stop Delay (hr)	0.0	5.1
Stop Del/Veh (s)	3.8	10.0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	22	43	89	10	14	41	314	171	41	711	28
Future Volume (veh/h)	15	22	43	89	10	14	41	314	171	41	711	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	23	45	94	11	15	43	331	180	43	748	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	382	310	263	366	310	263	134	1470	656	134	1470	656
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.07	0.41	0.41	0.07	0.41	0.41
Sat Flow, veh/h	1407	1900	1610	1354	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	16	23	45	94	11	15	43	331	180	43	748	29
Grp Sat Flow(s),veh/h/ln	1407	1900	1610	1354	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.4	0.5	1.1	2.9	0.2	0.4	1.0	2.7	3.4	1.0	7.0	0.5
Cycle Q Clear(g_c), s	0.7	0.5	1.1	3.3	0.2	0.4	1.0	2.7	3.4	1.0	7.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	310	263	366	310	263	134	1470	656	134	1470	656
V/C Ratio(X)	0.04	0.07	0.17	0.26	0.04	0.06	0.32	0.23	0.27	0.32	0.51	0.04
Avail Cap(c_a), veh/h	1461	1768	1498	1405	1768	1498	604	2369	1057	604	2369	1057
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	1.00	1.00
Uniform Delay (d), s/veh	16.2	16.0	16.3	17.4	15.9	16.0	19.9	8.8	9.0	19.9	10.0	8.1
Incr Delay (d2), s/veh	0.1	0.2	0.7	0.9	0.1	0.2	0.5	0.2	0.6	0.5	0.8	0.1
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	0.1	0.2	0.4	0.8	0.1	0.1	0.4	0.7	0.9	0.4	2.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.3	16.3	17.0	18.3	16.0	16.2	20.4	9.0	9.5	20.4	10.8	8.2
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	B	A
Approach Vol, veh/h		84			120			554			820	
Approach Delay, s/veh		16.7			17.8			10.0			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	23.7		13.3	8.2	23.7		13.3				
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9				
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1				
Max Q Clear Time (g_c+I1), s	3.0	9.0		5.3	3.0	5.4		3.1				
Green Ext Time (p_c), s	0.0	9.4		0.9	0.0	5.7		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.6
HCM 7th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	2	522	17	7	791
Future Volume (veh/h)	24	2	522	17	7	791
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	25	2	549	18	7	833
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	74	66	1435	640	21	2073
Arrive On Green	0.04	0.04	0.40	0.40	0.01	0.57
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	25	2	549	18	7	833
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.3	0.0	2.6	0.2	0.1	3.1
Cycle Q Clear(g_c), s	0.3	0.0	2.6	0.2	0.1	3.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	74	66	1435	640	21	2073
V/C Ratio(X)	0.34	0.03	0.38	0.03	0.34	0.40
Avail Cap(c_a), veh/h	1946	1731	3687	1645	1197	3687
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.3	11.1	5.2	4.4	11.9	2.8
Incr Delay (d2), s/veh	5.5	0.4	0.3	0.0	3.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.8	11.5	5.4	4.5	15.4	3.0
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	27		567			840
Approach Delay, s/veh	16.4		5.4			3.2
Approach LOS	B		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	19.2		5.0	4.3	14.9
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	5.1		2.3	2.1	4.6
Green Ext Time (p_c), s	7.7		0.1	0.0	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	371	0	430	0	174	42	0	801	49
Future Volume (veh/h)	0	0	0	371	0	430	0	174	42	0	801	49
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				391	0	453	0	183	0	0	843	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1162	0	938	0	1315		0	1315	
Arrive On Green				0.33	0.00	0.33	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				391	0	453	0	183	0	0	843	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.6	0.0	5.5	0.0	1.5	0.0	0.0	8.4	0.0
Cycle Q Clear(g_c), s				3.6	0.0	5.5	0.0	1.5	0.0	0.0	8.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1162	0	938	0	1315		0	1315	
V/C Ratio(X)				0.34	0.00	0.48	0.00	0.14		0.00	0.64	
Avail Cap(c_a), veh/h				2025	0	1635	0	2083		0	2083	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				10.9	0.0	11.5	0.0	9.2	0.0	0.0	11.4	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.9	0.0	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	1.4	0.0	0.4	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				11.3	0.0	12.5	0.0	9.3	0.0	0.0	12.1	0.0
LnGrp LOS				B		B		A			B	
Approach Vol, veh/h					844			183			843	
Approach Delay, s/veh					11.9			9.3			12.1	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		6	8
Phs Duration (G+Y+Rc), s	22.6		22.6	20.7
Change Period (Y+Rc), s	6.8		6.8	6.4
Max Green Setting (Gmax), s	25.0		25.0	25.0
Max Q Clear Time (g_c+I1), s	3.5		10.4	7.5
Green Ext Time (p_c), s	1.1		5.4	6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	11.7
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	73	0	0	0	0	178	594	0	683	488
Future Volume (veh/h)	38	0	73	0	0	0	0	178	594	0	683	488
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	40	0	77				0	187	0	0	719	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	299	0	266				0	1389		0	1389	
Arrive On Green	0.17	0.00	0.17				0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	40	0	77				0	187	0	0	719	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.6	0.0	1.3				0.0	1.0	0.0	0.0	4.7	0.0
Cycle Q Clear(g_c), s	0.6	0.0	1.3				0.0	1.0	0.0	0.0	4.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	299	0	266				0	1389		0	1389	
V/C Ratio(X)	0.13	0.00	0.29				0.00	0.13		0.00	0.52	
Avail Cap(c_a), veh/h	1189	0	1058				0	2966		0	2966	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	11.1				0.0	6.1	0.0	0.0	7.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.7				0.0	0.1	0.0	0.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4				0.0	0.2	0.0	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.1	0.0	11.9				0.0	6.1	0.0	0.0	7.6	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		117						187			719	
Approach Delay, s/veh		11.6						6.1			7.6	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	18.6	11.8	18.6
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	3.0	3.3	6.7
Green Ext Time (p_c), s	1.1	0.3	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	6	5	22	2	153	0	596	18	239	487	30
Future Volume (veh/h)	23	6	5	22	2	153	0	596	18	239	487	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	6	5	23	2	161	0	627	19	252	513	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	80	258	219	77	255	216	3	1028	459	305	1020	865
Arrive On Green	0.04	0.14	0.14	0.04	0.13	0.13	0.00	0.28	0.28	0.17	0.54	0.54
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	24	6	5	23	2	161	0	627	19	252	513	32
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	0.8	0.2	0.2	0.7	0.1	5.6	0.0	8.8	0.5	7.9	10.1	0.6
Cycle Q Clear(g_c), s	0.8	0.2	0.2	0.7	0.1	5.6	0.0	8.8	0.5	7.9	10.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	258	219	77	255	216	3	1028	459	305	1020	865
V/C Ratio(X)	0.30	0.02	0.02	0.30	0.01	0.74	0.00	0.61	0.04	0.83	0.50	0.04
Avail Cap(c_a), veh/h	453	625	529	453	625	529	453	1495	667	466	1020	865
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	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	22.0	22.0	27.2	22.0	24.4	0.0	18.2	15.2	23.6	8.6	6.4
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.8	0.0	7.5	0.0	1.5	0.1	4.2	1.1	0.0
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	0.3	0.1	0.1	0.3	0.0	2.3	0.0	3.3	0.2	3.3	3.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	22.0	22.0	28.0	22.0	31.9	0.0	19.7	15.3	27.7	9.7	6.5
LnGrp LOS	C	C	C	C	C	C		B	B	C	A	A
Approach Vol, veh/h		35			186			646			797	
Approach Delay, s/veh		26.1			31.3			19.6			15.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	22.4	7.8	13.7	0.0	37.2	7.9	13.6
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	19.9	10.8	2.7	2.2	0.0	12.1	2.8	7.6
Green Ext Time (p_c), s	0.2	5.9	0.0	0.0	0.0	4.9	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	19.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	270	46	50	177	58	27	136	63	61	173	24
Future Vol, veh/h	59	270	46	50	177	58	27	136	63	61	173	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	62	284	48	53	186	61	28	143	66	64	182	25
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	12.7	11.8	15.6	17.7
HCM LOS	B	B	C	C

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	12%	100%	0%	0%	100%	0%	0%	24%
Vol Thru, %	60%	0%	100%	66%	0%	100%	50%	67%
Vol Right, %	28%	0%	0%	34%	0%	0%	50%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	59	180	136	50	118	117	258
LT Vol	27	59	0	0	50	0	0	61
Through Vol	136	0	180	90	0	118	59	173
RT Vol	63	0	0	46	0	0	58	24
Lane Flow Rate	238	62	189	143	53	124	123	272
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.461	0.129	0.367	0.268	0.112	0.246	0.232	0.534
Departure Headway (Hd)	6.982	7.487	6.971	6.727	7.658	7.142	6.783	7.077
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	516	479	515	534	468	503	528	511
Service Time	4.728	5.233	4.717	4.472	5.407	4.891	4.532	4.821
HCM Lane V/C Ratio	0.461	0.129	0.367	0.268	0.113	0.247	0.233	0.532
HCM Control Delay, s/veh	15.6	11.3	13.7	11.9	11.4	12.2	11.6	17.7
HCM Lane LOS	C	B	B	B	B	B	B	C
HCM 95th-tile Q	2.4	0.4	1.7	1.1	0.4	1	0.9	3.1

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	103	33	0	39	40	38	166	9	51	159	54
Future Vol, veh/h	21	103	33	0	39	40	38	166	9	51	159	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	108	35	0	41	42	40	175	9	54	167	57
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.2	9.4	11.1	10.7
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	100%	0%	0%	0%	24%	0%
Vol Thru, %	81%	0%	0%	76%	100%	49%	76%	0%
Vol Right, %	0%	100%	0%	24%	0%	51%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	9	21	136	0	79	210	54
LT Vol	38	0	21	0	0	0	51	0
Through Vol	166	0	0	103	0	39	159	0
RT Vol	0	9	0	33	0	40	0	54
Lane Flow Rate	215	9	22	143	0	83	221	57
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.34	0.013	0.04	0.231	0	0.133	0.348	0.076
Departure Headway (Hd)	5.695	4.893	6.489	5.812	6.131	5.772	5.665	4.835
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	636	735	553	618	0	621	639	745
Service Time	3.401	2.6	4.217	3.54	3.864	3.504	3.371	2.541
HCM Lane V/C Ratio	0.338	0.012	0.04	0.231	0	0.134	0.346	0.077
HCM Control Delay, s/veh	11.3	7.7	9.5	10.3	8.9	9.4	11.4	7.9
HCM Lane LOS	B	A	A	B	N	A	B	A
HCM 95th-tile Q	1.5	0	0.1	0.9	0	0.5	1.6	0.2

1: Marks Ave & Belmont Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	R	L	T	R	L	T	T
Denied Delay (hr)												
Denied Del/Veh (s)												
Total Delay (hr)	0.1	0.1	0.8	0.2	0.9	0.1	3.1	5.2	0.7	0.1	0.3	0.2
Total Del/Veh (s)	10.1	10.4	12.5	16.1	17.3	4.7	30.0	43.6	14.1	8.3	13.5	13.2
Stop Delay (hr)	0.1	0.1	0.5	0.1	0.5	0.1	2.9	2.7	0.3	0.0	0.2	0.2
Stop Del/Veh (s)	9.0	5.9	7.6	5.6	9.2	5.0	28.3	22.5	5.9	6.4	7.1	10.1

1: Marks Ave & Belmont Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Delay (hr)		0.2
Denied Del/Veh (s)		0.4
Total Delay (hr)	0.0	11.8
Total Del/Veh (s)	6.1	24.1
Stop Delay (hr)	0.0	7.5
Stop Del/Veh (s)	6.6	15.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	12	42	135	14	47	24	829	96	17	273	50
Future Volume (veh/h)	23	12	42	135	14	47	24	829	96	17	273	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	12	44	141	15	49	25	864	100	18	284	52
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	382	331	281	385	331	281	86	1612	719	65	1570	700
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.45	0.45	0.04	0.43	0.43
Sat Flow, veh/h	1359	1900	1610	1369	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	24	12	44	141	15	49	25	864	100	18	284	52
Grp Sat Flow(s),veh/h/ln	1359	1900	1610	1369	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.7	0.2	1.1	4.5	0.3	1.2	0.6	8.2	1.7	0.5	2.3	0.9
Cycle Q Clear(g_c), s	1.0	0.2	1.1	4.7	0.3	1.2	0.6	8.2	1.7	0.5	2.3	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	331	281	385	331	281	86	1612	719	65	1570	700
V/C Ratio(X)	0.06	0.04	0.16	0.37	0.05	0.17	0.29	0.54	0.14	0.28	0.18	0.07
Avail Cap(c_a), veh/h	1365	1706	1446	1375	1706	1446	583	2287	1020	583	2287	1020
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	1.00	1.00
Uniform Delay (d), s/veh	16.5	16.1	16.4	18.0	16.1	16.5	21.6	9.4	7.7	22.0	8.1	7.7
Incr Delay (d2), s/veh	0.2	0.1	0.6	1.4	0.1	0.7	0.7	0.7	0.2	0.9	0.2	0.1
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	0.2	0.1	0.4	1.3	0.1	0.4	0.2	2.2	0.4	0.2	0.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.7	16.2	17.0	19.4	16.2	17.2	22.3	10.2	7.9	22.9	8.3	7.9
LnGrp LOS	B	B	B	B	B	B	C	B	A	C	A	A
Approach Vol, veh/h		80			205			989			354	
Approach Delay, s/veh		16.8			18.6			10.2			9.0	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	25.7		14.1	6.6	26.2		14.1				
Change Period (Y+Rc), s	4.9	5.3		5.9	4.9	5.3		5.9				
Max Green Setting (Gmax), s	15.1	29.7		42.1	15.1	29.7		42.1				
Max Q Clear Time (g_c+I1), s	2.6	4.3		6.7	2.5	10.2		3.1				
Green Ext Time (p_c), s	0.0	4.0		1.7	0.0	10.8		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	2	918	14	5	448
Future Volume (veh/h)	14	2	918	14	5	448
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	2	966	15	5	472
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	48	43	1890	843	15	2399
Arrive On Green	0.03	0.03	0.52	0.52	0.01	0.66
Sat Flow, veh/h	1810	1610	3705	1610	1810	3705
Grp Volume(v), veh/h	15	2	966	15	5	472
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	0.2	0.0	5.2	0.1	0.1	1.5
Cycle Q Clear(g_c), s	0.2	0.0	5.2	0.1	0.1	1.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	48	43	1890	843	15	2399
V/C Ratio(X)	0.31	0.05	0.51	0.02	0.34	0.20
Avail Cap(c_a), veh/h	1563	1391	2962	1321	962	2962
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.4	14.3	4.7	3.4	14.8	1.9
Incr Delay (d2), s/veh	7.8	1.0	0.3	0.0	4.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.2	15.2	5.0	3.5	19.8	2.0
LnGrp LOS	C	B	A	A	B	A
Approach Vol, veh/h	17		981			477
Approach Delay, s/veh	21.3		5.0			2.2
Approach LOS	C		A			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	25.3		4.8	4.2	21.1
Change Period (Y+Rc), s	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s	24.7		26.0	16.0	24.7
Max Q Clear Time (g_c+I1), s	3.5		2.2	2.1	7.2
Green Ext Time (p_c), s	4.2		0.0	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	407	0	749	0	280	76	0	450	23
Future Volume (veh/h)	0	0	0	407	0	749	0	280	76	0	450	23
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	0	1900	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h				428	0	788	0	295	0	0	474	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				1600	0	1292	0	850		0	850	
Arrive On Green				0.46	0.00	0.46	0.00	0.24	0.00	0.00	0.24	0.00
Sat Flow, veh/h				3510	0	2834	0	3705	1610	0	3705	1610
Grp Volume(v), veh/h				428	0	788	0	295	0	0	474	0
Grp Sat Flow(s),veh/h/ln				1755	0	1417	0	1805	1610	0	1805	1610
Q Serve(g_s), s				3.2	0.0	9.0	0.0	2.9	0.0	0.0	4.9	0.0
Cycle Q Clear(g_c), s				3.2	0.0	9.0	0.0	2.9	0.0	0.0	4.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1600	0	1292	0	850		0	850	
V/C Ratio(X)				0.27	0.00	0.61	0.00	0.35		0.00	0.56	
Avail Cap(c_a), veh/h				2053	0	1657	0	2111		0	2111	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				7.2	0.0	8.8	0.0	13.6	0.0	0.0	14.4	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.1	0.0	0.3	0.0	0.0	0.7	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	2.0	0.0	0.9	0.0	0.0	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.4	0.0	9.9	0.0	13.9	0.0	0.0	15.1	0.0
LnGrp LOS				A		A		B			B	
Approach Vol, veh/h					1216			295			474	
Approach Delay, s/veh					9.0			13.9			15.1	
Approach LOS					A			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	16.9		16.9		25.9			
Change Period (Y+Rc), s	6.8		6.8		6.4			
Max Green Setting (Gmax), s	25.0		25.0		25.0			
Max Q Clear Time (g_c+I1), s	4.9		6.9		11.0			
Green Ext Time (p_c), s	1.9		3.1		8.5			

Intersection Summary		
HCM 7th Control Delay, s/veh	11.2	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	0	39	0	0	0	0	368	477	0	511	307
Future Volume (veh/h)	35	0	39	0	0	0	0	368	477	0	511	307
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	37	0	41				0	387	0	0	538	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	237	0	211				0	1324		0	1324	
Arrive On Green	0.13	0.00	0.13				0.00	0.37	0.00	0.00	0.37	0.00
Sat Flow, veh/h	1810	0	1610				0	3705	2834	0	3705	1610
Grp Volume(v), veh/h	37	0	41				0	387	0	0	538	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1417	0	1805	1610
Q Serve(g_s), s	0.5	0.0	0.6				0.0	2.1	0.0	0.0	3.0	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.6				0.0	2.1	0.0	0.0	3.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	237	0	211				0	1324		0	1324	
V/C Ratio(X)	0.16	0.00	0.19				0.00	0.29		0.00	0.41	
Avail Cap(c_a), veh/h	1327	0	1181				0	3310		0	3310	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.5	0.0	10.6				0.0	6.1	0.0	0.0	6.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.5				0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2				0.0	0.3	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.9	0.0	11.1				0.0	6.3	0.0	0.0	6.7	0.0
LnGrp LOS	B		B					A			A	
Approach Vol, veh/h		78						387			538	
Approach Delay, s/veh		11.0						6.3			6.7	
Approach LOS		B						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	16.9	10.4	16.9
Change Period (Y+Rc), s	6.9	6.8	6.9
Max Green Setting (Gmax), s	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	4.1	2.6	5.0
Green Ext Time (p_c), s	2.6	0.2	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	5	3	29	15	300	6	489	6	145	361	44
Future Volume (veh/h)	56	5	3	29	15	300	6	489	6	145	361	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	5	3	31	16	316	6	515	6	153	380	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	147	494	418	96	440	373	23	848	378	211	632	535
Arrive On Green	0.08	0.26	0.26	0.05	0.23	0.23	0.01	0.23	0.23	0.12	0.33	0.33
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	1900	1610
Grp Volume(v), veh/h	59	5	3	31	16	316	6	515	6	153	380	46
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1900	1610
Q Serve(g_s), s	2.0	0.1	0.1	1.1	0.4	12.1	0.2	8.2	0.2	5.2	10.7	1.3
Cycle Q Clear(g_c), s	2.0	0.1	0.1	1.1	0.4	12.1	0.2	8.2	0.2	5.2	10.7	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	147	494	418	96	440	373	23	848	378	211	632	535
V/C Ratio(X)	0.40	0.01	0.01	0.32	0.04	0.85	0.26	0.61	0.02	0.73	0.60	0.09
Avail Cap(c_a), veh/h	414	570	483	414	570	483	414	1365	609	425	730	619
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	1.00	1.00
Uniform Delay (d), s/veh	28.1	17.7	17.6	29.3	19.1	23.6	31.4	21.9	18.9	27.4	17.9	14.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	0.1	12.2	2.2	1.8	0.0	1.8	2.6	0.2
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	0.8	0.0	0.0	0.4	0.2	5.3	0.1	3.2	0.1	2.1	4.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	17.7	17.7	30.1	19.2	35.8	33.7	23.8	18.9	29.2	20.5	14.9
LnGrp LOS	C	B	B	C	B	D	C	C	B	C	C	B
Approach Vol, veh/h		67			363			527			579	
Approach Delay, s/veh		27.4			34.6			23.8			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	20.8	8.7	22.4	6.1	27.1	10.5	20.6
Change Period (Y+Rc), s	4.9	5.7	5.3	5.7	5.3	* 5.7	5.3	5.7
Max Green Setting (Gmax), s	15.1	24.3	14.7	19.3	14.7	* 25	14.7	19.3
Max Q Clear Time (g_c+I1), s	7.2	10.2	3.1	2.1	2.2	12.7	4.0	14.1
Green Ext Time (p_c), s	0.1	4.9	0.0	0.0	0.0	3.5	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	26.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	318	40	41	223	54	29	154	68	47	138	30
Future Vol, veh/h	69	318	40	41	223	54	29	154	68	47	138	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	73	335	42	43	235	57	31	162	72	49	145	32
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay, s/veh	13.6	12.6	17.5	16.4
HCM LOS	B	B	C	C

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	12%	100%	0%	0%	100%	0%	0%	22%
Vol Thru, %	61%	0%	100%	73%	0%	100%	58%	64%
Vol Right, %	27%	0%	0%	27%	0%	0%	42%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	251	69	212	146	41	149	128	215
LT Vol	29	69	0	0	41	0	0	47
Through Vol	154	0	212	106	0	149	74	138
RT Vol	68	0	0	40	0	0	54	30
Lane Flow Rate	264	73	223	154	43	156	135	226
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.524	0.152	0.436	0.292	0.093	0.314	0.26	0.463
Departure Headway (Hd)	7.138	7.544	7.028	6.83	7.742	7.225	6.921	7.368
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	505	475	511	526	462	496	517	489
Service Time	4.891	5.297	4.781	4.583	5.499	4.982	4.677	5.123
HCM Lane V/C Ratio	0.523	0.154	0.436	0.293	0.093	0.315	0.261	0.462
HCM Control Delay, s/veh	17.5	11.7	15.1	12.4	11.3	13.3	12.1	16.4
HCM Lane LOS	C	B	C	B	B	B	B	C
HCM 95th-tile Q	3	0.5	2.2	1.2	0.3	1.3	1	2.4

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	37	17	26	56	37	47	129	0	57	178	25
Future Vol, veh/h	46	37	17	26	56	37	47	129	0	57	178	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	39	18	27	59	39	49	136	0	60	187	26
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.4	9.4	10.6	11.1
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	100%	0%	100%	0%	24%	0%
Vol Thru, %	73%	100%	0%	69%	0%	60%	76%	0%
Vol Right, %	0%	0%	0%	31%	0%	40%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	0	46	54	26	93	235	25
LT Vol	47	0	46	0	26	0	57	0
Through Vol	129	0	0	37	0	56	178	0
RT Vol	0	0	0	17	0	37	0	25
Lane Flow Rate	185	0	48	57	27	98	247	26
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.286	0	0.087	0.091	0.048	0.152	0.375	0.034
Departure Headway (Hd)	5.559	5.425	6.484	5.753	6.36	5.572	5.456	4.629
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	639	0	556	626	558	636	653	764
Service Time	3.352	3.217	4.184	3.453	4.16	3.371	3.24	2.413
HCM Lane V/C Ratio	0.29	0	0.086	0.091	0.048	0.154	0.378	0.034
HCM Control Delay, s/veh	10.6	8.2	9.8	9	9.5	9.4	11.5	7.6
HCM Lane LOS	B	N	A	A	A	A	B	A
HCM 95th-tile Q	1.2	0	0.3	0.3	0.2	0.5	1.7	0.1

APPENDIX E

QUEUING ANALYSIS WORKSHEETS

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	27	134	204	48	47	21	55	94	54	49	92	68
Average Queue (ft)	13	29	79	17	26	8	30	42	30	24	49	41
95th Queue (ft)	34	76	149	39	42	22	52	63	46	46	75	65
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)		0	7								8	3
Queuing Penalty (veh)		0	10								22	8

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	42
Average Queue (ft)	11
95th Queue (ft)	29
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	19	44	38	10	10	40	343	70	34	772	26
v/c Ratio	0.05	0.05	0.11	0.12	0.02	0.02	0.12	0.14	0.06	0.10	0.33	0.02
Control Delay (s/veh)	18.9	18.8	3.4	19.3	18.7	0.1	21.0	8.2	3.0	21.0	9.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.9	18.8	3.4	19.3	18.7	0.1	21.0	8.2	3.0	21.0	9.1	0.0
Queue Length 50th (ft)	2	3	0	7	2	0	7	20	0	6	51	0
Queue Length 95th (ft)	16	20	10	32	13	0	35	62	15	31	142	0
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1282	1699	1452	1282	1699	1452	656	2581	1178	656	2581	1178
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.03	0.01	0.01	0.06	0.13	0.06	0.05	0.30	0.02

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	27	2	452	19	8	815
v/c Ratio	0.07	0.01	0.16	0.01	0.03	0.27
Control Delay (s/veh)	15.2	12.0	4.5	4.2	17.6	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.2	12.0	4.5	4.2	17.6	2.8
Queue Length 50th (ft)	4	0	0	0	1	0
Queue Length 95th (ft)	20	4	66	8	10	68
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1282	1147	2898	1300	788	3525
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.00	0.16	0.01	0.01	0.23

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	370	360	174	21	779	49
v/c Ratio	0.35	0.33	0.13	0.01	0.59	0.03
Control Delay (s/veh)	12.7	2.8	8.9	0.0	12.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	2.8	8.9	0.0	12.5	0.0
Queue Length 50th (ft)	32	0	12	0	68	0
Queue Length 95th (ft)	65	21	28	0	119	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2226	1938	2295	1615	2295	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.19	0.08	0.01	0.34	0.03

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	24	37	153	476	600	440
v/c Ratio	0.06	0.09	0.06	0.17	0.22	0.27
Control Delay (s/veh)	11.8	2.3	4.6	0.1	4.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	2.3	4.6	0.1	4.6	0.4
Queue Length 50th (ft)	3	0	0	0	0	0
Queue Length 95th (ft)	15	7	19	0	67	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1060	978	3121	2842	3121	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.04	0.05	0.17	0.19	0.27

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	4	5	16	1	108	521	9	139	496	23
v/c Ratio	0.07	0.01	0.01	0.06	0.00	0.28	0.32	0.01	0.41	0.38	0.02
Control Delay (s/veh)	25.4	25.0	0.0	25.3	26.0	4.6	15.2	0.0	25.6	7.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.4	25.0	0.0	25.3	26.0	4.6	15.2	0.0	25.6	7.2	0.0
Queue Length 50th (ft)	5	1	0	4	0	0	59	0	36	61	0
Queue Length 95th (ft)	29	10	0	24	5	22	147	0	108	196	0
Internal Link Dist (ft)		640			720		666			466	
Turn Bay Length (ft)	345		125	350		65		125	165		
Base Capacity (vph)	521	721	707	521	721	707	2020	971	535	1295	1150
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.01	0.01	0.03	0.00	0.15	0.26	0.01	0.26	0.38	0.02

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	50	53	55	30	31	55	76	78
Average Queue (ft)	21	26	35	16	30	30	36	41
95th Queue (ft)	44	46	49	38	32	44	55	61
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	TR	LT	R	LT	R
Maximum Queue (ft)	26	45	41	60	32	54	30
Average Queue (ft)	7	26	19	33	5	36	4
95th Queue (ft)	25	44	29	50	24	52	21
Link Distance (ft)		2462	765	538		2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205				25		95
Storage Blk Time (%)				8	0		
Queuing Penalty (veh)				0	0		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	49	46	84	26	67	22	139	194	88	28	48	37
Average Queue (ft)	15	17	41	17	32	15	67	101	43	11	27	21
95th Queue (ft)	40	37	68	33	54	27	117	172	70	33	41	32
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)											1	0
Queuing Penalty (veh)											1	0

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	9
95th Queue (ft)	24
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	10	42	39	10	33	24	801	44	11	252	38
v/c Ratio	0.04	0.02	0.10	0.12	0.02	0.08	0.07	0.33	0.04	0.03	0.10	0.03
Control Delay (s/veh)	17.0	16.7	3.1	17.4	16.7	1.8	19.0	7.4	1.2	18.8	6.7	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.0	16.7	3.1	17.4	16.7	1.8	19.0	7.4	1.2	18.8	6.7	0.9
Queue Length 50th (ft)	2	2	0	7	2	0	4	53	0	2	14	0
Queue Length 95th (ft)	17	14	11	34	14	6	26	158	7	16	49	4
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1347	1785	1522	1347	1785	1522	683	2689	1224	683	2689	1224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.03	0.01	0.02	0.04	0.30	0.04	0.02	0.09	0.03

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	14	2	897	14	5	339
v/c Ratio	0.04	0.01	0.27	0.01	0.02	0.10
Control Delay (s/veh)	17.5	14.5	2.8	2.9	20.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	14.5	2.8	2.9	20.0	1.1
Queue Length 50th (ft)	2	0	0	0	1	0
Queue Length 95th (ft)	18	5	136	7	10	26
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1261	1129	3278	1467	776	3414
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.27	0.01	0.01	0.10

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	347	706	217	32	348	16
v/c Ratio	0.31	0.51	0.20	0.02	0.33	0.01
Control Delay (s/veh)	9.6	2.5	10.2	0.0	10.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.6	2.5	10.2	0.0	10.9	0.0
Queue Length 50th (ft)	23	0	15	0	26	0
Queue Length 95th (ft)	45	25	34	0	52	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2531	2249	2609	1615	2609	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.31	0.08	0.02	0.13	0.01

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	20	21	243	444	507	227
v/c Ratio	0.05	0.05	0.09	0.16	0.18	0.14
Control Delay (s/veh)	12.9	0.6	4.1	0.1	4.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	0.6	4.1	0.1	4.1	0.2
Queue Length 50th (ft)	3	0	0	0	0	0
Queue Length 95th (ft)	13	2	28	0	55	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1030	953	3051	2842	3051	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.08	0.16	0.17	0.14

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	56	5	3	17	8	169	7	523	6	121	374	44
v/c Ratio	0.22	0.01	0.01	0.07	0.03	0.44	0.03	0.42	0.01	0.41	0.39	0.05
Control Delay (s/veh)	30.6	22.3	0.0	30.4	27.7	9.6	30.2	20.0	0.0	31.2	13.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.6	22.3	0.0	30.4	27.7	9.6	30.2	20.0	0.0	31.2	13.9	0.1
Queue Length 50th (ft)	20	1	0	6	3	0	2	90	0	43	85	0
Queue Length 95th (ft)	58	11	0	26	15	47	15	154	0	102	220	0
Internal Link Dist (ft)		640			720			666			466	
Turn Bay Length (ft)	345		125	350		65	255		125	165		
Base Capacity (vph)	460	664	664	460	636	653	460	1523	769	473	961	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.00	0.04	0.01	0.26	0.02	0.34	0.01	0.26	0.39	0.05

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	31	74	56	31	55	77	75	55
Average Queue (ft)	21	31	37	15	32	37	36	34
95th Queue (ft)	42	48	52	39	44	57	54	49
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LT	LT	R
Maximum Queue (ft)	26	45	24	45	55	52	31
Average Queue (ft)	10	17	3	20	33	30	9
95th Queue (ft)	28	36	16	34	45	42	31
Link Distance (ft)		2462		765	538	2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205		200				95
Storage Blk Time (%)					8		
Queuing Penalty (veh)					0		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	51	108	230	49	50	22	74	78	76	53	98	70
Average Queue (ft)	11	26	85	20	28	8	34	46	33	25	54	43
95th Queue (ft)	34	57	157	43	48	22	59	71	57	47	88	67
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)		0	6								9	4
Queuing Penalty (veh)		0	8								25	12

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	21
Average Queue (ft)	13
95th Queue (ft)	28
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	20	44	101	12	16	40	359	187	40	774	26
v/c Ratio	0.05	0.04	0.10	0.29	0.03	0.04	0.13	0.18	0.19	0.13	0.39	0.03
Control Delay (s/veh)	18.3	18.1	3.0	20.6	18.0	0.1	23.8	10.3	3.1	23.8	11.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	18.1	3.0	20.6	18.0	0.1	23.8	10.3	3.1	23.8	11.6	0.0
Queue Length 50th (ft)	3	3	0	19	2	0	8	25	0	8	62	0
Queue Length 95th (ft)	18	21	10	69	15	0	39	73	30	39	161	0
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1227	1636	1401	1217	1636	1401	598	2356	1118	598	2356	1083
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.08	0.01	0.01	0.07	0.15	0.17	0.07	0.33	0.02

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	27	2	586	19	8	880
v/c Ratio	0.07	0.01	0.20	0.01	0.03	0.29
Control Delay (s/veh)	15.7	12.5	4.5	4.4	18.0	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.7	12.5	4.5	4.4	18.0	2.8
Queue Length 50th (ft)	4	0	0	0	1	0
Queue Length 95th (ft)	20	4	86	9	10	75
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1255	1124	3011	1350	772	3495
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.00	0.19	0.01	0.01	0.25

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	370	477	192	21	838	55
v/c Ratio	0.36	0.41	0.14	0.01	0.61	0.03
Control Delay (s/veh)	13.3	2.9	8.8	0.0	12.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.3	2.9	8.8	0.0	12.6	0.0
Queue Length 50th (ft)	33	0	14	0	75	0
Queue Length 95th (ft)	68	23	31	0	128	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2164	1938	2231	1615	2231	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.25	0.09	0.01	0.38	0.03

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	32	37	161	476	604	488
v/c Ratio	0.08	0.09	0.07	0.17	0.25	0.30
Control Delay (s/veh)	12.9	2.4	5.7	0.1	5.9	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	2.4	5.7	0.1	5.9	0.5
Queue Length 50th (ft)	8	0	9	0	41	0
Queue Length 95th (ft)	18	7	20	0	67	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	997	924	2817	2842	2817	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.04	0.06	0.17	0.21	0.30

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	4	5	16	1	108	529	9	139	500	23
v/c Ratio	0.07	0.01	0.01	0.06	0.00	0.28	0.32	0.01	0.41	0.39	0.02
Control Delay (s/veh)	25.5	25.3	0.0	25.5	26.0	4.6	15.2	0.0	25.8	7.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.5	25.3	0.0	25.5	26.0	4.6	15.2	0.0	25.8	7.2	0.0
Queue Length 50th (ft)	5	1	0	4	0	0	60	0	36	61	0
Queue Length 95th (ft)	29	10	0	24	5	22	150	0	109	197	0
Internal Link Dist (ft)		640			720		666			466	
Turn Bay Length (ft)	345		125	350		65		125	165		
Base Capacity (vph)	517	715	703	517	715	703	2015	969	531	1297	1151
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.01	0.01	0.03	0.00	0.15	0.26	0.01	0.26	0.39	0.02

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	51	53	55	52	52	81	73	92
Average Queue (ft)	25	31	39	25	28	31	41	45
95th Queue (ft)	45	44	57	46	41	54	61	69
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	TR	LT	R	LT	R
Maximum Queue (ft)	25	46	43	76	32	54	52
Average Queue (ft)	8	27	20	37	6	38	22
95th Queue (ft)	26	43	31	57	26	56	45
Link Distance (ft)		2462	765	538		2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205				25		95
Storage Blk Time (%)				12	0		
Queuing Penalty (veh)				1	1		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	49	46	104	47	69	45	162	186	102	49	64	66
Average Queue (ft)	11	17	38	20	31	17	76	103	43	14	28	21
95th Queue (ft)	36	42	68	39	56	35	130	167	76	40	52	47
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)			0								2	1
Queuing Penalty (veh)			0								2	1

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	9
95th Queue (ft)	24
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	11	42	136	11	40	24	805	98	17	265	39
v/c Ratio	0.04	0.02	0.09	0.35	0.02	0.08	0.08	0.40	0.10	0.05	0.13	0.04
Control Delay (s/veh)	16.4	16.2	2.5	19.4	16.2	2.3	23.3	10.6	3.4	23.3	9.2	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.4	16.2	2.5	19.4	16.2	2.3	23.3	10.6	3.4	23.3	9.2	0.9
Queue Length 50th (ft)	2	2	0	26	2	0	5	66	0	4	18	0
Queue Length 95th (ft)	17	15	10	95	15	9	30	190	26	24	61	5
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1254	1672	1430	1254	1672	1430	592	2454	1129	592	2454	1124
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.11	0.01	0.03	0.04	0.33	0.09	0.03	0.11	0.03

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	14	2	956	14	5	452
v/c Ratio	0.04	0.01	0.29	0.01	0.02	0.13
Control Delay (s/veh)	18.2	15.5	2.8	2.9	20.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.2	15.5	2.8	2.9	20.6	1.0
Queue Length 50th (ft)	2	0	0	0	1	0
Queue Length 95th (ft)	19	5	147	8	11	35
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1219	1091	3286	1470	750	3402
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.29	0.01	0.01	0.13

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	347	756	227	32	453	23
v/c Ratio	0.31	0.53	0.21	0.02	0.41	0.01
Control Delay (s/veh)	9.9	2.6	10.3	0.0	11.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.9	2.6	10.3	0.0	11.6	0.0
Queue Length 50th (ft)	23	0	16	0	35	0
Queue Length 95th (ft)	49	27	37	0	71	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2470	2227	2546	1615	2546	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.34	0.09	0.02	0.18	0.01

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	26	21	247	444	515	330
v/c Ratio	0.06	0.05	0.09	0.16	0.18	0.20
Control Delay (s/veh)	12.1	0.6	4.3	0.1	4.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.1	0.6	4.3	0.1	4.4	0.3
Queue Length 50th (ft)	3	0	0	0	0	0
Queue Length 95th (ft)	14	2	28	0	56	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1050	969	3094	2842	3094	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.08	0.16	0.17	0.20

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	56	5	3	17	8	169	7	528	6	121	382	44
v/c Ratio	0.22	0.01	0.01	0.07	0.03	0.44	0.03	0.43	0.01	0.41	0.40	0.05
Control Delay (s/veh)	30.7	22.5	0.0	30.5	27.9	9.6	30.3	20.0	0.0	31.2	14.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.7	22.5	0.0	30.5	27.9	9.6	30.3	20.0	0.0	31.2	14.0	0.1
Queue Length 50th (ft)	20	1	0	6	3	0	2	91	0	43	87	0
Queue Length 95th (ft)	59	11	0	26	15	48	15	156	0	101	226	0
Internal Link Dist (ft)		640			720			666			466	
Turn Bay Length (ft)	345		125	350		65	255		125	165		
Base Capacity (vph)	460	663	663	460	636	653	460	1521	769	472	962	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.00	0.04	0.01	0.26	0.02	0.35	0.01	0.26	0.40	0.05

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	52	55	55	31	54	56	77	87
Average Queue (ft)	22	35	38	20	31	33	46	36
95th Queue (ft)	45	54	55	42	49	45	66	57
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LT	LT	R
Maximum Queue (ft)	26	46	25	46	70	55	51
Average Queue (ft)	18	19	3	23	38	35	12
95th Queue (ft)	33	32	16	38	58	49	37
Link Distance (ft)		2462		765	538	2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205		200				95
Storage Blk Time (%)					13		
Queuing Penalty (veh)					0		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	27	215	381	47	65	43	56	96	72	52	115	103
Average Queue (ft)	15	64	112	16	26	13	30	52	32	27	57	39
95th Queue (ft)	36	183	246	33	44	31	56	87	55	49	97	72
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)		0	16								12	3
Queuing Penalty (veh)		1	23								38	9

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	21
Average Queue (ft)	11
95th Queue (ft)	26
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	20	44	101	12	16	40	364	187	40	781	26
v/c Ratio	0.05	0.04	0.10	0.29	0.03	0.04	0.13	0.18	0.19	0.13	0.40	0.03
Control Delay (s/veh)	18.4	18.2	3.0	20.6	18.1	0.1	23.9	10.3	3.1	23.9	11.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.4	18.2	3.0	20.6	18.1	0.1	23.9	10.3	3.1	23.9	11.6	0.0
Queue Length 50th (ft)	3	4	0	19	2	0	8	25	0	8	63	0
Queue Length 95th (ft)	18	21	10	69	15	0	39	73	30	39	162	0
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1225	1633	1399	1216	1633	1399	598	2353	1117	598	2353	1081
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.08	0.01	0.01	0.07	0.15	0.17	0.07	0.33	0.02

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	27	2	591	19	8	887
v/c Ratio	0.07	0.01	0.20	0.01	0.03	0.29
Control Delay (s/veh)	15.7	12.5	4.5	4.4	18.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.7	12.5	4.5	4.4	18.1	2.9
Queue Length 50th (ft)	4	0	0	0	1	0
Queue Length 95th (ft)	20	4	86	9	10	76
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1255	1124	3012	1350	772	3493
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.00	0.20	0.01	0.01	0.25

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	378	479	194	24	845	55
v/c Ratio	0.37	0.41	0.14	0.01	0.62	0.03
Control Delay (s/veh)	13.4	2.9	8.9	0.0	12.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.4	2.9	8.9	0.0	12.7	0.0
Queue Length 50th (ft)	34	0	14	0	76	0
Queue Length 95th (ft)	70	23	31	0	131	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2154	1932	2220	1615	2220	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.25	0.09	0.01	0.38	0.03

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	32	39	167	493	614	493
v/c Ratio	0.08	0.09	0.07	0.17	0.25	0.31
Control Delay (s/veh)	13.0	2.6	5.7	0.1	5.9	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	2.6	5.7	0.1	5.9	0.5
Queue Length 50th (ft)	8	0	10	0	42	0
Queue Length 95th (ft)	18	8	21	0	68	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	992	920	2808	2842	2808	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.04	0.06	0.17	0.22	0.31

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	4	5	16	1	118	540	9	142	504	27
v/c Ratio	0.09	0.01	0.01	0.06	0.00	0.32	0.34	0.01	0.44	0.40	0.02
Control Delay (s/veh)	28.3	24.3	0.0	28.1	28.0	5.8	17.1	0.0	28.7	8.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.3	24.3	0.0	28.1	28.0	5.8	17.1	0.0	28.7	8.9	0.0
Queue Length 50th (ft)	6	1	0	4	0	0	62	0	37	62	0
Queue Length 95th (ft)	32	10	0	25	5	28	156	0	112	203	0
Internal Link Dist (ft)		640			720		666			466	
Turn Bay Length (ft)	345		125	350		65		125	165		
Base Capacity (vph)	492	691	684	492	680	676	1942	940	505	1251	1115
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.01	0.01	0.03	0.00	0.17	0.28	0.01	0.28	0.40	0.02

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	31	52	76	53	55	55	72	96
Average Queue (ft)	25	31	42	24	33	32	39	53
95th Queue (ft)	42	38	62	48	45	47	60	88
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	TR	LT	R	LT	R
Maximum Queue (ft)	25	67	44	56	32	70	31
Average Queue (ft)	14	26	16	38	9	36	23
95th Queue (ft)	32	47	32	56	32	54	42
Link Distance (ft)		2462	765	538		2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205				25		95
Storage Blk Time (%)				11	1		
Queuing Penalty (veh)				1	1		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	48	47	113	52	94	43	178	200	104	64	48	71
Average Queue (ft)	13	19	53	18	38	20	91	122	48	22	30	20
95th Queue (ft)	36	37	89	45	66	34	153	186	78	46	49	43
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)			0								1	0
Queuing Penalty (veh)			0								1	0

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	42
Average Queue (ft)	8
95th Queue (ft)	25
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	11	42	136	11	40	24	814	98	17	272	39
v/c Ratio	0.04	0.02	0.09	0.35	0.02	0.08	0.08	0.40	0.10	0.05	0.13	0.04
Control Delay (s/veh)	16.5	16.3	2.6	19.5	16.3	2.3	23.4	10.6	3.4	23.4	9.2	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.5	16.3	2.6	19.5	16.3	2.3	23.4	10.6	3.4	23.4	9.2	0.9
Queue Length 50th (ft)	2	2	0	26	2	0	5	67	0	4	18	0
Queue Length 95th (ft)	17	15	10	96	15	9	30	192	26	24	62	5
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1251	1668	1427	1251	1668	1427	591	2448	1127	591	2448	1122
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.11	0.01	0.03	0.04	0.33	0.09	0.03	0.11	0.03

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	14	2	965	14	5	460
v/c Ratio	0.04	0.01	0.29	0.01	0.02	0.14
Control Delay (s/veh)	18.3	15.5	2.8	2.9	20.8	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	15.5	2.8	2.9	20.8	1.0
Queue Length 50th (ft)	2	0	0	0	1	0
Queue Length 95th (ft)	19	5	149	8	11	35
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1215	1088	3286	1470	748	3402
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.29	0.01	0.01	0.14

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	367	762	230	35	461	23
v/c Ratio	0.32	0.53	0.21	0.02	0.42	0.01
Control Delay (s/veh)	10.1	2.6	10.3	0.0	11.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.1	2.6	10.3	0.0	11.7	0.0
Queue Length 50th (ft)	25	0	17	0	36	0
Queue Length 95th (ft)	53	27	38	0	73	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2451	2217	2526	1615	2526	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.34	0.09	0.02	0.18	0.01

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	26	26	253	457	539	334
v/c Ratio	0.06	0.06	0.09	0.16	0.19	0.21
Control Delay (s/veh)	11.9	1.3	4.4	0.1	4.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.9	1.3	4.4	0.1	4.4	0.3
Queue Length 50th (ft)	3	0	0	0	0	0
Queue Length 95th (ft)	15	3	29	0	58	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1055	974	3108	2842	3108	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.03	0.08	0.16	0.17	0.21

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	61	5	3	17	8	176	7	536	6	133	395	47
v/c Ratio	0.23	0.01	0.01	0.07	0.03	0.45	0.03	0.44	0.01	0.44	0.41	0.05
Control Delay (s/veh)	31.4	22.8	0.0	31.2	28.4	9.7	31.0	20.5	0.0	31.7	14.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.4	22.8	0.0	31.2	28.4	9.7	31.0	20.5	0.0	31.7	14.1	0.1
Queue Length 50th (ft)	22	1	0	6	3	0	2	94	0	48	91	0
Queue Length 95th (ft)	64	11	0	27	16	49	15	162	0	111	236	0
Internal Link Dist (ft)		640			720			666			466	
Turn Bay Length (ft)	345		125	350		65	255		125	165		
Base Capacity (vph)	463	667	666	463	640	660	463	1531	773	476	984	910
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.01	0.00	0.04	0.01	0.27	0.02	0.35	0.01	0.28	0.40	0.05

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	53	55	77	31	55	59	123	113
Average Queue (ft)	26	37	46	21	35	39	53	47
95th Queue (ft)	48	55	66	42	51	57	84	85
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LT	LT	R
Maximum Queue (ft)	25	22	24	44	56	55	31
Average Queue (ft)	19	19	3	20	36	36	18
95th Queue (ft)	33	26	16	31	54	51	41
Link Distance (ft)		2462		765	538	2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205		200				95
Storage Blk Time (%)					11		
Queuing Penalty (veh)					0		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	27	215	397	48	67	22	56	95	52	71	107	88
Average Queue (ft)	12	73	147	20	31	13	37	54	28	35	56	47
95th Queue (ft)	33	192	279	39	51	28	54	90	42	54	89	74
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)		0	26								12	6
Queuing Penalty (veh)		0	38								39	16

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	21
Average Queue (ft)	13
95th Queue (ft)	29
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	22	45	37	9	9	43	316	74	38	746	29
v/c Ratio	0.04	0.05	0.11	0.12	0.02	0.02	0.12	0.13	0.07	0.11	0.32	0.03
Control Delay (s/veh)	18.7	18.5	3.5	19.1	18.4	0.1	20.8	8.3	3.2	20.8	9.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.7	18.5	3.5	19.1	18.4	0.1	20.8	8.3	3.2	20.8	9.1	0.0
Queue Length 50th (ft)	2	4	0	7	2	0	8	17	0	7	49	0
Queue Length 95th (ft)	17	23	13	33	13	0	39	61	18	35	146	1
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1286	1704	1456	1286	1704	1456	660	2598	1186	660	2598	1186
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.03	0.01	0.01	0.07	0.12	0.06	0.06	0.29	0.02

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	25	2	428	18	7	774
v/c Ratio	0.06	0.01	0.14	0.01	0.02	0.23
Control Delay (s/veh)	13.3	11.0	3.4	3.5	15.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.3	11.0	3.4	3.5	15.6	1.7
Queue Length 50th (ft)	3	0	0	0	1	0
Queue Length 95th (ft)	20	4	65	9	10	67
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1368	1224	3157	1414	842	3591
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.00	0.14	0.01	0.01	0.22

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	391	347	167	44	789	46
v/c Ratio	0.37	0.32	0.13	0.03	0.60	0.03
Control Delay (s/veh)	12.9	2.8	9.0	0.0	12.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	2.8	9.0	0.0	12.7	0.0
Queue Length 50th (ft)	35	0	12	0	70	0
Queue Length 95th (ft)	74	23	30	0	131	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2199	1914	2267	1615	2267	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.18	0.07	0.03	0.35	0.03

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	33	77	179	625	715	465
v/c Ratio	0.08	0.18	0.08	0.22	0.30	0.29
Control Delay (s/veh)	12.5	5.4	5.9	0.2	6.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.5	5.4	5.9	0.2	6.4	0.5
Queue Length 50th (ft)	6	0	11	0	51	0
Queue Length 95th (ft)	20	21	22	0	82	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1024	950	2874	2842	2874	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.08	0.06	0.22	0.25	0.29

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	6	5	23	2	161	619	19	252	508	32
v/c Ratio	0.10	0.02	0.01	0.10	0.01	0.44	0.57	0.03	0.64	0.44	0.03
Control Delay (s/veh)	31.3	25.5	0.0	31.3	29.0	10.1	22.2	0.1	34.4	9.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	25.5	0.0	31.3	29.0	10.1	22.2	0.1	34.4	9.4	0.1
Queue Length 50th (ft)	7	2	0	7	1	0	90	0	73	63	0
Queue Length 95th (ft)	34	13	0	33	7	51	191	0	#229	222	0
Internal Link Dist (ft)		640			720		666			466	
Turn Bay Length (ft)	345		125	350		65		125	165		
Base Capacity (vph)	439	621	630	439	607	625	1452	741	451	1151	1038
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.01	0.01	0.05	0.00	0.26	0.43	0.03	0.56	0.44	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	52	75	55	31	53	58	71	77
Average Queue (ft)	26	35	39	20	34	32	44	47
95th Queue (ft)	47	52	57	41	46	52	64	73
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	TR	LT	R	LT	R
Maximum Queue (ft)	26	85	39	98	33	54	31
Average Queue (ft)	7	27	18	44	9	36	12
95th Queue (ft)	25	49	28	70	32	52	35
Link Distance (ft)		2462	765	538		2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205				25		95
Storage Blk Time (%)				14	1		
Queuing Penalty (veh)				1	1		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	66	86	86	49	86	44	233	245	98	49	48	37
Average Queue (ft)	18	26	47	19	40	17	101	113	47	17	31	22
95th Queue (ft)	46	52	78	39	68	38	183	185	79	42	52	34
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)		0	0				0	0			2	0
Queuing Penalty (veh)		0	0				2	1			2	0

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	38
Average Queue (ft)	9
95th Queue (ft)	25
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	11	44	43	14	43	25	859	46	13	272	51
v/c Ratio	0.08	0.03	0.11	0.14	0.04	0.11	0.08	0.39	0.05	0.04	0.12	0.05
Control Delay (s/veh)	17.7	17.1	3.4	18.3	17.2	3.3	19.6	8.4	1.3	19.4	7.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.7	17.1	3.4	18.3	17.2	3.3	19.6	8.4	1.3	19.4	7.2	1.6
Queue Length 50th (ft)	4	2	0	8	3	0	5	58	0	2	15	0
Queue Length 95th (ft)	25	15	12	38	18	12	28	172	7	18	53	9
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1277	1708	1460	1281	1708	1460	621	2471	1131	621	2471	1131
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.01	0.03	0.03	0.01	0.03	0.04	0.35	0.04	0.02	0.11	0.05

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	15	2	907	15	5	360
v/c Ratio	0.04	0.01	0.28	0.01	0.02	0.11
Control Delay (s/veh)	17.4	14.5	2.9	3.0	19.8	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.4	14.5	2.9	3.0	19.8	1.1
Queue Length 50th (ft)	2	0	0	0	1	0
Queue Length 95th (ft)	19	5	138	8	10	28
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1258	1126	3274	1466	774	3418
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.28	0.01	0.01	0.11

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	428	739	285	80	369	17
v/c Ratio	0.36	0.51	0.27	0.05	0.35	0.01
Control Delay (s/veh)	9.9	2.4	11.1	0.1	11.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.9	2.4	11.1	0.1	11.7	0.0
Queue Length 50th (ft)	29	0	22	0	29	0
Queue Length 95th (ft)	57	26	47	0	60	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2447	2208	2522	1615	2522	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.33	0.11	0.05	0.15	0.01

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	32	41	383	502	531	226
v/c Ratio	0.08	0.10	0.16	0.18	0.22	0.14
Control Delay (s/veh)	12.3	2.6	5.8	0.1	6.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.3	2.6	5.8	0.1	6.0	0.2
Queue Length 50th (ft)	7	0	24	0	35	0
Queue Length 95th (ft)	17	8	42	0	58	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1013	938	2848	2842	2848	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.04	0.13	0.18	0.19	0.14

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	59	5	3	31	16	316	6	511	6	153	373	46
v/c Ratio	0.21	0.01	0.01	0.09	0.05	0.58	0.02	0.47	0.01	0.45	0.42	0.05
Control Delay (s/veh)	32.1	26.2	0.0	28.1	28.3	9.0	32.3	21.9	0.0	32.2	14.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	26.2	0.0	28.1	28.3	9.0	32.3	21.9	0.0	32.2	14.8	0.1
Queue Length 50th (ft)	21	1	0	11	6	0	2	90	0	56	85	0
Queue Length 95th (ft)	66	12	0	43	24	69	15	171	0	136	245	0
Internal Link Dist (ft)		640			720			666			466	
Turn Bay Length (ft)	345		125	350		65	255		125	165		
Base Capacity (vph)	501	704	695	546	692	789	501	1657	824	514	1057	967
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.00	0.06	0.02	0.40	0.01	0.31	0.01	0.30	0.35	0.05

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	54	56	76	31	53	71	98	76
Average Queue (ft)	25	35	41	17	33	40	42	45
95th Queue (ft)	50	51	61	41	44	64	67	71
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LT	LT	R
Maximum Queue (ft)	25	22	25	44	74	55	31
Average Queue (ft)	10	17	13	21	40	37	14
95th Queue (ft)	29	29	31	40	61	54	38
Link Distance (ft)		2462		765	538	2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205		200				95
Storage Blk Time (%)					13		
Queuing Penalty (veh)					0		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	89	214	304	48	49	21	82	98	76	132	140	130
Average Queue (ft)	16	77	141	16	27	13	39	58	35	29	51	46
95th Queue (ft)	49	198	252	36	44	27	65	90	62	71	91	88
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)	0	0	28							0	9	6
Queuing Penalty (veh)	0	2	41							0	30	19

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	14
95th Queue (ft)	28
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	
Queuing Penalty (veh)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	23	45	94	11	15	43	331	180	43	748	29
v/c Ratio	0.05	0.05	0.10	0.27	0.02	0.03	0.13	0.17	0.19	0.13	0.38	0.03
Control Delay (s/veh)	18.1	17.9	3.1	20.1	17.9	0.1	23.3	10.2	3.2	23.3	11.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.1	17.9	3.1	20.1	17.9	0.1	23.3	10.2	3.2	23.3	11.5	0.1
Queue Length 50th (ft)	3	4	0	17	2	0	9	22	0	9	57	0
Queue Length 95th (ft)	19	24	12	67	15	0	42	70	33	42	163	1
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1243	1657	1418	1230	1657	1418	607	2389	1129	607	2389	1096
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.01	0.03	0.08	0.01	0.01	0.07	0.14	0.16	0.07	0.31	0.03

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	25	2	549	18	7	833
v/c Ratio	0.06	0.01	0.17	0.01	0.02	0.25
Control Delay (s/veh)	14.0	11.5	3.4	3.5	16.3	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	11.5	3.4	3.5	16.3	1.7
Queue Length 50th (ft)	3	0	0	0	1	0
Queue Length 95th (ft)	21	4	84	9	11	75
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1320	1182	3259	1460	812	3560
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.00	0.17	0.01	0.01	0.23

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	391	453	183	44	843	52
v/c Ratio	0.38	0.39	0.13	0.03	0.62	0.03
Control Delay (s/veh)	13.4	2.9	8.9	0.0	12.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.4	2.9	8.9	0.0	12.8	0.0
Queue Length 50th (ft)	36	0	13	0	77	0
Queue Length 95th (ft)	76	27	32	0	141	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2146	1916	2212	1615	2212	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.24	0.08	0.03	0.38	0.03

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	40	77	187	625	719	514
v/c Ratio	0.10	0.18	0.08	0.22	0.30	0.32
Control Delay (s/veh)	12.7	5.5	5.8	0.2	6.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	5.5	5.8	0.2	6.4	0.5
Queue Length 50th (ft)	7	0	11	0	51	0
Queue Length 95th (ft)	23	22	23	0	83	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1024	949	2873	2842	2873	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.08	0.07	0.22	0.25	0.32

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	6	5	23	2	161	627	19	252	513	32
v/c Ratio	0.10	0.02	0.01	0.10	0.01	0.44	0.58	0.03	0.64	0.45	0.03
Control Delay (s/veh)	31.4	25.5	0.0	31.4	29.0	10.1	22.2	0.1	34.5	9.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.4	25.5	0.0	31.4	29.0	10.1	22.2	0.1	34.5	9.5	0.1
Queue Length 50th (ft)	7	2	0	7	1	0	92	0	73	64	0
Queue Length 95th (ft)	34	13	0	33	7	51	194	0	#229	225	0
Internal Link Dist (ft)		640			720		666			466	
Turn Bay Length (ft)	345		125	350		65		125	165		
Base Capacity (vph)	438	619	629	438	605	624	1449	740	450	1152	1039
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.01	0.01	0.05	0.00	0.26	0.43	0.03	0.56	0.45	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	54	56	57	54	56	72	94	122
Average Queue (ft)	25	37	49	26	36	38	45	55
95th Queue (ft)	49	58	64	50	53	57	71	93
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	TR	LT	R	LT	R
Maximum Queue (ft)	25	46	43	77	35	55	31
Average Queue (ft)	12	30	19	43	10	41	29
95th Queue (ft)	31	48	31	67	33	59	38
Link Distance (ft)		2462	765	538		2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205				25		95
Storage Blk Time (%)				14	1		
Queuing Penalty (veh)				1	2		

Intersection: 1: Marks Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	R	L	T	R	L	T	T
Maximum Queue (ft)	49	47	86	68	67	65	284	272	109	49	49	66
Average Queue (ft)	18	27	49	23	36	24	121	136	50	19	29	29
95th Queue (ft)	41	47	75	52	59	43	213	224	86	45	51	52
Link Distance (ft)			987	2468	2468			2544	2544		782	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	105	105				125	230			135		50
Storage Blk Time (%)			0				3	1			1	1
Queuing Penalty (veh)			0				14	2			2	1

Intersection: 1: Marks Ave & Belmont Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	38
Average Queue (ft)	8
95th Queue (ft)	23
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	13	44	141	15	49	25	864	100	18	284	52
v/c Ratio	0.07	0.03	0.09	0.39	0.03	0.10	0.09	0.49	0.12	0.06	0.18	0.07
Control Delay (s/veh)	17.3	16.9	2.8	20.7	16.9	3.5	24.3	11.6	3.4	24.3	11.7	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.3	16.9	2.8	20.7	16.9	3.5	24.3	11.6	3.4	24.3	11.7	1.8
Queue Length 50th (ft)	4	2	0	28	3	0	5	73	0	4	20	0
Queue Length 95th (ft)	26	17	11	101	18	14	32	208	26	25	65	10
Internal Link Dist (ft)		679			2480			483			2558	
Turn Bay Length (ft)	55		55	210		210	240		270	245		220
Base Capacity (vph)	1176	1573	1350	1178	1573	1350	537	2137	997	537	2137	990
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.01	0.03	0.12	0.01	0.04	0.05	0.40	0.10	0.03	0.13	0.05

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	15	2	966	15	5	472
v/c Ratio	0.04	0.01	0.29	0.01	0.02	0.14
Control Delay (s/veh)	18.1	15.0	2.9	2.9	20.6	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.1	15.0	2.9	2.9	20.6	1.1
Queue Length 50th (ft)	2	0	0	0	1	0
Queue Length 95th (ft)	19	5	150	8	11	37
Internal Link Dist (ft)	349		568			483
Turn Bay Length (ft)	75			75	110	
Base Capacity (vph)	1216	1089	3281	1469	748	3407
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.29	0.01	0.01	0.14

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	428	788	295	80	474	24
v/c Ratio	0.36	0.55	0.27	0.05	0.43	0.01
Control Delay (s/veh)	10.3	3.1	11.0	0.1	12.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.3	3.1	11.0	0.1	12.2	0.0
Queue Length 50th (ft)	30	3	23	0	39	0
Queue Length 95th (ft)	61	33	50	0	77	0
Internal Link Dist (ft)			816		568	
Turn Bay Length (ft)	345	200		465		255
Base Capacity (vph)	2394	2174	2468	1615	2468	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.36	0.12	0.05	0.19	0.01

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	37	41	387	502	538	323
v/c Ratio	0.09	0.10	0.16	0.18	0.23	0.20
Control Delay (s/veh)	12.3	2.6	5.8	0.1	6.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.3	2.6	5.8	0.1	6.0	0.3
Queue Length 50th (ft)	9	0	24	0	36	0
Queue Length 95th (ft)	19	8	43	0	60	0
Internal Link Dist (ft)			466		816	
Turn Bay Length (ft)		515		255		475
Base Capacity (vph)	1019	943	2862	2842	2862	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.14	0.18	0.19	0.20

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	59	5	3	31	16	316	6	515	6	153	380	46
v/c Ratio	0.21	0.01	0.01	0.09	0.05	0.58	0.02	0.47	0.01	0.45	0.42	0.05
Control Delay (s/veh)	32.1	26.2	0.0	28.1	28.3	9.0	32.3	21.9	0.0	32.3	14.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	26.2	0.0	28.1	28.3	9.0	32.3	21.9	0.0	32.3	14.9	0.1
Queue Length 50th (ft)	21	1	0	11	6	0	2	91	0	56	87	0
Queue Length 95th (ft)	66	12	0	43	24	69	15	172	0	136	250	0
Internal Link Dist (ft)		640			720			666			466	
Turn Bay Length (ft)	345		125	350		65	255		125	165		
Base Capacity (vph)	501	704	694	546	692	789	501	1656	824	514	1058	967
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.00	0.06	0.02	0.40	0.01	0.31	0.01	0.30	0.36	0.05

Intersection Summary

Intersection: 7: Hughes Ave & Belmont Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	53	55	76	53	55	95	109	99
Average Queue (ft)	31	39	48	24	35	43	57	54
95th Queue (ft)	50	57	69	45	51	70	84	75
Link Distance (ft)		2468	2468		1034	1034	2514	666
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	145			160				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Hughes Ave & Nielsen Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LT	LT	R
Maximum Queue (ft)	47	44	25	44	96	94	31
Average Queue (ft)	22	21	13	22	44	45	20
95th Queue (ft)	39	34	32	37	72	69	42
Link Distance (ft)		2462		765	538	2514	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	205		200				95
Storage Blk Time (%)					16	0	
Queuing Penalty (veh)					0	0	

APPENDIX F

TASAS AND TIMS TRAFFIC COLLISION REPORTS

Crash Diagram

Primary Street:
Hughes Avenue

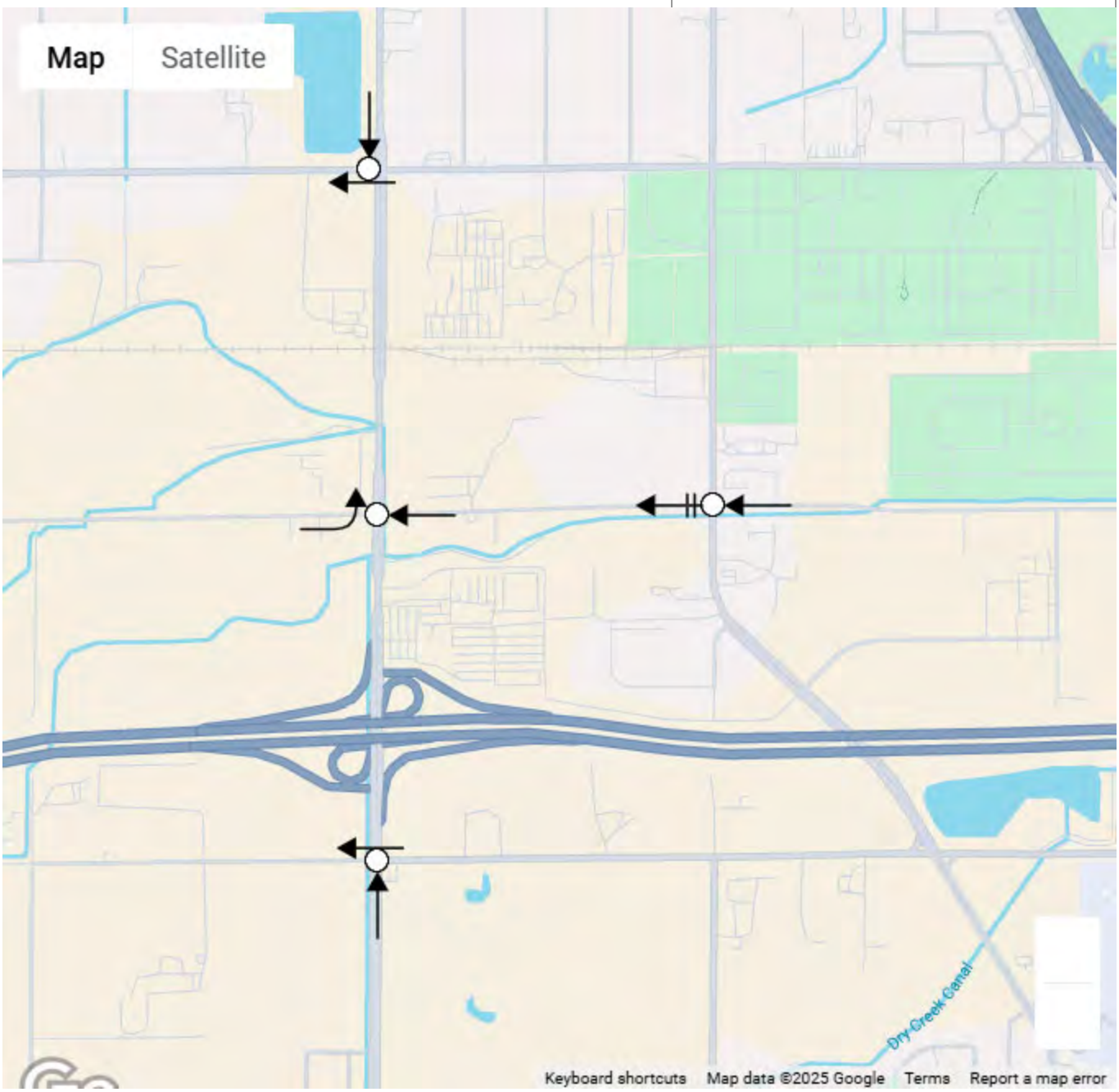
Secondary Street:
Nielsen Avenue

Time Period:
April 2021 to March 2024

Agency Name:
LSA Associates

Mapping Summary:	
Fatal Crash	0
Injury Crash	4
Mapped	4
Not Drawn	1
Total	5

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash



Date Created: 01/06/2025

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7/15/2024

BASIC AVERAGE CRASH RATE TABLE FOR INTERSECTIONS

RATE GROUP		BASE RATE	+ ADT FACTOR	PCT FAT	PCT INJ	PCT F+ I	INTERSECTION TYPE*	CONTROL TYPE	AREA	CRASH COST ($1000) F+I	CRASH COST ($1000) ALL
I	01	0.20	0.00000	0.9	33.2	34.1	F, M and S	NO CONTROL	RURAL	679.2	242.1
I	02	0.36	0.00000	2.4	43.4	45.8	F, M and S	STOP & YIELD SIGNS (EXC 4WAY)	RURAL	1048.4	488.8
I	03	0.59	0.00000	1.0	33.3	34.3	F, M and S	4 WAY STOP	RURAL	718.4	256.8
I	04	0.74	0.00000	0.6	34.2	34.8	F, M and S	SIGNALS	RURAL	549.3	201.5
I	05	0.82	0.00000	0.7	34.2	34.9	F, M and S	4 WAY FLASHERS	RURAL	589.2	216.0
I	06	0.23	0.00000	3.9	47.1	51.0	F, M and S	NO CONTROL	SUBURBAN	1319.7	682.7
I	07	0.36	0.00000	1.5	42.6	44.1	F, M and S	STOP & YIELD SIGNS (EXC 4WAY)	SUBURBAN	750.6	342.0
I	08	0.39	0.00000	0.7	30.6	31.3	F, M and S	4 WAY STOP	SUBURBAN	594.4	199.5
I	09	0.55	0.00000	0.5	39.2	39.7	F, M and S	SIGNALS	SUBURBAN	463.4	195.8
I	10	0.47	0.00000	0.8	32.0	32.8	F, M and S	4 WAY FLASHERS	SUBURBAN	621.6	217.0
I	11	0.07	0.00000	1.7	41.2	42.9	F, M and S	NO CONTROL	URBAN	829.0	365.9
I	12	0.20	0.00000	1.1	47.5	48.6	F, M and S	STOP & YIELD SIGNS (EXC 4WAY)	URBAN	599.5	300.6
I	13	0.21	0.00000	2.5	25.6	28.1	F, M and S	4 WAY STOP	URBAN	1495.4	433.2
I	14	0.33	0.00000	0.6	47.7	48.3	F, M and S	SIGNALS	URBAN	461.6	232.2
I	15	0.47	0.00000	1.2	43.4	44.6	F, M and S	4 WAY FLASHERS	URBAN	657.2	303.1
I	16	0.21	0.00000	1.7	40.1	41.8	T, Y and Z	NO CONTROL	RURAL	881.8	377.9
I	17	0.29	0.00000	1.7	39.8	41.5	T, Y and Z	STOP & YIELD SIGNS (EXC 4WAY)	RURAL	886.0	377.0
I	18	1.01	0.00000	0.5	34.9	35.4	T, Y and Z	4 WAY STOP	RURAL	505.0	189.0
I	19	0.62	0.00000	0.4	36.4	36.8	T, Y and Z	SIGNALS	RURAL	458.8	178.9
I	20	1.01	0.00000	0.5	34.9	35.4	T, Y and Z	4 WAY FLASHERS	RURAL	505.0	189.0
I	21	0.17	0.00000	0.8	41.1	41.9	T, Y and Z	NO CONTROL	SUBURBAN	550.6	242.1
I	22	0.22	0.00000	1.2	40.9	42.1	T, Y and Z	STOP & YIELD SIGNS (EXC 4WAY)	SUBURBAN	676.7	296.2
I	23	0.18	0.00000	1.7	23.1	24.8	T, Y and Z	4 WAY STOP	SUBURBAN	1213.5	315.7
I	24	0.43	0.00000	0.6	38.0	38.6	T, Y and Z	SIGNALS	SUBURBAN	503.0	206.2
I	25	0.18	0.00000	2.9	23.1	26.0	T, Y and Z	4 WAY FLASHERS	SUBURBAN	1789.8	479.9
I	26	0.08	0.00000	1.7	43.4	45.1	T, Y and Z	NO CONTROL	URBAN	802.9	372.0
I	27	0.13	0.00000	1.3	47.3	48.6	T, Y and Z	STOP & YIELD SIGNS (EXC 4WAY)	URBAN	655.1	327.6
I	28	0.11	0.00000	1.1	43.5	44.6	T, Y and Z	4 WAY STOP	URBAN	626.9	289.6
I	29	0.28	0.00000	0.9	49.1	50.0	T, Y and Z	SIGNALS	URBAN	536.9	277.5
I	30	0.11	0.00000	2.6	43.5	46.1	T, Y and Z	4 WAY FLASHERS	URBAN	1055.5	496.3
I	31	0.59	0.00000	2.1	16.4	18.5	R	YIELD ON ALL APPROACHES	ALL*	1748.5	337.8

7/15/2024

BASIC AVERAGE CRASH RATE TABLE FOR INTERSECTIONS

RATE GROUP	BASE RATE	+ ADT FACTOR	PCT FAT	PCT INJ	PCT F+ I	INTERSECTION TYPE*	CONTROL TYPE	AREA	CRASH COST ($1000) F+I	CRASH COST ($1000) ALL

Highway, Intersection and Ramp Base Rates / Crash Percentage were loaded into TSN on April 22, 2022.

* INTERSECTION TYPES

F - FOUR-LEGGED
M - MULTI-LEGED
S - OFFSET
T - TEE
Y - Y WYE
Z - OTHERS
R - ROUNDABOUT

(I- 31 - "R", Roundabout = Travel and Crash Cost based on Average)

Traffic Accident Surveillance and Analysis System (TASAS)
Collision Data Summary

The data provided is protected by 23 U.S.C. § 407, and shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. By allowing the release of this information, the State of California, Department of Transportation does not waive any rights it has under 23 U.S.C. § 407.

Table 1 summarizes collision rates for the requested Route 180 mainline segment in eastbound and westbound directions from Postmile (PM) R53.668 to Postmile (PM) R55.668 in the County of Fresno. The Table B reports were generated on January 2, 2025, and they depict existing collision rates per million vehicle miles (mainline) and per million vehicles (ramps) for the most recent 36-month period from April 1, 2021, to March 31, 2024, from the Traffic Accident Surveillance and Analysis System (TASAS).

Table 1
3-Year Collision Rates: Highway Segment (excluding ramps on freeways)

Fre 180 Segment	TOTAL No. of Collisions	ACTUAL (per million vehicle miles)			AVERAGE (per million vehicle miles)		
		Fatal Collisions	Fatal + Injury Collisions	Total (1)	Fatal Collisions	Fatal + Injury Collisions	Total (1)
Eastbound PM R53.668 / R55.668	19	0.000	0.15	0.55	0.006	0.33	0.95
Westbound PM R53.668 / R55.668	11	0.000	0.03	0.32	0.006	0.33	0.95

(1) All reported collisions (includes Property Damage Only (PDO) Collisions)

FRE SR 180 EB (PM R53.668 to PM R55.668)

Analysis of the TASAS Table B records shows a total of 19 collisions within the segment of eastbound Route 180 from PM R53.668 to PM R55.668 and study periods summarized above. Table 1 reflects that the Actual Fatal, Actual Fatal + Injury, and Actual Total collision rates are below the average for similar facilities statewide.

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Table 2. Highway Primary Collision Factors and Type of Collision

Primary Collision Factor	Type of Collision					
	Side Swipe	Rear End	Broad-Side	Hit Object	Overturn	Other
Influence of Alcohol		1		2		
Improper Turn	1			1	1	
Speeding		3	1	2		
Other Violation	3					
Other than Driver			1	2		1
Total	**4**	**4**	**2**	**7**	**1**	**1**

Table 2 shown above indicates that the predominant collision type was Hit Object (7), and the corresponding collision factor were Influence of Alcohol (2), Speeding (2), Other than Driver (2), and improper Turn (1). Other types of collisions that occurred on this segment were Side Swipe (4), Rear End (4), Broadside (2), Overturn (1), and Other (1).

TASAS Table B shows that there were 7 Hit Object types of collisions. The Hit Objects were “Barrier”, “Dike or Curb”, “Other object on the road”, “Unknown Object Struck”, “No Object Involved”, “Animal: Dog”, and “Does Not Apply”.

Of the 19 total collisions, 12 occurred in daylight and 2 occurred under wet conditions.

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FRE SR 180 WB (PM R53.668 to PM R55.668)

Analysis of the TASAS Table B records shows a total of 11 collisions within the segment of westbound Route 180 from PM R53.668 to PM R55.668 and study periods summarized above. Table 1 reflects that the Actual Fatal, Actual Fatal + Injury, and Actual Total collision rates are below the average for similar facilities statewide.

Table 3
Highway Primary Collision Factors and Type of Collision

Primary Collision Factor	Type of Collision		
	Side Swipe	Hit Object	Overturn
Influence of Alcohol		1	
Improper Turn	2	2	3
Other Violation	2		
Unknown	1		
Total	**5**	**3**	**3**

Table 3 shown above indicates that the predominant collision type was Side Swipe (5), and the corresponding collision factor were Improper Turn (2), Other Violation (2), and Unknown (1). Other types of collisions that occurred on this segment were Hit Object (3) and Overturn (3).

TASAS Table B shows that there were 3 Hit Object types of collisions. The Hit Objects were “End of Guard Rail”, “Dike or Curb”, and “Over Embankment”.

Of the 11 total collisions, 7 occurred in daylight and 0 occurred under wet conditions.

Protected by 23 U.S.C. § 407

RAMPS: FRE SR 180 (PM R53.668 to PM R55.668)

Table 4
3-Year Collision Rates: Ramps

LOCATION	TOTAL No. of Collisions	ACTUAL (per million vehicles)			AVERAGE (per million vehicles)		
		Fatal Collisions	Fatal + Injury Collisions	Total (1)	Fatal Collisions	Fatal + Injury Collisions	Total (1)
RAMPS AT MARKS AVE							
PM R054.428 180/EB OFF TO MARKS AVE	0	0.000	0.00	0.00	0.002	0.23	0.63
PM R054.449 180/WB ON FROM SB MARKS AVE	0	0.000	0.00	0.00	0.004	0.23	0.70
PM R054.612 180/EB ON FROM SB MARKS AVE	1	0.000	0.00	0.40	0.002	0.23	0.77
PM R054.668 180/WB ON FROM NB MARKS AVE	0	0.000	0.00	0.00	0.002	0.23	0.77
PM R054.843 180/WB OFF TO MARKS AVE	3	0.000	0.31	0.46	0.003	0.38	1.04
PM R054.886 180/EB ON FROM NB MARKS AVE	0	0.000	0.00	0.00	0.004	0.23	0.70

Note: Collision data may overlap between facility types, i.e. highway segments, intersections, and ramps. For details, refer to the Traffic Safety Investigation Handbook.

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PM R054.612 180/EB ON FROM SB MARKS AVE

Analysis of the TASAS Table B records shows a total of 1 collision at PM R054.612 at the ramp of 180/EB on from SB Marks Ave and study periods summarized above. Table 4 reflects that the Actual Fatal, Actual Fatal + Injury, and Actual Total collision rates are below the average for similar facilities statewide.

Table 5
Highway Primary Collision Factors and Type of Collision

Primary Collision Factor	Type of Collision
	Hit Object
Improper Turn	1
Total	**1**

Table 5 shown above indicates that the predominant collision type was Hit Object (1), and the corresponding collision factor was Improper Turn (1).

TASAS Table B shows that there was 1 Hit Object type of collisions. The Hit Objects were "Light or Signal".

PM R054.843 180/WB OFF TO MARKS AVE

Analysis of the TASAS Table B records shows a total of 3 collisions at PM R054.843 at the ramp of 180/WB off to Marks Ave and study periods summarized above. Table 4 reflects that the Actual Fatal, Actual Fatal + Injury, and Actual Total collision rates are below the average for similar facilities statewide.

Table 6
Highway Primary Collision Factors and Type of Collision

Primary Collision Factor	Type of Collision
	Hit Object
Influence of Alcohol	2
Improper Turn	1
Total	**3**

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Table 6 shown above indicates that the predominant collision type was Hit Object (3), and the corresponding collision factor was Influence of Alcohol (2) and Improper Turn(1).

The TASAS Table B shows that there were 3 Hit Object types of collisions. The Hit Objects were “Dike or Curb”, “Guardrail”, and “Over Embankment”.

End of summary.

KW/CW

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APPENDIX G

VMT CALCULATION WORKSHEETS

LSA

Appendix G
VMT Calculations
2740 West Nielsen Avenue Warehouse

2019	2740 Nielsen Warehouse (Project)	Fresno County
Project employment (a)	451	
Percent employment traveling outside of County (b) *	7.03%	
Project employment traveling to outside (c=b*a)	32	
Total Internal-Internal (II) Project VMT (d) **	5,774	
Internal project employment (e=a-c)	420	
II VMT per employee (f=d/e)	13.8	
XI VMT per employee (g) ***	16.3	
Total XI VMT (h=g*c)	516	
Total project VMT (i=d+h)	6,291	
VMT per employee (j=i/a)	13.9	25.6

** : Obtained from "Fresno_worker_ixxifractions.dat" from model inputs. Used same percentages/values as the parent TAZ 723*

***: Includes primary work tour VMT and all work sub-tours VMT from the ABM model run*

***: XI VMT per employee was estimated as an average of all Fresno zones within the CSTDM zone 2475 (parent Fresno TAZ 723)*