INITIAL STUDY

FOR THE

COMSTOCK PLACE TOWNHOUSE PROJECT

Prepared for:

City of Whittier
13230 Penn Street
Whittier, California 90602

Prepared by:

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LIST OF ABBREVIATIONS AND ACROYNMS

°F	Fahrenheit
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACM	Asbestos-containing materials
ACOE	Army Corps of Engineers
AF	acre feet
AFY	acre feet per year
AKA	also known as
amsl	above mean sea level
AMTP	Archaeological Monitoring and Treatment Plan
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BACMs	Best Available Control Measures
BLM	Bureau of Land Management
BMPs	Best Management Practices
C&D	construction and demolition
C_2Cl_4	perchloroethylene
C_2H_4O	acetaldehyde
C_4H_6	1,3-butadiene
C_6H_6	benzene
CAA	Clean Air Act
CAAA	Clean Air Act Amendment
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAR	California Climate Action Registry
CDFW	California Department of Fish & Wildlife
CE	State Candidate Endangered
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFS	cubic feet per second
CH_2O	formaldehyde
CH_4	methane
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide

CO_2	carbon dioxide
COA	Conditions of Approval
COCs	constituents of concern
Cr(VI)	hexavalent chromium
CRECs	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CRMP	Cultural Resource Management Plan
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CY	cubic yard
dB	decibel
dBA	A-weighted decibel
DBH	diameter of the tree at breast height
DIF	Development Impact Fee
DOI	Department of Interior
DPM	diesel particulate matter
DTSC	Department of Toxic and Substance Control
DWR	Department of Water Resources
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMS	emergency medical services
EO	Executive Orders
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FGC	Fish & Game Code
FGC	Fish & Game Code
FHSZ	Fire Hazard Severity Zone
FIRM	Federal Insurance Rate Map
FIRM	Flood Insurance Rate Map
FT	Federal Threatened
FTA	Federal Transit Administration
GCC	Global Climate Change
GHG	Greenhouse Gas
gpm	gallons per minute
GPUEIR	General Plan Update EIR
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plans
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
hP	horse power
HSC	Health and Safety Code
IEPR	Integrated Energy Policy Report
IN	Institutional
in/sec	inches per second
IPaC	Information for Planning and Consultation

IPCC	Intergovernmental Panel on Climate Change
IS/MND	Initial Study / Mitigated Negative Declaration
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
JWPCP	Joint Water Pollution Control Plant
km	kilometers
kWh	kilowatt hour
LACDS	Sanitation Districts of Los Angeles County
LACFCD	Los Angeles County Flood Control District
LACFD	Los Angeles County Fire Department
LAFCO	Local Agency Formation Commission
lbs./day	Pounds Per Day
LBV	least Bell's vireo
LDR	Low Density Residential
Leq	equivalent continuous sound level
LID	Low Impact Development
LRA	Local Responsibility Area
LSA	Lake or Streambed Alteration
LST	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCLs	maximum contaminant levels
MLD	Most Likely Descendant
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MT	Metric Ton
$MTCO_2e/yr$	Metric Tons of CO_2 equivalent per year
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NBP	Nesting Bird Plan
No.	Number
NO2 or NOx	Nitrogen Dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
O3	Ozone
OS	Open Space
OSHA	Occupational Safety and Health Administration
Pb	Lead
PFCs	perfluorocarbons
PM 10	Fine Particulate Matter
PM 2.5	Fine Particulate Matter
ppm	parts per million
PPV	peak particle velocity

PRC	Public Resource Code
PSI	pounds per square inch
RECLAIM	Regional Clean Air Incentive Market
RECs	Recognized Environmental Condition
RHNA	Regional Housing Needs Assessment
RMS	root mean square
ROG	reactive organic gases
ROW	Rights-of-Way
RPS	Renewable Portfolio Standards
RTP/SCS	Regional Transportation Plan / Sustainable Communities Strategies
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SE	State Endangered
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SGMP	Sustainable Groundwater Management Plan
SIP	State Implementation Plan
SLF	Sacred Lands File
SMU	Site Mitigation Unit
SO2	Sulfur Dioxide
SOI	Secretary of Interior
SOI	Sphere of Influence
SRA	Source Receptor Area
SRA	State Responsibility Area
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	*Toxic Air Contaminants*
TAZ	Traffic Analysis Zone
TCR	Tribal Cultural Resources
TEA	Transportation Equity Act
THPO	Tribal Historic Preservation Officer
U-CT	Uptown Center
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish & Wildlife Services
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
UWSP	Uptown Whittier Specific Plan
VdB	velocity in decibels

VdB	vibration-velocity decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
WOTUS	Waters of the United States
WPD	Whittier Police Department
WQMP	Water Quality Management Plan

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ENVIRONMENTAL CHECKLIST

1. Project Title: Comstock Place Townhouse Project

2. Lead Agency Name: City of Whittier
   Address: 13230 Penn Street, Whittier, CA 90602

3. Contact Person: Crystal Arroyo
   Phone Number: 562-567-9320
   E-Mail: c.arroyo@cityofwhittier.org

4. Project Location: The proposed project is located at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier, Los Angeles County, California. The address is 12826 Philadelphia Street and the Assessor's Identification Number [AIN] is 8139-024-027). The site is located in Section 21, Township 2 South, Range 11 West SBM as found on the USGS – Whittier Quadrangle, 7.5 Minute Series topographic. The geographic coordinates are as follows: 33.978652º, -118.038916°. Refer to **Figures 1 and 2** which show the regional and site locations for the project, respectively.

5. Project Sponsor and Address: MW Investment Group, LLC
   27702 Crown Valley Parkway, Suite D-4-197
   Ladera Ranch, CA 92694

6. General Plan Designation: Specific Plan – Uptown Whittier Specific Plan (UWSP)

7. Zoning: UWSP, Uptown Center

8. **Project Description**

Background/Location

MW Investment Group, LLC has submitted applications to the City of Whittier to construct a 24 unit townhouse residential project (proposed project) at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue (the address is 12826 Philadelphia Street and the Assessor's Identification Number is 8139-024-027). Refer to **Figures 1 and 2** which show the regional and site locations for the project, respectively. The site is presently occupied by an approximate 7,172 square foot (sf) office building that is vacant. The overall site encompasses approximately 0.826 net acre (about 35,980 gross sf) and the remainder of the project site is presently allocated to parking and landscaping. The project plans are provided as **Appendix 1** to this Initial Study.

Note that this project utilizes a suite of project site based technical studies that were prepared for a previous site plan proposed at the very same site. The proposed project has evolved from a multi-family apartment complex into the Comstock Place Townhouse Project that is proposed herein. The use of technical studies, such as the Arborist Report, Cultural Resources Report, Geotechnical Report, Phase I and II Environmental Site Assessments (ESAs), that are prepared

based on the site conditions, rather than the specific project that is being proposed, has been employed herein, as the site conditions have not changed substantially such that the findings of these reports would differ when applied to the Comstock Place Townhouse Project in comparison to the former site plans.

Project Characteristics

The Comstock Place Townhouse Project site is located within the Uptown Center portion of the Uptown Whittier Specific Plan (UWSP). A copy of the UWSP is provided as **Appendix 2** of this Initial Study. The City has identified the following entitlements/approvals that are needed for the proposed project.

- Vesting Tentative Tract Map No. VTTM 24-0001 (VTTM 84431)
- Certificate of Appropriateness for Demolition Permit (HRC 24-0007)
- Approval of Variances VAR24-0001
- Development Review DRP24-0011
- CEQA compliance

Vesting Tentative Tract Map 84431 will consolidate six parcels into a single 0.826 gross acre lot to facilitate development of the Comstock Place Townhouse Project. A Certificate of Appropriateness will be required for the Demolition Permit to authorize the removal of the 7,172 square foot medical office building and associated surface parking lot.

The proposed project will require the following variances from the Uptown Whittier Specific Plan in order to be developed as proposed:

- "Lot Width" for the Courtyard Housing: Allow for a minimum lot size of 120 feet instead of the required minimum 125 feet for courtyard housing. **UWSP section 4.4.8 (A)** .
- Tandem parking: Allow the use of 8 tandem parking garages. The Uptown Whittier Specific Plan (UWSP) does not allow tandem parking. 8 tandem parking garages have been incorporated into the site plan out of 24. **UWSP section 4.9.1 (E) (4).**
- Guest Parking: Allow for the revision of the required number of guest parking spaces at 6 spaces to 4 spaces. **UWSP section 4.3.4 section (C) (3).**
- Guest Parking Placement: Allow for guest parking that does not meet the provisions of **UWSP, Center District Section 4.3.4 (C)(1).**

The variance application is being processed under the case number of VAR24-0001.

The site development plan (DRP24-0011) envisions two structures with varied dimensions along the frontage of Comstock Avenue and Philadelphia Street. The building heights will be a maximum of 3 stories. There will be two structures that would be situated in a "U" formation. The project provides 59 parking spaces. Each individual townhouse will be equipped with a garage that will each contain 2 parking spaces (for a total of 48 garage spaces) and 7 resident spaces. Additionally, 4 guest parking spaces will be provided, which includes 1 accessible space in compliance with the American Disabilities Act (ADA). Guest parking spaces would be 9' x 19'. Additionally, there is also adjacent on-street open parking providing sixteen (16) spaces on Comstock Avenue. The site provides approximately 16 adjacent on-street parallel parking spaces (For eligibility see Sections 4.3.1.C.2 [Zones and Their Purposes/U-CT] and 18.48.020, item 5 [Schedule of Parking Standards]).

Between the two townhouse buildings, which will each contain 12 townhouses, will be a courtyard that will contribute to the overall landscaped area within the project site. Overall, about 6,892 SF of landscaping will be provided. **Figure 3** contains a rendering of the buildings that are proposed to be constructed at the site. The 24 units on the 0.825-acre site correlates to a density of about 29.27 units per acre.

The sizes of the townhouses at the Comstock Place Townhouse Project are proposed to range from 1,336 square feet (sf) to 2,251 sf. The townhouse plan and sizes are as follows:

Table 1
TOWNHOUSE PLAN AND SIZES

	# Planned Onsite	# of Bedrooms	# of Bathrooms	Size	Parking Required
Plan 1	2	2	2.5	1,340 SF	4
Plan 2	2	3	2.5	1,485 SF	5
Plan 3	8	2	2.5	1,336 SF	16
Plan 4	8	3	3.5	1,729 SF	20
Plan 5	2	4	3.5 + Loft	2,251 SF	5
Plan 6	2	4	3.5	2,177 SF	5
Total:	**24**	**-**	**-**	**38,990 SF**	**55**
				Guest Spaces 0.25/unit	**6**
					Total Required = 61
					Resident = 55 Guest = 4 including 1 ADA space **Total Provided = 59**

The townhouses would be for sale for ownership, once developed.

This completes the description of the project characteristics.

Construction Scenario

The anticipated construction sequence is as follows, but may be adjusted to conform to specific conditions at the time of actual construction:

1. Clear and grub, and demolish the onsite structure and pavement;
2. Preparation of subgrade;
3. Mass-grade site and parking areas;
4. Installation of the storm drain system;
5. Installation of public sewer system;
6. Installation of public water system;
7. Fine grade to prepare for surface improvements;
8. Installation of building foundations and parking areas;
9. Install private utilities, including water quality infrastructure;
10. Install curb, gutters, sidewalks and first asphalt lift;
11. Complete construction of buildings;
12. Install landscaping; place final lift of asphalt/concrete; and
13. Install signage and striping.

Most of the preceding construction activities are self-explanatory.

The buildings will be developed with a combination of wood and steel framing, and the exterior will be a mix of materials. Construction will be completed in closely spaced, sequential phases with the entirety of the horizontal construction to be completed first. This will include clearing and grubbing, grading and installation of utilities, and may also include development of internal paved areas. Once the horizontal improvements are completed, the Applicant plans to install the building and supporting infrastructure at the site. This pattern of development will continue until the Comstock Place Townhouse Project has been completed. Construction should be initiated in mid- to late-2024 and the project should open for occupancy in early-2025. The project site will require about 3,000 cubic yards (CY) of cut and 2,500 CY of fill, with a net export of approximately 500 CY. Construction details are further discussed in the Air Quality evaluation in **Appendix 5**. It is anticipated that between 30 and 40 construction workers will be on site at any given time during construction. The construction staging area will be determined by the project contractor. Please note that all proposed mitigation measures identified in this document are fully incorporated into the project Mitigation Monitoring and Reporting Program.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

   North: Medical office building with paved surface parking lots
   South: Self-storage facility and paved surface parking lots
   East: Paved surface parking lots
   West: Commercial building, duplex and storage facility building, and paved parking lots

10. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

Based on an evaluation of the specific project location, the proposed project will not require many permits from other agencies to support development of the site as the Comstock Place Townhouse Project. The amount of area to be disturbed by the whole project will be less one acre; therefore, the developer will not be required to file a Notice of Intent (NOI) for a General Construction permit to comply with the National Pollutant Discharge Elimination System (NPDES) requirements. However, a Storm Water Pollution Prevention Plan (SWPPP) must be implemented in conjunction with construction activities. No other permits or agency requirements have been identified in association with the proposed project.

11. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

AB 52 consultation letters were mailed to the Gabrieleño Band of Mission Indians-Kizh Nation and Soboba Band of Luiseño Indians via certified mail on March 18, 2024. The Gabrieleño Band of Mission Indians-Kizh Nation responded by requesting a consultation meeting that was scheduled for May 7, 2024. Ultimately, the Tribe determined that the mitigation measures that were requested as part of the AB 52 process for the former site plan at this very same project site would suffice to protect tribal cultural resources as a result of the proposed development. These mitigations can be found in the analysis provided under Subsection XVIII, Tribal Cultural Resources.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☒ Aesthetics
- ☒ Biological Resources
- ☒ Geology / Soils
- ☒ Hydrology & Water Quality
- ☐ Noise
- ☐ Recreation
- ☒ Utilities / Service Systems
- ☐ Agriculture and Forestry Resources
- ☒ Cultural Resources
- ☐ Greenhouse Gas Emissions
- ☐ Land Use / Planning
- ☐ Population / Housing
- ☐ Transportation
- ☐ Wildfire
- ☒ Air Quality
- ☐ Energy
- ☒ Hazards & Hazardous Materials
- ☐ Mineral Resources
- ☐ Public Services
- ☒ Tribal Cultural Resources
- ☒ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

☐	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Tom Dodson & Associates _____
Prepared by

_____
Date

_____
Lead Agency (signature)

_____
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: 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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or 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?	☐	☐	☒	☐

SUBSTANTIATION: A schematic photometrics lighting plan has been prepared to demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. This report is provided as **Appendix 3**. Additionally, an Arborist Report was prepared for the proposed project. It is provided as **Appendix 4** to this Initial Study, and is titled "Existing Tree Inspection Report 18282 Philadelphia Street Whittier, CA" prepared by Jim Borer, Certified Arborist #496 dated January 3, 2022.

a. *Less Than Significant Impact* – Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. The City of Whittier General Plan Update Draft Environmental Impact Report (EIR), June 2021, indicates that vistas of the Puente Hills, particularly the streets with unobstructed views that provide a wider, less obstructed viewshed of the hills, should be protected within the City. The proposed project is in a developed urban area within the Uptown area of the City of Whittier. The Comstock Place Townhouse site itself does not contain any scenic vistas (currently developed with a medical office building) which could be impacted by the installation of an up to 4-story, 41' 2"-foot in height single-family residential townhouse development. A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. The Puente Hills can be seen to the north of the project site at the street level only within the intersection of Philadelphia Street and Comstock Avenue. Views to the east are limited due to the large trees that line Philadelphia Street, and also would be limited due to adjacent and nearby 2-, 3-, 4-, and 5-story structures. In general, the City seeks to preserve mostly unobstructed views of the nearby Puente Hills.

   During construction, the presence of construction equipment and related construction materials would be visible from public vantage points in the vicinity of the project site. Construction is unlikely to disturb views to the nearby hills as views to the Puente Hills are obstructed by urban development; regardless, construction impacts related to aesthetics would be temporary and short-term in nature and would not substantially affect existing scenic vistas in the area. Furthermore, given that there is an existing structure at the project site, and that views area to the nearby hills are obstructed by urban development surrounding the project site, as the Uptown area of the City has been built-out, the addition of a new 41' 2"-foot in height single-family residential townhouse structure at this location would not obstruct any existing unobstructed views to the Puente Hills. Development of this site will

involve demolition of onsite structures and paved areas, grading to create level surfaces upon which to install the proposed townhouse development, and while new structures will be in place, the views in the general area to the Puente Hills will continue to be obstructed by existing development. However, the new residents of the proposed townhouses will have access to scenic vistas on the rooftop and higher floors due to the non-uniform height of the structures in the vicinity of the project site. The project is designed to fit into the existing urban development setting of the Uptown area. Additionally, given the project's location and that the site is removed from the Puente Hills by about one mile, development of this site would not result in impacts to any scenic vistas that could be viewed presently from public or private spaces. Therefore, the proposed project would have a less than significant potential to have a substantial adverse effect on a scenic vista. No mitigation is required.

b. *Less Than Significant With Mitigation Incorporated* – The Whittier General Plan Update EIR (GPUEIR) identifies scenic resources within the City including the Uptown Whittier area, which is characterized by tree-lined, narrow, cobble-stone roads. The Envision Whittier General Plan map of Corridors, Gateways, and Landmarks (**Figure I-1**) illustrates the location of the Planning Area's view corridors, major and minor gateways, and key landmarks. There are a total of five existing *Ficus nitida* (Indian Laurel Trees) along Comstock Avenue and Philadelphia Street are planned to be removed in order to enable site development. The five individual Ficus trees support extensive surface roots. The trees have uplifted and damaged adjacent curbs, sidewalks, and street surfaces, and have been occurring for decades of the lives of these trees. These conditions expose the Ficus' surface root systems to be very shallow and in contact with many of these uplifted/damaged features. The Arborist Report makes the determination that, these trees would be subject to significant disaffection as the result of substantial efforts to repair the uplifting damage that they have subjected the adjacent paved surfaces and curbs in any attempt to repair and replace the same. Additionally, the trees would be subject to severe impacts to their surface root structures in any such effort. There would be additional encroachment from demolition, removal of the adjacent structures, sidewalks, curbs, and paved surfaces that would be required to comprehensively redevelop the site into the proposed Comstock Place Townhouse Project. Additionally, these trees would experience significant decline to both their systemic vigor (growth systems) and structural integrity (ability to support themselves) in any such demolition and reconstruction efforts. Thus, the trees would be subject to severe decline and catastrophic failure and collapse if the trees were subject to conservation in place during such activities.

Thus, as described in the Arborist Report, these street trees should be removed and replaced, in the context of the site's redevelopment, with a species that is less invasively surface rooted, smaller in mature stature, and upright in growth form, and therefore more well-suited to the setting of townhouse building(s), more vertical spaces, and realistic street frontages planter sizes. It is the Arborist Report's recommendation that a species such as either Indian tribe crape myrtles, (Lagerstroemia x. faurei varieties) or Brisbane box, Tristania conferta. The final selection of street trees shall conform to the tree specified in the Uptown Whittier Streetscape Beautification Plan adopted by City Council on May 28, 2019 that recommends *Gingko biloba* (Maiden Hair Tree) at the corner of Philadelphia Street and Comstock Avenue and *Cassia letophylla* (Gold Medallion Tree) and *Pistacia Chinensis* (Chinese Pistache) along Comstock Avenue. These five existing trees fall under the Parkway Tree Ordinance: Per Municipal Code 12.40, residents and/or property owners are required to apply for a permit to plant, trim, or remove any tree within the parkway. As such, in order to ensure that the Applicant complies with this regulation, the following mitigation measure (**MM**) shall be implemented:

AES-1 The Applicant shall obtain City approval to remove any trees on site through tree removal permit(s). The Applicant shall obtain a tree removal permit pursuant to City of Whittier Municipal Code 12.40.

Within the parking lot, there are 12 *Cupania* (Carrotwood) trees that will be removed, that do not meet the criteria of the City's tree ordinance, and as such their removal would not constitute damage to scenic resources. Furthermore, these trees are mature specimens that exhibit varying degrees of poor vigor and poor structural integrity. Therein they are poor candidates for conservation within the

re-development process in any manner. The Applicant will provide appropriate replacement trees as indicated on the Landscape Plans provided within the Project Plans in **Appendix 1** and in conformance to the trees specified in the Uptown Whittier Streetscape Beautification Plan adopted by City Council on May, 28, 2019. Within the project site, as it has been fully developed for many years, no rock outcroppings exist. Furthermore, according to the City's GPUEIR, no scenic highways are located within the City. The City's GPUEIR indicates that a variety of scenic or view corridors are formed along key major roadways including Turnbull Canyon, Skyline Drive, La Cuarta and Colima, which are currently designated as Scenic Corridors and Beverly Boulevard and Hadley, Greenleaf, Painter, Whittier Blvd and portion of Colima, which are considered Design Corridors. As the proposed project is not located adjacent to the above roadways within the City, the proposed project would not have a potential to impact such scenic resources. While the City's General Plan does identify that the Uptown portion of the City is an area of scenic importance within the City, the proposed project would not demolish any structures of scenic importance that have been identified in the City's GPUEIR, especially as the existing onsite structure does not contain any historically significant or distinguishing features (refer to the Cultural Study prepared for this project that has been provided as **Appendix 7**) that would qualify the structure onsite as a scenic resource. Given the above, with the implementation of **MM AES-1**, implementation of the proposed Comstock Place Townhouse Project would have a less than significant potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

c. *Less Than Significant Impact* – The proposed Comstock Place Townhouse Project is located within an urbanized area within the City of Whittier, in the Uptown area of the City. Construction of the proposed project would create a temporary change in the visual character of the project site. The project is located within the Uptown Whittier Specific Plan (UWSP), and has a zone classification of Uptown Center. According to the UWSP the intent of the Uptown Center (U-CT) classification is as follows:

The U-CT zone is applied along segments of Philadelphia Street, and Comstock Avenues, as shown on the Regulating Plan, in part to provide transitions in building form and mass between areas within the U-CO zone and the U-G zone. This zone is intended for mixed-use buildings and courtyard housing, that accommodate a variety of non-residential and residential uses at lower intensities and densities than in the U-CO zone. Building types include mixed-use commercial blocks, live-work, and courtyard housing. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells. Parking is accommodated on-street, in structures with liner buildings, underground, and in block centers in surface lots not visible from streets.

The UWSP provides a development code specific to development within the zoning classifications within the Specific Plan, including within the U-CT classification within which the project will be developed. The proposed project will would comply with the development guidelines for the U-CT classification, with the approval of the necessary variances, which have been detailed in the project description that affect the project site only. These amendments would enable the Comstock Place Townhouse project to fully comply with the UWSP development code for the U-CT classification. By developing this site in accordance with City's General Plan and in accordance with the design guidelines outlined in the Uptown Whittier Development Code as enforced by the City's Code of Ordinances (Title 18 – Zoning), the visual character of this site will continue to be an urban visual setting consistent with surrounding Uptown core development, but also consistent with the General Plan vision for the City at build-out. With the City's design elements incorporated into the project, implementation of the proposed project will be consistent with the surrounding urban setting and the potential aesthetic impacts to the site will result in a less than significant impact.

d. *Less Than Significant Impact* – The City GPUEIR indicates that because the City is generally built-out and is located in an area surrounded by development, night skies are dominated by urban and suburban lighting in the more developed portions of the City. Additionally, the primary sources of glare during the day are from reflections off of roadways and structures, with the primary sources of glare during the evenings consisting of both stationary sources (structure illumination, interior lighting,

decorative landscape lighting, and streetlights), and mobile sources (vehicle headlamp illumination). The Comstock Place Townhouse Project must be developed in accordance with the City of Whittier Municipal Code Section 18.96.030(J) (Site Design Guidelines), and the design guidelines provided within the Uptown Specific Plan. The City's GPUEIR indicates that, while new uses and developments may result in an increase in the number of lighting sources within the City, the impacts from build-out of the General Plan were determined to be minimal in nature, and through compliance with the City's Municipal Code, impacts from future development would be less than significant. As stated above, the proposed project will comply with the City's Municipal Code, and is therefore anticipated to result in less than significant contributions to lighting and glare impacts within the City. However, to ensure that light or glare (particularly off of structures with glass exteriors) does not result in intrusive lighting or glare to existing structures or persons in the project area, a photometric study has been prepared to demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. This report is provided as **Appendix 3**. Given the above the proposed Comstock Place Townhouse Project would have a less than significant potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – The General Plan indicates that, according to the California Department of Conservation Important Farmland Map Finder, there is no farmland mapped within the City and Planning Area. Furthermore, no agricultural uses are located internally within the City, and as such the City has not zoned or designated any land internally for such uses. Therefore, given that the City does not identify the project site for agricultural use, and that no Prime Farmland, Unique Farmland or Farmland of Statewide Importance has been identified within the City or Planning Area, implementation of the proposed project and conversion of the project site to the proposed single-family residential townhouse uses will not pose any significant adverse impact to agricultural resources or values. No mitigation is required.

b. *No Impact* - Implementation of the proposed project will not conflict with existing zoning classification (Specific Plan) for agricultural use, or a Williamson Act contract. There are no Williamson Act contract

lands located within the City or Planning Area. Please reference the discussion in II(a), above. Based on this information, the proposed project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. No adverse impacts are anticipated and no mitigation is required.

c. *No Impact* – The City's GPUEIR indicates that the Puente Hills Preserve could be considered forest land as defined by Public Resources Code Section 12220(g) in terms of tree cover. The project site is located in the Uptown core area of the City, and is therefore not located within or near the Puente Hills Preserve such that the conversion of the site to a single-family residential townhouse use would conflict with existing forest land, timberland or timberland zoned for Timberland Production. As the proposed Comstock Place Townhouse Project currently is zoned as U-CT by the UWSP, which is not a zoning classification that supports timberland or forest lands, the proposed project will not conflict with existing zoning for, or cause rezoning of, forest, timberland, or timberland zoned Timberland Production. No adverse impacts are anticipated and no mitigation is required.

d. *No Impact* – The project site is not located within forest land and has no commercial forest trees on the property; therefore, the project will not result in the loss of forest land or conversion of forest land to non-forest production use. No adverse impacts are anticipated and no mitigation is required.

e. *No Impact* – Please refer to the discussion under issue II(a), above. The City has designated the Comstock Place Townhouse Project site for Specific Plan use, and is zoned as U-CT, which does not support agricultural uses. The uses in the immediate vicinity surrounding the proposed project do not currently support agricultural activities, nor do any exist within the boundaries of the City. Ultimately, the development of this site as the Comstock Place Townhouse Project would not involve other changes that would result in off-site agricultural land converting to a non-agricultural use. Furthermore, there is no forest land within the Uptown Whittier Specific Plan area of the City, and as such none would be impacted by the development of the proposed project. Therefore, the proposed project would have a less than significant potential to 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. 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?	☐	☐	☒	☐

SUBSTANTIATION: An Air Quality Impact Analysis (AQIA) was prepared for the proposed project. It is provided as **Appendix 5** to this Initial Study, and is titled "Philadelphia & Comstock Townhouse, Air Quality Impact Analysis, City of Whittier" prepared by Urban Crossroads dated September 27, 2024.

Background and Climate Conditions

The regional climate has a substantial influence on air quality in the South Coast Air Basin (SCAB). In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Additionally, the importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution.

Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those

standards currently in effect in California and the nation are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

Table III-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter (PM2.5)[9]	24 Hour	–	–	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Flourescense; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead 8[12,13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Footnotes

1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 $\mu g/m^3$, is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9 On December 14, 2012, the national PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primarily and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primarily and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects, Table III-2. The Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six of the most common air pollutants: carbon monoxide, lead, ozone, particulate matter, nitrogen dioxide, and sulfur dioxide which are known as criteria pollutants. The South Coast Air Quality Management District

(SCAQMD) monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district. On February 21, 2019, California Air Resources Board (CARB) posted the 2018 amendments to the state and national area Pollutant level designations. Table III-3 outlines the attainment designations for SCAB.

Table III-3
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Pollutant	State Status	National Status
Ozone – 1-hour standard	Nonattainment	—
Ozone – 8-hour standard	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Attainment/Unclassified
Nitrogen dioxide (NO_2)	Attainment	Attainment/Unclassified
Sulfur dioxide (SO_2)	Attainment	Attainment/Unclassified
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Lead[1] (Pb^1)	Attainment	Attainment/Unclassified

Note: See Appendix 3.1 (part of **Appendix 5, AQIA**) for a detailed map of State/National Area Designations within the SCAB
"—" = The national 1-hour O3 standard was revoked effective June 15, 2005.
[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

Local Air Quality

The project site is located within the Source Receptor Area (SRA) 11 of the SCAB. Within SRA 11, the SCAQMD South San Gabriel Valley monitoring station, located 6.18 miles southeast of the project site, is the nearest long-term air quality monitoring station for CO, NO_2, O_3 and $PM_{2.5}$. The South San Gabriel Valley monitoring station does not include data for PM_{10}. As such, the next nearest monitoring station will be used. The East San Gabriel Valley 2 monitoring station, located in SRA 9, is the next nearest monitoring station for PM_{10} and is located approximately 12.71 miles northeast of the project site. It should be noted that the East San Gabriel Valley 2 monitoring station was utilized in lieu of the South San Gabriel Valley monitoring station only in instances where data was not available.

The most recent 3 years of data available is shown on Table III-4, which identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2018 through 2020 was obtained from the SCAQMD Air Quality Data Tables. Additionally, data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

Standards of Significance

The criteria used to determine the significance of potential project-related air quality impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 CCR §§15000, et seq.), which are listed at the beginning of this section. The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table III-5. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table III-4
PROJECT AREA AIR QUALITY MONITORING SUMMARY 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.169	0.104	0.123
Maximum Federal 8-Hour Concentration (ppm)		0.114	0.074	0.091
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	20	2	3
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	23	3	3
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	3.1	1.8	1.6
Maximum Federal 8-Hour Concentration	> 20 ppm	1.7	1.5	1.5
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.069	0.072	0.065
Annual Federal Standard Design Value		0.018	0.018	0.017
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	120	115	90
Annual Federal Arithmetic Mean (µg/m^3)		23.9	22.9	22.3
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	13	12	7
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	35.4	66.0	53.8
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	13.22	13.07	11.32
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	0	3	1

Table III-5
MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Construction Thresholds	Operations Thresholds
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

Source: Regional Thresholds presented in this table are based on the SCAQMD Air Quality Significance Thresholds, April 2019

Impact Analysis

a. *Less Than Significant Impact* – Projects such as the proposed Comstock Place Townhouse Project do not directly relate to the Air Quality Management Plan (AQMP) in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the Final 2022 AQMP (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 RTP/SCS, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements. The project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below. The project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the 1993 CEQA Handbook. These indicators are discussed below:

Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the California Ambient Air Quality Standards (CAAQS) and NAAQS. NAAQS and CAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if Localized Significance Thresholds (LSTs) or regional significance thresholds were exceeded. Based on the analysis herein, the project's localized construction-source emissions would not exceed applicable regional significance thresholds or LST. As such, the project is consistent with the AQMP with regard to regional construction-source air quality.

Operational Impacts – Consistency Criterion 1
As evaluated, the project's localized operational-source emissions would not exceed applicable regional significance thresholds or LST. As such, the project would result in a less than significant impact with respect to this criterion.

On the basis of the preceding discussion, and the lack of thresholds exceedances the project is determined to be consistent with the first criterion.

Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP based on the years of project build-out phase.

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the SCAB are provided to the Southern California Association of Governments (SCAG), which uses these to develop and the Regional Housing Needs Assessments (RHNA) for each jurisdiction along with regional population and vehicle miles travelled (VMT) growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with these growth projections is considered to be consistent with the AQMP. Consistency can be evaluated using several methods, including, but not limited to, consistency with a local jurisdiction's land use designations and consistency with SCAG's jurisdictional growth projections, such as those in the RHNA.

Construction Impacts – Consistency Criterion 2
Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2
The project site is located within the Uptown Center of the Uptown Whittier Specific Plan and designates the project site as "Uptown Center." The "Uptown Center" designation allows for mixed-use buildings and courtyard housing that allow for non-residential and residential uses at a lower intensity than other zones. Types of buildings include mixed-use commercial blocks, live-work, and courtyard housing with an urban landscape style.

Vesting Tentative Tract Map 84431 will consolidate six parcels into a single 0.826 gross acre lot to facilitate development of the Comstock Place Townhouse Project. A Certificate of Appropriateness will be required for the Demolition Permit to authorize the removal of the 7,172 square foot medical office building and associated surface parking lot.

As previously stated, the total development is proposed to consist of 24 townhouse units on 0.826 acres, which is consistent with the site's land use designation. Since the project's proposed land use is consistent with the Specific Plan and as the project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the project is determined to be consistent with the second criterion.

On the basis of the preceding discussion, the project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion
The project would not result in or cause NAAQS or CAAQS violations, as the project's construction and operational emissions would not exceed the applicable threshold of significance. The project would also be consistent with the City of Whittier land use plans. As such, the project is therefore considered to be consistent with the AQMP.

b. *Less Than Significant Impact* – Air pollution emissions associated with the proposed project would occur over both a short and long-term time periods. Short-term emissions include fugitive dust from construction activities (i.e., site prep, demolition, grading, and exhaust emission) at the proposed project site. Long-term emissions generated by future residents of the proposed project primarily include energy consumption and trips generated by the future development.

Emissions Calculation Methodology

In May 2022, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod version 2022.1.1.21. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the 2022.1.1.21 version of CalEEMod has been used for this project to determine construction and operational air quality emissions.

Construction Emissions

The proposed 24 townhouse residential units are anticipated to be constructed in a single phase. The project is anticipated to have an opening year of 2025.

Construction activities associated with the project will result in emissions of VOCs, NOX, SOX, CO, PM10, and PM2.5. Construction related emissions are expected from the following construction activities: Demolition; Site Preparation; Grading; Building Construction; Paving; and, Architectural Coating.

Demolition

The site is currently developed with existing uses/structures which total approximately 7,172 square feet that will be demolished. Demolished material associated with demolition will be hauled off-site.

Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Per client-provided data, the project would require 500 cubic yards of export for earthwork activities.

On-Road Trips

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips are presented below in Table III-6. Worker trips for all phases are based on client provided data. It should be noted that for vendor trips specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Hauling trips are based on CalEEMod defaults.

Table III-6
CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Demolition	80	0	8
Site Preparation	80	0	0
Grading	80	0	32
Building Construction	80	3	0
Paving	80	0	0
Architectural Coating	80	0	0

Construction Duration
For purposes of analysis, construction of the project is was forecast to commence in August 2024 and would last through January 2025. The construction schedule utilized in the analysis, shown in Table III-7, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[1] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. The duration of construction activities was based on project specific data provided by the project applicant, where available.

Table III-7
CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	8/1/2024	8/14/2024	10
Site Preparation	8/15/2024	8/15/2024	1
Grading	8/16/2024	8/19/2024	2
Building Construction	8/20/2024	1/6/2025	100
Paving	12/31/2024	1/6/2025	5
Architectural Coating	12/31/2024	1/6/2025	5

Construction Equipment
A modification to the default equipment list was made to allow the model to more accurately calculate fugitive dust from ground disturbance for purposes of the air quality localized significance threshold. As CalEEMod does not calculate ground disturbance for the backhoes/loaders/tractors equipment, these were replaced with crawler tractors with the same horse power and load factors of the backhoes Tractors/Loaders/Backhoes equipment. A detailed summary of construction equipment assumptions by phase is provided at Table III-8.

[1] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Table III-8
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Demolition	Tractors/Loaders/Backhoes	2	8
	Rubber Tired Dozers	1	8
	Concrete/Industrial Saws	1	8
Site Preparation	Graders	1	8
	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Cranes	1	8
	Forklifts	2	8
	Tractors/Loaders/Backhoes	2	8
Paving	Tractors/Loaders/Backhoes	1	8
	Cement and Mortar Mixers	4	8
	Pavers	1	8
	Rollers	1	8
Architectural Coating	Air Compressors	1	8

T/L/B = Tractors, Loaders, Backhoes; E = Excavators

Construction Emission Summary
The estimated maximum daily construction emissions without mitigation are summarized on Table III-9. Detailed construction model outputs are presented in Appendix 3.1 of the AQIA. Under the assumed scenarios, emissions resulting from the project construction would not exceed criteria pollutant thresholds established by the SCAQMD. This, emissions would be less-than-significant, as shown at Table III-9.

Table III-9
OVERALL CONSTRUCTION EMISSIONS SUMMARY

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	2.18	19.78	21.68	0.04	4.51	2.14
Winter						
2024	52.10	16.07	32.22	0.03	3.81	1.34
2025	51.97	15.00	31.00	0.03	3.74	1.27
Maximum Daily Emissions	**52.10**	**19.78**	**32.22**	**0.04**	**4.51**	**2.14**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1 of the AQIA.

Operational Emissions
Operational activities associated with the proposed project will result in emissions of VOCs, NOX, SOX, CO, PM10, and PM2.5. Operational emissions would be expected from the following primary sources: Area Source Emission, Energy Source Emissions, and Mobile Source Emissions.

Area Source Emissions

- Architectural Coatings: Over a period of time, the buildings that are part of this project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.
- Consumer Products: Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.
- Landscape Maintenance Equipment: Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

Energy Source Emissions

- Combustion Emissions Associated with Natural Gas and Electricity: Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Electricity and natural gas usage associated with the project were calculated by CalEEMod using default parameters.

Mobile Source Emissions

The project related operational air quality emissions derive primarily from vehicle trips generated by the project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the Philadelphia & Comstock Townhouse Trip Generation Assessment were utilized in this analysis.

Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table III-10. Detailed operational model outputs are presented in Appendix 3.1 to the AQIA. Project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant

Table III-10
OPERATIONAL EMISSIONS SUMMARY

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	0.71	0.53	6.02	0.01	1.24	0.32
Area Source	1.05	0.41	1.53	0.00	0.03	0.03
Energy Source	0.01	0.15	0.06	0.00	0.01	0.01
Project Maximum Daily Emissions	**1.77**	**1.09**	**7.61**	**0.02**	**1.29**	**0.37**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	0.70	0.58	5.55	0.01	1.24	0.32
Area Source	0.93	0.40	0.17	0.00	0.03	0.03
Energy Source	0.01	0.15	0.06	0.00	0.01	0.01
Project Maximum Daily Emissions	**1.64**	**1.13**	**5.79**	**0.02**	**1.29**	**0.37**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Conclusion
The development of the Comstock Place Townhouse Project would have a less than significant potential to 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. *Less Than Significant Impact* – The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and/or CAAQS. Collectively, these are referred to as LSTs. The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[2]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology*

For this project, the appropriate SRA for the LST analysis is the SCAQMD South San Gabriel Valley (SRA 11). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

Emissions Considered

[2] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs". As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

Maximum Daily Disturbed Acreage

For analytical purposes, the "acres disturbed" are based on specific equipment type for each subcategory of construction activity and the estimated maximum area a given piece of equipment can pass over in an 8-hour workday (as shown on Table III-11). The equipment-specific grading rates are summarized in the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix C: Emission Calculation Details for CalEEMod*. The disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acre in a given 8-hour day. Based on Table III-11, the project's construction activities could actively disturb approximately 0.5 acre per day during demolition, 1.0 acre per day during site preparation, and 1.5 acres per day during grading activities.

Table III-11
MAXIMUM DAILY DISTURBED-ACREAGE

Construction Activity	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Demolition	Rubber Tired Dozers	1	0.5	8	0.5
Total acres disturbed per day during Demolition					0.5
Site Preparation	Crawler Tractors	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
Total acres disturbed per day during Site Preparation					1.0
Grading	Crawler Tractors	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
Total acres disturbed per day during Grading					1.5

Sensitive Receptors

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from project activities.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a

full 24 hours but are typically onsite for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours"* (27). Therefore, any adjacent land use where an individual could remain for 1 or 8-hours, that is located at a closer distance to the project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8-hours.

Project-related Sensitive Receptors
Receptors in the project study area are described below and shown on **Figure III-1**. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the project site. All distances are measured from the project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the project site.

R1: Location R1 represents the existing residence at 6737 Milton Avenue, approximately 352 feet northwest of the project site. Since there are no private outdoor living areas (backyards) facing the project site, receptor R1 is placed at the building façade.
R2: Location R2 represents the Grace Brethren Church Whittier at 6704 Milton Avenue, approximately 563 feet north of the project site. Since there are no private outdoor living areas (backyards) facing the project site, receptor R2 is placed at the building façade.
R3: Location R3 represents The Good Shepherd Church at 7021 Greenleaf Ave, approximately 225 feet east of the project site. Since there are no private outdoor living areas (backyards) facing the project site, receptor R3 is placed at the building façade.
R4: Location R4 represents the existing residence at 7052 Milton Avenue, approximately 174 feet southwest of the project site and is placed at the outdoor living areas (backyards).
R5: Location R5 represents the existing residence at 7014 Milton Avenue, approximately 33 feet west of the project site and is placed at the outdoor living areas (backyards).

Construction-Source Emissions (LST Analysis)
Since the total acreage disturbed is less than five acres per day for demolition, site preparation and grading activities, the SCAQMD's screening look-up tables were utilized to determine impacts for phases. It should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table III-12 were calculated by interpolating the threshold values for the project's disturbance of 1-acre.

Table III-12
MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Construction Activity	Construction Localized Thresholds			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	64 lbs/day	494 lbs/day	4 lbs/day	1 lbs/day
Site Preparation	83 lbs/day	673 lbs/day	5 lbs/day	1 lbs/day
Grading	102 lbs/day	852 lbs/day	6 lbs/day	2 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology, July 2008

Localized Construction-Source Emissions
Table III-13 identifies the localized impacts at the nearest receptor location in the vicinity of the project. For analytical purposes, emissions associated with peak demolition, site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs

for emissions of any criteria pollutant. Outputs from the model runs for unmitigated construction LSTs are provided in the AQIA.

Table III-13
LOCALIZED SIGNIFICANCE SUMMARY OF CONSTRUCTION

Constructio n Activity	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	**Maximum Daily Emissions**	**14.38**	**14.11**	**1.32**	**0.67**
	SCAQMD Localized Threshold	64	494	4	1
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Site Preparation	**Maximum Daily Emissions**	**6.24**	**6.16**	**0.68**	**0.40**
	SCAQMD Localized Threshold	83	673	5	1
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading	**Maximum Daily Emissions**	**16.62**	**14.58**	**2.85**	**1.70**
	SCAQMD Localized Threshold	102	852	6	2
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Based on project modeling, LST impacts would be less than significant.

Operational-Source Emissions (LST Analysis)
The proposed project is located on approximately 0.826 acres. As previously stated, the total development is proposed to consist of 24 residential (townhome) dwelling units. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

CO "Hot Spot" Analysis
As discussed below, the project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of project-specific CO "hot spots" is not needed to reach this conclusion. An adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO.

The proposed project considered herein would generate 174 net trips and would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative Bay Area Air Quality Management District (BAAQMD) CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the proposed project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

Toxic Air Contaminants

Construction Activity
During short-term construction activity, the project will also result in some diesel particulate matter (DPM) which is a listed carcinogen and toxic air contaminant (TAC) in the State of California. The

2015 Office of Environmental Health Hazard Assessment (OEHHA) revised risk assessment guidelines suggest that construction projects as short as 2-6 months may warrant evaluation. Notwithstanding, based on Urban Crossroad's professional opinion and experience in preparing health risk assessments for development projects, given the distance of the project from surrounding sensitive receptors, the dominant wind patterns blowing to the northwest away for receptors, and the annual PM2.5 emissions from equipment during each year of construction, any DPM generated from construction activity would result in less than significant ground level concentrations of DPM and not result in a significant health risks and no further evaluation is required.

Furthermore, many air districts throughout the state, including the SCAQMD, are currently evaluating the applicability of age sensitivity factors and have not established CEQA guidance. More specifically in their response to comments received on SCAQMD New Source Review rule, the SCAQMD explicitly states that:

"The Proposed Amended Rules are separate from the CEQA significance thresholds. The SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board. In the interim, staff will continue to use the previous guidelines for CEQA determinations."

Operational Activity
The project proposes residential land uses, which are not known emitters of substantial TAC concentrations. The project itself does not include any significant source of TACs that would potentially affect sensitive receptors. Land uses in the vicinity of the project include commercial and residential land uses. These land uses are not typically associated with the emission of TACs. Additionally, as stated in the Air Quality and Land Use Handbook: A Community Health Perspective the concern for residential land uses is generally limited to siting new development within 500 feet of a freeway or urban road with 100,000 daily vehicles or constructing a new freeway or urban road with 100,000 daily vehicles within 500 feet of existing residences. The project site is located over 1,500 feet from State Route 72 (Whittier Blvd) which has a volume of less than 50,000 daily vehicles thus exposure of persons on the project site would be less than significant.

Conclusion
The potential impact of project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during project construction.

Additionally, the project would not exceed the SCAQMD localized significance thresholds during operational activity. Further project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of project operations.

d. *Less Than Significant Impact* – The potential for the project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include: Agricultural uses (livestock and farming); Wastewater treatment plants; Food processing plants; Chemical plants; Composting operations; Refineries; Landfills; Dairies; and, Fiberglass molding facilities. The project is a residential development and does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction

and is thus considered less than significant. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed project would be less than significant and no mitigation is required.

Cumulative Impacts

As previously shown, the CAAQS designate the project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the project site as nonattainment for O_3 and $PM_{2.5}$.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.* In this report the AQMD clearly states (Page D-3):

…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

Construction Impacts

The project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed project construction-source emissions would be considered less than significant on a project-specific and cumulative basis.

Operational Impacts

The project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed project operational-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed project operational-source emissions would be considered less than significant on a project-specific and cumulative basis.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: 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?	☐	☐	☐	☒

SUBSTANTIATION: The following information utilized in this Section of the Initial Study was obtained from the U.S. Fish and Wildlife Service IPaC Trust Resources Report generated on February 08, 2024, as well as from the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB) generated on February 08, 2024.

Area Background

According to the City GPUEIR, the City and Planning Area support avian, reptile, and mammal species that occupy urban areas, but the vast majority of wildlife and sensitive species occur in the Puente Hills Preserve, which is in the northeastern portion of the City, away from the urban Uptown core.

The IPaC Trust Resources Report indicates that there are few listed species that occur within the Whittier area. These are:

- Coastal California Gnatcatcher (*Polioptila californica californica*)
    - This species is a United States Fish and Wildlife Service (USFWS) threatened species, and critical habitat exists for this species mainly in the Puente Hills area.
- Least Bell's Vireo (*Vireo belli pusillus*)
    - This species is a USFWS endangered species. The least Bell's vireo (LBVI) is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats.

- Monarch Butterfly (*Danaus plexippus*)
    - This species is a USFWS candidate species. The Monarch Butterfly's habitat consists of open fields and meadows with milkweed in the spring and summer, though they can also be found on the Coast of California during the winter.

Additionally, the City's GPUEIR indicates that some parts of the Planning Area provide suitable habitat for special-status plant and wildlife species including: western spadefoot, northern harrier, burrowing owl, yellow-breasted chat, coastal California gnatcatcher, San Diego woodrat, and red-diamondback rattlesnake. Most of these species are supported by relatively undisturbed natural areas including coastal sage scrub, grassland, and riparian habitats.

Impact Analysis

a. *Less Than Significant Impact* – The project site is currently 100% developed, as it contains an existing office structure with a paved parking lot, and limited landscaping. The site itself and surrounding area contain no natural habitat and no potential to support any species identified as a candidate, sensitive or special status species within the IPaC or CNDDB reports. As described above, the City's GPUEIR indicates that wildlife and sensitive species are generally most likely to occur in undeveloped areas within the City, specifically in the Puente Hills Preserve. Additionally, the City's GPUEIR suggests that the policies in the adopted General Plan would encourage the addition of trees in public and private spaces which both contribute to existing and provide additional habitat resources to support wildlife. As discussed in Subsection I(b), above, the proposed project would remove five large *Ficus nitida* (Indian Laurel Trees) along Comstock Avenue and Philadelphia Street, and 12 *Cupania* (Carrotwood) trees will be removed, that do not meet the criteria of the City's tree ordinance, and would ultimately be replaced with trees specified in the Uptown Whittier Streetscape Beautification Plan adopted by City Council on May 28, 2019 and with several other trees planned for the upper level, including an 8-tree Olive tree grove. As such, the proposed project would not conflict with the City General Plan's Goals and Policies intended to support wildlife in the City's urban areas. Ultimately, due to past disturbance within the site, no further biological studies are necessary. With no habitat or species of concern located within the project area, the development of the Comstock Place Townhouse Project has a less than significant potential to impact to any native biological resources. No mitigation is required.

b. *No Impact* – As stated under issue IV(a), above, the City's GPUEIR identifies the Puente Hills Preserve areas as possessing riparian habitat and sensitive communities, though none of these areas would be developed under the General Plan, which remains true for the proposed project. The proposed Comstock Place Townhouse Project would develop 24 townhouse units within a developed site containing one office building and a parking lot. Neither the project site or surrounding area contain any riparian habitat or other sensitive natural community resources, as the project is located within the urban Uptown area of the City. Therefore, no adverse impact to riparian habitat or any native biological resources would occur from implementing the proposed project. No mitigation is required.

c. *No Impact* – As stated under issues IV(a) and (b), above, the City's GPUEIR identifies the Puente Hills Preserve areas as possessing wetlands, though none of these areas would be developed under the General Plan, which remains true for the proposed project. Additionally, no state or federally protected wetlands are anticipated to occur within the urbanized areas of Whittier as water features are highly channelized in these areas. As the proposed project has been entirely developed with an office structure and parking lot, and no jurisdictional features run through the project site, or adjacent to the project site, no impacts to wetlands are anticipated to occur from the implementation of the proposed project. No mitigation is required.

d. *Less Than Significant Impact With Mitigation Incorporated* – According to the IPaC Resources Report and the CNDDB (**Appendix 6**) several species of migratory birds could potentially be affected by construction activities in the area. With no native habitat, and no wildlife corridors that traverse the

project site, implementation of the proposed project is not anticipated to interfere with the movement of native animals of any kind, or to impede the use of any native wildlife nursery sites. However, the project would require removal and replacement of trees on site that may be used for nesting birds, and construction could disturb nesting birds utilizing the trees adjacent to and within the site that would be retained. Therefore, the following mitigation measure is provided as a contingency in the event that any nesting birds are found at the site location:

BIO-1 ***The State of California prohibits the "take" of active bird nests. To avoid impacts to nesting birds (common and special status) during the nesting season (generally between February 1 to August 31), a qualified Avian Biologist shall conduct pre-construction nesting bird survey prior to project-related disturbance to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist shall set appropriate no-work buffers around the nest, which would be determined based on the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.***

Thus, with implementation of the above measure, any effects on wildlife movement or the use of wildlife nursery sites can be reduced to a less than significant impact.

e. *Less Than Significant With Mitigation Incorporated* – The project site is currently 100% developed with a parking lot and existing office structure. As shown on the plans provided as **Appendix 1** to this Initial Study, 5 existing Ficus trees along Comstock Avenue and Philadelphia Street will be removed per City Parks Department tree removal guidelines. Within the parking lot, there are 12 Carrotwood trees that will be removed that do not meet the criteria of the City's tree ordinance, and as such their removal would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. However, as discussed under Subsection I(b), above, there are a total of five existing *Ficus nitida* (Indian Laurel Trees) along Comstock Avenue and Philadelphia Street are planned to be removed in order to enable site development. The five individual Ficus trees support extensive surface roots. The trees have uplifted and damaged adjacent curbs, sidewalks, and street surfaces, and have been occurring for decades of the lives of these trees. These trees would experience significant decline to both their systemic vigor (growth systems) and structural integrity (ability to support themselves) in any such demolition and reconstruction efforts. Thus, the trees would be subject to severe decline and catastrophic failure and collapse if the trees were subject to conservation in place during such activities. As such, and as described in the Arborist Report provided as **Appendix 4**, these street trees should be removed and replaced, in the context of the site's redevelopment, with a species that is less invasively surface rooted, smaller in mature stature, and upright in growth form, and therefore more well-suited to the setting of townhouse building(s), more vertical spaces, and realistic street frontages planter sizes. Implementation of **MM AES-1** would ensure that the Applicant complies with the City's tree removal ordinance (Municipal Code 12.40), thus ensuring that the project will comply with local policies or ordinances protecting biological resources.

The project has been designed to comply with the City's Municipal Code, which would ensure compliance with local policies and ordinances protecting biological resources as the City's GPUEIR indicates that the Municipal Code further ensures compliance with bird and wildlife protection laws. No other local policies or ordinances protecting biological resources would apply to the proposed project, as no native biological resources exist on site. Therefore, impacts under this issue are considered less than significant with the implementation of **MM AES-1**.

f. *No Impact* – The City's GPUEIR specifies that there are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the City or that would affect the City or Planning Area. The Puente Hills Preserve Management Plan protects the Puente Hills Preserve, and as the proposed project is located in the Uptown area of the City, project implementation would not have a potential to impact this Management Plan. As such, the proposed project would not result in any conflicts with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: 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?	☐	☐	☒	☐

SUBSTANTIATION: A due diligence archaeological sensitivity assessment report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect entitled "Historic-Period Building Evaluation: Former Security-First National Bank Building, 12826 Philadelphia Street, Whittier, Los Angeles County, California" prepared by CRM TECH dated January 14, 2022, which was revised on June 9, 2022 (**Appendix 7**). The following summary information has been abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Background

Between October 2021 and January 2022 CRM TECH performed a cultural resources study on the former Security-First National Bank building at 12826 Philadelphia Street in the City of Whittier, Los Angeles County, California. Currently vacant, the building is situated at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue, in the southwest quarter of Section 21, Township 2 South Range 11 West, San Bernardino Baseline and Meridian.

The purpose of the study is to provide the City with the necessary information and analysis to determine whether the removal of the building would constitute "a substantial adverse change in the significance of a historical resource." In order to facilitate the significance evaluation of the building and to document its history and characteristics, CRM TECH conducted a cultural resources records search, pursued historical background research, contacted the local historical society, and carried out a field inspection of the building and its environs.

The results of these research procedures indicate that the building dates to 1952 and has been in use for banking, medical, dental, and other commercial purposes since then. In light of its age, the building was recorded into the California Historical Resources Inventory and designated temporarily as Site CRM TECH 3799-1H, pending assignment of a permanent identification number once the California Historical Resources Information System resumed normal operation. The building is a generally rectangular-shape masonry building with white stucco coating on the exterior walls. The primary façade, facing Philadelphia Street to the north, features a centered, deep-set front entry in the main, two-story mass framed by beveled walls and filled with a steel-framed, smoked-glass double door surrounded by plate-glass panels. A one-story addition attached to the eastern side has a similar double door on its northern elevation. The centered entry at the rear of the main mass opens to a paved parking lot, where a tall drive-up banking canopy is located. The western side of the building is blind, and the eastern side features three pairs of smoked-glass windows and an employee entrance near the rear. However, the building does not appear eligible for listing in the California Register of Historical Resources.

Based on these findings, CRM TECH concludes that former Security-First National Bank building does not meet CEQA's definition of a "historical resource." Accordingly, CRM TECH recommends to the City of Whittier a finding that the demolition of the building would not constitute "a substantial adverse change in

the significance of a historical resource." No further cultural resources investigation is recommended on this building.

Impact Analysis

a & b. *Less Than Significant With Mitigation Incorporated* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Significance Evaluation of On-Site Historical Resources

The results of the Cultural Resource Evaluation (**Appendix 7**) indicate that the former Security-First National Bank building was built in 1952 and used for its original function for many years before being converted to other commercial uses, such as dental and medical offices. At the time of its construction, Whitter's downtown core was well-established but expanding in service industry enterprises catering to the post-World War II residential boom. This building is related to that episode that helped shape the subsequent history of the city, but as one of numerous commercial buildings of similar vintage easily found across the region today, it does not demonstrate a unique, important, or particularly close association with this pattern of events or any other established themes in local and regional history.

Historical research has uncovered no evidence that the building is closely associated with any persons or specific events of recognized significance in national, state, or local history, nor have any prominent architects, designers, or builders been identified in its construction. In terms of architectural or engineering qualities, the building is not known to be an important or notable example of any architectural style, property type, period, region, or method of construction, either in relation to the original 1952 design or the 1975 remodeling, on the national, state, local, or neighborhood level.

In its current conditions, the building stands as unremarkable specimen of the Brutalist architecture that was popular among commercial and public buildings in the 1950s-1970s. What little information could be gathered from available sources on the designer for the project, Griffin and Banks, yielded no evidence that the firm gained any particular distinction or renown in the field of architecture. The contractor, Wheeler and Gray, appears to be somewhat more prominent in its field, but this building would certainly not be considered one of the firm's more prominent undertakings in its large body of work.

As an extensively altered late-historic-period building of common design and construction practice, the building does not exhibit a high level of artistic or aesthetic merit or an outstanding attention to design, detail, material, or craftsmanship. Nor does it hold the potential for any important data for the study of the history of downtown commercial development in Whittier, which is well- documented in both historical literature and contemporary publications. Based on these considerations, and in light of the criteria listed above, the present study concurs with the 2015-2016 evaluation that the former Security-First National Bank building at 12826 Philadelphia Street does not appear eligible for listing in the California Register of Historical Resources or for designation by the City of Whittier as a "historic landmark." As such, it does not meet CEQA's definition of "historical resources" in the category of "discretionary historical resources."

In light of this information and pursuant to PRC §21084.1, the following conclusions have been reached for the project:

- No historical resources within or adjacent to the project area have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed,

and thus, the project as it is currently proposed will not cause a substantial adverse change to any known historical resources.

- No further cultural resources investigation is necessary for the proposed project unless construction plans undergo such changes as to include areas not covered by this study.

However, if buried cultural materials are discovered during any earth-moving operations associated with the project, the following contingency mitigation measure shall be implemented:

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the City. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

With the above mitigation measure, the potential for impacts to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

c. *Less Than Significant Impact* – As noted in the discussion above, no available information suggests that human remains may occur within the APE, but there is a limited potential to encounter human remains. As such, in the event that human remains are inadvertently discovered during project construction activities, the human remains could be inadvertently damaged, which could result in a significant impact. Implementation of the proposed project would comply with provisions of state law regarding discovery of human remains, including PRC Section 5097.98 and Health and Safety Code Section 7050.5. If human remains are accidentally exposed during site grading, Section 7050.5 of the California Health and Safety Code requires a contractor to immediately stop work in the vicinity of the discovery and notify the County Coroner. The Coroner must then determine whether the remains are human and if such remains are human, the Coroner must determine whether the remains are or appear to be of a Native American origin. If deemed potential Native American remains, the Coroner contacts the NAHC to identify the most likely affected tribe and/or most likely descendant (MLD). Until the landowner has conferred with the MLD, the landowner shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities consider the possibility of multiple burials. Since this process is mandatory, no mitigation is required to ensure that the impacts to human remains will be treated with dignity and result in a less than significant impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: 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 operations?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

SUBSTANTIATION: An Energy Analysis (EA) was prepared for the proposed project. It is provided as **Appendix 8** to this Initial Study and is titled "Philadelphia & Comstock Townhouse, Energy Analysis, City of Whittier" prepared by Urban Crossroads dated September 27, 2024.

Existing Conditions

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2021, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included:

- As of 2021, approximately 7,359 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2021, approximately 605 million barrels of petroleum
- As of 2021, approximately 2,101 billion cubic feet of natural gas
- As of 2021, approximately 1 million short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. In 2022, about 251,923 million gallons (or about 5.99 million barrels) of finished petroleum products were consumed in the U.S., an average of about 690 million gallons per day (or about 16.4 million barrels per day). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day).

The most recent data provided by the EIA for energy use in California is reported from 2021 and provided by demand sectors as follows:

- Approximately 37.8% transportation sector
- Approximately 23.2% industrial sector
- Approximately 20.0% residential sector
- Approximately 19.0% commercial sector

According to the EIA, California used approximately 247,250 gigawatt hours of electricity in 2021. By sector in 2021, residential uses utilized 36.5% of the state's electricity, followed by 43.9% for commercial uses, 19.2% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building.

According to the EIA, California used approximately 200,871 million therms of natural gas in 2021 (U.S. Energy Information Administration, n.d.). In 2021 (the most recent year for which data is available), by sector, industrial uses utilized 33% of the state's natural gas, followed by 30% used as fuel in the electric power sector, 21% from residential, 11% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself (U.S. Energy Information Administration, n.d.). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas.

In 2022, total system electric generation for California was 287,220 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 203,257 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (17%). Natural gas is the main source for electricity generation at 47.46% of the total in-state electric generation system power as shown in Table VI-1.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- In 2022, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2022, the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- In 2020, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all but three other states.
- In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49% of California's in-state electricity generation. Natural gas fueled another 42%. Nuclear power supplied almost all the rest.
- In 2022, California was the fourth-largest electricity producer in the nation. The state was also the nation's third-largest electricity consumer, and additional needed electricity supplies came from out-of-state generators.

As indicated below, California is one of the nation's leading energy producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the project.

Table VI-1
TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2022)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	273	0.13%	181	5,716	5,897	6,170	2.15%
Natural Gas	96,457	47.46%	44	7,994	8,038	104,495	36.38%
Oil	65	0.03%	-	-	-	65	0.2%
Other (Waste Heat / Petroleum Coke)	315	0.15%	-	-	-	315	0.11%
Unspecified	-	0.0%	12,485	7,943	20,428	20,428	7.11%
Total Thermal and Unspecified	**97,110**	**47.78%**	**12,710**	**21,653**	**34,363**	**121,473**	**45.77%**
Nuclear	17,627	8.67%	397	8,342	8,739	26,366	9.18%
Large Hydro	14,607	7.19%	10,803	1,118	11,921	26,528	9.24%
Biomass	5,366	2.64%	771	25	797	6,162	2.15%
Geothermal	11,110	5.47%	253	2,048	2,301	13,412	4.67%
Small Hydro	3,005	1.48%	211	13	225	3,230	1.12%
Solar	40,494	19.92%	231	8,225	8,456	48,950	17.04%
Wind	13,938	6.86%	8,804	8,357	17,161	31,099	10.83%
Total Non-GHG and Renewables	**106,147**	**52.22%**	**21,471**	**28,129**	**49,599**	**155,747**	**54.23%**
SYSTEM TOTALS	***203,257***	***100.0%***	***34,180***	***49,782***	***83,962***	***287,220***	***100.0%***

Electricity
The usage associated with electricity use was calculated using CalEEMod Version 2022.1.1.21. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2022 IEPR's provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities.

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

Table VI-2, SCE's specific proportional shares of electricity sources in 2022. As indicated in Table VI-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0%.

Table VI-2
SCE 2022 POWER CONTENT MIX

Energy Resources	2022 SCE Power Mix
Eligible Renewable	**33.2%**
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
Coal	**0.0%**
Large Hydroelectric	**3.4%**
Natural Gas	**24.7%**
Nuclear	**8.3%**
Other	**0.1%**
Unspecified Sources of power*	30.3%
Total	**100%**
* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.	

Natural Gas
Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State

Transportation Energy Sources
The project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles identified 36.2 million registered vehicles in California, and those vehicles consume an estimated 17.2 billion gallons of fuel each year[3]. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector.

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2021, about 33% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2021. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1%.

[3] Fuel consumptions estimated utilizing information from EMFAC2021.

Evaluation Criteria
In compliance with Appendix G of the *State CEQA Guidelines,* this report analyzes the project's anticipated energy use during construction and operations to determine if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition, Appendix F of the *State CEQA Guidelines,* states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

Summary of Energy Demands

Construction Energy Demands
The estimated power cost of on-site electricity usage during the construction of the project is assumed to be approximately $792.41. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full project build-out, is calculated to be approximately 5,197 kWh.

Construction equipment used by the project would result in single event consumption of approximately 10,228 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the project's proposed construction process that are unusual or energy-intensive, and project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the project would result in the estimated fuel consumption of 6,660 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDs and HHDs) will total approximately 1,073 gallons. Diesel fuel would be supplied by the City and regional residential vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2022 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As supported by the preceding discussions, project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Operational Energy Demands
Transportation Energy Demands: Annual vehicular trips and related VMT generated by the operation of the project would result in a fuel demand of 540,093 annual VMT and 21,635 gallons per year during operations.

Fuel would be provided by current and future residential vendors. Trip generation and VMT generated by the project are consistent with other residential uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other residential developments of similar size.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from

trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Facility Energy Demands: Project facility operational net energy demands are estimated at: 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity. Natural gas would be supplied to the project by SoCalGas; electricity would be supplied by SCE. The project proposes conventional residential uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration.

Implementation of the project would increase the demand for electricity at the project site and petroleum consumption in the region during operation. However, the electrical consumption demands of the project during operation would conform to the state's Title 24 and to CALGreen standards, which implement conservation measures. Further, the proposed project would not directly require the construction of new energy generation or supply facilities and providers of electricity are in compliance with regulatory requirements that assist in conservation, including requirements that electrical providers achieve state-mandated renewal energy production requirements. With compliance with Title 24 conservation standards and other regulatory requirements, the project would not be wasteful or inefficient or unnecessarily consume energy resources during construction or operation and would result in a less-than-significant impact with respect to consumption of energy resources.

Lastly, the project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

Impact Analysis

a. *Less Than Significant Impact* – A significant impact would occur if the proposed project would result in the inefficient, wasteful, or unnecessary use of energy.

   Construction
   Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with future development projects, construction-related vehicle trips would result in approximately 188,939 VMT and consume an estimated 7,733 gallons of gasoline and diesel combined during future development projects construction phases. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel- powered equipment and are enforced by the ARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

   Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the

proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operation
Electricity and Natural Gas: Operation of the proposed project would consume energy as part of building operations and transportation activities. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on client provided energy use estimations, operations for the project would result in approximately 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity annually.

Future development projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Fuel: Operational energy would also be consumed during vehicle trips associated with future development projects envisioned under the proposed project. Fuel consumption would be primarily related to vehicle use by residents, visitors, and employees associated with future development projects. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 540,093 VMT and consume an estimated 21,635 gallons of gasoline and diesel combined, annually.

The project is located on an infill site that is surrounded by existing urban uses, the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the project access to a mix of land uses in close proximity to the project, thus further reducing fuel consumption demand. Additionally, the project will also be providing parking and EV infrastructure that would further promote fuel efficient vehicles. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

b. *Less Than Significant Impact* – A significant impact would occur if the proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction
As discussed in Section 5.1, above, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on- road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation
California's Renewable Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to

meet the 2022 Scoping Plan greenhouse gas emissions reductions. As discussed in above, the project would result in approximately a 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity annually.

This development project will be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that this development project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: 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 onsite or offsite land-slide, 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

SUBSTANTIATION: The analysis provided in this subsection is supported by a "*Preliminary Geotechnical Evaluation and Recommendations, Proposed Multi-Family Residential Development Located at the Intersection of Philadelphia Street and Comstock Avenue, Whittier, California*" prepared by LGC Geotechnical, Inc. dated May 17 2021. This report is provided as **Appendix 9** to this document.

a. i. Ground Rupture

Less Than Significant Impact – The proposed project is located in the Uptown area of the City of Whittier, which is set back from the Puente Hills. Many active faults run through the Puente Hills, however, none are delineated as Alquist Priolo Fault Zones. **Figure VII-1** depicts the locations of the Alquist-Priolo Fault Traces and Hazard Zones as prepared by the California Geologic Survey within the vicinity of the project. According to **Figure VII-1**, the site is not located on an active fault or within the nearest Alquist-Priolo fault zone. The Alquist-Priolo fault zones are approximately 3 miles to the

east of the project site. There is a potential for the proposed development to be subject to relatively strong ground motion. However, based on this information, the risk for ground rupture at the site location is low; therefore, it is not likely that future residents of the Comstock Place Townhouse Project would be subject to seismic hazards from rupture of a known earthquake fault. Furthermore, the project will demolish existing facilities and construct updated facilities that would be constructed to meet current California Building Code, which includes enhanced seismic safety standards. Therefore, any impacts under this issue are considered less than significant; no mitigation is required.

ii. Strong Seismic Ground Shaking

Less Than Significant With Mitigation Incorporated – As stated in the discussion above, several faults run through the southern California region in which the proposed project is located. According to the Envision Whittier General Plan Local Seismic Hazards and Earthquake Faults, **Figure VII-2** shows the Elsinore Fault Zone. Additionally, according to the Preliminary Geotechnical Investigation provided as **Appendix 9** to this document, some of the other major active nearby faults in the area include the Whittier, Puente Hills, Compton, Elysian Park, and Anaheim Fault Zones, among others. Like all other development projects in the City and throughout the Southern California Region, the proposed project will be required to comply with all applicable seismic design standards contained in the 2022 California Building Code (CBC), including Section 1613 Earthquake Loads. Compliance with the CBC can ensure that structural integrity will be maintained in the event of an earthquake. Additionally, given the strong potential for groundshaking at the site, the following mitigation measure shall be implemented to ensure that the seismic design values outlined in the Preliminary Geotechnical Investigation are incorporated into the final design for the proposed structures of the Comstock Place Townhouse Project.

GEO-1 Based upon the preliminary geotechnical investigation, all of the recommended seismic design parameters identified shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic soil stability on future project-related structures.

Therefore, impacts associated with strong ground shaking will be less than significant with mitigation.

iii. Seismic-related Ground Failure Including Liquefaction

No Impact – Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non- cohesive (granular) soils; and 3) high-intensity ground motion. The proposed project is located on an entirely developed lot that will not require extensive excavation to complete. According to the Envision Whittier General Plan Local Seismic Hazards and Earthquake Faults (**Figure VII-2**), seismically induced liquefaction is generally limited to the northeastern and southwestern portions of the City, and is not mapped as having the potential to occur within the project site or Uptown area. Furthermore, the Preliminary Geotechnical Investigation prepared for the proposed project indicates that due to the absence of groundwater and the presence of very stiff fine-grained soils in the upper 50 feet of soils at the project site, the potential for liquefaction is considered very low to remote. Therefore, the project will not expose people or structures to potential substantial adverse liquefaction hazards, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required. No mitigation is required.

iv. Landslides

No Impact – According to the Envision Whittier General Plan Local Seismic Hazards and Earthquake Faults (**Figure VII-2**), seismically induced landslide occurs generally near, and in the Puente Hills, and as the proposed project is located in the Uptown area of the City of Whittier, which is about 1 mile

to the west of the Puente Hills, the proposed project site is not located in an area with any known earthquake induced landslide hazards. Based on a site reconnaissance the project site is essentially flat as it contains existing development. Therefore, the project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required.

b. *Less Than Significant With Mitigation Incorporated* – The potential for soil erosion, loss of topsoil, and/or placing structures on unstable soils is anticipated to be marginally possible at the site during ground disturbance associated with construction. The project site is essentially flat with some pavement, one building, and non-native vegetation coverage. City grading standards, best management practices, and the Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) are required to control the potential significant erosion hazards.

During project construction when soils are exposed, temporary soil erosion could occur, which could be exacerbated by rainfall. Project grading and potential runoff would be managed through the preparation and implementation of a SWPPP during construction, and will be required to implement best management practices to achieve concurrent water quality controls after construction is completed and the Comstock Place Townhouse Project is constructed and occupied. The following mitigation measures or equivalent best management practices (BMPs) shall be implemented to address the potential erosion hazards:

GEO-2 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sandbags shall be used to capture and hold eroded material on the project site for future cleanup such that erosion does not occur.

GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Comstock Place Townhouse Project is being constructed.

With implementation of the above mitigation measures, as well as **MM GEO-1**, and the mandatory erosion control measures incorporated in the site design (i.e., retaining walls and extensive compacted fill), the project will not result in substantial soil erosion or the loss of topsoil. No further mitigation is necessary.

c. *Less Than Significant With Mitigation Incorporated* – Refer to the discussion under VII(a), above. Potential instability associated with slope stability related to the project was determined to be less than significant as the site and surrounding area are essentially flat. Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching, shallow ground rupture, soil liquefaction and dynamic settlement. According to the Preliminary Geotechnical Investigation (pages 9-10), liquefaction and dynamic settlement potential were determined to be very low to remote at the project site (refer to **Appendix 9**). Furthermore, the Preliminary Geotechnical Investigation identified several recommendations for site construction that will ensure that the proposed project is constructed to address the geotechnical constraints at the project site, including subsidence recommendations, which are addressed on page 17 (**Appendix 9**). These conclusions and recommendations shall be implemented through the following mitigation measure.

GEO-4 Based upon the Preliminary Geotechnical Investigation, all of the recommended design parameters shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including subsidence

According to the Geotechnical Investigation, the undocumented artificial fill soils consisted of variable amounts of sand, silt, clay, and gravel, that is brown to grayish brown, slightly moist to moist, and loose to very stiff up to approximately 5 feet below existing grade. The native alluvial soils consisted of primarily silt with varying amounts of sand and clay, that is brown to dark brown, dry to moist, and very stiff too hard for fine-grained soils and medium dense for coarse-grained soils. The near-surface loose and compressible soils are not suitable for the planned improvements in their present condition, and as such must comply with the recommendations outlined in **MM GEO-4**, above, to ensure that proper fill soil is imported or provided to develop the site. Thus, with the above mitigation measure, the project will not have a significant potential to 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Any impacts are considered less than significant with mitigation.

d. *Less Than Significant With Mitigation Incorporated* – The Preliminary Geotechnical Investigation concluded that the underlying soil/bedrock at the site possess low to medium expansive characteristics. The expansion potential of these materials is not considered to pose a hazard for the proposed site development. However, the final expansion potential of site soils will be determined at the completion of grading. Results of expansion testing at finish grades will be utilized to confirm final foundation design through the implementation of **MMs GEO-1** and **GEO-4**, which are intended to ensure that the recommendations provided in the Preliminary Geotechnical Investigation are implemented. Therefore, the development of the Comstock Place Townhouse Project at this site will have a less than significant potential to create a substantial risk to life or property by being placed on expansive soils because none exist on the site. Any impacts are considered less than significant with the implementation of mitigation identified above.

e. *No Impact* – The project does not propose any septic tanks or alternative wastewater disposal systems. Therefore, determining if the project site soils are capable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater does not apply. No impacts are anticipated. No mitigation is required.

f. *Less Than Significant With Mitigation Incorporated* – The potential for discovering paleontological resources during development of the project is considered highly unlikely based on the fact that the site has been previously engineered and disturbed at depth. No unique geologic features are known or suspected to occur on or beneath the site. However, because these resources are located beneath the surface and can only be discovered as a result of ground disturbance activities, the following measure shall be implemented:

GEO-5 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

With incorporation of this contingency mitigation measure, the potential for impact to paleontological resources will be reduces to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: 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?	☐	☐	☒	☐

SUBSTANTIATION: A Greenhouse Gas Analysis (GHGA) was prepared for the proposed project. It is provided as **Appendix 10** to this Initial Study and is titled "Philadelphia & Comstock Townhouse, Greenhouse Gas Analysis, City of Whittier" prepared by Urban Crossroads dated September 27, 2024.

Introduction to Global Climate Change

Global is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed project cannot generate enough GHG emissions to affect a discernible change in global climate. However, the project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, below is presented an evaluation of the potential for the project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

Global Climate Change Defined

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

Greenhouse Gases and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects such as the proposed project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's

ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

Global Warming Potential
GHGs have varying Global Warming Potential (GWP) values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO2 is utilized as the reference gas for GWP, and thus has a GWP of 1. Carbon dioxide equivalent (CO2e) is a term used for describing the difference GHGs in a common unit. CO_2e signifies the amount of CO2 which would have the equivalent GWP.

The GWP for the Second Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO_2 to 23,900 for SF_6 and GWP for the IPCC's 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6.

Greenhouse Gas Emissions Inventories
Global: Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2020. Based on the latest available data, the sum of these emissions totaled approximately 28,026,643 gigagram (Gg) CO_2e, as summarized under Table VIII-1. As noted in Table VIII-1, the United States, as a single country, was the number two producer of GHG emissions in 2020.

Table VIII-1
TOP GHG PRODUCTING COUNTRIES AND THE EUROPEAN UNION[4]

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	5,981,354
European Union (27-member countries)	3,706,110
India	2,839,420
Russian Federation	2,051,437
Japan	1,148,122
Total	**28,026,643**

State of California: California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2022 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2020 GHG emissions period, California emitted an average 369.2 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 369,200 Gg CO_2e (6.17% of the total United States GHG emissions).

Significance Thresholds
The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

[4] Used http://unfccc.int data for Annex I countries. Consulted the CAIT Climate Data Explorer in https://www.climatewatchdata.org site to reference Non-Annex I countries of China and India.

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3:** The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

Discussion on Establishment of Significance Thresholds
The City of Whittier has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of Whittier and numerous cities in the South Coast Air Basin (SCAB) and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As noted by the SCAQMD:

"…the…screening level for stationary sources is based on an emission capture rate of 90% for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than 1% of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."

Thus, and based on guidance from the SCAQMD, if a non-industrial project would emit GHGs less than 3,000 $MTCO_2e$/yr, the project is not considered a substantial GHG emitter and the GHG impact is less than significant, requiring no additional analysis and no mitigation. On the other hand, if a non-industrial project would emit GHGs in excess of 3,000 $MTCO_2e$/yr, then the project could be considered a substantial GHG emitter, requiring additional analysis and potential mitigation. As previously discussed, a screening

threshold of 3,000 $MTCO_2e$/yr is an acceptable approach for small projects to determine if additional analysis is required and is therefore applied for this project.

Impact Analysis

a. *Less Than Significant Impact* – GHG emissions associated with the proposed project would occur during both construction (short-term) and operations (long-term).

Construction Emissions

Project construction activities would generate CO_2 and CH_4 emissions The AQIA provided as **Appendix 5** contains detailed information regarding project construction activities. Construction related emissions are expected from the following activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Construction Duration

For purposes of analysis, construction of the project is forecast to commence in August 2024 and would last through January 2025. The construction schedule utilized in the analysis, shown in Table VIII-2, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[5] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. The duration of construction activities was based on CalEEMod defaults and an opening year of 2025.

Table VIII-2
CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	8/1/2024	8/14/2024	10
Site Preparation	8/15/2024	8/15/2024	1
Grading	8/16/2024	8/19/2024	2
Building Construction	8/20/2024	1/6/2025	100
Paving	12/31/2024	1/6/2025	5
Architectural Coating	12/31/2024	1/6/2025	5

Construction Equipment

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table VIII-3 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

[5] As shown in the CalEEMod User's Guide Version 2016.3.2, Section 4.3 "Offroad Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Table VIII-3
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Demolition	Tractors/Loaders/Backhoes	2	8
	Rubber Tired Dozers	1	8
	Concrete/Industrial Saws	1	8
Site Preparation	Graders	1	8
	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Cranes	1	8
	Forklifts	2	8
	Tractors/Loaders/Backhoes	2	8
Paving	Tractors/Loaders/Backhoes	1	8
	Cement and Mortar Mixers	4	8
	Pavers	1	8
	Rollers	1	8
Architectural Coating	Air Compressors	1	8

T/L/B = Tractors, Loaders, Backhoes; E = Excavators

Construction Emissions Summary
For construction phase project emissions, GHGs are quantified and amortized over the life of the project. To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table VIII-4.

Table VIII-4
AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[6]
2024	156.86	0.01	0.00	0.10	158.32
2025	12.25	0.00	0.00	0.01	12.36
Total GHG Emissions	169.11	0.01	0.00	0.12	170.68
Amortized Construction Emissions	**5.64**	**0.00**	**0.00**	**0.00**	**5.69**

Operational Emissions
Operational activities associated with the proposed project will result in emissions of CO_2, CH_4, and N_2O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Water Supply, Treatment, and Distribution

[6] CalEEMod reports the most common GHGs emitted which include CO_2, CH_4, N_2O and Refrigerants. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

- Solid Waste
- Refrigerants

Area Source Emissions
Landscape Maintenance Equipment: Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the project. It should be noted that as October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

Energy Source Emissions
Combustion Emissions Associated with Natural Gas and Electricity: GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity and natural gas usage associated with the project were calculated by CalEEMod using default parameters.

Mobile Source Emissions
Project mobile source GHG impacts are dependent on both overall daily vehicle trip generation and the effect of the project on peak hour traffic volumes and traffic operations in the vicinity of the project. The project-related GHG impacts are derived primarily from vehicle trips generated by the project. Trip characteristics available from the Trip Generation Assessment (**Appendix 13**) were utilized in this analysis.

Water Supply, Treatment, and Distribution
Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

Solid Waste
The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed project were calculated by CalEEMod using default parameters.

Refrigerants
Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters

Emissions Summary
The annual GHG emissions associated with the operation of the proposed project without mitigation are estimated to be approximately 212.86 CO_2e/yr as summarized in Table VIII-5.

Table VIII-5
PROJECT GHG EMISSIONS

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	5.64	0.00	0.00	0.00	5.69
Mobile Source	190.92	0.01	0.01	0.31	193.96
Area Source	6.14	0.00	0.00	0.00	6.15
Energy Source	49.19	0.00	0.00	0.00	49.38
Water Usage	1.42	0.03	0.00	0.00	2.36
Waste	1.58	0.16	0.00	0.00	5.54
Refrigerants	0.00	0.00	0.00	0.04	0.04
Total CO_2e (All Sources)	**263.12**				

Emissions Summary
The annual GHG emissions associated with the operation of the proposed project are estimated to be 263.12 $CO2_e$ per year as summarized in Table VIII-5. Direct and indirect operational emissions associated with the project are compared with the SCAQMD threshold of significance for small land use projects, which is 3,000 MT $CO2_e$ per year. As shown, the proposed project would result in a less than significant impact with respect to GHG emissions.

b. *Less Than Significant Impact* – As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the project's consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary since both of these plans have been superseded by the 2022 Scoping Plan. Project consistency with SB 32 is evaluated in the following discussion.

SB 32/2017 Scoping Plan Consistency
The project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the Low Carbon Fuel Standard. As such, the project would be consistent with the 2022 Scoping Plan.

Conclusion
As shown, the project does not directly conflict with any applicable plans or policies adopted for the purpose of reducing GHG emissions. Additionally, the project would not exceed the SCAQMD

threshold of 3,000 MT CO_2e. Therefore, project-related emissions would be less than significant relative to GHG reduction plans.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: 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 two 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?	☐	☐	☐	☒

SUBSTANTIATION: The analysis provided in this subsection is supported by a "*Phase I Environmental Site Assessment Report*" prepared by PIC Environmental Services dated January 26, 2021. This report is provided as **Appendix 11a** to this document. A follow-on Phase II report was prepared and is titled *Phase II Environmental Site Assessment Report*" and dated March 17, 2021. This report is provided as **Appendix 11b** to this document.

Background

In 1912, the site served as a gas station. The existing building was constructed in 1952. Historic use of the property as a former gasoline station could have caused subsurface contamination from the release of gasoline and other petroleum compounds. The former laundry at the project site that inhabited the project site in the late 1800s was demolished prior to the manufacturing of perchloroethene (PCE), and as such its past presence does not warrant further subsurface testing. However, the former gasoline station warrants a precautionary Subsurface Phase II Investigation. Asbestos containing construction materials (ACMs) may be present at the existing structure onsite, as the structure was constructed prior to 1980; however, hazardous waste disposal records indicate that much of the ACMs were removed in 1996.

The Phase II was prepared and the consultant—PIC—recommended and drilled a total of 3 borings where the former gasoline service station facilities was located. A total of four soil samples and three soils gas samples were recovered at depths of 5 to 10 feet. The laboratory results document a lack of detectable petroleum or solvents contamination in all soil and gas samples. All measured concentrations were well below the screening guidelines adopted by the Federal Environmental Protection Agency (EPA), the California Regional Water Quality Control Board, and the California Department of Toxic Substances Control.

Impact Analysis

a & b. *Less Than Significant With Mitigation Incorporated* – The project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or may 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. During construction of the proposed Comstock Place Townhouse Project, there are activities that can expose the public to significant hazards from accidental circumstances. The first pathway occurs when petroleum products are accidentally released from construction equipment or storage facilities. For example, vandalism can cause a release from stored fuels, or a hydraulic hose may break on a large piece of construction equipment. This type of impact is readily mitigated by immediately stopping the construction activity; controlling the accidental release; and carrying out remediation of the area contaminated by the spill. The following mitigation measure addresses this circumstance, and with implementation of this measure, no residual contamination will remain.

HAZ-1 Prior to and during grading and construction, should an accidental release of a hazardous material occur, the following actions will be implemented: construction activities in the immediate area will be immediately stopped; appropriate regulatory agencies will be notified; immediate actions will be implemented to limit the volume and area impacted by the contaminant; the contaminated material, primarily soil, shall be collected and removed to a location where it can be treated or disposed of in accordance with the regulations in place at the time of the event; any transport of hazardous waste from the property shall be carried out by a registered hazardous waste transporter; and testing shall be conducted to verify that any residual concentrations of the accidentally released material are below the regulatory remediation goal at the time of the event. All of the above sampling or remediation activities related to the contamination will be conducted under the oversight of Los Angeles County Certified Unified Program Agency (CUPA) Site Mitigation Unit (SMU). All of the above actions shall be documented and made available to the appropriate regulatory agencies prior to closure (a determination of the regulatory agency that a site has been remediated to a threshold that poses no hazard to humans) of the contaminated area.

Furthermore, as discussed under the Background discussion above, the Phase II report concluded that the project is unlikely to encounter soil contamination, as the areas in which the gas station operated within the site was sampled for evidence of petroleum contamination in the soils and none was found to exceed current significance thresholds. As such, it is unlikely that accidental uncovering of hazardous materials as a result of development at the project site will occur.

Roadways adjacent to the project site are public roads that can be used by any common carrier to or from the local area. For such transporters, the existing regulatory mandates ensure that the hazardous materials and any hazardous wastes transported to and from the project site will be properly managed. These regulations are codified in Titles 8, 22, and 26 of the California Code of Regulations. For example, maintenance trucks for construction equipment must transport their hazardous materials in appropriate containers, such as tanks or other storage devices. In addition, the haulers must comply with all existing applicable federal, state and local laws and regulations

regarding transport, use, disposal, handling and storage of hazardous wastes and material, including storage, collection and disposal. Compliance with these laws and regulations related to transportation will minimize potential exposure of humans or the environment to significant hazards from transport of such materials and wastes.

Since the proposed project involves the demolition of the existing structure on site, which may contain asbestos or lead based paint, appropriate abatement of identified chemicals is necessary prior to demolition. Federal and State regulations govern the demolition of structures where materials containing lead and asbestos are present. Asbestos-containing materials (ACMs) are regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal/OSHA. These requirements include SCAQMD Rules and Regulations pertaining to asbestos abatement (including Rule 1403); Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from CCR Title 8; CFR Title 40, Part 61, Subpart M (pertaining to asbestos); and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services.

Operation of the proposed Comstock Place Townhouse Project consists of 24 townhouse units; operation of such uses would not involve the use of a substantial amount of hazardous materials. Household cleaning supplies would be used in small quantities to support the townhouse residences, which the City's GPUEIR does not identify as capable of generating significant hazardous emissions or involve the use of acutely hazardous materials that could pose a significant threat to the environment. Compliance with all federal, State, and local regulations governing the storage and use of hazardous materials is required, and will ensure that the project operates in a manner that poses no substantial hazards to the public or the environment. No further mitigation is required.

c. *Less Than Significant Impact* – The project site is located less than one-quarter mile from any public school. The proposed project is located in close proximity to several private schools. About 1,000 feet to the southwest is Saint Mary's Catholic School, while Whittier Christian School is located less than 1,000 feet to the north of the project site, and about one quarter mile to the east of the project site is the Whittier Friends School. Based on the information contained in the Phase I and II Assessments, it is unlikely that the proposed project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed project is not anticipated to emit hazardous emissions as discussed under issue IX(a & b), above, as it is a project that would develop a single-family residential townhouse complex with no potential for use of substantial amounts of hazardous materials. Furthermore, the City's GPUEIR indicates that hazardous materials associated with new residential use would be used in such limited quantity that its use would not generate significant hazardous air emissions or involve the use of acutely hazardous materials that could pose a significant threat to the environment or human health. Based on this information, implementation of the project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Less than significant adverse impacts are anticipated under this topic.

d. *Less Than Significant Impact* – The proposed project consists of a previously developed site containing a parking lot and an office structure surrounded by existing urban development. The project will not be located on a site that is included on a list of hazardous materials sites that are currently under remediation. According to the California State Water Board's GeoTracker website (consistent with Government Code Section 65962.5), which provides information regarding Leaking Underground Storage Tanks (LUST) and other types of clean-up sites, there are no open LUST, Cleanup Program, Military, or Department of Toxic Substances Control (DTSC) clean-up sites within 1,000 feet of the project site (**Figure IX-1**). There are two cleanup sites that have been remediated, and are no longer considered hazardous to the environment and as such would not impact development at this site. The Envision Whittier General Plan map showing Hazardous Waste Generators (**Figure IX-2**) indicates that there is a hazardous waste generator in close proximity to

the project site, however the safe operations of this site are permitted, and must comply with federal, State, and local regulations governing the storage and use of hazardous materials, and as such would not pose a hazard to the occupancy of the project site by future residents of Comstock Place Townhouse Project. Therefore, the proposed construction and operation of the site as the Comstock Place Townhouse Project will not create a significant hazard to the population or to the environment from their implementation. No mitigation is required.

e. *No Impact* – The project site is not located within two miles of an airport or private airstrip. The El Monte Airport is located approximately 6.9 miles north of the center of the City, and Fullerton Airport is located approximately 8.5 miles southeast of the City. The City does not fall within the Planning Boundary/Airport Influence Area for either airport. As such, development of the proposed project at the proposed site location would have no potential to result in a safety hazard or excessive noise for people residing or working in the project area as a result of proximity to an airport or private airstrip. No impacts are anticipated and no mitigation is required.

f. *Less Than Significant Impact* – According to the City's GPUEIR, the Whittier Natural Hazards Mitigation Plan specifies all major public streets serve as principal evacuation routes including Whittier Boulevard, Lambert Road, Santa Fe Springs Road, La Mirada Boulevard/Colima Road, Norwalk Boulevard, Beverly Boulevard, and Interstate 605 (I-605). The proposed project will occur within the project site and is not anticipated to impact surrounding roadways. The project site is located adjacent to Philadelphia Street and Comstock Avenue, which have not been designated as evacuation routes by the City's GPUEIR. It is not anticipated that development of the project site would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the site activities will be confined within the proposed project site. The proposed construction staging plan and the onsite parking and circulation plans will be reviewed by the local Fire Department and City Engineering Department to ensure that the project's ingress/egress are adequate for accommodating emergency vehicles. Therefore, there is no potential for the development of the project to physically interfere with any adopted emergency response plans, or evacuation plans. No impacts are anticipated and no mitigation is required.

g. *No Impact* – According to the Envision Whittier General Plan Wildfire Hazards map (**Figure IX-3**), the proposed project is not located in a high fire hazard zone. Given the proposed project's location removed from the Puente Hills where the high and very high fire hazard severity zones are located, project implementation would not result and a potential to expose people or structures to fire hazards. No impacts are anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: 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 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 onsite or offsite?	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite 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?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within the planning area of the Los Angeles Regional Water Quality Control Board (RWQCB). The project would be supplied with water by City of Whittier Water Department that uses water supplied from local groundwater basins, and recycled water provided by Central Basin Municipal Water District (CBMWD) for landscape irrigation purposes.

For a developed area, the only three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater, stormwater runoff, and potential discharges of pollutants, such as accidental spills. Municipal wastewater is delivered to the Sanitation Districts of Los Angeles County (LACSD) through City of Whittier owned, operated, and maintained wastewater collection system. The LACSD and City of Whittier are required to comply with water quality and waste discharge requirements. Additionally, the Los Angeles County Flood Control District (LACFCD) operates the storm drain system. Stormwater discharges to the Pacific Ocean via the San Gabriel River, which is impaired by pollutants according to the City's GPUEIR.

To address stormwater and accidental spills within this environment, any new project must ensure that site development implements BMPs to control potential sources of water pollution that could violate any standards or discharge requirements during construction and BMPs to ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term. The project would implement operational BMP requirements for capturing, retaining, and treating on site stormwater runoff once the townhouses have been occupied. This shall occur through the implantation of the City required drainage management plan (shown on **Figure X-1**), and through the implementation of **MM HYD-1,** below. The project would be located within a developed site, and while it will contain landscaping, much of the project site will be covered with developed or paved impervious surfaces. As such, onsite drainage will be managed through biofiltration planters throughout the site (shown on **Figure X-1**). The construction BMPs would ensure that all potential water pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property during construction. This shall be enforced through the following mitigation measure:

HYD-1: Prior to the commencement of construction, the Applicant shall be required to implement and the construction contractor(s) shall select BMPs to achieve a reduction in pollutants from stormwater discharge to the maximum extent practicable during the construction of the Project, and to control urban runoff after the Project is constructed and is in operation. Examples of BMP(s) that would achieve a reduction in pollutants include, but are not limited to:

- ***The use of silt fences or coir rolls;***
- ***The use of temporary stormwater desilting or retention basins;***
- ***The use of water bars to reduce the velocity of stormwater runoff;***
- ***The use of wheel washers on construction equipment leaving the site;***
- ***The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;***
- ***The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and***
- ***Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.***

Furthermore, the City's GPUEIR considers that the City's development review process would minimize impacts under this issue from future development. With implementation of these mandatory Plans and their BMPs, **MM HYD-1,** as well as **MM HAZ-1** above, the development of Comstock Place Townhouse Project will not cause a violation of any water quality standards or waste discharge requirements.

b. *Less Than Significant Impact* – Implementation of the proposed project will not deplete groundwater supplies that would substantially affect the water availability for existing or planned land uses or biological resources. It is anticipated that, based on the Preliminary Geotechnical Investigation provided as **Appendix 9**, the depth to groundwater is anticipated to be greater than 100 feet below the ground surface (bgs) as groundwater was not encountered during the subsurface evaluation performed at the project site. Therefore, given that the project does not require extensive excavation, the potential to intercept groundwater during ground disturbing activities at the project site is considered to be less than significant. The design of the drainage facilities of the proposed project would encourage groundwater recharge through biofiltration planters throughout the site (shown in **Figure X-1**). Regardless, given that the project site is entirely developed with a parking lot and office structure, as well as supporting landscaping, and that the proposed project would result in a similar amount of impervious surface to the existing environmental setting, the groundwater basin would not experience substantial physical alteration or impact as a result of the proposed project

The Comstock Place Townhouse Project is a single-family residential townhouse project that will consist of 24 dwelling units. The project would be supplied with water by the City of Whittier that uses groundwater and other sources to meet primary customer demand. The City has provided the Applicant with a will service letter indicating that the City of Whittier Water Department has the resources to serve this project (refer to **Appendix 14**, which consists of a compilation of all Utility will-serve letters). The City's Urban Water Management Plan (2020) identifies sufficient water resources to meet demand in its service area. The total supply for City in 2019-2020 was 6,906 acre-feet (AF). This included groundwater from the Main San Gabriel Basin and the Central Basin in the total amount of 6,848 AF, with an additional supply of recycled water in the amount of 58 AF. The demand was 6,906 AF. According to the City, single-family uses accounted for 3,123 AF of the overall water demand in 2020. Based on data compiled by the Southern California Association of Governments (SCAG)[7], in 2019 there were approximately 20,629 single-family units, which indicates that each dwelling unit requires about 0.156 AFY per dwelling unit. Therefore, it can be assumed that this project, which would contribute an additional 24 dwelling units, would demand about 3.74 AF per year (AFY, 0.156 AFY x 24 units = 3.74 AFY). Based on the projected water demand for single-family residential townhouse uses within the City's service area for 2025, 1,758 AFY, and for 2045, 1,919 AFY, it is anticipated that the 3.74 AFY demand can be accommodated into the future, particularly given that the overall available water supply is anticipated to meet demand. These data indicate that the City has available capacity to serve the proposed project without significant adverse impacts on area groundwater basins. The City GPUEIR provides **MM UTIL-1**, which prevents future development from occurring where the development would demand water in excess of what is identified for supply in 2040 under the most recent UWMP. Furthermore, as stated above, the proposed project would not significantly decrease impervious area on site from that which occurs at the site at present, and in fact may enhance percolation. The development of the project will, therefore, not substantially interrupt the existing percolation of the site, or any flow of groundwater under the project site. No significant adverse impacts to groundwater resources are forecast to occur from implementing the proposed project. No mitigation is required.

c i. Result in substantial erosion or siltation onsite or offsite?

Less Than Significant Impact – The proposed project is not anticipated to significantly change the volume of flows downstream of the project site, and would not be anticipated to change the amount of surface water in any water body in an amount that could initiate a new cycle of erosion or sedimentation downstream of the project site. The City is primarily located in the Lower San Gabriel River sub-watershed area. The onsite drainage system will capture the incremental increase in runoff from the project site associated with project development. Onsite flows will be pretreated and flow collected and discharged through biofiltration planters. These systems will be designed to capture the peak flow runoff from the project site greater than 100-year flows, or otherwise detain this flow on site. Treated surface runoff will be discharged in conformance with Los Angeles County and City of Whittier requirements. The downstream drainage system will not be altered given the control of future surface runoff from the project site. The City GPUEIR identifies the above, in addition to compliance with the City's development review procedures, which require new projects to be consistent with regulations of federal and state agencies regarding BMPs to protect water quality, including erosion control, as sufficient to ensure a less than significant impact under this issue. Thus, the potential for downstream erosion or sedimentation will be controlled to a less than significant impact level.

c. ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?

Less Than Significant Impact – The proposed project will alter the existing drainage pattern onsite (there are no drainage courses) but will maintain the existing offsite downstream drainage system

[7] SCAG, 2024. 2021 Local Profiles. https://scag.ca.gov/sites/main/files/file-attachments/2021_local_profiles_dataset.xlsx?1661892901 (accessed 02/09/24)

through control of future discharges from the site through the bioretention basin, which would prevent flooding onsite or offsite from occurring. Onsite flows will be pretreated and collected through flow through biofiltration planters (**Figure X-1**). These systems will be designed to capture any excess runoff from the project site after development. The City GPUEIR identifies compliance with the City's development review procedures, which require new projects to be consistent with flood control regulations and guidelines of federal and state agencies to protect downstream properties, as sufficient to ensure a less than significant impact under this issue. Thus, the implementation of onsite drainage system improvements and applicable requirements included in the WQMP will ensure that stormwater runoff will not substantially increase the rate or volume of runoff in a manner that would result in substantial flooding on- or off-site. Impacts under this issue are considered less than significant with no mitigation required.

c. 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?

Less Than Significant With Mitigation Incorporated – The proposed project will alter the site such that stormwater runoff within the site may be increased, but will maintain the existing off-site downstream drainage system through control of future discharges from the site. This would prevent the project from exceeding the capacity of existing or planned stormwater drainage systems and from providing substantial additional sources of polluted runoff. The drainage throughout the project site will be captured and treated in the proposed biofiltration planters (**Figure X-1**). These systems will be designed to capture the flows above the peak 100-year flow runoff from the project site without development or otherwise be detained on site and discharged in conformance with Los Angeles County requirements. The runoff points from the site will remain the same and the outlets from the storm drain system will keep the peak flows within 10% of the existing peak flows. This project would discharge into the regional system that flows into Lower San Gabriel River sub-watershed, which eventually conveys flows to the Pacific Ocean. Varying amounts of urban pollutants, such as motor oil, antifreeze, gasoline, pesticides, detergents, trash, animal wastes, and fertilizers, could be introduced into downstream stormwater. However, the proposed project is not anticipated to generate discharges that would require pollution controls beyond those already designed into the project and/or required by the City as a standard operating procedure to meet water quality management requirements from the RWQCB. The proposed development would install onsite and offsite drainage improvements, including the bioretention planters, and connect to existing the drainage system downstream (**Figure X-1**). The project is not anticipated to result in a significant adverse impact to water quality or flows downstream of the project with implementation of mitigation outlined below.

The City and County have adopted stringent best management practices designed to control discharge of non-point source pollution that could result in a significant adverse impact to surface water quality. The City has implemented a stringent non-point source water pollution control program. The City has identified BMPs that when implemented, can ensure that neither significant erosion and sedimentation, nor other water quality degrading impacts will occur as a result of developing the project. Although BMPs are mandatory for the project to comply with established pollutant discharge requirements, the following mitigation measure is designed to establish a performance standard to ensure that the degree of water quality control is adequate to ensure the project does not contribute significantly to downstream water quality degradation. Mitigation (**MM HYD-4**) to enforce BMPs is provided below to minimize impacts at sites that are less than an acre and are therefore not subject to the CGP or SWPPP. **MM HYD-4** would require implementation of BMPs for projects of less than one acre in size that would be comparable to the requirements of the CGP and SWPPP, which are required for larger projects, thereby avoiding a potentially significant impact under this issue. Each of these permits and plans would require the implementation of BMPs that manage overland runoff from construction sites and establish permanent drainage pathways to stabilized outlets. With implementation of such BMPs, compliance with conditions of required permits governing storm water runoff from construction sites, and retention of runoff on site where feasible, the potential to 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 would be reduced to less than

significant levels and discharges from construction sites would not exceed the capacity of existing storm water drainage systems. Construction impacts would be less than significant through the implementation of mitigation.

Compliance will also be ensured through fulfilling the requirements of the City's required drainage management plan implementation of which will be monitored by the City and the RWQCB. The project would implement operational BMP requirements for capturing, retaining, and treating on site stormwater runoff once the townhouses have been occupied. This shall occur through the implantation of the City required drainage management plan (shown on **Figure X-1**), and through the implementation of **MM HYD-1,** below. The project would be located within a developed site, and while it will contain landscaping, much of the project site will be covered with developed or paved impervious surfaces. As such, onsite drainage will be managed through biofiltration planters throughout the site (shown on **Figure X-1**). Thus, the implementation of onsite drainage improvements and applicable requirements will ensure that that drainage and stormwater will not create or contribute runoff that would exceed the capacity of existing or planned offsite stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts under this issue are considered less than significant with mitigation required.

c. iv. Impede or redirect flood flows?

Less Than Significant Impact – As shown on the Envision Whittier General Plan provided as **Figure X-2**, the project site is located within an area delineated as having a minimal flood hazard potential. Furthermore, development of this site is not anticipated to redirect or impede flood flow at the project site, particularly given that surface flows on site will be directed to the onsite drainage features which will be capable of intercepting the peak 100-year flow rate from the project site or otherwise be detained on site and discharged in conformance with Los Angeles County requirements. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

d. *Less Than Significant Impact* – Implementation of the project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or other flood hazards. According to the Envision Whittier General Plan Map depicting Inundation Hazards (**Figure X-2**), the proposed project is not located in an area of dam inundation or by any of the surrounding reservoirs, and as it is located outside of the inundation area, the potential for seiche to occur from these enclosed bodies of water that would impact the proposed project is negligible. Furthermore, the project is located about 15 miles from the Pacific Ocean, and is located at an elevation that is about 317 feet above mean sea level (amsl). Therefore, the potential to expose people or structures to a significant risk of flood hazard due to dam inundation, tsunami, or seiche would be minimal. Furthermore, as discussed under Subchapter IX, Hazards and Hazardous Materials, as well as under issues X(a) and (c[i-iv]), above, the proposed project would manage the potential for polluted runoff and therefore would manage the potential for pollutant release in the unlikely event of project inundation. Thus, impacts under this issue are less than significant and no mitigation is required.

e. *Less Than Significant Impact* – According to the City's GPUEIR, the Water Quality Control Plan Los Angeles Region (Basin Plan) is the water quality control plan for the greater Los Angeles Basin, including the City of Whittier. All development within the City is required to be consistent with the Basin Plan, as such, as this is a City requirement, the proposed project has been designed to not conflict with Basin Plan.

Whittier is underlain by the Los Angeles coastal plain groundwater basin system. This system is made up of five groundwater basins: West Coast, Santa Monica, Hollywood, Central Basin, and the Orange County Coastal Plain. Whittier is located within the Central Basin which underlies a large portion of the southeastern part of the Los Angeles coastal plain. This groundwater basin is considered a very low priority. The Sustainable Groundwater Management Act (SGMA) "requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability

within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline."[8] The City's GPUEIR indicates that the two local Watermasters are currently in the process of determining if it will form or join a groundwater sustainability agency (GSA) to prepare groundwater sustainability plan (GSPs) for their respective groundwater basins. Once the GSPs are developed, the UWMPs of the four-local water-serving agencies/companies will need to bring their UWMPs into compliance or consistency with the GSP. As stated under issue X(b), above, the proposed project would comply with the City's **GPEIR MM UTIL-1**, which prevents future development from occurring where the development would demand water in excess of what is identified for supply in 2040 under the most recent UWMP. As the proposed project would not demand water in excess of the identified supply by the City's 2020 UWMP, the proposed project would have a less than significant potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

[8] State Water Resources Control Board, 2024, Sustainable Groundwater Management Act (SGMA) https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management (accessed 03/08/24)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: 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?	☐	☒	☐	☐

SUBSTANTIATION: A Parking Management Plan (PMP) was prepared for the proposed project. It is provided as **Appendix 14** to this Initial Study and is titled Comstock & Philadelphia Townhomes Parking Management Plan prepared by Urban Crossroads dated November 6, 2024.

a. *No Impact* – Refer to the aerial photos provided as **Figures 1 and 2**, which depict the project's regional and site-specific location. The project site would be developed within a site zoned for urban development under the UWSP, specifically Uptown Center, which allows for attached single-family uses, such as the townhouse uses proposed by the project. The project is located within a developed site containing a vacant office and parking lot, surrounded by comparable urban development. The development of the Comstock Place Project at this location would be consistent with both the uses surrounding the project and the surrounding land use designations and zoning classifications. Consequently, the development of the project site with the proposed use will not divide any established community in any manner. Therefore, no significant impacts under this issue are anticipated and no mitigation is necessary.

b. *Less Than Significant With Mitigation Incorporated* – The project site encompasses about 0.826 acre, and it is zoned for Specific Plan use (UWSP, Uptown Center). The project proposes a total of 24 townhouse units at a density of 29.02 dwelling units per acre (DU/A). With approval of the certain variances outlined in the project description, the proposed Comstock Place Townhouse Project will be fully consistent the City's zoning classification and General Plan designation for the project site. These variances are detailed in the project description and would have minimal effect on the welfare of the citizens of the City of Whittier, which is protected through the provisions in both the City's General Plan and the UWSP. Ultimately, the variances from the specific plan, which are specific to the proposed Comstock Place Project only, would allow for the following:

- "Lot Width" for the Courtyard Housing: Allow for a minimum lot size of 120 feet instead of the required minimum 125 feet for courtyard housing. **UWSP section 4.4.8 (A)**.
- Tandem parking: Allow the use of 8 tandem parking garages. The Uptown Whittier Specific Plan (UWSP) does not allow tandem parking. 8 tandem parking garages have been incorporated into the site plan out of 24. **UWSP section 4.9.1 (E) (4)**.
- Guest Parking: Allow for the revision of the required number of guest parking spaces at 6 spaces to 4 spaces. **UWSP section 4.3.4 section (C) (3)**.
- Guest Parking Placement: Allow for guest parking that does not meet the provisions of **UWSP, Center District section 4.3.4 (C)(1)**.

The above variances would enable full site utilization of a smaller minimum lot size than that which is required in the UWSP, which is necessary in order to develop a project of this type within the narrow site proposed for the Comstock Place Townhouse Project. The variances would allow for tandem garages to create more efficient parking capabilities within the small site, and allow for more flexible parking in light of the small site constraints. These variances are primarily parking related, and the variances are justified by the fact that the proposed project is located in a low vehicle miles traveled area (VMT) because the project site is located in an area 15% below the City average daily home-based VMT per capita. Furthermore, the enablement of these variances would further aid the City in

meeting Southern California Association of Governments (SCAG) Regional Housing Needs Assessment (RHNA) requirements. These modifications are supportive of the intent of the UWSP and would comply with the City's General Plan.

Furthermore, to demonstrate that adequate parking supply exists within the proposed Project, a Parking Management Plan (PMP) was prepared by Urban Crossroads (**Appendix 14**) to provide a review of the City of Whittier Municipal Code parking requirements and an estimate of the peak parking demands. Chapter 4.3.4 of the UWSP Code describes the Uptown Center off-street parking for residential land uses. Chapter 4.3.4.C.3 identifies the parking stalls required for residential land uses such as the proposed Project. The PMP utilized the Institute of Transportation Engineers (ITE) Parking Generation Manual to project the actual parking need for the project site. The PMP determined that 34 parking spaces would be needed to support a project of this size and type. The proposed project provides a total of 59 parking spaces, which is greater than that which the PMP identified as necessary for a project of this size and type. Additionally, the PMP determined that the project can apply additional parking strategies to increase the parking supply. With a PMP, the availability of parking for guests and residents can be maximized (refer to the PMP shown on **Figure XI-1**).

The PMP outlines the onsite parking supply and key parking management strategies to maximize the utilization of parking for residents and guests. The PMP provides the following recommendations that shall be enforced through the following mitigation measure:

LU-1: The Applicant shall be required to implement the following parking management strategies:

- ***Short-term parking shall be considered adjacent to the center of the community for equal distribution throughout the development.***
- ***The ADA compliant parking stalls, resident stalls, and guest parking stalls shall have the appropriate signage.***
- ***The HOA shall ensure residents comply with the PMP recommendations and rules of conduct.***

A review of the Land Use Element Goals indicates that of the 26 goals, the proposed project is consistent with Goals 1, Policy LUCC-1.3, Goal 2, LUCC-2.4, and Goal 3, LUCC-3.1, 3.2, 3.5. All other Land Use Element Goals are not applicable to the proposed project.

A review of all other General Plan Element Goals (Mobility and Infrastructure, Housing Element, Historic Resources Element, Resource Management Element, and Public Safety, Noise, and Health Element) indicates that the proposed project is consistent with all applicable Goals, often with mitigation, as demonstrated by the findings in the pertinent sections of this Initial Study. The proposed project can be implemented without significant effects on the circulation system; all infrastructure exists at or can be extended to the site to support the 24 townhouse unit project; it can meet the City's goal to establish and maintain a balanced, multi-modal transportation network that enables residents to travel safely and minimize environmental and neighborhood impacts in the City; it will provide the City with additional facilities to support human resident recreation needs, as well as meet the needs of the Housing Element; it will not generate significant air emissions or GHG emissions; it will meet noise design requirements with mitigation; it can meet all Public Safety, Noise, and Health Element requirements; and it implements the City's Housing Element, specifically Goals 1 and 3 which state:

- *Goal 1: Encourage a variety of housing types to meet the existing and future needs of City residents.*
  - *HE-1.1: Implement land use policies and standards that allow for a range of residential densities and products that will provide households of all types and income levels the opportunity to find suitable ownership or rental housing.*
  - *HE-1.2: Encourage residential development in key areas, L Line transit-oriented district, Uptown, and along Lambert Road and Whittier Boulevard corridors, to create active,*

enlivened destinations and centers that encourage transit use, improve walkability, while providing housing for all income levels and a diversity of housing types.
    - *HE-1.3: Encourage infill development and recycling of land to provide adequate residential sites.*
    - *HE-1.4: Support the assembly of small vacant or underutilized parcels to enhance the feasibility of infill development.*
- *Goal 3: Address and where legally possible, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities.*
    - *HE-3.1: Review projects in as timely a manner as possible, while maintaining adequate public involvement and fulfilling the appropriate requirements of state and local laws.*
    - *HE-3.3: Use the community benefit program, density bonuses, fee reductions, or other regulatory incentives, as available and appropriate, to minimize the effect of governmental constraints.*
    - *HE-3.6: Encourage energy conservation and sustainable building measures in new and existing homes through adherence to the California Green Building Code.*

In addition to the above goals and policies pertaining to the City's Housing Element, the proposed project would comply with the Resource Management Element (natural environment, water resources, air quality, greenhouse gas, and associated health effects, tribal resources, oil and gas, parks and open spaces, and urban forestry, and energy demands). Specifically, an Arborist Report (**Appendix 4**) was prepared to address the potential impacts to trees within the project area of potential effects (APE). Resources Management Element Goals and Policies that are applicable to this project are as follows:

- *Goal 11: An urban forestry program that provides for shaded green spaces citywide, preserves long-established character of Whittier's boulevards, and provides incentives for tree planting and preservation on private properties.*
    - *RM-11.2: Maintain a street tree and planting plan that includes strategies for long-term planned replacement of specimen trees due to age or disease.*
    - *RM-11.6: Require tree planting for all new development projects with trees that are climate appropriate, add quality and character to a site, and forward the City's climate adaption goals.*
    - *RM-11.7: Aim to protect mature trees and urban forests.*

The proposed project would require the removal of 5 existing *Ficus nitida* (Indian Laurel Trees) along Comstock Avenue and Philadelphia Street in order to enable site development. The five individual Ficus trees supported extensive surface roots. Existing conditions have exposed the Ficus' surface root systems to be very shallow and in contact with many of these uplifted/damaged features referenced in the Arborist Report. The Arborist Report makes the determination that, these trees would be subject to significant disaffection as the result of substantial efforts to repair the uplifting damage caused by the existing root systems. Additionally, the trees would be subject to severe impacts to their surface root structures in any such effort and would experience significant decline to both their systemic vigor (growth systems) and structural integrity (ability to support themselves) in any such demolition and reconstruction efforts. Therein, the trees would be subject to severe decline and catastrophic failure and collapse if they were subject to conservation in place during such operations. Thus, as described in the Arborist Report, these street trees should be removed and replaced, in the context of the site's redevelopment, with a species that is less invasively surface rooted, smaller in mature stature, and upright in growth form, and therefore more well-suited to the setting of townhouse building(s), more vertical spaces, and realistic street frontages planter sizes. The replacement street trees shall be in conformance with the trees specified in the Uptown Whittier Streetscape Beautification Plan adopted by City Council on May, 28, 2019. The Applicant will be required, through **MM AES-1**, to obtain tree removal permits pursuant to City of Whittier Municipal Code 12.40. Given the above discussion, the development of the proposed project would ensure that, while trees would be removed, their removal is imperative given the condition of the existing trees. Furthermore, per the landscape plans (**Figure I-1**) that have been developed for the proposed

Comstock Place Townhouse Project, replacement trees would be sizable at the start, thus ensuring that the City's urban forest is protected. Thus, the proposed project would conform with the City's Resources Management Element.

Therefore, the implementation of this project at this site is consistent with the City's plans and policies. Based on the preceding information, implementation of the Comstock Place Townhouse Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, zone classification, or the City's Municipal Code) adopted for the purpose of avoiding or mitigating an environmental effect. No adverse impacts are anticipated under this issue and no additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: 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?	☐	☐	☐	☒

SUBSTANTIATION

a & b. *No Impact* – The proposed site for the Comstock Place Townhouse Project is highly disturbed as it is currently developed with an office and a parking lot. The site is in an urbanized area surrounded by development to the south, east, west, and north within the City of Whittier's Uptown area. According to the map prepared for the Whittier GPUEIR depicting Oil Production Facilities, provided as **Figure XII-1**, the project is not located on a site that has potential for oil production, or for other mineral resources to occur. The City's GPUEIR indicates that future development within the City that complies with the City's land use designations would have no potential to impact mineral resources. As the proposed project would comply with the City's land use designation, the development of the proposed project will not cause any loss of mineral resource values to the region or residents of the state, nor would it result in the loss of any locally important mineral resources identified on the Envision Whittier General Plan. No impacts would occur under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a 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 two 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?	☐	☐	☐	☒

SUBSTANTIATION: A Noise Impact Analysis (NIA) was prepared for the proposed project. It is provided as **Appendix 12** to this Initial Study and is titled "Comstock Residential, Noise Impact Analysis, City of Whittier" prepared by Urban Crossroads dated October 22, 2024.

Background

Noise is generally described as unwanted sound. The proposed project will include the development of 24 townhouse units as well as associated site improvements. The site is located within the City of Whittier within the Uptown area of the City, and as such is surrounded by urban development. The distance to the nearest sensitive receptors is about 200 feet from the project site, as there are scattered multi-family residences in all directions in this area. Regardless, the background noise level at the project site is moderate to high, given the urban environment within which the project will be developed.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called "A-weighting," written as "dBA."

L_{eq} is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit is the decibel (dB). The most common averaging period for L_{eq} is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA increment be added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable"

up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

Significance Thresholds

Envision Whittier General Plan

The Envision Whittier General Plan addresses noise in the Public Safety, Noise and Health Element to control and abate environmental noise, and to protect the citizens of Whittier from excessive exposure to noise. The Public Safety, Noise and Health Element section specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Public Safety, Noise and Health Element identifies noise polices designed to protect, create, and maintain an environment free from noise that may jeopardize the health or welfare of sensitive receivers, or degrade quality of life. To protect City of Whittier residents from excessive noise, the Public Safety, Noise and Health Element contains the following goals related to the project:

Goal 10: Noise levels community-wide that allow residents to enjoy quiet neighborhoods and outdoor activities.

- *PSNH-10.1: Work toward the separation and buffering of major roadways from noise-sensitive land uses such as residences, care facilities, schools, and hospitals.*
- *PSNH-10.2: Consider steps to correct existing noise problems. Avoid future problems through design measures such as buffers and barriers or through abatement procedures.*
- *PSNH-10.3: Control, at their sources, any sounds that exceed accepted community noise levels.*
- *PSNH-10.4: Consider noise impacts as part of the development review process, particularly the location of parking, recreational activities, crowd noises, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.*
- *PSNH-10.5: Use the provisions in the City's noise ordinance to abate unlawful noise.*
- *PSNH-10.6: Enforce Municipal Code noise controls for construction projects.*
- *PSNH-10.7: Minimize new residential or other noise-sensitive land use development in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce outdoor activity area noise levels to a "normally acceptable" community noise equivalent level (CNEL).*
- *PSNH-10.8: Require industrial uses and trucking-related uses to incorporate buffers that maintain acceptable noise levels for surrounding uses and areas.*
- *PSNH-10.9: Regulate the use of sound-amplifying equipment to prevent impacts on sensitive receptors.*

Land Use Compatibility

Table PSHN-11: Noise and Land Use Compatibility Guidelines in the Envision Whittier General Plan Public Safety, Noise and Health Element provides guidelines to evaluate the allowable exterior noise levels by land use type. The compatibility criteria, shown on Exhibit XII-1, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

Table PSNH-5: Noise and Land Use Compatibility Guidelines describes categories of compatibility and not specific noise standards. According to these categories of compatibility, sensitive residential land use in the project study area is considered clearly compatible with exterior noise levels below 60 dBA CNEL and normally compatible with exterior noise levels below 70 dBA CNEL. For normally compatible land use, new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Exhibit XII-1: CITY OF WHITTIER NOISE AND LAND USE COMPATIBILITY MATRIX

Land Use Category	Community Noise Exposure Limit (CNEL or DNL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low-Density Single-Family, Duplex, Mobile Homes	60	70	75	75+
Residential - Multi-Family	65	70	75	75+
Transient Lodging - Motels, Hotels	65	70	80	80+
Schools, Libraries, Religious Buildings, Hospitals, Nursing Homes	70	70	80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	70	N/A	70+
Sports Arenas, Outdoor Spectator Sports	N/A	N/A	75	75+
Playgrounds, Neighborhood Parks	70	70	75	75+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75	N/A	80	80+
Office Buildings, Business Commercial and Professional	70	77.5	77.5+	N/A
Industrial, Manufacturing, Utilities, Agriculture	75	80	80+	N/A

Source: OPR, 2017, Appendix D

Municipal Code

To analyze noise impacts originating from a designated fixed location or private property such as the Comstock Place Townhouse Project, stationary-source (operational) noise is typically evaluated against standards established under a City's Municipal Code where available.

Chapter 8.32 of the City of Whittier Municipal Code regulates control of noise and vibration. This Chapter was updated in February 2020. The current City Municipal Code is more general in nature and does not prescribe specific noise limits. Section 8.32.030 of the City Municipal Code specifies: It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any excessive or unreasonable noise, which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. Section 8.32.060 indicates that the official's normal hearing faculties shall be the primary means of noise detection. Based on the evaluation criteria, a readily noticeable change of ≥ 5 dBA CNEL project increase is used to evaluate operational noise impacts.

Construction Noise Standards

Section 8.32.040 discusses loud, annoying, and unnecessary noises, and specifically defines horns and signaling devices (section F), erection or demolition of buildings, the grading and excavation of land, the start-up and use of heavy equipment (e.g., dump trucks and graders), and the use of jack hammers. These noises would be in violation of the Municipal Code except on weekdays between the hours of 7:00 a.m. and 6:00 p.m. and on Saturdays 8:00 a.m. to 5:00 p.m.

However, neither the Envision Whittier General Plan nor Municipal Code establishes a numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally

not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for residential land uses, 85 dBA L_{eq} for commercial land uses, and 90 dBA L_{eq} q for industrial uses.

Construction Vibration Standards

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration.

To analyze vibration impacts originating from the operation and construction of the Comstock Place Townhouse Project, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Whittier does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans Transportation and Construction Vibration Guidance Manual, (11 p. 38) Table 19, vibration damage are used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. The construction vibration damage potential criteria include consideration of the building conditions. (3 p. 182) Table XIII-1 describes the maximum acceptable transient and continuous vibration building damage potential levels by structure type and condition. The existing buildings adjacent to the project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

Table XIII-1
BUILDING DAMAGE VIBRATION CRITERIA

Structure and Condition	Maximum Transient Vibration Levels PPV (in/sec)	Maximum Continuous Vibration Levels PPV (in/sec)
Extremely fragile historic buildings	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial / commercial buildings	2.0	0.5

Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.

Noise Sensitive Receivers

Based on Section 8.32.060 of the City of Whittier Municipal Code, a readily noticeable change of ≥ 5 dBA CNEL project increase is used to evaluate operational noise impacts.

Significance Criteria

Table XIII-2
SIGNIFICANCE CRITERIA SUMMARY

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
On-Site Traffic Noise	Exterior Noise Level Criteria[1]	See Exhibit XII-1	
	Interior Noise Level Standard[2]	45 dBA CNEL	
Operational	Exterior Noise Level Standards[3]	≥ 5 dBA CNEL Project increase	
Construction Noise & Vibration	Stationary Equipment Noise Level Threshold[3]	80 dBA L_{max}	N/A
	Vibration Level Threshold[4]	0.3 PPV in/sec	

1 City of Whittier General Plan, 2021.
2 City of Whittier Municipal Code Section 8.32.060.
3 Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Existing Noise Level Measurements

To assess the existing noise level environment, 24-hour noise level measurements were taken at four locations in the project study area. The receiver locations were selected to describe and document the existing noise environment within the project study area. **Figure XIII-1** provides the boundaries of the project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Tuesday, November 23, 2021.

Noise Measurement Results

The noise measurements presented below focus on the equivalent noise level or L_{eq}. The L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table XIII-3 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

Table XIII-3
24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Hourly Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located northwest of the project site near multi-family residential at 6704 Milton Avenue.	55.4	48.9
L2	Located east of the project site near The Good Shepherd Church at 7021 Greenleaf Ave.	58.2	53.4
L3	Located southwest of the project site near single-family residence at 7052 Milton Avenue.	62.8	54.7
L4	Located west of the project site near single-family residence at 7014 Milton Avenue.	55.9	51.0

[1] See **Figure XIII-1** for the noise level measurement locations.
[2] The long-term 24-hour measurement printouts are included in Appendix 5.1 of the NIA.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table XIII-3 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 of the NIA provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L1, L2,

L5, L8, L25, L50, L90, L95, and L99 percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the project study area are dominated by the transportation-related noise associated with the local surface streets surrounding the project site and measurement locations. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations.

Sensitive Receiver Locations

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on **Figure XIII-2,** were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas.

To describe the potential off-site project noise levels, five receiver locations (R#) in the vicinity of the project site were identified. All distances are measured from the project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the project site. Distance is measured in a straight line from the project boundary to each receiver location.

- R1: Location R1 represents the existing residence at 6737 Milton Avenue, approximately 352 feet northwest of the project site and is placed at the nearest building façade.
- R2: Location R2 represents the Grace Brethren Church Whittier at 6704, approximately 563 feet north of the project site and since there are no private outdoor living areas (backyards) facing the project site, receiver is placed at the nearest building façade. A 24-hour noise measurement was taken near this location, L1.
- R3: Location R3 represents The Good Shepherd Church at 7021 Greenleaf Ave, approximately 225 feet east of the project site and since there are no private outdoor living areas (backyards) facing the project site, receiver is placed at the nearest building façade. A 24-hour noise measurement was taken near this location, L2.
- R4: Location R4 represents an existing single-family residence at 7052 Milton Avenue, approximately 174 feet southwest of the project site and is placed at the outdoor living areas (backyards). A 24-hour noise measurement was taken near this location, L3.
- R5: Location R5 represents an existing single-family residence at 7014 Milton Avenue, approximately 33 feet west of the project site and is placed at the outdoor living areas (backyards). A 24-hour noise measurement was taken near this location, L4.

Impact Analysis

a. *Less Than Significant Impact* – As stated above, a Noise Impact Analysis (NIA) was prepared on behalf of the proposed project to ascertain whether the proposed project would result in significant: On Site Noise, Interior Noise, Operational Noise, Construction Noise or Vibration. As such the following discussion includes analysis of each of these types of noise and impacts thereof:

On Site Traffic Noise Impacts

An on-site exterior noise impact analysis has been completed to determine the traffic noise exposure and to identify potential necessary noise abatement measures for the proposed Comstock Place Townhouse Project that is consistent with City of Whittier noise standards. It is expected that the primary source of noise impacts to the project site will be traffic noise from Philadelphia Street and Comstock Avenue. The project will also experience some background traffic noise from the project's internal local streets, however, due to the low traffic volume/speeds; traffic noise from these roads will not make a significant contribution to the noise environment.

On-Site Exterior Noise Analysis

Table XIII-4 presents a summary of future exterior noise levels at the building façade within the project site. The on- site traffic noise level analysis indicates that the building facades will experience exterior noise levels ranging from 62.1 to 64.9 dBA CNEL. This will comply with the City of Whittier maximum exterior noise level standard of 65 CNEL for residential land uses. However, future noise levels are also considered "*conditionally acceptable*" under the City of Whittier noise and land use compatibility standards for single-family residential land uses.

Table XIII-4
EXTERIOR NOISE LEVELS (CNEL)

Roadway	Unmitigated Exterior Noise Level (dBA CNEL)[1]			
	1st Floor	2nd Floor	3rd Floor	4th Floor
Philadelphia Street	64.9	64.4	64.5	63.7
Comstock Street	63.6	64.1	63.1	62.1

[1] Exterior noise calculations at the building façade are shown in Appendix 7.1 of the NIA.

As shown in Table XIII-4, exterior noise levels will meet the City of Whittier noise level conditionally acceptable 70 dBA CNEL exterior noise level for single-family residential land uses. Therefore, "Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements." As such, on site traffic noise would not result in a significant noise impact as a result of implementation of the proposed project.

Interior Noise Analysis

While the City does not explicitly define an interior noise level limit for residential land uses, the OPR Noise Element Guidelines and Section 1206.4 of the 2022 California Building Code identify an interior noise level limit of 45 CNEL for residential land uses. To assess the interior noise levels, the future exterior noise levels are calculated at the first through fourth-floor building facade locations. Since each unit would have air conditioning, a standard 25 dBA reduction is applied to the exterior noise level to determine if additional structural measures are necessary to comply with the 45 dBA CNEL interior noise level standard.

The following interior analysis was completed assuming windows in a closed position. Table XIII-5 shows that the future noise levels within the first-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 38.6 to 39.9 dBA CNEL. Table XIII-6 shows that the future noise levels within the second-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 39.1 to 39.4 dBA CNEL. Table XIII-7 shows that the future noise levels within the third-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 38.1 to 39.5 dBA CNEL. The interior noise level analysis shows that the 45 dBA CNEL interior noise level standard can be satisfied using standard construction with the windows in a closed position.

Table XIII-5
FIRST FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.9	19.9	25.0	No	39.9	45	No
Comstock Street	63.6	18.6	25.0	No	38.6	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

Table XIII-6
SECOND FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.4	19.4	25.0	No	39.4	45	No
Comstock Street	64.1	19.1	25.0	No	39.1	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

Table XIII-7
THIRD FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.5	19.5	25.0	No	39.5	45	No
Comstock Street	63.1	18.1	25.0	No	38.1	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

Operational Noise Impacts

Operational Noise Sources
The proposed residential development is not expected to include any specific type of operational noise levels beyond the typical noise sources associated with residential land uses in the project study area. However, to present a conservative approach, on-site project-only operational noise sources are analyzed in this noise study and are expected to include: heating, ventilation, and air conditioning units, and trash enclosure/collection activity.

Roof-Top Air Conditioning Units
To assess the noise levels created by the air conditioning units, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Rheem RP14 Series). The air conditioning units were modeled as operating 45 minutes per hour during the daytime and 30 minutes at nighttime, which represents the typical maximum operating time for properly sized AC systems. The air conditioning units are anticipated to be located 3 feet above ground level. At a uniform reference distance of 50 feet the units would generate a reference noise level of 45.4 dBA L_{eq}.

Trash Enclosure/Collection Activity
To describe the noise levels associated with a trash enclosure and collection activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, and trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the project site. The measured reference noise level at the uniform 50-foot reference distance is 57.3 dBA L_{eq} for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the trash enclosures for the project's proposed building. Typical trash enclosure activities are estimated to occur for 10 minutes per hour.

Parking Lot Activity
While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The reference project operational noise levels are based on the project related noise sources shown on **Figure XIII-3**. The reference project operational sound power levels are summarized in Table XIII-8.

Table XIII-8
REFERENCE NOISE LEVELS

Noise Source	Noise Source Height (Feet)	Source Type	Min./Hour[2]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[3]
			Day	Night		
Air Conditioner Unit	3'	Point	45	30	45.4	77.0
Trash Enclosure Activity[1]	5'	Point	10	10	57.4	89.0
Parking Lot Activity	0'	Area	60	60	31.4	63.0

[1] As measured by Urban Crossroads, Inc.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

Operational Noise Levels
Using the reference noise levels to represent the proposed project operations that include heating, ventilation, and air conditioning units, and trash enclosure/collection activity, Urban Crossroads, Inc. calculated the unmitigated operational source noise levels that are expected to be generated at the project site and the project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table XIII-9 shows the project operational daytime noise levels. The hourly noise levels at the off-site receiver locations are expected to range from 27.4 to 46.3 dBA L_{eq}.

Table XIII-9
PROJECT DAYTIME OPERATIONAL LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})				
	R1	R2	R3	R4	R5
Air Conditioner Unit	28.5	25.3	33.3	33.7	43.3
Trash Enclosure Activity	26.7	23.2	28.2	27.5	43.3
Parking Lot Activity	15.4	11.7	18.9	19.6	40.9
Total (All Noise Sources)	**30.7**	**27.4**	**34.5**	**34.6**	**46.3**

[1] See **Figure XIII-3** for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1 of the NIA.

Table XIII-10 shows the project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 29.6 to 48.2 dBA L_{eq}. The differences between the daytime and nighttime noise levels are largely related to the duration of noise activity.

Table XIII-10
PROJECT NIGHTTIME OPERTAIONAL LEVELS

Noise Source[1]	Operational Noise Level by Receiver Location (dBA L_{eq})[1]				
	R1	R2	R3	R4	R5
Air Conditioner Unit	31.3	28.1	36.0	36.4	46.0
Trash Enclosure Activity	27.7	24.2	29.1	28.5	44.3
Parking Lot Activity	15.4	11.7	18.9	19.6	40.9
Total (All Noise Sources)	**32.9**	**29.6**	**36.8**	**37.1**	**48.2**

[1] See **Figure XIII-3** for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1 of the NIA.

Project Operational Noise Level Increases

To describe the project operational noise level increases, the project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by project operational noise sources. Noise levels that would be experienced at receiver locations when project-source noise is added to the daytime and nighttime ambient conditions are presented on Tables XIII-9 and XIII-10, respectively.

As indicated on Tables XIII-11 and XIII-12, the project will generate an unmitigated daytime and nighttime operational noise level increases ranging from 0.0 to 1.3 dBA L_{eq} at the nearest receiver locations. In effect, the amount to which a given noise level increase is considered acceptable is reduced based on existing ambient noise conditions. The project-related operational noise level increases will satisfy the operational noise level increase criteria at the nearest sensitive receiver locations and the impact will be *less than significant*.

Table XIII-11
DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project & Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	32.9	L1	55.4	55.4	0.0	5.0	No
R2	29.6	L1	55.4	55.4	0.0	5.0	No
R3	36.8	L2	58.2	58.2	0.0	5.0	No
R4	37.1	L3	62.8	62.8	0.0	3.0	No
R5	48.2	L4	55.9	56.6	0.7	5.0	No

1 See **Figure XIII-2** for the receiver locations.
2 Total project daytime operational noise levels as shown on Table XIII-6.
3 Reference noise level measurement locations as shown on **Figure XIII-1**.
4 Observed daytime ambient noise levels as shown on Table XIII-3.
5 Represents the combined ambient conditions plus the project activities.
6 The noise level increase expected with the addition of the proposed project activities.
7 See Table XIII-2.

Table XIII-12
NIGHTTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project & Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	30.7	L1	48.9	49.0	0.1	5.0	No
R2	27.4	L1	48.9	48.9	0.0	5.0	No
R3	34.5	L2	53.4	53.5	0.1	5.0	No
R4	34.6	L3	54.7	54.7	0.0	5.0	No
R5	46.3	L4	51.0	52.3	1.3	5.0	No

1 See Figure XIII-2 for the receiver locations.
2 Total project daytime operational noise levels as shown on Table XIII-7.
3 Reference noise level measurement locations as shown on **Figure XIII-1**.
4 Observed daytime ambient noise levels as shown on Table XIII-3.
5 Represents the combined ambient conditions plus the project activities.
6 The noise level increase expected with the addition of the proposed project activities.
7 See Table XIII-2.

Construction Impacts

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the project. **Figure XIII-4** shows the construction noise source locations in relation to the nearest sensitive receiver locations. To prevent high noise-levels of construction noise from impacting noise-sensitive land uses, Section 8.32.040 of the City of Whittier Municipal Code prohibits construction activities between the hours of 6:00 p.m. and 7:00 a.m. and on Saturdays 5:00 p.m. and 8:00 a.m.

Noise generated by the project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving

- Architectural Coating

To describe peak construction noise activities, this construction noise analysis was prepared using reference noise level measurements published in the Federal Highway Administration (FHWA) Road Construction Nosie Model (RCNM). Table XIII-13 provides a summary of the FHWA construction reference noise level measurements expressed in hourly average dBA L_{eq} using the estimated FHWA RCNM usage factors to describe the typical construction activities for each stage of project construction.

Table XIII-13
CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Activity[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Noise Level (dBA L_w)
Demolition	Front End Loader	75.0	83.8	115.4
	All Other Equip	82.0		
	Excavator	77.0		
Site Preparation	Dozer	78.0	81.0	112.7
	Front End Loader	75.0		
	Front End Loader	75.0		
Grading	Dozer	78.0	81.8	113.5
	Excavator	77.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	81.1	112.8
	Tractor	80.0		
	Welder/Torch	70.0		
Paving	Paver	74.0	83.1	114.7
	All Other Equip	82.0		
	Roller	73.0		
Architectural Coating	Crane	73.0	77.4	109.1
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model

Construction Noise Analysis

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the project construction noise level impacts at the nearest sensitive receiver locations were completed. To assess the worst-case construction noise levels, the project construction noise analysis relies on the highest combined reference noise level operating at the closest point from the edge of primary construction activity (project site boundary) to each receiver location. As shown on Table XIII-14, the construction noise levels are expected to range from 52.9 to 77.2 dBA L_{eq}, and the highest construction levels are expected to range from 59.3 to 77.2 dBA L_{eq} at the nearest receiver locations.

Table XIII-14
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})						
	Demolition	Site Prep	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[3]
R1	62.2	59.4	60.2	59.5	61.5	55.8	62.2
R2	59.3	56.5	57.3	56.6	58.6	52.9	59.3
R3	67.1	64.3	65.1	64.4	66.4	60.7	67.1
R4	67.2	64.4	65.2	64.5	66.5	60.8	67.2
R5	77.2	74.4	75.2	74.5	76.5	70.8	77.2

1 Construction noise source and receiver locations are shown on **Figure XIII-4**.
2 Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1 of the NIA.

To evaluate whether the project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related, daytime noise level thresholds based on land use as developed by the FTA are used as reasonable thresholds to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the significance thresholds during project construction activities as shown on Table XIII-15.

Table XIII-15
CONSTRUCTION NOISE ANALYSIS AT THE NEAREST RECEIVER LOCATIONS

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})			
	Highest Construction Noise Levels[2]	Land Use	Threshold[3]	Threshold Exeeded[4]
R1	62.2	Medical	80	No
R2	59.3	Religious	80	No
R3	67.1	Religious	80	No
R4	67.2	Residential	80	No
R5	77.2	Residential	80	No

1 Noise receiver locations are shown on **Figure XIII-4**.
2 Highest construction noise level operating at the project site boundary to nearby receiver locations (Table XIII-11).
3 Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
4 Do the estimated project construction noise levels exceed the construction noise level threshold?

Therefore, the noise impacts due to project construction noise is considered less than significant at all receiver locations.

Conclusion
Given the discussion above, interior and exterior traffic noise, operational noise, and construction noise impacts are all either less than significant or less than significant without the need for mitigation. Therefore, the proposed project would have a less than significant potential to result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b. *Less Than Significant Impact* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous or transient. Vibration is often described in units

of velocity (inches per second), and discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are generally associated with activities such as train operations, construction, and heavy truck movements.

The Federal Transit Association (FTA) Assessment states that in contrast to airborne noise, ground-borne vibration is not a common environmental problem. Although the motion of the ground may be noticeable to people outside structures, without the effects associated with the shaking of a structure, the motion does not provoke the same adverse human reaction to people outside. Within structures, the effects of ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. FTA Assessment further states that it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. However, some common sources of vibration are trains, trucks on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment. The FTA guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential project related vibration impacts.

Construction Vibration Impacts

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from project construction activities would cause only intermittent, localized intrusion. Ground vibration levels associated with various types of construction equipment are summarized on Table XIII-16. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential project construction vibration levels using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$.

Table XIII-16
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 Ft
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

Table XIII-17 presents the expected typical construction equipment vibration levels at the nearest receiver locations. At distances ranging from 33 feet to 563 from typical project construction activities (at the project site boundary), construction vibration levels are estimated to range from 0.001 to 0.059 in/sec PPV at the nearest receiver locations. The project construction is not expected to generate vibration levels exceeding the City of Whittier maximum acceptable vibration standard of 0.30 in/sec PPV. Further, impacts at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period, but will occur rather only during the times that heavy construction equipment is operating proximate to the project site perimeter.

Table XIII-17
TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Receiver Location[1]	Distance to Const. Activity (Ft)	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded
		Small Bulldozer	Jack-Hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level		
R1	352'	0.000	0.001	0.001	0.002	0.002	0.30	No
R2	563'	0.000	0.000	0.001	0.001	0.001	0.30	No
R3	225'	0.000	0.001	0.003	0.003	0.003	0.30	No
R4	174'	0.000	0.002	0.004	0.005	0.005	0.30	No
R5	33'	0.002	0.023	0.050	0.059	0.059	0.30	No

1 Construction receiver locations are shown on **Figure XIII-4**.
2 Distance from receiver location to project construction boundary.
3 Based on the Vibration Source Levels of Construction Equipment (Table XIII-13).
4 FTA Construction Noise and Vibration Manual, 2018.
5 Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

Moreover, construction at the project site will be restricted to daytime hours consistent with City requirements thereby eliminating potential vibration impact during the sensitive nighttime hours. On this basis the potential for the project to result in exposure of persons to, or generation of, excessive ground-borne vibration is determined to be less than significant.

c. *No Impact* – The project is not located within an airport land use plan. The closest airport is the El Monte Airport located 6.9 miles north of the project site. Given the large distance between the proposed project and nearby airports, project implementation would not expose people residing or working in the project area to excessive noise levels. There are no private airstrips located within two miles of the project site. Therefore, there is no potential to expose people residing or working in the project area to excessive noise levels due to the project location. No impacts will occur as a result of project implementation. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial 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?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – The proposed Comstock Place Townhouse Project would convert an office use located within the City of Whittier Uptown area zoned as Uptown Center use to a single-family residential townhouse use within the same site. The project will develop 24 townhouse units. The Southern California Association of Government (SCAG) 2020-2045 RTP/SCS Adopted Growth Forecast projects an estimated City population of 98,900 by the year 2045 (refer to the City's GPEIR), while the City had an estimated population of 87,100 persons in the year 2020. The SCAG Local Profile for the City of Whittier indicates that the average household size was 2.97 persons in 2020.[9] As such, the development of 24 townhouse units is anticipated to house about 71 persons. Given that the current population of the City of Whittier is about 11,800 persons less than the projected 2045 population, the potential for an additional 71 residents within the City of Whittier is considered less than significant as the project represents only about 0.6% of the potential growth anticipated between the present population and SCAG's projected 2045 population.

   Additionally, according to the California Department of Finance, as of April 2020 there were approximately 29,591 housing units within the City of Whittier, while the SCAG 2020-2045 RTP/SCS projected an estimated 29,000 units in 2020, with an anticipated growth of 3,900 units by 2045, for a total of 33,500 housing units within the City in 2045. As such, the addition of 24 residential units would be well within the projected number of households that would be developed in the next 25 years. These units would contribute to the housing needs within the City, which, as determined by the SCAG Regional Housing Needs Assessment Final Allocation Plan approved on 3/22/21, modified 7/1/21,[10] was determined to be 3,439 units. Given the above, the proposed project would not induce population growth beyond that which has been planned for in the City General Plan or SCAG planning documents, or that can be accommodated by the project and the City. Therefore, impacts would be less than significant. No mitigation is required.

b. *No Impact* – No occupied residential homes are located on the project site, and no persons currently occupy the site. Though the proposed project contains an office building that will be demolished, this facility does not serve as housing for any employees who work at the existing office building; therefore, implementation of the proposed project will not displace substantial numbers of existing

[9] SCAG, 2021. 2020 Local Profiles https://scag.ca.gov/sites/main/files/file-attachments/2021_local_profiles_dataset.xlsx?1661892901 (accessed 03/08/24)
[10] SCAG, 2021. SCAG 6th Cycle Final RHNA Allocation Plan. https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899 (accessed 03/08/24)
According to SCAG, "the RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and addresses social equity, fair share housing needs."; The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

housing or persons, necessitating the construction of replacement housing elsewhere. No impacts will occur; therefore, no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: Would the project 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:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

SUBSTANTIATION: Public Facilities are shown on the City's GPUEIR Community Facilities Map provided as **Figure XV-1** to this Initial Study.

a. *Less Than Significant Impact* – The City of Whittier is served by the Los Angeles County Fire Department (LACFD) for Emergency Medical Services (EMS), fire and rescue services, and safe haven services. The closest fire station to the proposed project site is Station #17, which is located 12006 Hadley Street just northwest of Uptown. According to the City's GPUEIR, Station #17 is staffed daily with a four-person engine company consisting of one fire captain, one fire fighter specialist (engineer), and two fire fighters (Centeno, pers. comm. 2020). Also, the City's GPUEIR map depicting fire stations and service area within the City (**Figure XV-2**) indicates that the proposed project is located within a one-mile service area distance from the nearest fire station(s).

The proposed project will incrementally add to the existing demand for fire protection services. Cumulative impacts are mitigated through the payment of the Development Impact Fee (DIF), and the City's GPUEIR stipulates that, in the event that additional fire protection facilities and/or resources are needed in the City and Planning Area of the City, property tax growth would provide the City with the funding to meet new growth needs. As the proposed project would contribute property taxes to the general fund to offset this incremental demand for fire protection services, the proposed project would not contribute significant demand for fire protection services. Additionally, the City's GPUEIR deems the compliance with Los Angeles County Fire Department requirements for fire sprinkler systems, fire alarm systems, fire flow, and equipment and firefighter access, as well as fire code requirements is sufficient to minimize fire protection impacts. Furthermore, given that the proposed project was recently occupied by an operating office use served by existing fire protection services, the transfer of such demand to the proposed residential development would further minimize the incremental increase in demand created by the proposed project. As such, impacts under this issue are considered less than significant and no mitigation is required.

b. *Less Than Significant Impact* – The proposed project would be served by law enforcement services provided by the City of Whittier Police Department (WPD), which operates out of its headquarters adjacent to City Hall at 13200 Penn Street. The WPD also serves Santa Fe Springs. The City's

GPUEIR identifies that WPD has 121 sworn officers and 54 civilian staff, and serves a population of about 106,000 persons, equal to about 1.7 law enforcement professionals per 1,000 residents. According to the GPUEIR, the average response time for Priority One Calls—robbery, assault with a deadly weapon, traffic collisions with injuries, etc.—is 5 minutes and 12 seconds. The average response time for all other calls is 24 minutes and 13 seconds.

The proposed project will incrementally add to the existing demand for police protection services. These incremental impacts are mitigated through the payment of the DIF, and the City's GPUEIR indicates that incremental demand on police protection services would be offset by increased property tax revenues which can be used for the maintenance and/or expansion of police protection facilities. Given the above, the proposed development of 24 townhouse units at the project site would not cause a significant additional demand on police protection services; in particular, given that the proposed project site was recently occupied by an operating office use served by existing police protection services, the transfer of such demand to the proposed residential development would further minimize the incremental increase in demand created by the proposed project. As such, impacts under this issue are considered less than significant and no mitigation is required.

c. *Less Than Significant Impact* – The proposed project would develop 24 townhouse units, and would likely generate a new demand for school services within the project area. According to the City's GPUEIR, the City and Planning Area are served by two high school (grades 9-12) districts and five elementary/middle school (grades K-8) districts. These seven districts operate a total of 48 schools with over 36,000 enrolled students although their boundaries are not coterminous with those of the Planning Area. Only 33 of the schools are located within the Planning Area. In addition to the numerous public schools, 25 private schools in the Planning Area served 4,095 students as of 2017. Additionally, Whittier College, which is within about a one-mile distance from the project site, is a private four-year liberal arts college with an undergraduate enrollment of 1,650 students. Half of the students live on campus and the other half live off campus in private housing around the college. A second college serves the Planning Area; Rio Hondo College, a community college, is located in the Puente Hills above Whittier. According to the City's GPUEIR Districts and Schools Map provided as **Figure XV-3**, the proposed project is served by Whittier City Elementary School District and the Whittier Union High School District. Specifically, the project will be served by Longfellow Elementary School, Walter F. Dexter Middle School and the Whittier High School.

The City's GPUEIR concludes that, while the proposed General Plan Update would result in increased residential and non-residential building area and a higher population in the Planning Area, the anticipated trends in declining student-per-dwelling rates are estimated to result in a decrease in the number of students in the Planning Area of approximately 1,733 students. As such, while the proposed project will create an additional demand on schools through the development of 24 new residences within the City, as the project fits within the context of the Envision Whittier General Plan, it's installation would not ultimately cause an incremental demand for school services that could not be accommodated within the confines of the existing schools, districts, and systems that are available at present. The proposed project would be required to pay the standard school mitigation fees that finance the construction and/or reconstruction of school facilities needed to accommodate students coming from new development. Payment of school impact fees is deemed sufficient to offset any impacts on schools caused by the proposed single-family residential townhouse development. As such, impacts related to the need for new school facilities as a result of the proposed project would be less than significant, and no mitigation is required.

d. *Less Than Significant Impact* – The proposed project would develop 24 townhouse units, and would likely generate a new demand for parks and recreation. The proposed project is located within one-half mile walking distance to the nearest park according to the Envision Whittier General Plan Recreational Facilities and Access Map provided as **Figure XV-4**, which indicates that future residents of the Comstock Place Townhouse Project would have relatively close access to area parks within walking distance to the project site.

The City's GPUEIR indicates that the Whittier park system has 23 parks and the 4.5-mile Whittier Greenway Trail as well as a State-owned park and three Los Angeles County parks, which provides 3.32 acres of parkland per 1,000 residents in the City's Planning Area. This ratio meets the National Park and Recreation Association's guideline of 2.5–4.0 acres of parkland for every 1,000 residents. Additionally, the City's GPUEIR concludes that all new dwelling units would be subject to DIF fees and the City's Quimby Ordinance, requiring dedication or in-lieu fees equivalent to three acres of parkland per 1,000 persons. As such, the proposed project would be subject to payment to these park funding mechanisms, which is deemed adequate to offset the incremental increase in demand for park facilities from implementation of the proposed project. Furthermore, given that the proposed project would increase the number of residents served by the City's park planning area by 71 persons, the proposed project would lower the City's park acreage per resident to about 3.31, which is still deemed adequate by the City's parkland guideline of 2.5–4.0 acres of parkland for every 1,000 residents. Given that the proposed project would contribute DIF and Quimby Ordinance fees, and that it would not in and of itself reduce the acreage of parks available to residents of the City, the proposed project would have a less than significant impact under this issue. No mitigation is required.

e. *Less Than Significant Impact* – As stated above, the proposed project will install amenities, some of which may be considered other public facilities that will accommodate many of the project residents' needs. The City's GPUEIR indicates that the Whittier Public Library collection includes over 230,000 items, annually circulates 450,000 items, and receives 750,000 hits on its website and electronic databases. The proposed project will incrementally add to the existing demand for library services. However, according to the City's GPUEIR, the increase in use as a result of City build out would not be significant relative to citywide demand. As such, though the proposed project would contribute to this demand and would be responsible for the payment of DIF fees for all 24 new dwelling units, the library services available within the Planning Area are sufficient to handle the demand for such resources. Impacts under this issue are less than significant and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
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?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – As addressed in the discussion under XIV, Population and Housing, and XV(d) above, the proposed project would develop 24 townhouse units, and as such may induce population, though not substantially. As stated in the discussion under Population and Housing, an estimated maximum 71 persons may reside at the new Comstock Place Townhouse Project site. The Comstock Place Townhouse Project does not include the development of any recreational facilities. The proposed project is located within one-half-mile walking distance to the nearest park according to the Envision Whittier General Plan Recreational Facilities and Access Map provided as **Figure XV-4**, which indicates that future residents of the Comstock Place Townhouse Project would have relatively close access to area parks within walking distance to the project site that provide a full range of park and recreation amenities. The proposed project is also depicted within the one-half-mile walking distance radius of greenway trail service areas within the City (**Figure XVI-1**). Additionally, the proposed project will be required to comply with the payment of any required City Quimby Ordinance and DIF fees to enhance park and recreation facilities within the City. These parks and recreation funding mechanisms will offset the incremental increase in demand for park and recreation facilities from implementation of the proposed project. Thus, with the above provisions, the proposed project will not generate a substantial increase in residents of the City who would increase the use of existing recreational facilities. Therefore, any impacts under this issue are considered less than significant. No mitigation is required.

b. *Less Than Significant Impact* – The proposed project consists of 24 townhouse units in the City of Whittier. The project will not include any recreational facilities. The site currently contains a vacant office and parking lot, with no existing recreational facilities on or near the project site, and is designated for Specific Plan use, which allows for single-family residential townhouse uses in the Uptown Center zoning classification. As described throughout this Initial Study, the construction of the proposed Comstock Place Townhouse Project would not cause a significant adverse physical effect on the environment under any issue. No recreational facilities are required to serve the project, thus any impacts under this issue are considered less than significant. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION: 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 section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous inter-sections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

SUBSTANTIATION: The following section is based on the "Philadelphia & Comstock Townhouse Vehicle Miles Travelled (VMT) Screening Evaluation and Trip Generation Assessment" (TGA/VMT) prepared by Urban Crossroads dated September 27, 2024. The TGA/VMT is provided as **Appendix 13**. A Transportation Demand Management Strategies Plan was prepared for the proposed project. It is provided as **Appendix 15** to this Initial Study and is titled Comstock & Philadelphia Townhomes Transportation Demand Management Strategies Plan (TDMP) prepared by Urban Crossroads dated November 6, 2024.

a. *Less Than Significant Impact* – Implementation of the proposed project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The proposed project is located at the southwest intersection of Philadelphia Street and Comstock Avenue. Philadelphia Street is delineated as a minor arterial roadway, and Comstock Avenue is a secondary street serving the Uptown area within the City as shown on **Figure XVII-1**, Street Classifications, abstracted from the Envision Whittier General Plan.

The project is proposing to develop 24 single-family townhouse dwelling units. The trip generation rates obtained from the latest Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the proposed project use would result in an anticipated to 174 two-way trips per day with 12 AM peak hour trips and 14 PM peak hour trips. The City's Guidelines indicates that a localized transportation assessment must be prepared by a registered Civil or Traffic Engineer, or other qualified transportation professional. The localized transportation assessment is generally required if a project generates over 100 peak hour trips. As the proposed project is anticipated to generate fewer than 100 peak hour trips in the AM and PM peak hours (with no more than 20 peak hour trips in the PM peak hour), additional peak hour traffic operations analysis is not necessary based on the City's Guidelines, and therefore the project would have a less than significant potential to conflict with a program, plan, ordinance or policy addressing the circulation system.

The project will also generate construction traffic, which is temporary; during construction, the project is anticipated to generate no more than 50 truck roundtrips per day, and a maximum of 50 employee roundtrips per day; these trips will be spread throughout the day during construction. As such, no significant impacts on the automobile circulation system are anticipated over the short-term period of construction.

The project site is currently accessible by car, by adjacent sidewalk, but is not currently connected to adjacent streets with bike lanes. As stated under issue XVI, above, the proposed project is located within one-half-mile of the Whittier Greenway Trail (**Figure XVI-1**), and would not conflict with the adjacent pedestrian facilities in the project area.

The following discussion has been abstracted from the TDMP provided as **Appendix 15**:

Site Access, On-Site Parking, and Circulation
Access to the proposed Project would be provided via Philadelphia Street and Comstock Avenue. Greenleaf Avenue will serve as the primary travel route for heavy trucks to and from the Project, east of Comstock Avenue. Truck access to the buildings will primarily use Philadelphia Street. Trucks are anticipated to utilize designated truck routes such as Whittier Boulevard (SR-72) to reach regional freeways such as the I-605 Freeway. Once residents have taken occupancy of their units, truck traffic is anticipated to be minimal.

The following intersections will be signalized to maintain Right-of-Way (ROW) control for all vehicles, pedestrians, and bicyclists:

- Philadelphia Street and Comstock Avenue

The following Project driveways will provide truck access to the building:

- Philadelphia Street and Project Alleyway

Site access for Project passenger cars and service vehicles will be provided by Philadelphia Steet and the Project Alleyway.

On-site traffic signing and striping should be implemented consistent with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed plans for the Project site. Sight distance at each project access point should be reviewed with respect to standard City of Whittier and/or applicable agency sight distance standards, as determined by the City Engineer, at the time of preparation of final grading, landscape, and street improvement plans.

Truck/Passenger Car Route
The route for trucks shall utilize Greenleaf Avenue to the east of Comstock Avenue before accessing the sight via Philadelphia Street. Trucks shall be prohibited from using other roadways to access the Project site (i.e., Comstock Avenue). Route maps shall be provided to all truck drivers. Passenger cars have no restrictions on roadways to access the Project.

Emergency Vehicle Access Routes
Site access points shall be provided to the City and emergency service providers. The following driveways provide direct access to the fire lanes throughout the site:

- Philadelphia Street and the Project Alley
- Comstock Avenue

A minimum of two access points is required for emergency vehicle access. Fire lanes shall be constructed as required by the Fire Marshall. On-site parking and pedestrian routes shall be provided to all employees, City staff, and emergency service providers. Emergency service access shall be maintained during occupancy.

Pedestrian Routes
Sidewalks and walkways along the Project frontage and within the site shall be ADA compliant. Any pedestrian accommodations deemed necessary by the Public Works inspector shall be implemented as necessary to ensure a safe path along an ADA compliant route for pedestrians.

Bicycle Routes
The City of Whittier has future planned bicycle facilities, which proposes a Class III Intermodal Connection along Comstock Avenue, north of Mar Vista Street connecting Historic Uptown Whittier to the Whittier Greenway Trail. This short Class III route along Comstock Avenue north of Mar Vista Street would provide access to the rear parking lot of the Transit Center. The distance from the Whittier Greenway Trail to the Transit Depot is less than one mile. The nearest bike lane (Class III) access is at Greenleaf Avenue, which connects to the major bikeways within the City as shown on the Envision Whittier General Plan Map depicting Existing and Proposed Bike Facilities (**Figure XVII-**

2). Bicycle facilities within the site and Project frontage should maintain proper connectivity to the planned City of Whittier planned bicycle facilities.

Transit Routes
The City of Whittier is currently served by LA Metro, a public transit agency serving various jurisdictions within Los Angeles County. Based on a review of the existing transit routes within the vicinity of the proposed Project, as shown on Exhibit XVII-1, LA Metro Routes 10 & 50 operates on Philadelphia Street adjacent to and north of the Project site, with a bus stop located directly across the street from the Project site (Stop ID 1044). Transit service is reviewed and updated by LA Metro periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. The applicant should coordinate with LA Metro to potentially provide additional bus service to the site.

Exhibit XVII-1: LA METRO BUS ROUTE



Additionally, according to the City's GPUEIR, the City of Whittier is served by several transit providers: Metro, Norwalk Transit, Foothill Transit, Sunshine Shuttle, and Montebello Bus. The Envision Whittier General Plan Map depicting Transit Routes (**Figure XVII-3**) indicates that the proposed project is served by several routes, including the Montebello-10, Montebello-50, and therefore has access to the other major transit providers within the City. The proposed project is not anticipated to conflict with the circulation of any alternative modes of transportation, and furthermore would have access to such services without conflicts.

Conclusion
Based on a review of the circulation in the vicinity of the Comstock Place Townhouse Project, the minimal peak hour traffic that would be generated over the short- and long-term by the proposed project, and the project's contribution to off- and on-site improvements to area roadways and sidewalks, would ensure that the proposed project would have a less than significant potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. No mitigation is required.

b. *Less Than Significant Impact* – Senate Bill 743 mandates that California Environmental Quality Act (CEQA) guidelines be amended to provide an alternative to Level of Service for evaluating transportation impacts. The amended CEQA guidelines, specifically Section 15064.3, recommend

the use of Vehicle Miles Traveled (VMT) for transportation impact evaluation. Based on Governor's Office of Planning and Research (OPR)'s Technical Advisory, the City of Whittier adopted its City of Whittier Transportation Study Guidelines (October 2021) (City Guidelines), which documents the City's VMT analysis methodology and approved impact thresholds. The VMT screening evaluation presented in this report has been developed based on the adopted City Guidelines.

The City Guidelines provide details on appropriate screening criteria and thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed analysis. Screening thresholds are broken into the following six types:

- **Project Size Screening:** The City Guidelines indicate that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact. The proposed project use would result in an anticipated to 174 two-way trips per day with 12 AM peak hour trips sand 14 PM peak hour trips. For the purposes of VMT screening, the project exceeds the 110 daily vehicle trips threshold.
  - **Project Size screening criteria is not met.**

- **Locally Serving Retail:** The City Guidelines identify that local serving retail less than 50,000 square feet or other local serving essential services (e.g., local parks, day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The project does not propose to develop any locally serving retail.
  - **Locally Serving Retail screening criteria is not met.**

- **Low VMT Area Screening:** As noted in the City Guidelines, a residential or office project that is located in a Traffic Analysis Zone (TAZ) that is already 15% below the City and Sphere of Influence (SOI) Baseline VMT will tend to exhibit similarly low VMT. The City Guidelines provides a map of the City of Whittier+ SOI to locate areas of low VMT. The project site is located in an area 15% below the City average daily home-based VMT per capita.
  - **Low VMT Area screening criteria is met.**

- **Transit Proximity:** Consistent with guidance identified City Guidelines, projects that are located within a ½ mile of the Eastside Transit Corridor Phase 2 Project, or a ½ mile of where two or more 15-minute (during commute hours) bus routes intersect or within a ½ mile of a corridor served by 15-minute (during commute hours) bus service. In addition, the project should have the following characteristics:

  - A Floor Area Ratio (FAR) of 0.75 or greater
  - Is consistent with the applicable SCAG Sustainable Community Strategy (SCS) (as determined by the City)
  - Does not provide more parking than required by the City
  - Does not replace affordable housing units

  The project's location is presented in **Appendix 13**, which shows existing and planned future TPA areas for both bus and rail service within the City. The project site is located within a TPA based on bus service. However, further examination shows that the Montebello Bus Lines have reduced the frequency of service above 15-minute service intervals during commute hours and the City of Whitter no longer has any transit eligible areas for screening purposes.
  - **Transit Proximity screening criteria is not met.**

- **Transportation Facilities:** The City Guidelines identify Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersection traffic control (e.g., traffic signals or

roundabouts), or widening at intersections to provide new turn lanes. The project will not be developing a transportation project.
- **Transportation Facilities screening criteria is not met.**

- **Affordable Housing:** City Guidelines state that residential projects that provide affordable housing units; if part of a larger development, the affordable housing units only satisfy the screening criteria. The project does not intend to include any affordable housing units.
  - **Affordable Housing screening criteria is not met**

A land use project need only to meet one of the above screening thresholds to result in a less than significant VMT impact.

In addition to the above, the proposed Comstock Place Townhouse Project is located in an area that connects to alternative modes of transportation, such as sidewalks, bike paths, and bus route, making the area in the vicinity of the project accessible to alternative modes of transportation. This is further evidenced by the data presented under issue XVII(a), above, abstracted from the TDMP provided as **Appendix 15**. In accordance with the VMT thresholds and the analysis above and contained within **Appendix 13**, the Comstock Place Townhouse Project is not anticipated to result in significant impact related to vehicle miles travelled, and thus would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – The proposed project will occur entirely within the project site boundaries, as site access is already provided because the site is developed as an office with associated parking lot. Large trucks delivering equipment or removing small quantities of excavated dirt or debris can enter the site without major conflicts with the flow of traffic on the roadways used to access the site. Primary access to the site will be provided along the alley way that intersects with Philadelphia Street on the western boundary of the site. As stated above, Philadelphia Street is delineated as a minor arterial roadway, and Comstock Avenue is a secondary street serving the Uptown area within the City as shown on **Figure XVII-1**, Street Classifications, abstracted from the Envision Whittier General Plan; these roadways are moderate-to heavily travelled roadways within the City. However, the alley provides access to the properties along Comstock Avenue between Philadelphia Street and Wardman Street to the south. As the proposed project will be designed to avoid impacting major roadways, site access has been designed such that the project would not increase hazards due to a geometric design feature or incompatible uses, and as such construction traffic is not anticipated to result in any conflicts with the surrounding roadways. Additionally, the proposed project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Emergency response and evacuation procedures would be coordinated with the City and the County, as well as the police and fire departments. In the long term, no impacts to any hazards or incompatible uses in existing or planned roadways are anticipated. Operation of the proposed project would be similar to the surrounding uses, and the design of the project would not create any hazards to surrounding roadways. Thus, any impacts are considered less than significant without the need for added mitigation.

d. *Less Than Significant Impact* – The proposed project consists of activities that will take place along Philadelphia Street and Comstock Avenue within the City of Whittier in the County of Los Angeles. Vehicles travelling to and from the project site would utilize Philadelphia Street and Comstock Avenue, the adjacent alley, as well as Wardman Street to access the site. Primary access to the site will be provided by the alley, which ensures that the residents do not conflict with traffic along Philadelphia Street and Comstock Avenue. Access to the site is adequate and the nearest emergency response station is located within a one-mile service area radius for the nearest fire stations (refer to **Figure XV-2**). The proposed project would not conflict with a nearby evacuation route, particularly given that the project site is accessible via an alley that provides access primarily to uses along Comstock Avenue between Philadelphia Street and Wardman Street to the south. The project will comply with City and fire requirements for emergency access, which the City's GPUEIR determined is adequate, in conjunction with the City's development review process, to ensure that the proposed

project would not hinder emergency access within the project site once the Comstock Place Townhouse Project has been developed. Thus, because of the lack of adverse impact on local circulation a less than significant potential for significant impacts on emergency access are forecast to occur during construction and operation. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, 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 the California Native American tribe, and that is:				
a) 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	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in sub-division (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

SUBSTANTIATION

A Tribal Resource is defined in the Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1;
- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance of the resources to a California American tribe;
- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape;
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal resource if it conforms with the criteria of subdivision (a).

Impact Analysis

a & b. *Less Than Significant With Mitigation Incorporated* –

The City has contacted two Tribes under Assembly Bill (AB) 52: the Gabrieleño Band of Mission Indians and the Soboba Band of Luiseño Indians. The tribes were contacted to initiate the AB-52 process on March 18, 2024 to notify the tribes of the proposed project through mailed letters. During the 30-day consultation period, the Gabrieleño Band of Mission Indians (Gabrieleño Band) was the

only tribe to respond. The Gabrieleño Band of Mission Indians-Kizh Nation responded by requesting a consultation meeting that was scheduled for May 7, 2024. Ultimately, the Tribe determined that the mitigation measures that were requested as part of the AB 52 process for the former site plan at this very same project site in 2021 would suffice to protect tribal cultural resources as a result of the proposed development.

The Gabrieleño Band requested that mitigation be incorporated to ensure protection of potential tribal cultural resources within the project site, as such the following mitigation shall be implemented:

TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- ***A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground- disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.***
- ***B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.***
- ***C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground- disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.***
- ***D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for The project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to The project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.***
- ***E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the including for educational, cultural and/or historic purposes.***

TCR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TCR-3 Procedures for Burials and Funerary Remains:

A. As the Most Likely Descendant (MLD), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient times, as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or

by means as necessary to ensure complete recovery of all sacred materials.

D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

The above mitigation measures will ensure that a Native American monitor is available to monitor the site and to recover unearthed tribal cultural resources, and ultimately to ensure appropriate treatment of such resources, which is sufficient to ensure protection of such resources by the Gabrieleño and City standards. Furthermore, the above mitigation measures would ensure appropriate procedures are followed in the event of the unanticipated discovery of human remains and associated funerary objects, including procedures for burials and funerary remains treatment. Ultimately, the implementation of the above measures would prevent significant adverse impacts to tribal cultural resources, and impacts under this issue are considered less than significant with mitigation. No further mitigation is required beyond that which was identified under Section V, Cultural Resources, above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: 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?	☐	☒	☐	☐

SUBSTANTIATION: Will Serve Letters are provided for each of the Utilities that will serve the proposed project in Appendix 16.

a. Water

Less Than Significant Impact – Water will be provided by the City of Whittier. Water service is available through a connection located adjacent to and within the project site, as the existing office use is currently connected to the City's water service. However, the proposed project will require new connections to the City's water service. These new connections include a proposed 2" irrigation connection to the existing water main, a new 4" domestic water service connection, and a new 2" fire service connection. The project would be supplied with water by City, which uses groundwater and recycled water to serve the City's residents and businesses to meet customer demand. As previously stated under Section X, Hydrology and Water Quality, the City's Urban Water Management Plan (2020) identifies sufficient water resources to meet demand in its service area, though the City's GPUEIR indicates that at City build-out, there may be a deficiency in supply versus demand. The City's GPUEIR provides a mitigation measure preventing development that would exceed the UWMP's 2040 projections for available water supply. The overall available water supply is anticipated to meet demand, which indicates that the City has available capacity to serve the proposed project without significant adverse impacts on area groundwater basins. Therefore, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded water facilities. Impacts are less than significant.

Wastewater

Less Than Significant Impact – Wastewater collection will be provided by City of Whittier owned, operated, and maintained wastewater collection system that deliver municipal wastewater to the Sanitation Districts of Los Angeles County (LACSD) and the project will connect to the sewer main

adjacent to the project site. As such, the project would connect to the City's existing wastewater collection system within the adjacent alley. The proposed project would install an internal wastewater collection system to convey sewage generated by residents of the Comstock Place Townhouse Project, the development of which is not anticipated to cause a significant impact. Therefore, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded wastewater facilities. Impacts are less than significant.

Stormwater

Less Than Significant Impact – The surface runoff from the site, nonpoint source storm water runoff, will be managed in accordance with the WQMP as discussed in the Hydrology and Water Quality Section (Section X) of this Initial Study. Onsite flows will be collected through biofiltration planters located at the southern and western boundaries of the site. This system will be designed to capture the peak flows above the 100-year flow runoff from the project site or otherwise be detained on site and discharged in conformance with Los Angeles County requirements. Therefore, surface water will be adequately managed on site and as such, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded stormwater facilities. Impacts are less than significant.

Electric Power

Less Than Significant Impact – Southern California Edison (SCE) will provide electricity to the site and the power distribution system located adjacent to the site will be able to supply sufficient electricity. Furthermore, the existing use at the project site is currently served with sufficient electricity and is therefore already connected to SCE's system. The effort to connect to the existing electrical system, and to install electricity connections within the project site to serve future residents of the Comstock Place Townhouse Project with electricity is not anticipated to result in significant impacts, as evidenced by the discussions in preceding sections. Therefore, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded electric power facilities. Impacts are less than significant.

Natural Gas

Less Than Significant Impact – Natural gas will be supplied by Southern California Gas. The site may require a connection to the existing natural gas line adjacent to the project site. The effort to connect to the existing gas line within the adjacent roadway, and to install natural gas lines within the project site to serve future residents of the Comstock Place Townhouse Project with natural gas is not anticipated to result in significant impacts, as evidenced by the discussions in preceding sections. Therefore, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. Impacts are less than significant.

Telecommunications

Less Than Significant Impact – Development of the Comstock Place Townhouse Project would require a connection to telecommunication services, such as wireless internet service and phone service. This can be accomplished through connection to existing services that are available to the developer at the project site, particularly given that existing telecommunication service exists at the project site at present in service of the existing use. Therefore, development of the Comstock Place Townhouse Project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunications facilities. Impacts are less than significant.

b. *Less Than Significant Impact* – Please refer to the discussion under Hydrology, Section X(b) above. The Comstock Place Townhouse Project is a single-family residential townhouse project that will consist of 24 townhouse units. The project would be supplied with water by the City of Whittier that uses groundwater to meet primary customer demand. Based on a review of the City's Urban Water Management Plan (UWMP, 2020) it can be assumed that this project, which would contribute an

additional 24 dwelling units to the City's housing stock, would demand about 3.74 AFY (0.156 AFY x 24 units = 3.74 AFY). Based on the projected water demand for Single-family residential townhouse uses within the City's service area for 2025, 1,758 AFY, and for 2045, 1,919 AFY, it is anticipated that the 3.74 AFY demand can be accommodated into the future, particularly given that the overall available water supply is anticipated to meet demand, which indicates that the City has available capacity to serve the proposed project without significant adverse impacts on area groundwater basins. The City GPUEIR provides **MM UTIL-1**, which prevents future development from occurring where the development would demand water in excess of what is identified for supply in 2040 under the most recent UWMP. As such, given that the proposed project would not generate demand for water from the City that would exceed the projections for the available water supply available during normal, dry and multiple dry years. Impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – The LACSD master plans for wastewater treatment and disposal services are based on the land uses and growth projections in the general plans of the various partner agencies of the LACSD, including the 2021 City of Whittier General Plan Update. The City's GPUEIR projects that future residents will generate 75 gallons of wastewater per day. As the proposed project would create 24 new residential units, and with a person per dwelling unit rate of 2.97, the proposed project residents (71 persons) would generate an estimated 5,325 gallons per day (gpd) of wastewater. According to the City's GPUEIR, the LACSD Joint Water Pollution Control Plant (JWPCP) has a capacity of 400 million gallons per day (MGD) and currently processes an average flow of 259.7 MGD, and the Los Coyotes Water Reclamation Plant (LCWRP) has a capacity of 37.5 MGD and currently processes an average flow of 21.3 MGD. The additional projected wastewater generated by the proposed project would be well within the additional capacities of area wastewater treatment plants. Additionally, the City has plans to and is in the process of upgrading and expanding its wastewater collection system to meet existing and future demand. Given the above, it is anticipated that there will be available capacity to accommodate the demand generated by the proposed project. Impacts under this issue are less than significant.

d & e. *Less Than Significant With Mitigation Incorporated* – The proposed project will generate demand for solid waste service system capacity and has a potential to contribute to potentially significant cumulative demand impacts on the solid waste system. Solid waste generation rates estimated by CalRecycle[11] suggest that single-family residential townhouse uses such as that which this project proposes can produce about 4 pounds of refuse per dwelling unit per day. It is estimated that 24 townhouse units would generate about 294 pounds per day or 53.56 tons per year (12.23 x 24 x 365 = 107,134 pounds per year / 2,000 = 53.56 tons per year). The proposed project also must comply with the City's mandatory source reduction and recycling program, while mandates 50% of solid waste be diverted and recycled per the state's solid waste diversion requirements under AB 939. Additionally, as this project would be developed after 2022, future residents would be required to comply with SB1383, otherwise known as "California's Short-Lived Climate Pollutant Reduction" law, often called SB 1383, which establishes methane reduction targets for California. California SB 1383 sets goals to reduce disposal of organic waste in landfills, including edible food. [12] The bill's purpose is to reduce greenhouse gas emissions, such as methane, and address food insecurity in California. This requires jurisdictions to implement mandatory organic waste collection and recycling in a statewide effort to divert organic waste from landfills with goals to:

- Reduce organic waste disposal 50% by 2020 and 75% by 2025
- Recover at least 20% of currently disposed surplus edible food by 2025

As such, much of the waste generated by future residents of the proposed project will be required to be diverted from landfills, and as such, the amount of waste generated by the proposed project that would end up in landfills is at least half of the tonnage quoted above. According to the City's GPUEIR, the City currently complies with the waste reduction requirements of AB 341. As such, combined with

[11] CalRecycle, 2024. Estimated Solid Waste Generation Rates https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed 03/09/24)
[12] Santa Clara County, 2024. Understand Senate Bill (SB) 1383 https://reducewaste.sccgov.org/food-recovery/understand-senate-bill-sb-1383#3925188384-318395615 (accessed 03/09/24)

the City's mandatory source reduction and recycling program, the proposed project is not forecast to cause a significant adverse impact to the waste disposal system due to the available capacities at nearby landfills. Descriptions of the primary disposal facilities to which waste generated within the City would be hauled and their capacity are summarized below.

Solid waste will be disposed of in accordance with existing regulations at an existing licensed landfill. The solid waste will be disposed of in accordance with existing regulations at an existing licensed landfill—such as the Savage Canyon Landfill, which has a maximum daily permitted throughput of 3,350 tons per day, and a remaining capacity of 9,510,833 cubic yards (CY), located at 13919 East Penn Street Whittier, CA 90602.[13] As the proposed project complies with the City's General Plan, and conforms to the planning projections therein, the City's GPUEIR indicates that future demand on solid waste facilities would be less than significant, particularly given that available capacities exist at area landfills, and that the proposed project would generate a nominal estimated 294 pounds per day.

In addition to operational waste, the proposed project would generate construction waste from the demolition of the 7,172 SF vacant office on site, and the adjacent concrete and asphalt within the parking lot. Any construction and demolition (C&D) waste will be recycled to the maximum extent feasible and any residual materials will be delivered to one of several C&D disposal sites in the area surrounding the project site. Many of these C&D materials can be reused or recycled, thus prolonging the supply of natural resources and potentially saving money in the process. The proposed project would require demolition that is anticipated to generate approximately 3,000 CY of C&D waste. As such, it is assumed that about 200 15-yard dumpsters or about 75 40-yard dumpsters would be required in a given year in support of the construction and demolition efforts anticipated to be required to develop the Comstock Place Townhouse Project. Construction waste reduction/diversion would be the focus of recycling/reuse. Because of increased construction recycling efforts resulting from CalGreen and other regulations, opportunities for construction recycling are becoming easier to find, as evidenced by the number of facilities listed on the Construction and Demolition Debris Recycling Facilities list for Los Angeles County.[14] These facilities accept materials such as: appliances, cardboard, metals, wood, asphalt, concrete, soil, block rock, brick, carpet and padding, concrete with rebar, drywall, gravel, rock, roof tile, and tile.

The facilities that accept C&D materials, combined with the landfills in the surrounding area, have adequate capacity to serve the proposed project construction and operations. Solid waste will be disposed of in accordance with existing regulations at an existing licensed landfill, such as the Savage Canyon Landfill.

Any hazardous materials collected on the project site during either construction or operation of the project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Therefore, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes. To further reduce potential impacts to solid waste facilities due to the large scale of the materials that may require disposal or recycling, the following mitigation measure will be implemented:

UTIL-1 ***The contract with demolition and construction contractors shall include the requirement that all materials that can be recycled shall be salvaged and recycled. This includes, but is not limited to, wood, metals, concrete, road base, and asphalt. The developer shall submit a recycling plan to the City for review and approval prior to the start of demolition/construction activities to accomplish this objective.***

[13] CalRecycle, 2024. SWIS Facility/Site Activity Details Savage Canyon Landfill (19-AH-0001) https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3494?siteID=1399 (accessed 03/09/24)
[14] LA County Department of Public Works, ND. Construction and Demolition Debris Recycling Facilities in Los Angeles County. https://pw.lacounty.gov/epd/CD/cd_attachments/Recycling_Facilities.pdf (accessed 03/09/24)

Therefore, with the above mitigation measure, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes and be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs. No further mitigation is necessary.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: 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 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?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – The proposed project is not located within a Very High Fire Hazard Severity Zone in a Local Responsibility Area (LRA) or State Responsibility Area (SRA), shown on **Figure IX-3.** Please review the discussion under Subchapter IX(g), Hazards and Hazardous Materials. The project is located within an urban area, and is already at present developed with a vacant medical office and associated parking lot. The proposed project site is not located in an area that has been delineated as being located within any fire risk by CALFIRE (**Figure XX-**1), nor is the project located within an area delineated within historical fire perimeters (**Figure IX-3**). Furthermore, as a fully developed site, the project site does not contain a heavy vegetative fuel load. The City of Whittier reviews all proposed projects and provides conditions of approval for setbacks; building and fire sprinkler requirements; roofing design and material and construction requirements, fuel modification; and other measures as appropriate to reduce the risk to the development and surrounding uses to fire hazards. Furthermore, given the urban setting within which the project is located and the ease of access to local roadways, it is not anticipated that the development of the Comstock Place Townhouse Project within the project site would substantially impair an adopted emergency response or evacuation plan.

b. *Less Than Significant Impact* – The proposed project is characterized by essentially flat topography that has been disturbed as a result of existing development on the site, which includes a vacant medical office building and associated parking lot. The potential for significant exposure of site occupants to pollutant concentrations from a wildfire would be minimal. The project site itself is not anticipated to be exposed to wildfire because the site will not contain any features which are highly flammable, which will minimize fire risk at the site. Based on the site location, and the condition of the site and surrounding area, the project will have a less than significant potential to exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. No mitigation is required.

c. *Less Than Significant Impact* – The project will require associated infrastructure in support of the Comstock Place Townhouse Project operations/occupancy as follows: the project will require additional connection to the City's Water service area; the project will require new wastewater

connection to the sewer lines within the alley adjacent to the project site; electricity provided by SCE exists at the site at present; the site may connect to the existing natural gas line within the alley adjacent to the project site. This Uptown area of the City of Whittier is developed, and the project site is surrounded by development in all directions. Therefore, the project would not have a significant potential to exacerbate wildfire risk or to result in temporary or ongoing impacts to the environment. Impacts under this issue are considered less than significant.

d. *Less Than Significant Impact* – The discussion under Section VII, Geology and Soils, concluded that the project would not have a significant potential to experience landslides or slope instability. Once constructed, the project site will remain essentially flat, and the drainage will be managed in an efficient manner that would not expose people or structures to significant risk. Furthermore, as discussed under Section X, Hydrology and Water Quality, the project is not located in an area containing a flood hazard, and the project site is anticipated to remain stable should a wildfire occur at or near the project site. As discussed above, the project is not anticipated to be exposed to substantial fire risk because of the lack of fuel to spread wildfire surrounding the site. Therefore, the development of the Comstock Place Townhouse Project at this site is anticipated to have a less than significant potential to 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. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

SUBSTANTIATION: The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control certain potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis contained within this Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

a. *Less Than Significant With Mitigation Incorporated* – The project has no potential to cause a significant impact on any biological or cultural resources. The project has been identified as having no potential to degrade the quality of the natural environment, substantially reduce habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The project requires mitigation to prevent significant impacts from occurring to nesting birds as a result of implementation of the project, but no other resources would be impacted by the proposed project, and thus no other biological resource issues require mitigation. Based on the historic disturbance of the site, and its current disturbed condition, the potential for impacting cultural resources is low. The Cultural Resources Report determined that, while the existing structure on site was constructed in 1952, it has no distinguishing features that would render it eligible for listing in the California Register of Historical Resources. As such, no other cultural resources of importance were found at the project site, so it is not anticipated that any resources could be affected by the project because no cultural resources exist. However, because it is not known what could be accidentally exposed upon any excavation activities, contingency mitigation measures are provided to ensure that, in the unlikely event that any resources are found, they are protected from any potential impacts. Please see biological and cultural sections of this Initial Study.

b. *Less Than Significant With Mitigation Incorporated* – Based on the analysis in this Initial Study, the proposed Comstock Place Townhouse Project has the potential to cause impacts that are individually or cumulatively considerable. The proposed single-family residential townhouse development would contribute to cumulative impacts as a result of the resources required to support the demands of the

new residents of the Comstock Place Townhouse Project. However, the proposed project's contribution to such cumulative impacts would not be cumulatively considerable. The issues of Aesthetics, Biology, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Tribal Cultural Resources, and Utilities and Service Systems require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, would result in a less than significant cumulative impact.

c. *Less Than Significant With Mitigation Incorporated* – The proposed project includes activities that have a potential to cause direct substantial adverse effects on humans. The issues of Geology and Soils, Hazards and Hazardous Materials and Hydrology and Water Quality require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant with mitigation.

Conclusion

This document evaluated all CEQA issues contained in the Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Transportation, and Wildfire. The issues of Aesthetics, Biology, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Tribal Cultural Resources, and Utilities and Service Systems require the implementation of mitigation measures to reduce impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact.

Based on the findings in this Initial Study, the City of Whittier proposes to adopt a Mitigated Negative Declaration (MND) for the Comstock Place Townhouse Project. A Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) will be issued for this project by the City. The Initial Study and NOI will be circulated for 30 days of public comment. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by the City for possible adoption at a future public hearing the date for which has not yet been selected. If you or your agency comments on the MND/NOI for this project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*,(1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; San *Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019
Authority: Public Resources Code sections 21083 and 21083.09
Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Aesthetics

AES-1 The Applicant shall obtain City approval to remove any trees on site through tree removal permit(s). The Applicant shall obtain a tree removal permit pursuant to City of Whittier Municipal Code 12.40.

Biological Resources

BIO-1 The State of California prohibits the "take" of active bird nests. To avoid impacts to nesting birds (common and special status) during the nesting season (generally between February 1 to August 31), a qualified Avian Biologist shall conduct pre-construction nesting bird survey prior to project-related disturbance to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist shall set appropriate no-work buffers around the nest, which would be determined based on the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Cultural Resources

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the City. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

Geology and Soils

GEO-1 Based upon the preliminary geotechnical investigation, all of the recommended seismic design parameters identified shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic soil stability on future project-related structures.

GEO-2 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sandbags shall be used to capture and hold eroded material on the project site for future cleanup such that erosion does not occur.

GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Comstock Place Townhouse Project is being constructed.

GEO-4 Based upon the Preliminary Geotechnical Investigation, all of the recommended design parameters shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including subsidence

GEO-5 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an

onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

Hazards and Hazardous Materials

HAZ-1 Prior to and during grading and construction, should an accidental release of a hazardous material occur, the following actions will be implemented: construction activities in the immediate area will be immediately stopped; appropriate regulatory agencies will be notified; immediate actions will be implemented to limit the volume and area impacted by the contaminant; the contaminated material, primarily soil, shall be collected and removed to a location where it can be treated or disposed of in accordance with the regulations in place at the time of the event; any transport of hazardous waste from the property shall be carried out by a registered hazardous waste transporter; and testing shall be conducted to verify that any residual concentrations of the accidentally released material are below the regulatory remediation goal at the time of the event. All of the above sampling or remediation activities related to the contamination will be conducted under the oversight of Los Angeles County Certified Unified Program Agency (CUPA) Site Mitigation Unit (SMU). All of the above actions shall be documented and made available to the appropriate regulatory agencies prior to closure (a determination of the regulatory agency that a site has been remediated to a threshold that poses no hazard to humans) of the contaminated area.

Hydrology and Water Quality

HYD-1: Prior to the commencement of construction, the Applicant shall be required to implement and the construction contractor(s) shall select BMPs to achieve a reduction in pollutants from stormwater discharge to the maximum extent practicable during the construction of the Project, and to control urban runoff after the Project is constructed and is in operation. Examples of BMP(s) that would achieve a reduction in pollutants include, but are not limited to:

- The use of silt fences or coir rolls;
- The use of temporary stormwater desilting or retention basins;
- The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site;
- The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and
- Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

Land Use and Planning

LU-1: The Applicant shall be required to implement the following parking management strategies:

- Short-term parking shall be considered adjacent to the center of the community for equal distribution throughout the development.
- The ADA compliant parking stalls, resident stalls, and guest parking stalls shall have the appropriate signage.
- The HOA shall ensure residents comply with the PMP recommendations and rules of conduct.

Tribal Cultural Resources

TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground- disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground- disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for The project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to The project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.
E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the including for educational, cultural and/or historic purposes.

TCR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)
E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.
F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TCR-3 Procedures for Burials and Funerary Remains:

A. As the Most Likely Descendant (MLD), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient times, as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.
E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.
G. The Tribe will work closely with the project’s qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is

performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Utilities and Service Systems

UTIL-1 The contract with demolition and construction contractors shall include the requirement that all materials that can be recycled shall be salvaged and recycled. This includes, but is not limited to, wood, metals, concrete, road base, and asphalt. The developer shall submit a recycling plan to the City for review and approval prior to the start of demolition/construction activities to accomplish this objective.

REFERENCES

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State Water Resources Control Board, 2024, Sustainable Groundwater Management Act (SGMA) https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management (accessed 03/08/24)

Urban Crossroads, 2024. Philadelphia & Comstock Townhouse, Air Quality Impact Analysis, City of Whittier. (Appendix 5)

Urban Crossroads, 2024. Philadelphia & Comstock Townhouse, Energy Analysis, City of Whittier. (Appendix 8)

Urban Crossroads, 2024. Philadelphia & Comstock Townhouse, Greenhouse Gas Analysis, City of Whittier. (Appendix 10)

Urban Crossroads, 2024. Comstock Residential, Noise Impact Analysis, City of Whittier. (Appendix 12)

Urban Crossroads, 2024. Philadelphia & Comstock Townhouse Vehicle Miles Travelled (VMT) Screening Evaluation and Trip Generation Assessment. (Appendix 13)

Urban Crossroads, 2024. Comstock & Philadelphia Townhouse Parking Management Plan. (Appendix 14)

Urban Crossroads, 2024. Comstock & Philadelphia Townhouse Transportation Demand Management Strategies Plan. (Appendix 15)

City of Whittier, “Envision Whittier Draft General Plan” dated June 2021

City of Whittier, “General Plan Update and Housing Element Update Draft Environmental Impact Report” dated July 9, 2021

FIGURES

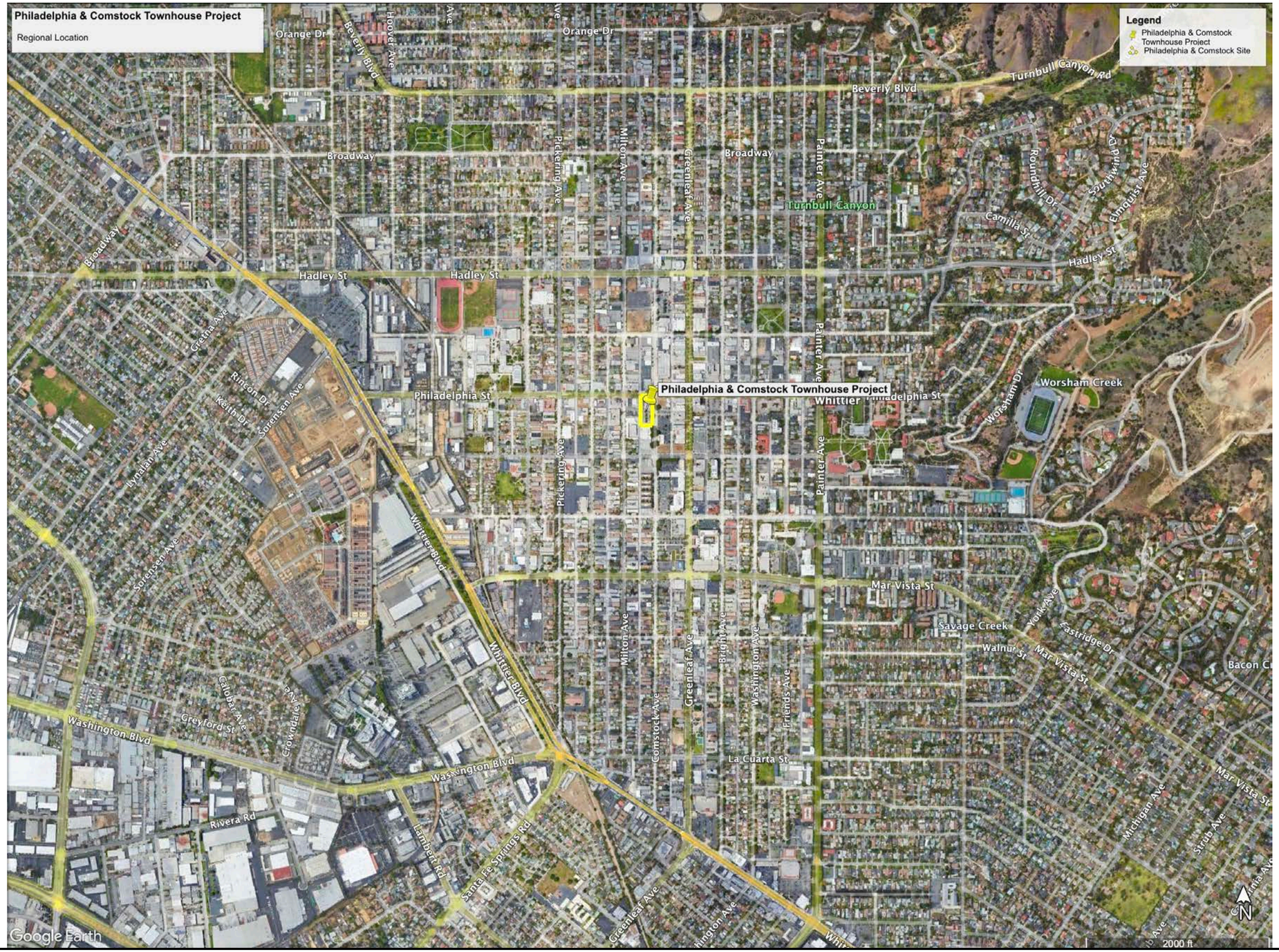


FIGURE 1

Tom Dodson & Associates
Environmental Consultants

Regional Location

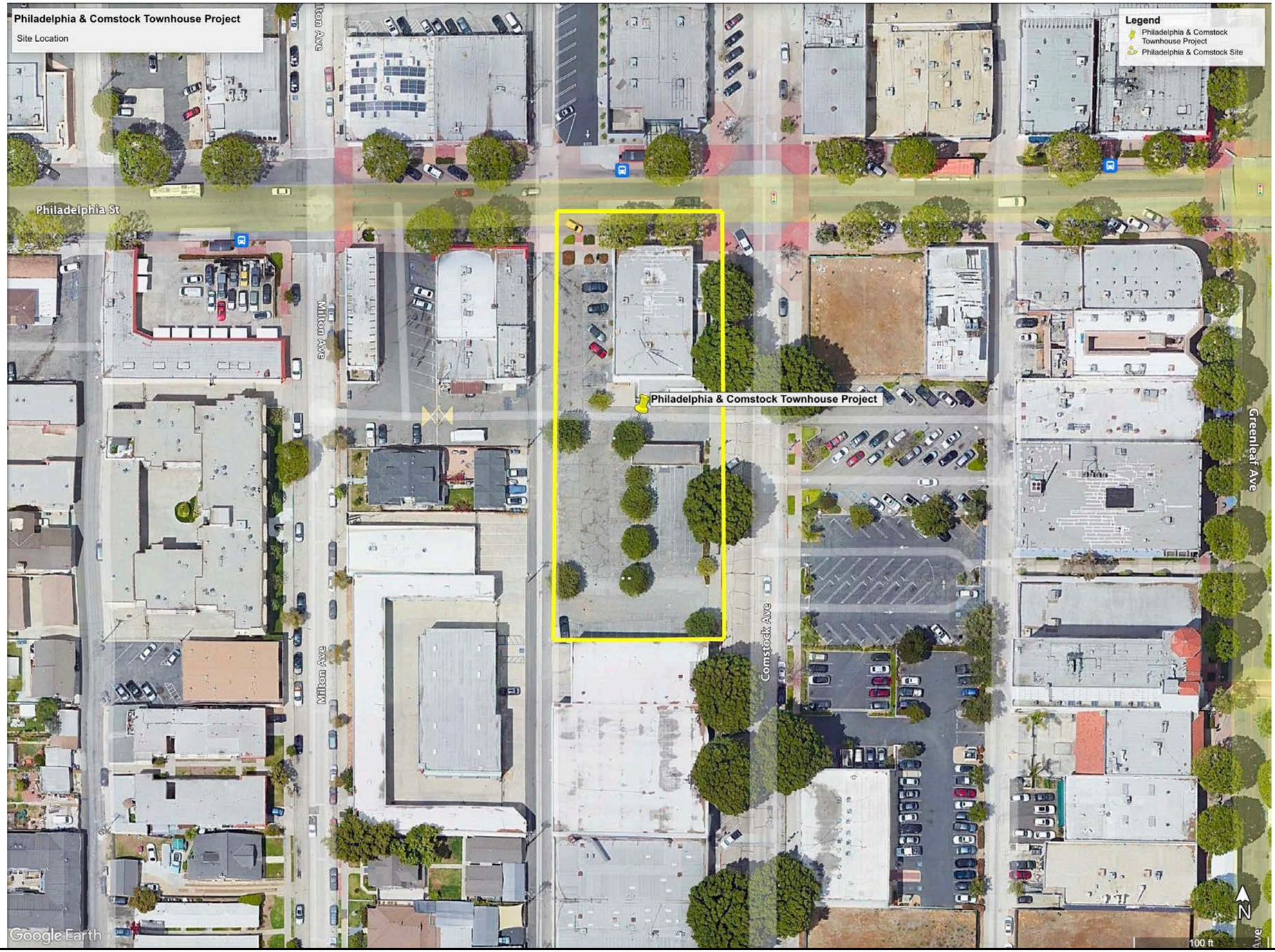


FIGURE 2

Tom Dodson & Associates
Environmental Consultants

Site Location



OPEN SPACE MATRIX PER LANDSCAPE
See Sheet L-6 for Designation
Open space requirement: 15% of Lot (5,397 SF)

OPEN SPACE PROGRAMMED PROVIDED	
Courtyard & Paseo Amenities	
Common Open Spaces	5,569 sf (15.5%)
OTHER COMMON SPACE PROVIDED	
Builder Installed & Maintained	2,546 sf (7.1%)
(See Landscape's Sheet L-6 for breakdown)	
PRIVATE OPEN SPACE PROVIDED	
Ground Level	
Homeowner Exclusive Use/Maintained	835 sf (2.3%)
Private Deck Open Space	3,240 sf (9.0%)
Breakdown (Net)	
Plan 1 (120 sf)	
Plan 2 (174 sf)	
Plan 3 (480 sf)	
Plan 4 (1,072 sf)	
Plan 5 (1,160 sf)	
Plan 6 (234 sf)	
COMBINED TOTAL OPEN SPACE	12,190 sf (33.9%)
(See Landscape Plans for Type of Activity Areas)	

U-TC COURTYARD HOUSING DEV STANDARDS
Front Setback: 0'
Side Setback: 0'
Rear Setback: 10'
Building Height: 2-4 stories*
Building south of Courtyard should be 1 story lower than the northern side to allow max exposure of sunlight in the courtyard
Courtyard with E/W axis: min 40'
Courtyard with N/S axis: min 30'
Couryard Size: 15% of lot for Open Space
Required Parking:
Studio/1bd: 1.5 sp/unit
2bd: 2.0 sp/unit
3bd: 2.5 sp/unit
Guest: 0.25 sp/unit
Min Parking Space for Residential:
Open Parking Space from 10'x20' to 9'x19' (with a two-foot overhang)
Tandem Parking Space to 10'x40' (in garages)

SITE DATA
Tentative Tract: 84431
Address: 12826 Philadelphia Street, Whittier, CA 90601
APN: 8139-024-027
Zoning: U-CT
Building Type: Courtyard Housing
Architectural Style Type: California Contemporary
Frontage Type: Stoop
Total Units: 24
Gross Building Area: 41,618 SF
FAR: 1.16
Density: 29.5
Net Site Area: .813 Acres (35,414 SF)
Gross Site Area: .826 Acres (35,980 SF)
Site Lot Coverage: 55.24%
Open space requirement: 15% (5,397 SF)
Landscape Area (Approx. Proposed): See Landscape Plan

BUILDING DATA
Type Construct: V-B
Fire Department: Whittier
Occupancy Type: R2
Fire Sprinkler Type: NFPA 13

Plan Types and Sizes (Net)	Park'g Req'd
(2) Plan 1 - 1340 SF (2B/2.5BA - 2 Car Gar.)	4 spaces
(2) Plan 2 - 1485 SF (3B/2.5BA - 2 Car Gar.)	5 spaces
(8) Plan 3 - 1336 SF (2B/2.5BA - 2 Car Tandem Gar.)	16 spaces
(8) Plan 4 - 1729 SF (3B/3.5BA - 2 Car Gar.)	20 spaces
(2) Plan 5 - 2251 SF (4B/3.5 BA/Loft - 2 Car Gar.)	5 spaces
(2) Plan 6 - 2177 SF (4B/3.5 BA - 2 Car Gar.)	5 spaces
Totals - (24) units 39,026 SF (Gross: 41,618 SF)	55 spaces
(Avg. 1626 Net SF)	+Guest .25/unit (6)

Total Spaces Required = 61 Spaces
Total Private Deck Space Provided: 2,398 Net SF (2,676 Gross SF)

Parking Spaces Provided/Proposed:

(RP) Garage -	48 Spaces
(RP) Resident Parking Space -	7 Spaces
(GS) Guest Parking Space -	4 Spaces (Includes 1 ADA space)
Total -	59 Spaces (Requires a Variance) (Avg. 2.46 sp/unit)

On-Street Adjacent Parallel Parking Proposed/Provided - 16**
See civil for details.
** Per Section 4.3.1.C.2 (Zones and Their Purposes/U-CT) and Section 18.48.020, Item 5 (Schedule of Parking Standards)

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

ktgy
Architecture + Planning
17911 Von Karman Ave, Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

MW INVESTMENT GROUP
MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

Plot Date: 09.23.2024
2nd Planning Submittal: 04.30.2024
3rd Planning Submittal: 07.15.2024
DRC Planning Submittal: 09.23.2024

0 10 20 40

SITE PLAN
CONCEPTUAL DENSITY STUDY

A1.0

FIGURE 3

Tom Dodson & Associates
Environmental Consultants

Site Plan

Figure LUCC-1: Corridors, Gateways, and Landmarks

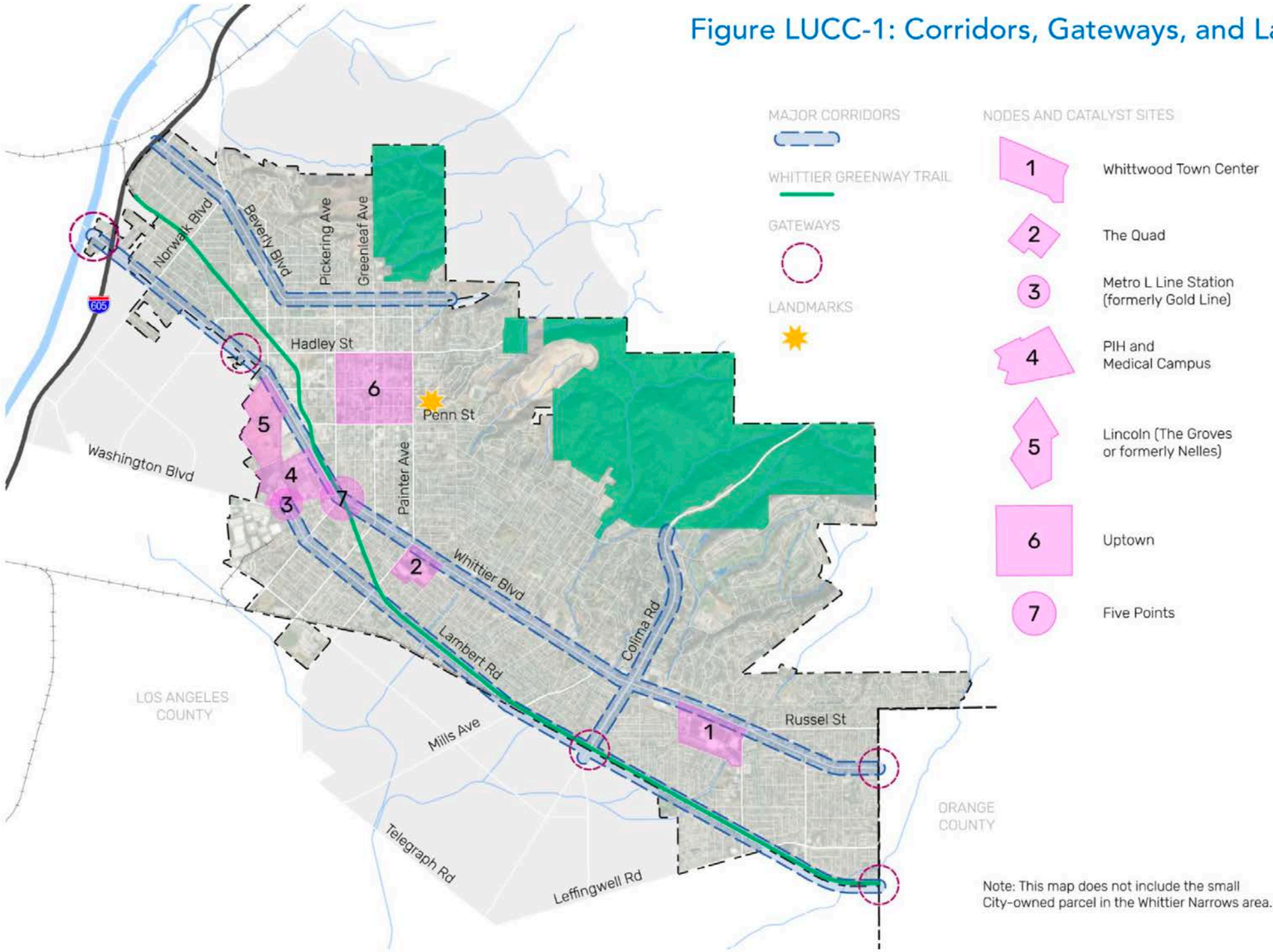


FIGURE I-1

Tom Dodson & Associates
Environmental Consultants

Corridors, Gateways, and Landmarks

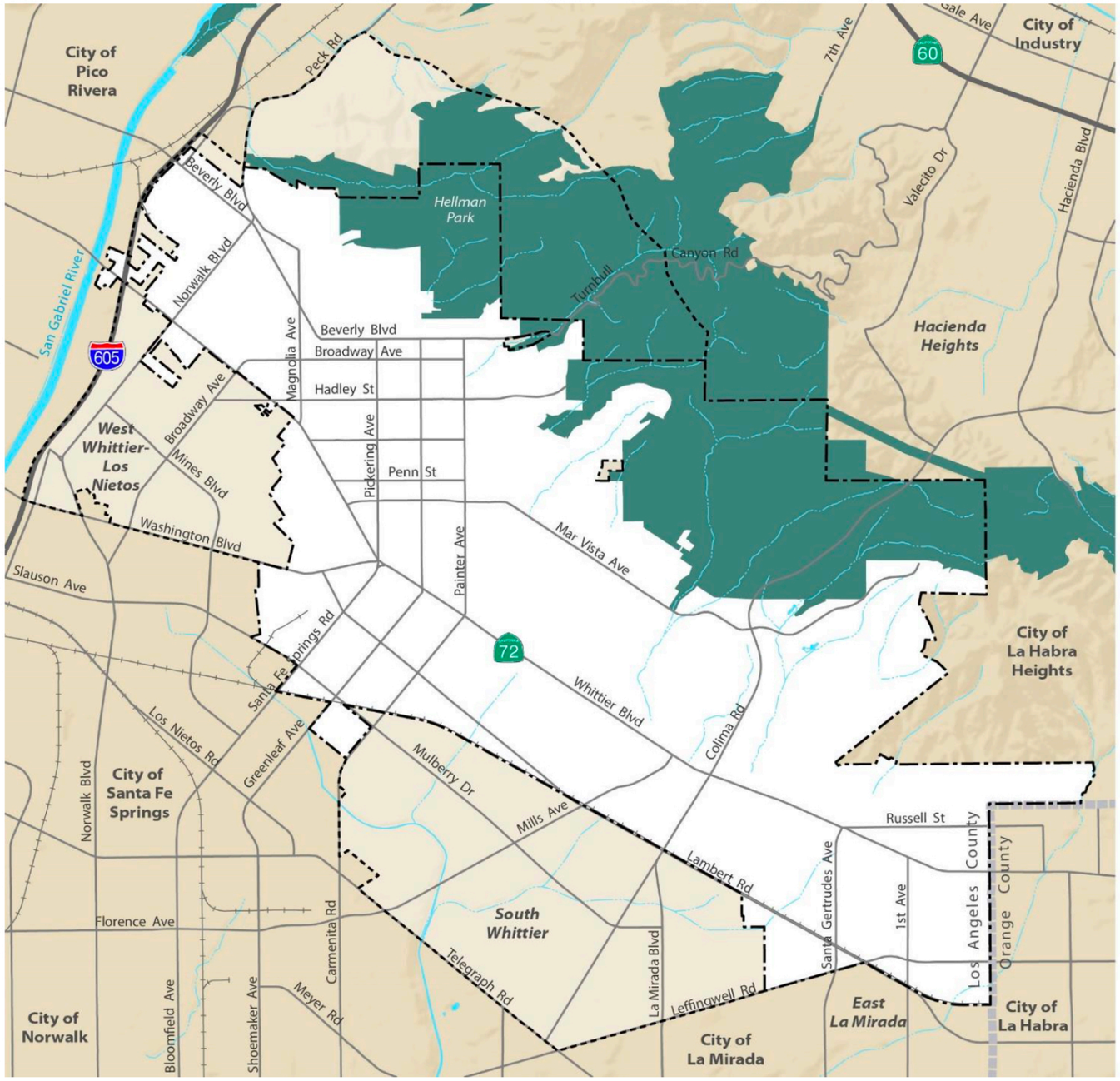


Figure RM-1: Significant Ecological Areas (SEA)

Significant Ecological Areas (SEA)

- Puente Hills SEA

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Waterbodies

Source: City of Whittier, 2017.

The City-owned parcel located near Whittier Narrows is excluded from this map to increase the maps readability.

FIGURE IV-1

Tom Dodson & Associates
Environmental Consultants

Significant Ecological Areas

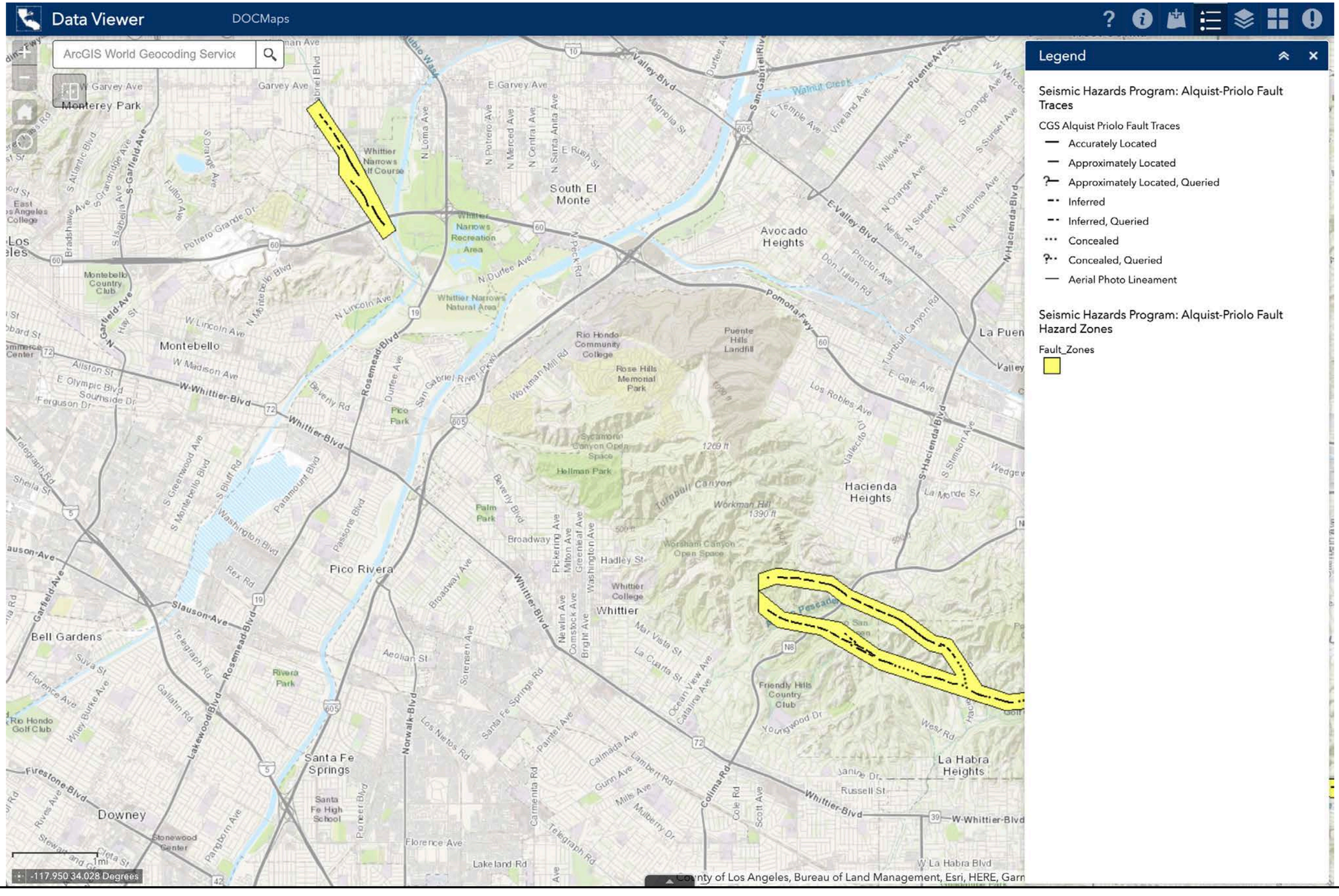


FIGURE VII-1

Tom Dodson & Associates
Environmental Consultants

Alquist PrioloFault Zones

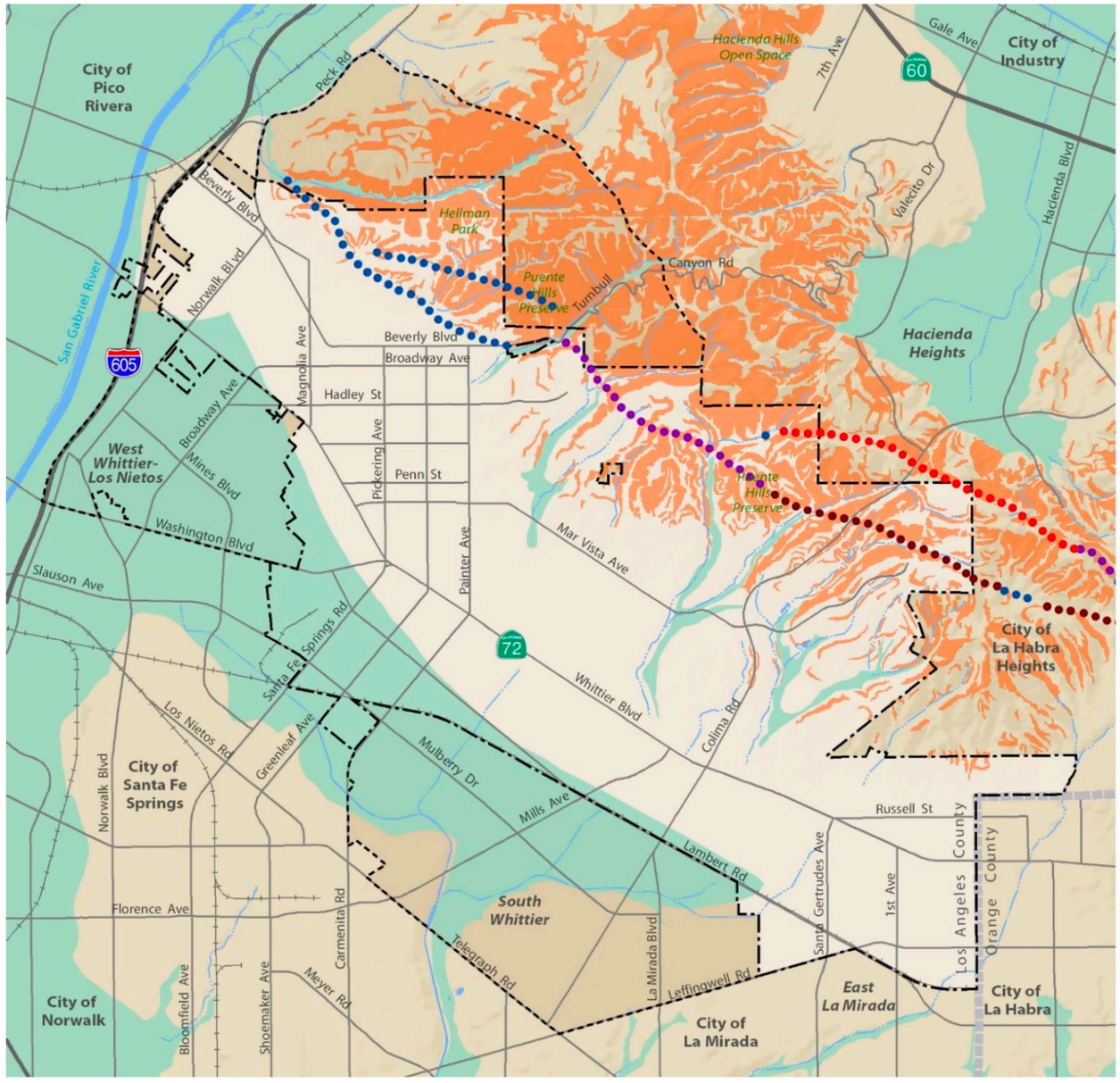


Figure PSNH-3: Local Seismic Hazards and Earthquake Faults

FIGURE VII-2

Tom Dodson & Associates
Environmental Consultants

Local Seismic Hazards and Earthquake Faults

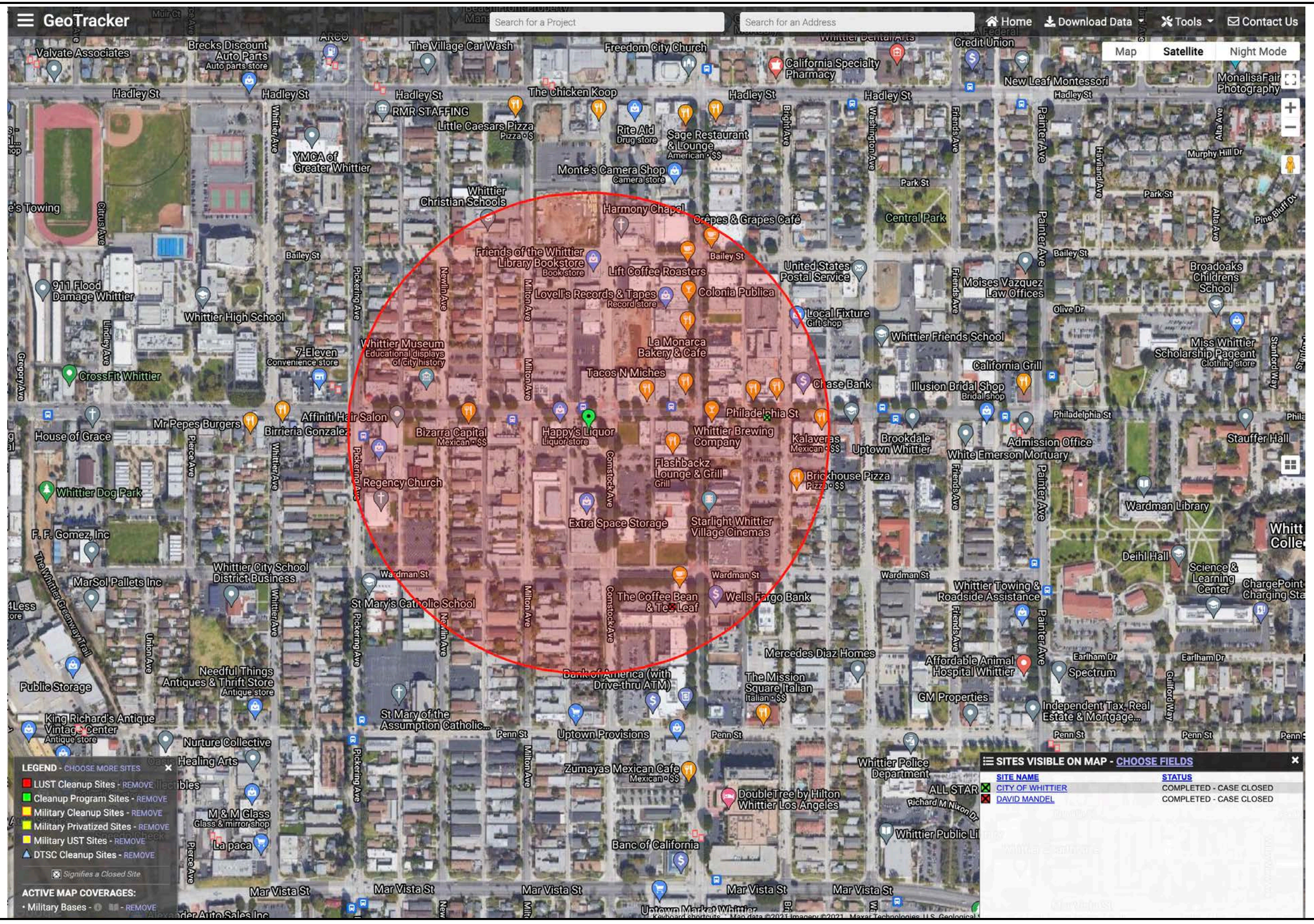


FIGURE IX-1

Tom Dodson & Associates
Environmental Consultants

GeoTracker

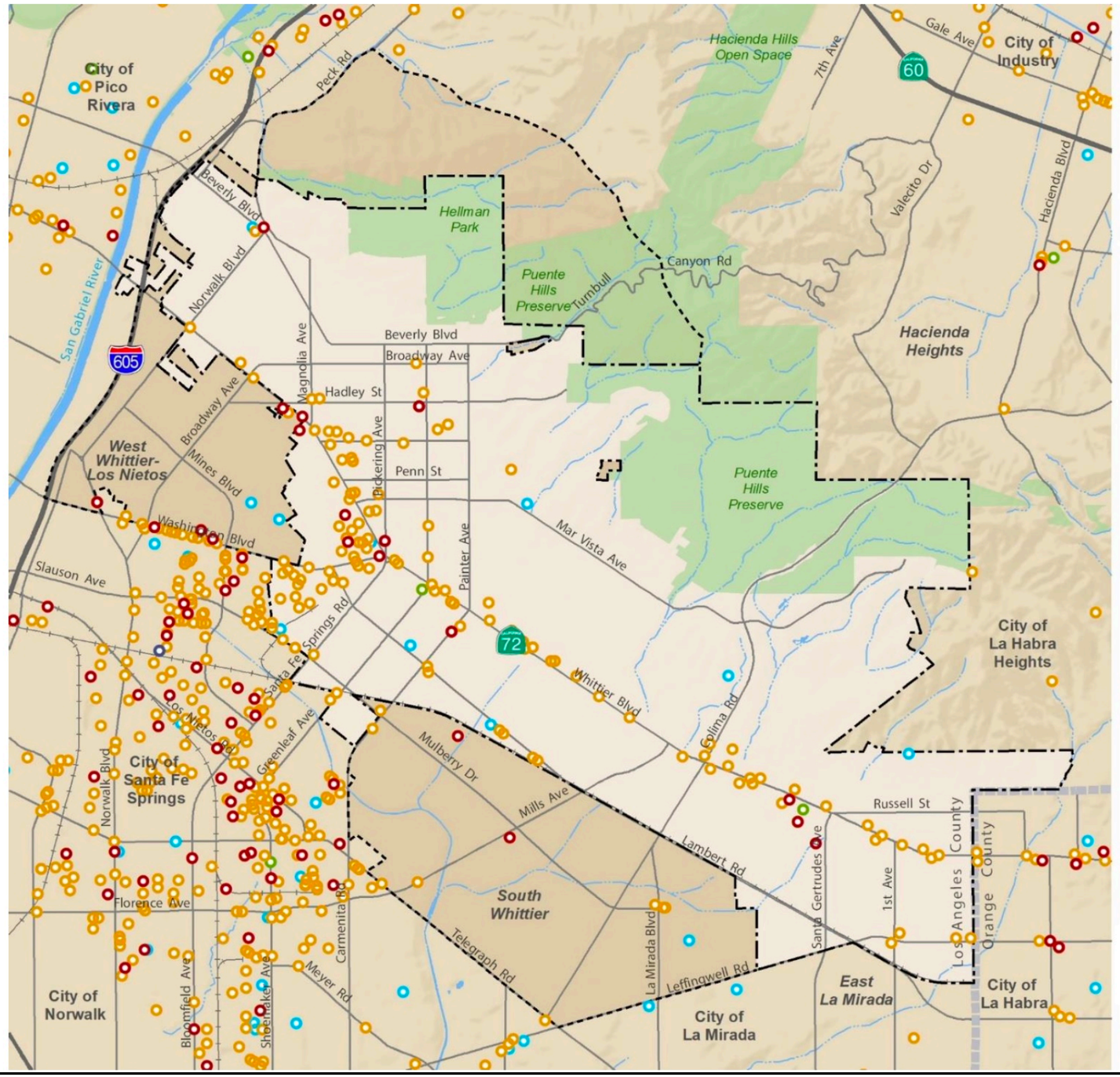


Figure PSNH-7: Hazardous Waste Generators

Hazardous Waste

- Large Quantity Generator (LQG)
- Small Quantity Generator (SQG)
- Conditionally Exempt SQG (CESQG)
- Hazardous Waste Transporter
- Transfer Facility

LQG: A business that generates more than 2,200 lbs per month of hazardous waste

SGQ: A business that generates more than 220 lbs but less than 2,200 lbs of hazardous waste per month

CESGQ: A business that generates less than 220 lbs of hazardous waste per month

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Waterbodies
- Open Space/Natural Areas

The City-owned parcel near Whittier Narrows is not included in this map to improve readability.

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE IX-2

Tom Dodson & Associates
Environmental Consultants

Hazardous Waste Generators

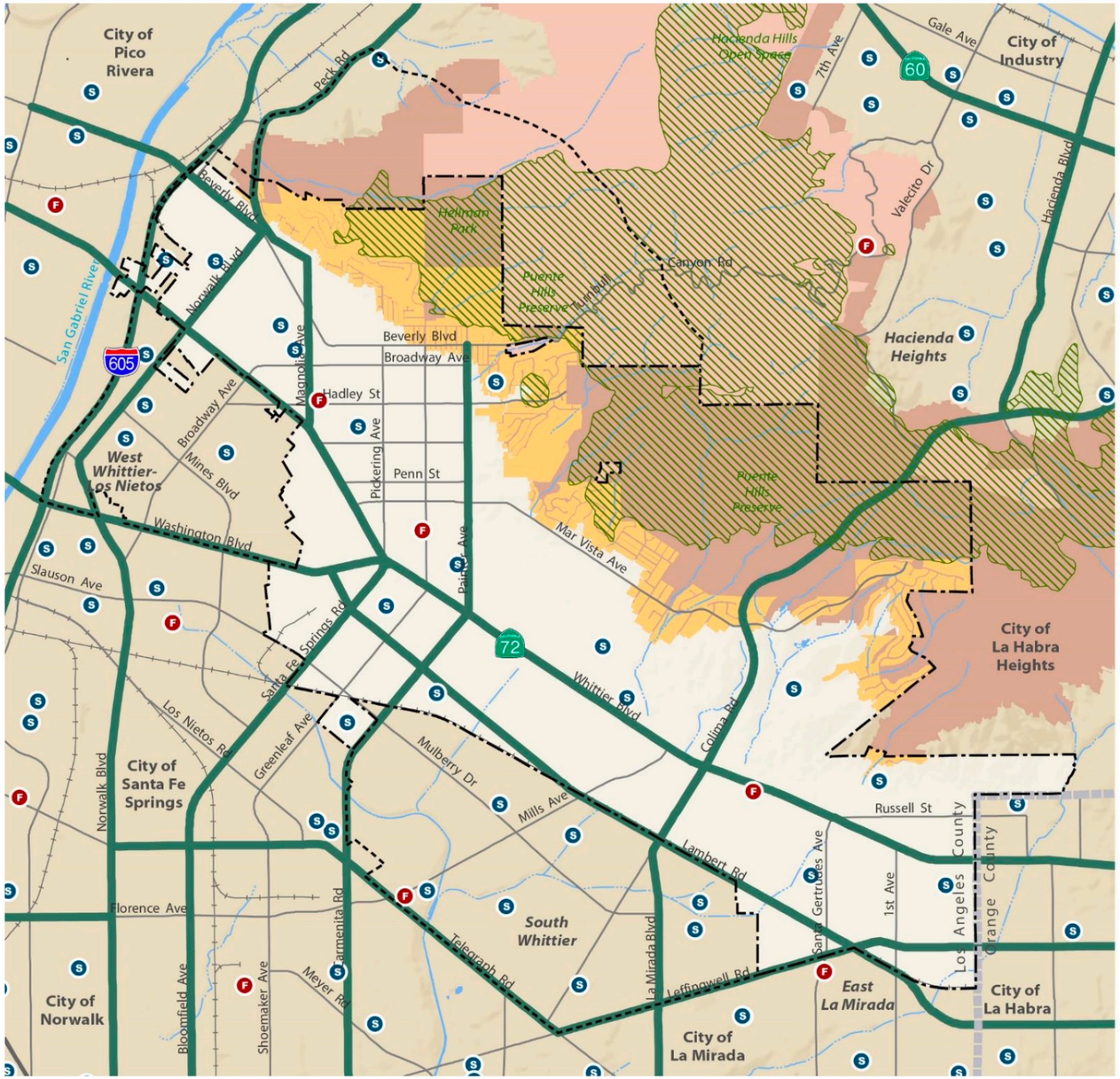


Figure PSNH-4: Wildfire Hazards

Fire Hazards

- Very High Fire Hazard Severity Zone (SRA)
- Very High Fire Hazard Severity Zone (LRA)
- Residential GP Designations in VHFHSZ
- Historic Fire Perimeters

Emergency Routes

- Evacuation Routes

Public Facilities

- Fire Stations
- Schools

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Waterbodies

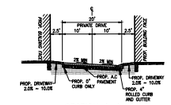
The City-owned parcel near Whittier Narrows is not included in this map to improve readability.

0 1,000 2,000 4,000 6,000 8,000 Feet

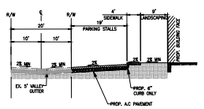
FIGURE IX-3

Tom Dodson & Associates
Environmental Consultants

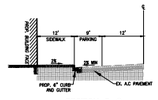
Wildfire Hazards



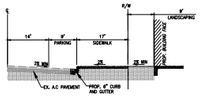
SECTION A–A
NTS



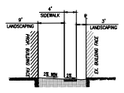
SECTION B–B
NTS



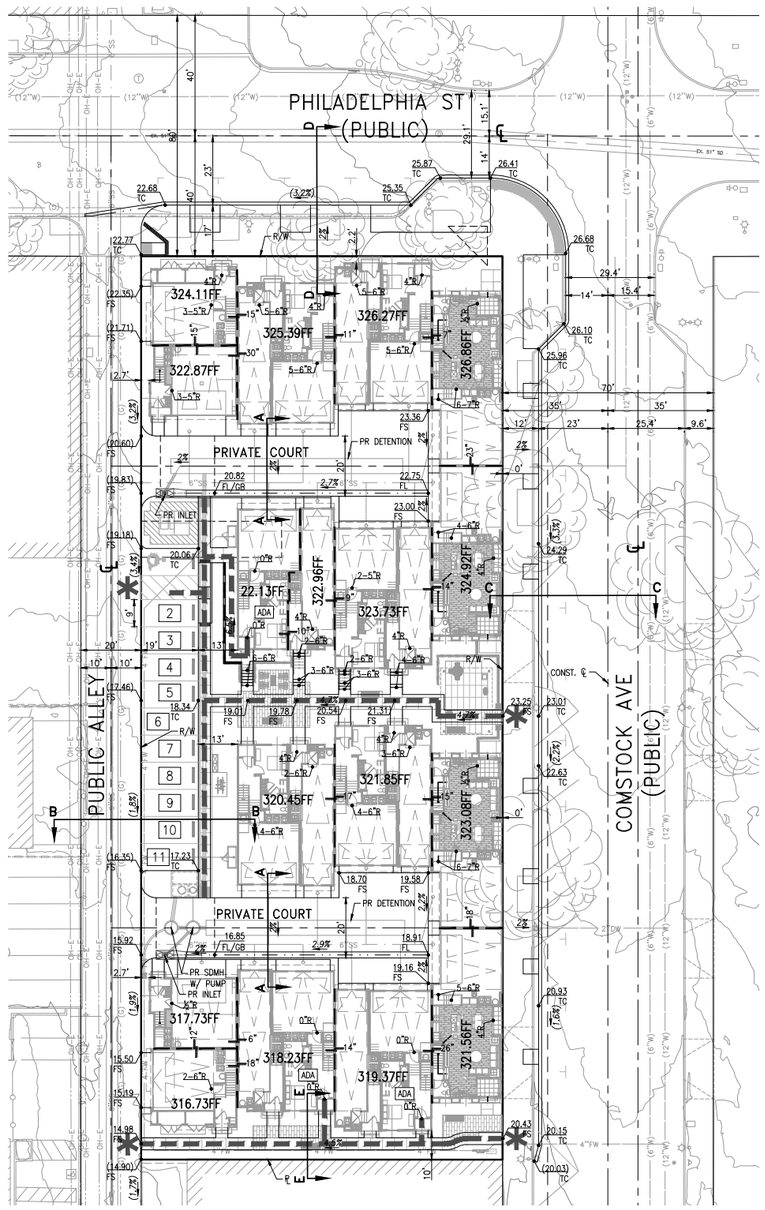
SECTION C–C
NTS



SECTION D–D
NTS



SECTION E–E
NTS



	UNITS	MIN. # OF SPACES PER UNIT	SPACE REQ.	GARAGE SPACE PROV.
PLAN 1 – 2 BR	2	2	4	4
PLAN 2 – 3 BR	2	2.5	4.5	4
PLAN 3 – 2 BR	8	2	16	16
PLAN 4 – 3 BR	8	2.5	18	16
PLAN 5 – 4 BR	4	2.5	9	8
TOTAL	24		55	48
STALLS REQ. (GUEST +0.25/UNIT)	61			
GARAGE PARKING STALLS PROVIDED	48			
SURFACE PARKING PROVIDED	11			

LEGEND:

ADA UNIT — ADA
ADA PATH
FRONT DOOR
OPEN PARKING — T2
ADA CONNECTION TO PUBLIC R/W

1" = 20'
0 10 20 40

REVISIONS		
REV	DATE	DESCRIPTION

PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER — DANIEL P. MCDONALD — C 80705 — CIVIL — STATE OF CALIFORNIA

C&V CONSULTING, INC. CIVIL ENGINEERING LAND PLANNING & SURVEYING
9330 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 581-8300
INFO@CVCINC.NET
WWW.CVCINC.NET

PREPARED FOR:

MW INVESTMENT GROUP

MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY,
STE. D–4–197
LADERA RANCH, CA 92694
(626) 710–6377

CITY OF WHITTIER
DEPARTMENT OF PLANNING AND DEVELOPMENT

VESTING TENTATIVE TRACT MAP NO. 84431
PRELIMINARY GRADING & DRAINAGE PLAN
12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA 90601

PROJECT NO. MWIG-006

SHEET 2 OF 4

PLAN SET: PDP
DATE: 2/7/2024

P:\PROJECTS\MWIG-006\DRAWINGS\PDP\MWIG-006-PDP-01.DWG

FIGURE X-1

Tom Dodson & Associates
Environmental Consultants

Drainage and Grading Plan

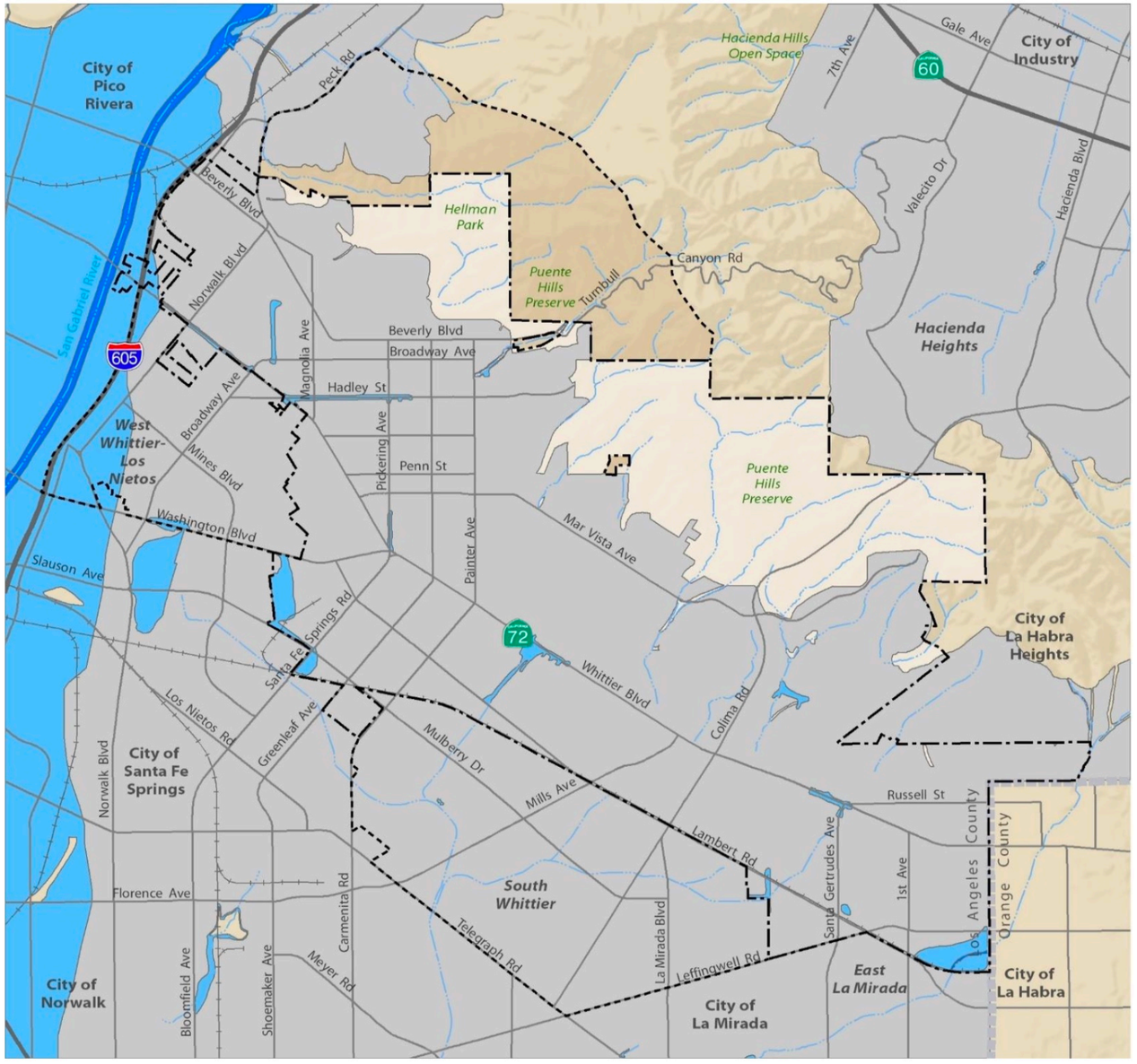


Figure PSNH-5: Flooding Hazards

FEMA Flood Zones

- 100-Year Flood Zone
- 500-Year Flood Zone
- Area of Minimal Flood Hazard

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks

The City-owned parcel near Whittier Narrows is not included in this map to improve readability.

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE X-2

Tom Dodson & Associates
Environmental Consultants

Flood Hazards

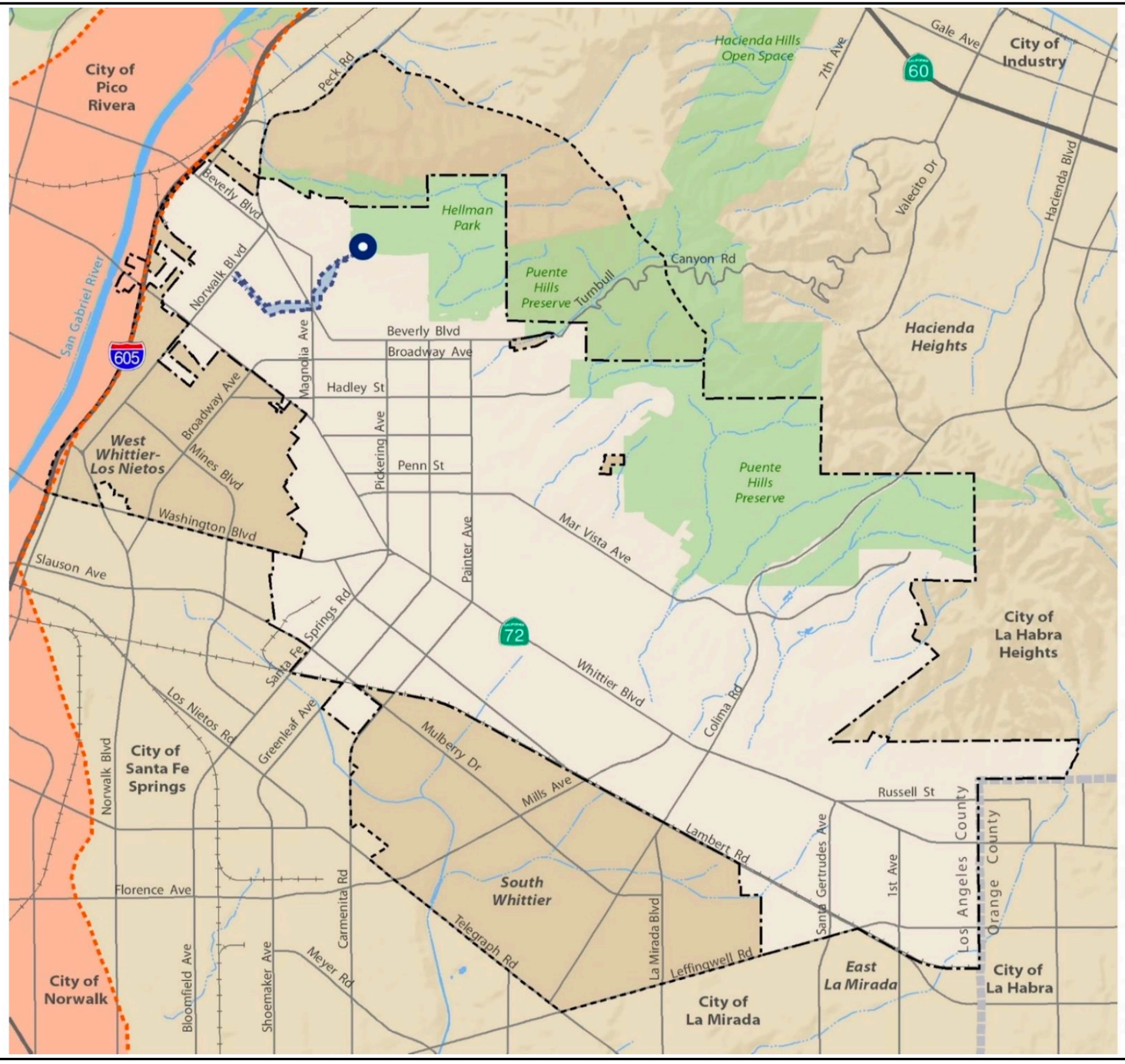


Figure PSNH-6: Inundation Hazards

Inundation Limits

- Whittier Narrows Indundation Limits
- Hoover Reservoir Indundation Limits
- Hoover Reservoir

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Waterbodies
- Open Space/Natural Areas

The City-owned parcel near Whittier Narrows is not included in this map to improve readability.

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE X-3

Tom Dodson & Associates
Environmental Consultants

Inundation Hazards



FIGURE XIII-1

Tom Dodson & Associates
Environmental Consultants

Noise Measurement Location



FIGURE XIII-2b

Tom Dodson & Associates
Environmental Consultants

Sensitive Receptors



FIGURE XIII-3

Tom Dodson & Associates
Environmental Consultants

Operational Noise Sources



FIGURE XIII-4b

Tom Dodson & Associates
Environmental Consultants

Construction Noise Sources

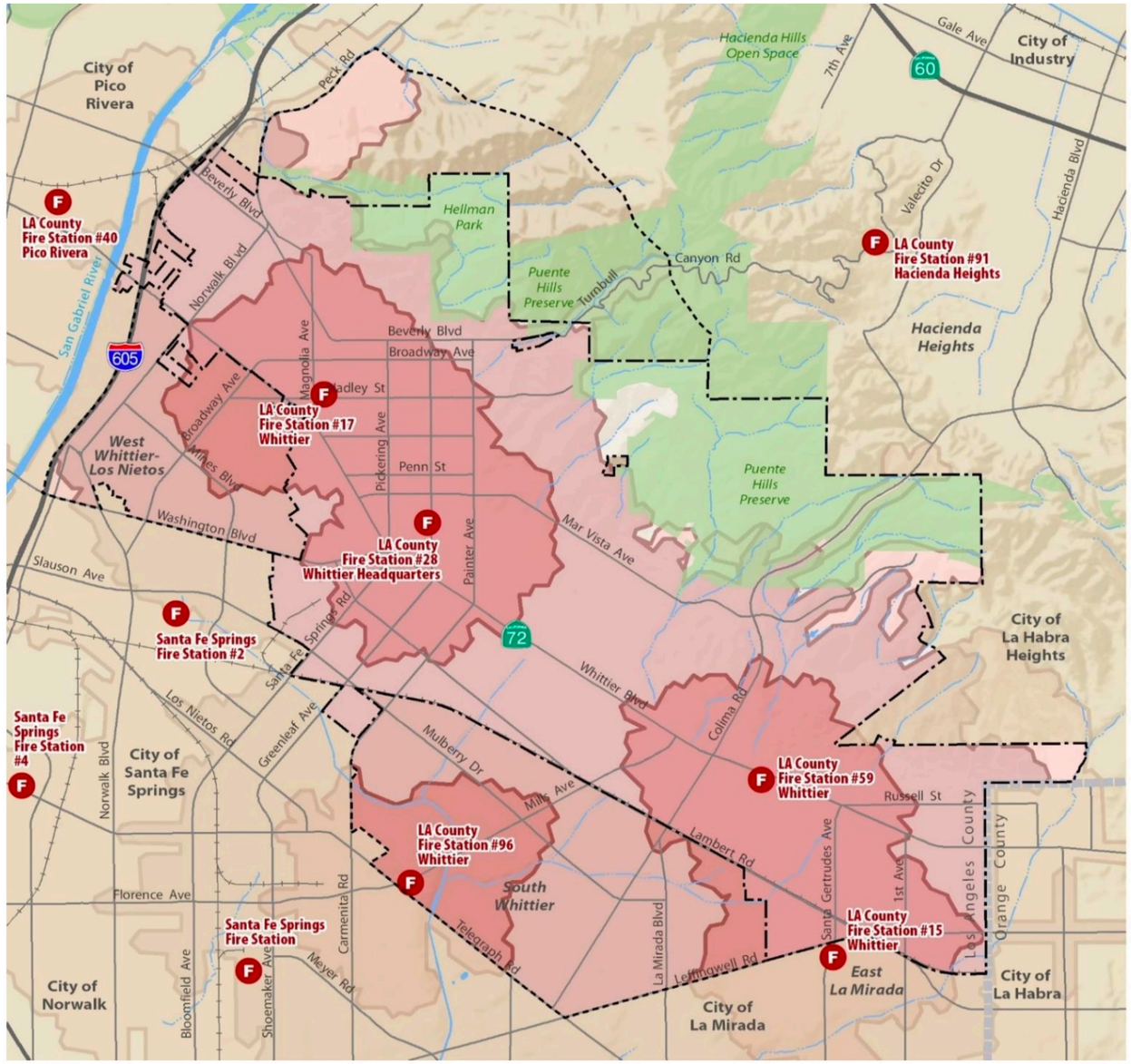


Figure PSNH-1: Fire Stations

FIGURE XV-1

Tom Dodson & Associates
Environmental Consultants

Fire Stations

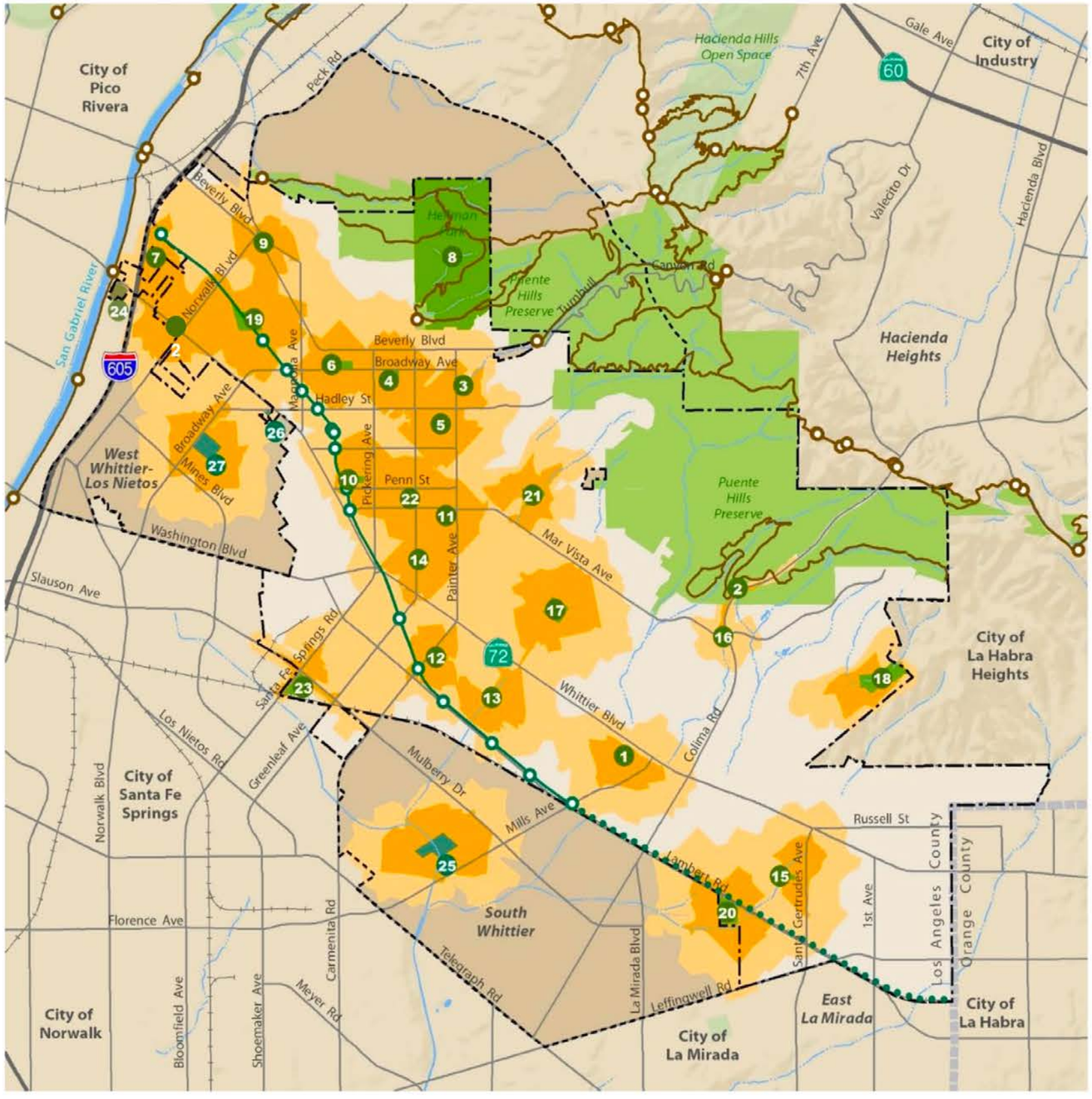


Figure RM-2: Recreation Facilities and Access

Parks and Recreation Facilities
- Whittier Parks
- Los Angeles County Parks
- Pio Pico State Historic Park

Park Service Areas to Neighborhoods
- Within 1/4-Mile Walking Distance
- Within 1/2-Mile Walking Distance

Open Space
- Puente Hills Habitat Authority
- Open Space/Natural Areas

Trails
- Greenway Trail
- Greenway Trail Extension
- Greenway Trail Access Points
- Other Trails
- Other Trail Access Points/Trailheads

Base Map Features
- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Waterbodies

Source: City of Whittier and Los Angeles County Parks and Recreation Department, 2017.

Prepared by MIG, July 2017.

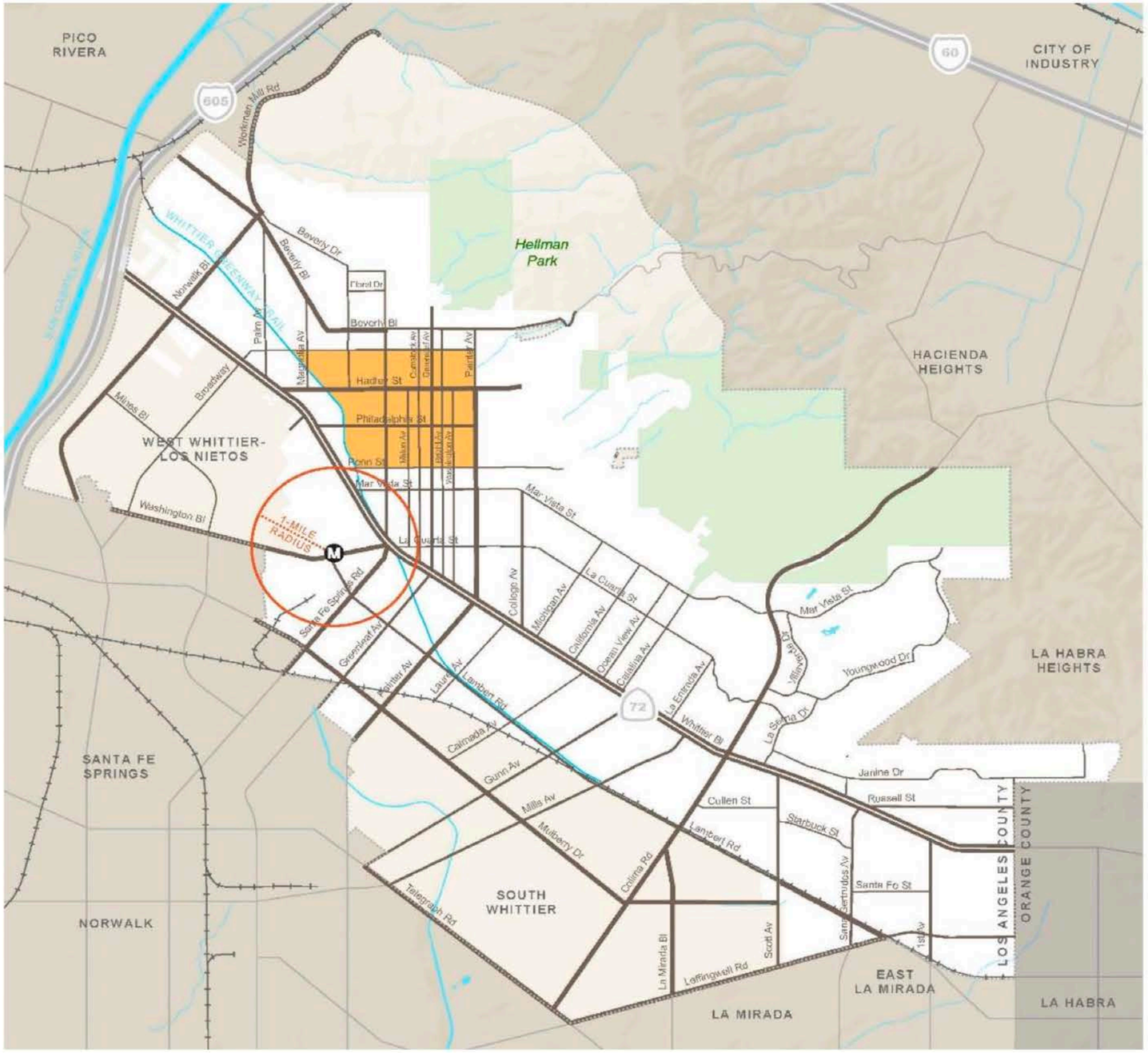
The City-owned parcel located near Whittier Narrows is excluded from this map to increase the maps readability.

FIGURE XV-2

Tom Dodson & Associates
Environmental Consultants

Recreational Facilities and Access

Figure MI-1: Street Classification



Street Classification

- Major Arterial
- Minor Arterial
- Secondary Street
- Collector Street
- Transit Priority Area
- Uptown Whittier
- City Boundary
- Sphere of Influence
- Railroads
- Waterways
- Open Space

Source: Whittier General Plan, 1993
Prepared by: Fehr & Peers, 2021

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE XVII-1

Tom Dodson & Associates
Environmental Consultants

Street Classification

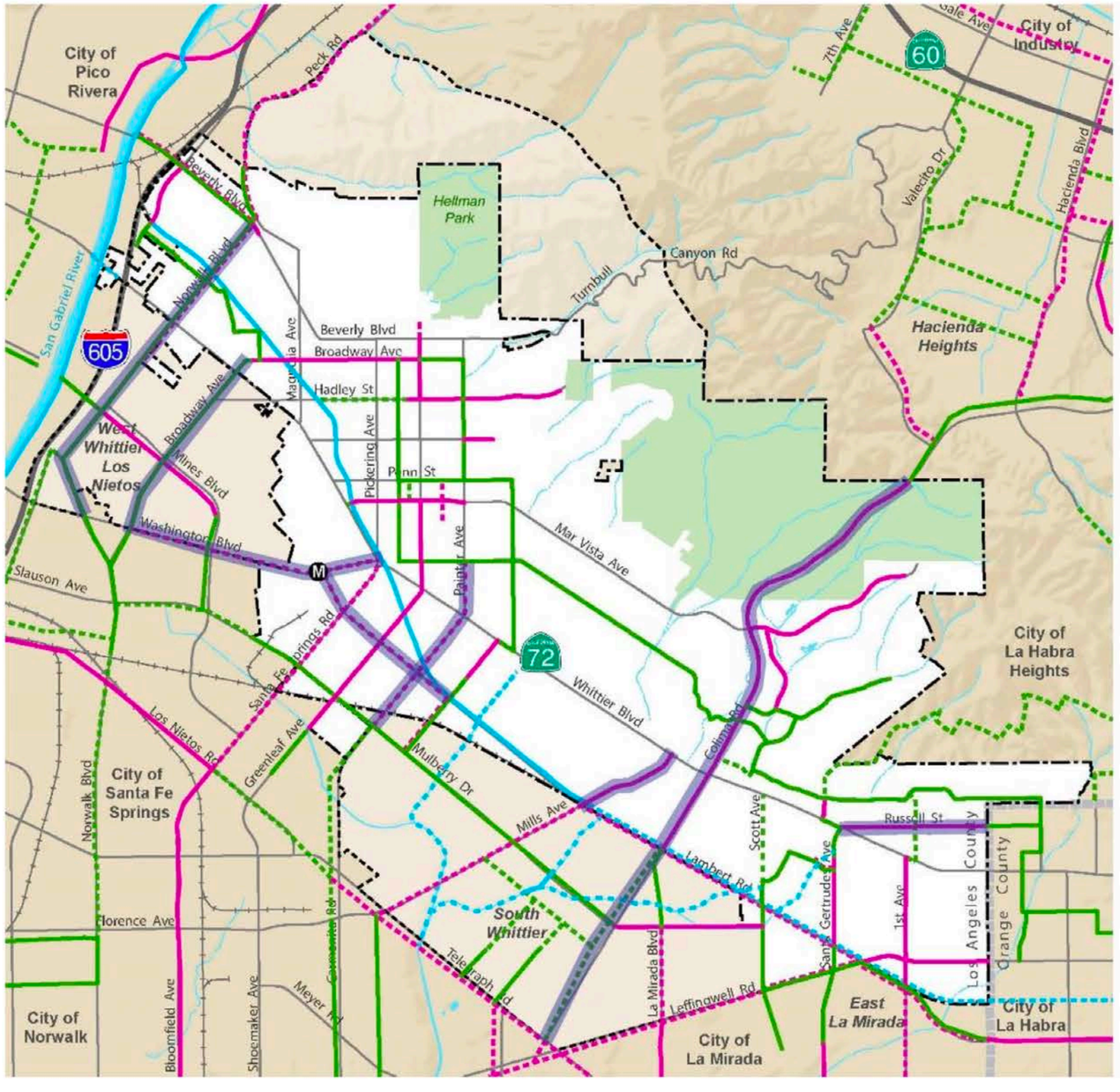


Figure MI-2: Existing and Proposed Bike Facilities

Bike Path Status and Class

- Existing Class I Bike Path
- Existing Class II Bike Path
- Existing Class III Bike Path
- Proposed Class I Bike Path
- Proposed Class II Bike Path
- Proposed Class III Bike Path
- Proposed Facility Enhancement
- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Open Space
- Waterbodies

Source: City of Whittier, 2017.
Prepared by Fehr & Peers, July 2017.

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE XVII-2

Tom Dodson & Associates
Environmental Consultants

Proposed Bike Facilities

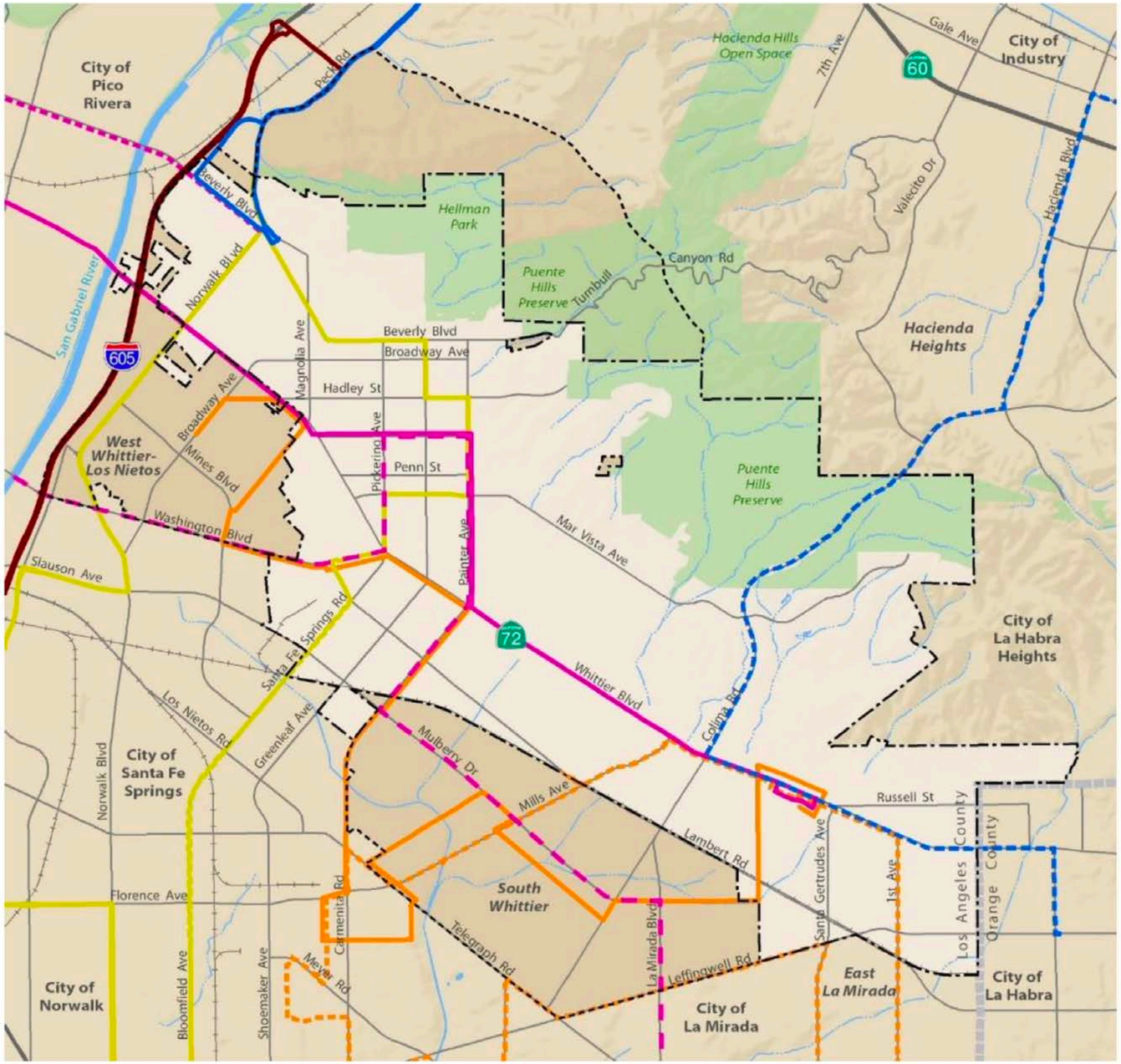


Figure MI-3: Bus Transit Routes

Bus Routes

- Foothill Transit - 274
- Foothill Transit - 285
- LA Metro - 120
- Montebello - 10
- Montebello - 40 and 90
- Montebello - 50
- Norwalk Transit -1
- Norwalk Transit - 7
- Sunshine Shuttle - A
- Sunshine Shuttle - B

Base Map Features

- Whittier City Boundary
- Whittier Sphere of Influence
- County Boundary
- Major Streets
- Freeways
- Railroads
- River and Creeks
- Open Space/Natural Areas

Source: Fehr & Peers; 2017 and City of Whittier, 2017.

Prepared by Fehr & Peers, September 2017.

0 1,000 2,000 4,000 6,000 8,000 Feet

FIGURE XVII-3

Tom Dodson & Associates
Environmental Consultants

Transit Route

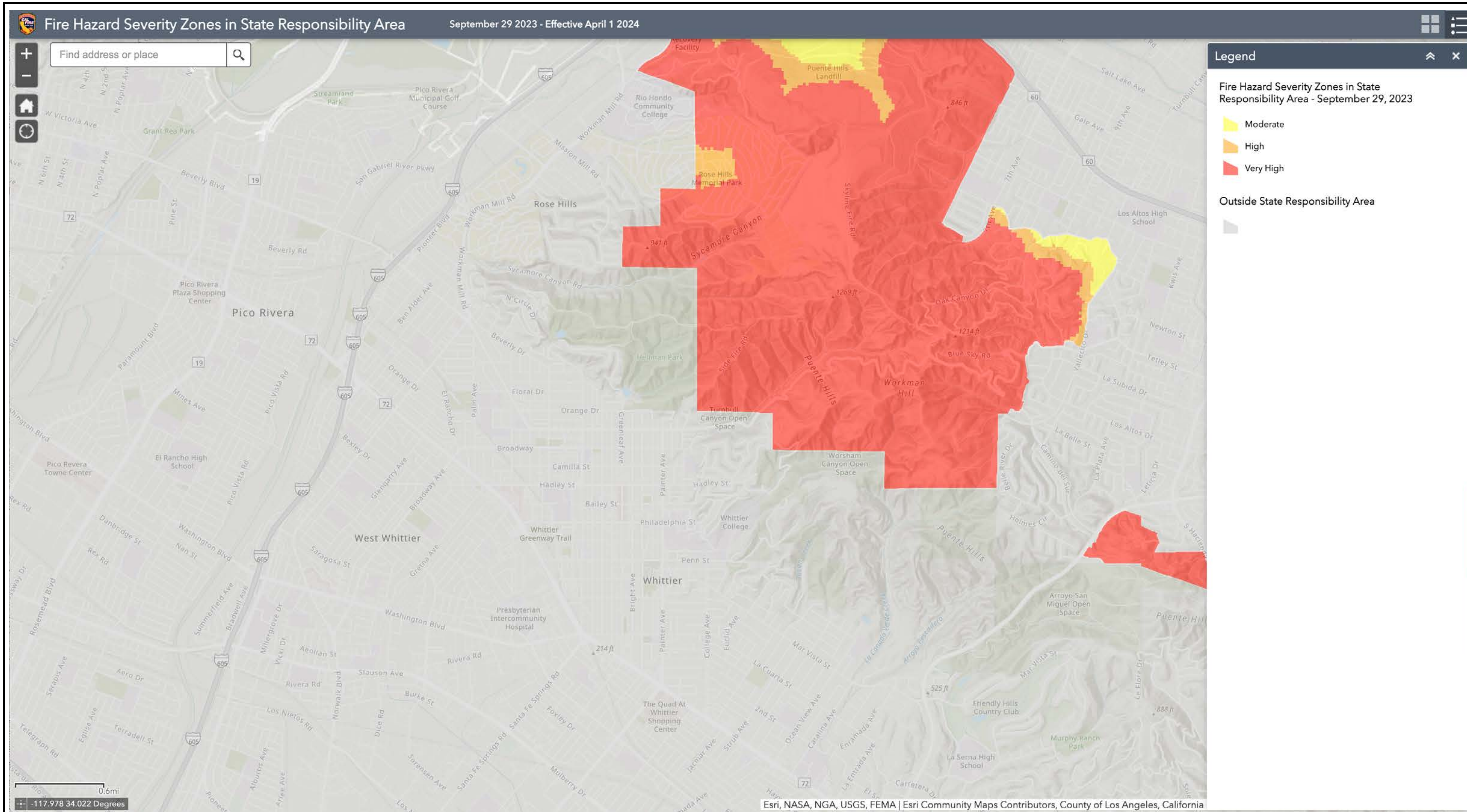


FIGURE XX-1

Tom Dodson & Associates
Environmental Consultants

Fire Hazard Severity Zone Viewer

APPENDIX 1



COMSTOCK PLACE

WHITTIER, CALIFORNIA

BUILDER/DEVELOPER:

MJW INVESTMENTS, LLC
27702 CROWN VALLEY PKWY
SUITE D-4-197
LADERA RANCH, CA92694

ARCHITECT:

KTGY GROUP, INC.
17911 VON KARMAN AVE.
SUIT 200
IRVINE, CA 92614

CIVIL:

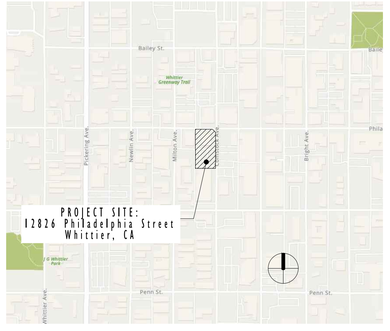
C&V CONSULTING, INC.
98030 IRVINE CENTER DRIVE
IRVINE, CA 92618

LANDSCAPE:

STUDIO PAD, INC
23282 MILL CREEK DRIVE
SUITE 200
LAGUNA HILLS, CA 92653

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

VICINITY MAP



MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
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Ladera Ranch, CA 92694

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MW INVESTMENT GROUP

MJW INVESTMENTS, LLC
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WHITTIER, CA # 2023-0840

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3rd Planning Submittal: 07.15.2024
DRC Planning Submittal: 09.23.2024

NTS

A0.0

SHEET INDEX

LANDSCAPE

L1	SCH. LANDSCAPE PLAN
L2	SCH. ENLARGEMENT PLAN - PASEO & COURTYARD
L3	SCH. WALL & FENCE PLAN
L4	SCH. WALL ELEVATIONS, MATERIALS, & DETAILS
L5	SCH. PLANTING PLAN
L6	SCH. OPEN SPACE CALCULATIONS PLAN
L7A	SCH. PHOTOMETRICS LIGHTING PLAN
L7B	SCH. LIGHTING SPECIFICATION & CUT SHEETS
L8	SCH. TRASH LAYOUT & HAULER CIRCULATION PLAN

CIVIL

1 OF 4	VESTING TENTATIVE TRACT MAP
2 OF 4	PRELIM. GRADING & DRAINAGE PLAN
3 OF 4	PRELIM. UTILITY PLAN
4 OF 4	PRELIM. FIRE ACCESS & HYDRANT LOCATION PLAN

ARCHITECTURE

A0.00	COVER SHEET
A0.10	SHEET INDEX
A1.00	ARCHITECTURAL SITE PLAN
A1.10	CONCEPTUAL FRONT STREET ELEVATION
A1.11	CONCEPTUAL REAR STREET ELEVATION
A1.20	CONCEPTUAL RENDERINGS
A1.21	CONCEPTUAL RENDERINGS
A1.22	CONCEPTUAL RENDERINGS
A1.23	CONCEPTUAL RENDERINGS
A1.24	CONCEPTUAL RENDERINGS
A1.30	ARCHITECTURAL INSPIRATION IMAGE BOARD
A1.31	ARCHITECTURAL INSPIRATION IMAGE BOARD
A2.00	BUILDING (BC-101) COMPOSITE - EXTERIOR ELEVATIONS
A2.01	BUILDING (BC-101) COMPOSITE - EXTERIOR ELEVATIONS
A2.02	BUILDING (BC-101) COMPOSITE - EXTERIOR ELEVATIONS
A2.10	BUILDING (BC-101) COMPOSITE - BUILDING PLANS
A2.11	BUILDING (BC-101) COMPOSITE - BUILDING & ROOF PLANS
A2.20	BUILDING (BC-101) COMPOSITE - CROSS SECTION
A3.00	BUILDING (BC-102) COMPOSITE - EXTERIOR ELEVATIONS
A3.01	BUILDING (BC-102) COMPOSITE - EXTERIOR ELEVATIONS
A3.10	BUILDING (BC-102) COMPOSITE - BUILDING PLANS
A4.00	BUILDING (BC-103) COMPOSITE - EXTERIOR ELEVATIONS
A4.01	BUILDING (BC-103) COMPOSITE - EXTERIOR ELEVATIONS
A4.10	BUILDING (BC-103) COMPOSITE - BUILDING PLANS
A4.11	BUILDING (BC-103) COMPOSITE - BUILDING & ROOF PLANS
A5.00	PLAN 1 & 2 - UNIT PLANS
A5.10	PLAN 3 & 4 - UNIT PLANS
A5.20	PLAN 5 - UNIT PLAN
A5.30	PLAN 6 - UNIT PLAN
A6.00	ENLARGE DETAIL SHEET
A6.01	ENLARGE DETAIL SHEET
A7.00	COLOR AND MATERIALS BOARD
A7.01	COLOR AND MATERIALS BOARD

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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WHITTIER, CA # 2023-0840

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DRC Planning Submittal: 09.23.2024

NTS

SHEET INDEX

A0.1



OPEN SPACE MATRIX PER LANDSCAPE
See Sheet L-6 for Designation
Open space requirement: 15% of Lot (5,397 SF)

OPEN SPACE PROGRAMMED PROVIDED
Courtyard & Paseo Amenities
Common Open Spaces 5,569 sf (15.5%)

OTHER COMMON SPACE PROVIDED
Builder Installed & Maintained 2,546 sf (7.1%)
(See Landscape's Sheet L-6 for breakdown)

PRIVATE OPEN SPACE PROVIDED
Ground Level
Homeowner Exclusive Use/Maintained 835 sf (2.3%)
Private Deck Open Space 3,240 sf (9.0%)
Breakdown (Net)
Plan 1 (120 sf)
Plan 2 (174 sf)
Plan 3 (480 sf)
Plan 4 (1,072 sf)
Plan 5 (1,160 sf)
Plan 6 (234 sf)

COMBINED TOTAL OPEN SPACE 12,190 sf (33.9%)
(See Landscape Plans for Type of Activity Areas)

U-TC COURTYARD HOUSING DEV STANDARDS
Front Setback: 0'
Side Setback: 0'
Rear Setback: 10'
Building Height: 2-4 stories*
Building south of Courtyard should be 1 story lower than the northern side to allow max exposure of sunlight in the courtyard
Courtyard with E/W axis: min 40'
Courtyard with N/S axis: min 30'
Couryard Size: 15% of lot for Open Space
Required Parking:
Studio/1bd: 1.5 sp/unit
2bd: 2.0 sp/unit
3bd: 2.5 sp/unit
Guest: 0.25 sp/unit
Min Parking Space for Residential:
Open Parking Space from 10'x20' to 9'x19' (with a two-foot overhang)
Tandem Parking Space to 10'x40' (in garages)

SITE DATA
Tentative Tract: 84431
Address: 12826 Philadelphia Street, Whittier, CA 90601
APN: 8139-024-027
Zoning: U-CT
Building Type: Courtyard Housing
Architectural Style Type: California Contemporary
Frontage Type: Stoop
Total Units: 24
Gross Building Area: 41,618 SF
FAR: 1.16
Density: 29.5
Net Site Area: .813 Acres (35,414 SF)
Gross Site Area: .826 Acres (35,980 SF)
Site Lot Coverage: 55.24%
Open space requirement: 15% (5,397 SF)
Landscape Area (Approx. Proposed): See Landscape Plan

BUILDING DATA
Type Construct: V-B
Fire Department: Whittier
Occupancy Type: R2
Fire Sprinkler Type: NFPA 13

Plan Types and Sizes (Net)	Park'g Req'd
(2) Plan 1 - 1340 SF (2B/2.5BA - 2 Car Gar.)	4 spaces
(2) Plan 2 - 1485 SF (3B/2.5BA - 2 Car Gar.)	5 spaces
(8) Plan 3 - 1336 SF (2B/2.5BA - 2 Car Tandem Gar.)	16 spaces
(8) Plan 4 - 1729 SF (3B/3.5BA - 2 Car Gar.)	20 spaces
(2) Plan 5 - 2251 SF (4B/3.5 BA/Loft - 2 Car Gar.)	5 spaces
(2) Plan 6 - 2177 SF (4B/3.5 BA - 2 Car Gar.)	5 spaces
Totals - (24) units 39,026 SF (Gross: 41,618 SF)	55 spaces
(Avg. 1626 Net SF)	+Guest .25/unit (6)

Total Spaces Required = 61 Spaces
Total Private Deck Space Provided: 2,398 Net SF (2,676 Gross SF)

Parking Spaces Provided/Proposed:

(RP) Garage -	48 Spaces
(RP) Resident Parking Space -	7 Spaces
(GS) Guest Parking Space -	4 Spaces (Includes 1 ADA space)
Total -	59 Spaces (Requires a Variance) (Avg. 2.46 sp/unit)

On-Street Adjacent Parallel Parking Proposed/Provided - 16**
See civil for details.
** Per Section 4.3.1.C.2 (Zones and Their Purposes/U-CT) and Section 18.48.020, Item 5 (Schedule of Parking Standards)

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COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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0 10 20 40

SITE PLAN
CONCEPTUAL DENSITY STUDY

A1.0

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P6R | P6 | P5R | P5ALT

BC-103 | BC-102 | BC-101

CONCEPTUAL STREET ELEVATION ALONG COMSTOCK AVENUE

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0 8 16 24

STREET SCENE
COMSTOCK AVENUE

A1.10



BC-101 BC-102 BC-103

CONCEPTUAL STREET ELEVATION ALONG ALLEYWAY

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STREET SCENE
ALLEYWAY

A1.11



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PERSPECTIVE VIEW 1
CORNER OF COMSTOCK AVENUE AT DUSK

A1.20



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PERSPECTIVE VIEW 2
CORNER OF COMSTOCK AVENUE

A1.21



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PERSPECTIVE VIEW 3
CORNER OF PHILADELPHIA STREET

A1.22



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PERSPECTIVE VIEW 4
COURTYARD FROM COMSTOCK AVENUE

A1.23



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PERSPECTIVE VIEW 5
VIEW FROM COMSTOCK AVENUE

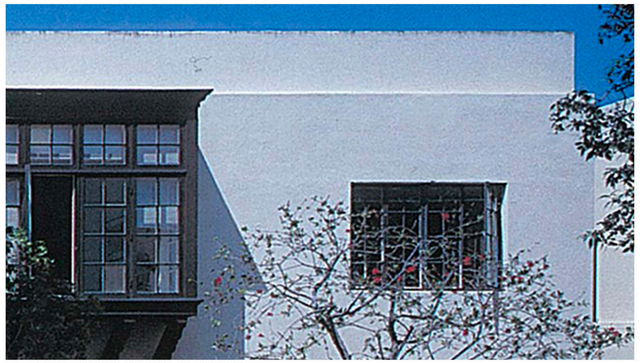
A1.24



1. MODERN METAL POST & BEAM



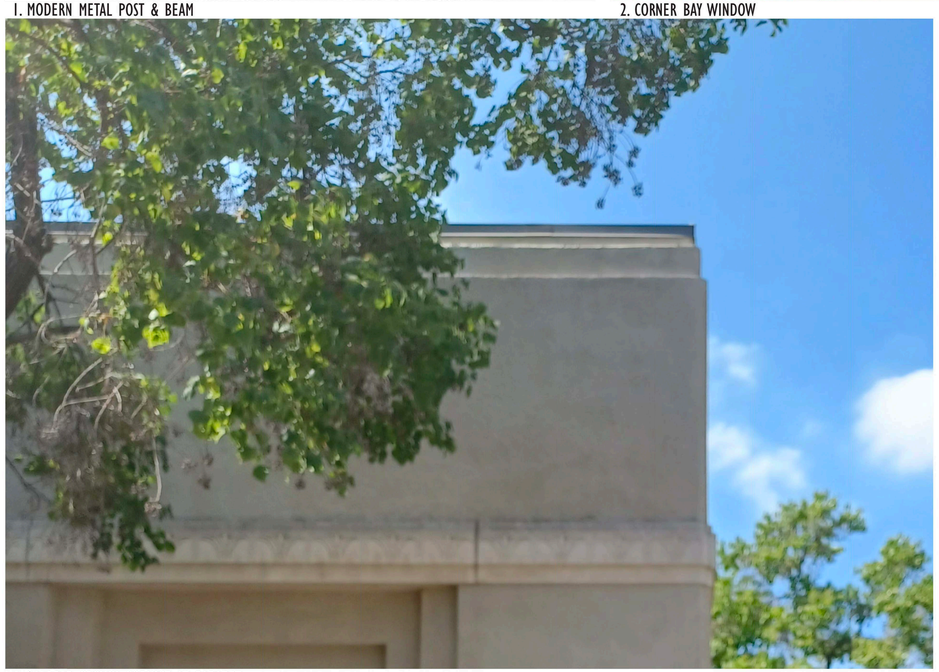
2. CORNER BAY WINDOW



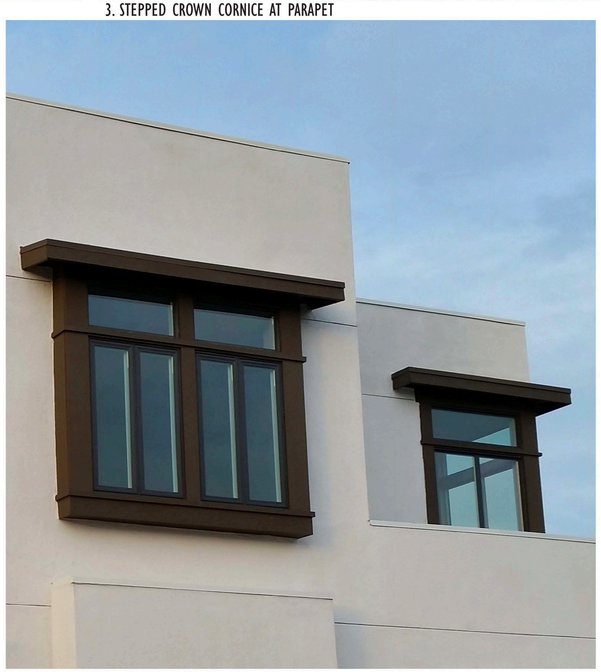
3. STEPPED CROWN CORNICE AT PARAPET



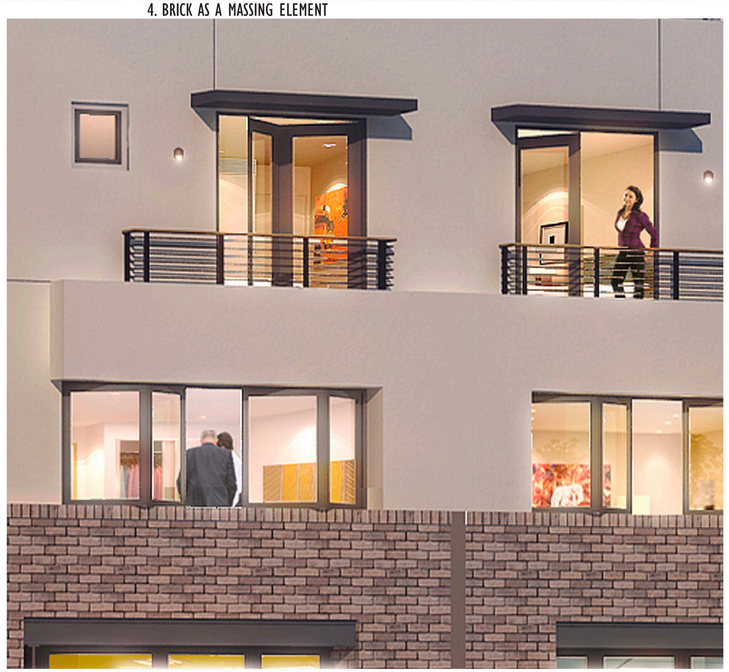
4. BRICK AS A MASSING ELEMENT



5. STEPPED CROWN CORNICE AT PARAPET



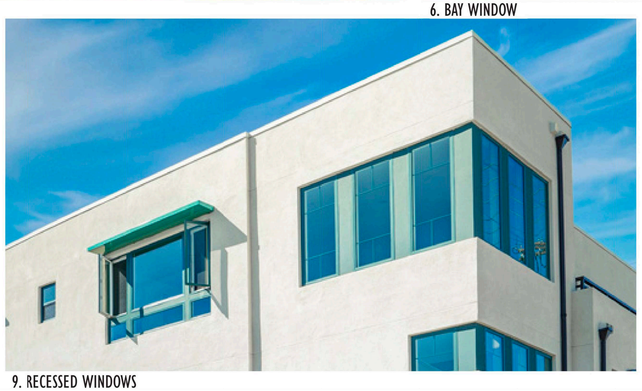
6. BAY WINDOW



7. BASE ARTICULATION THROUGH CHANGE IN PLANE/ MATERIAL



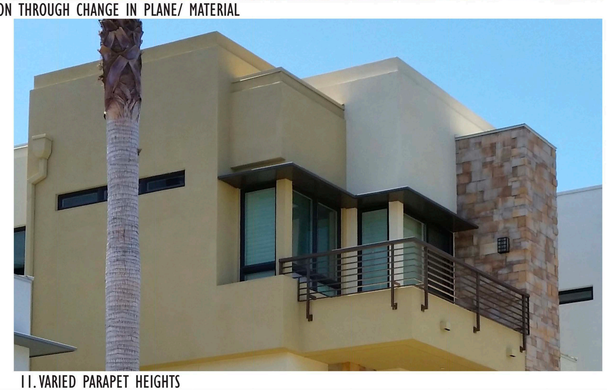
8. SIMPLE STUCCO MASSING BREAKS & SHELVES



9. RECESSED WINDOWS



10. CANTILEVERED STUCCO BALCONY & RAILING



11. VARIED PARAPET HEIGHTS

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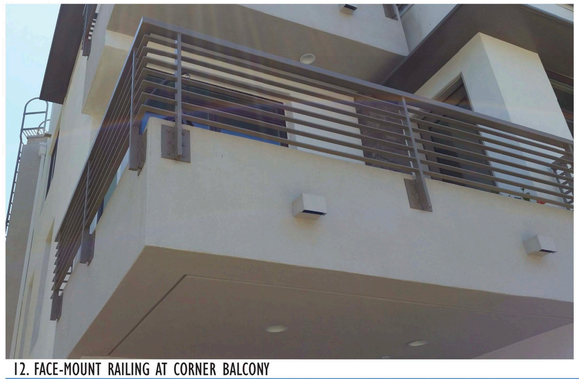
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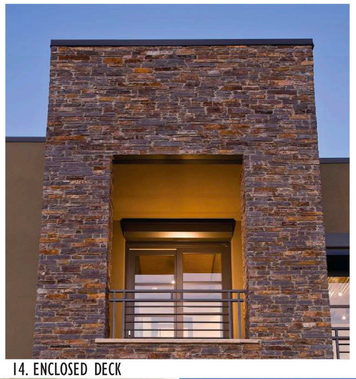
A1.30



12. FACE-MOUNT RAILING AT CORNER BALCONY



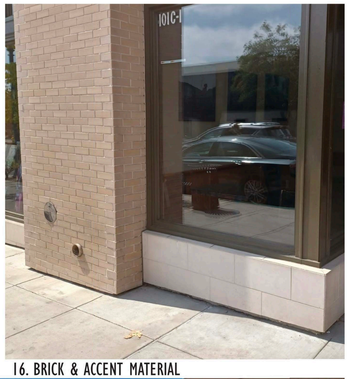
13. ALUMINUM OR METAL AWNING



14. ENCLOSED DECK



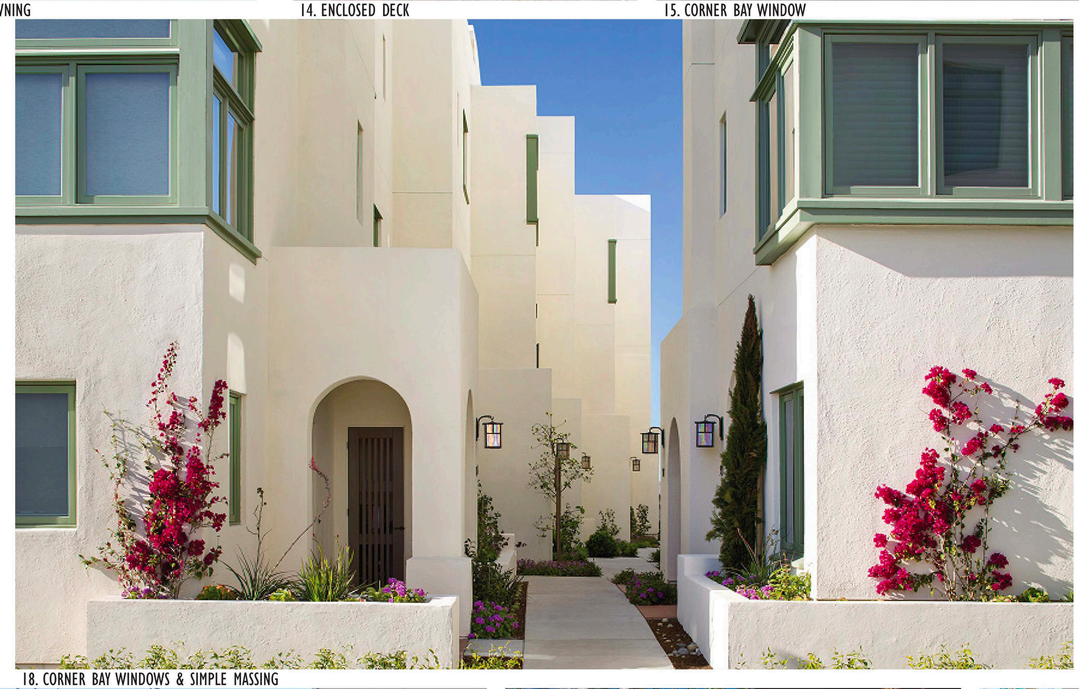
15. CORNER BAY WINDOW



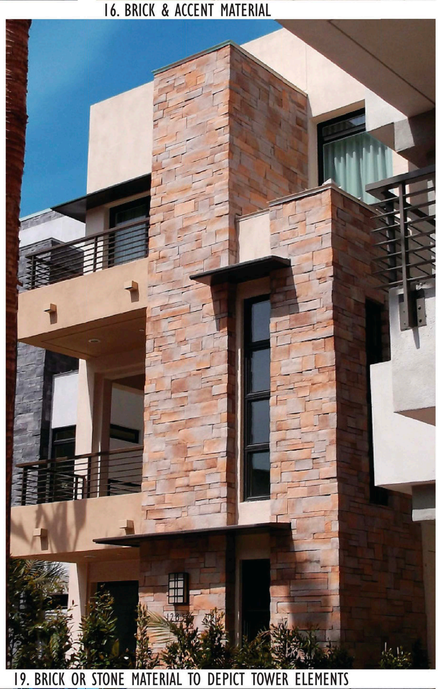
16. BRICK & ACCENT MATERIAL



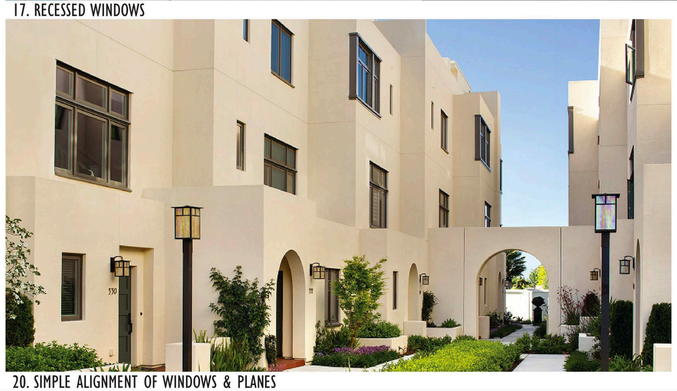
17. RECESSED WINDOWS



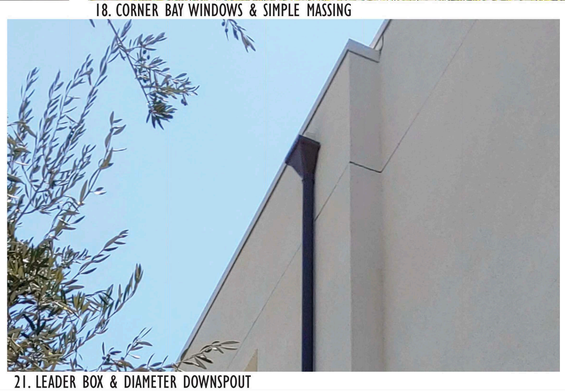
18. CORNER BAY WINDOWS & SIMPLE MASSING



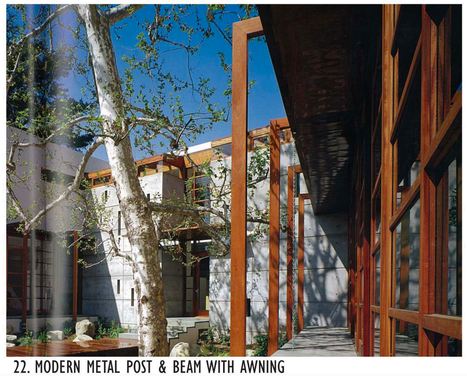
19. BRICK OR STONE MATERIAL TO DEPICT TOWER ELEMENTS



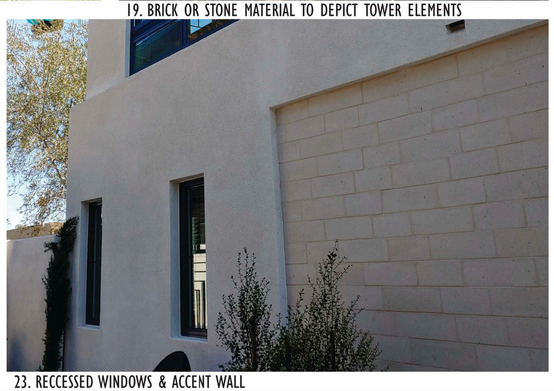
20. SIMPLE ALIGNMENT OF WINDOWS & PLANES



21. LEADER BOX & DIAMETER DOWNSPOUT



22. MODERN METAL POST & BEAM WITH AWNING



23. RECCESSED WINDOWS & ACCENT WALL

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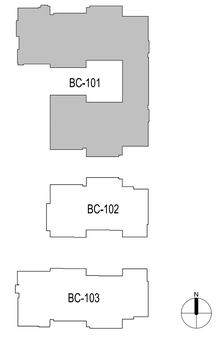
EAST



NORTH

LEGEND

1. Stucco (16/20)
2. Brick Modern (Long) Veneer
3. Concrete Cap to Match Stone Veneer
4. Aluminum or Metal Awning
5. Decorative Metal Flashing Cap at Parapets
6. Recessed Vinyl Window, 2" Min.
7. Header/Sill Trim at Brick Openings
8. Metal Post /Beam
9. Clear Story Window (FX)
10. Metal Horizontal Flat Bar Railing
11. Metal Juliet and Stucco Cantilevered Balcony
12. Decorative Fiberglass Entry Door
13. Trim
14. Decorative Exterior Lights & Raised Address Sign
15. Metal Utility Doors
16. Metal Sectional Garage Door
17. 1/8" Expansion Joints, Where Occurs (W.O.)
18. Decorative Up-lighting
19. Adhered Dry Stack Stone Veneer Wainscoting
20. Leader Box & Downspout Location (To Match Metal Color, See Sheets A6.01, A7.00, A7.01)
21. Bay Window



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EXTERIOR ELEVATIONS

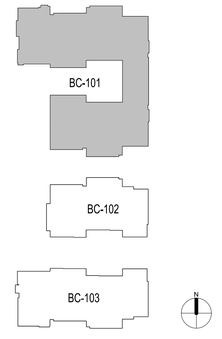
A2.00





LEGEND

1. Stucco (16/20)
2. Brick Modern (Long) Veneer
3. Concrete Cap to Match Stone Veneer
4. Aluminum or Metal Awning
5. Decorative Metal Flashing Cap at Parapets
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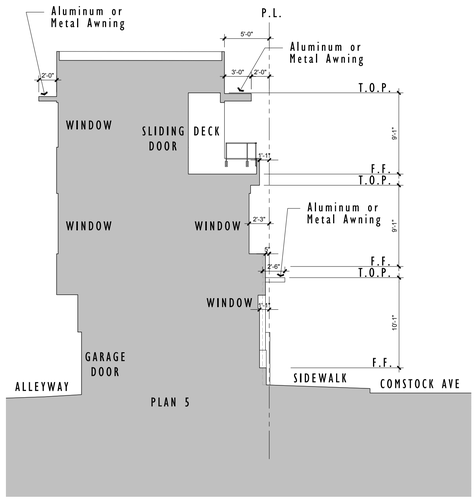
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BC-101
EXTERIOR ELEVATIONS

A2.01



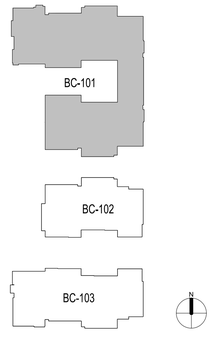
SOUTH / NORTH (VARIES ON BUILDING)



SECTION



NORTH / SOUTH (VARIES ON BUILDING)



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EXTERIOR ELEVATIONS

A2.02

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SECOND FLOOR



FIRST FLOOR

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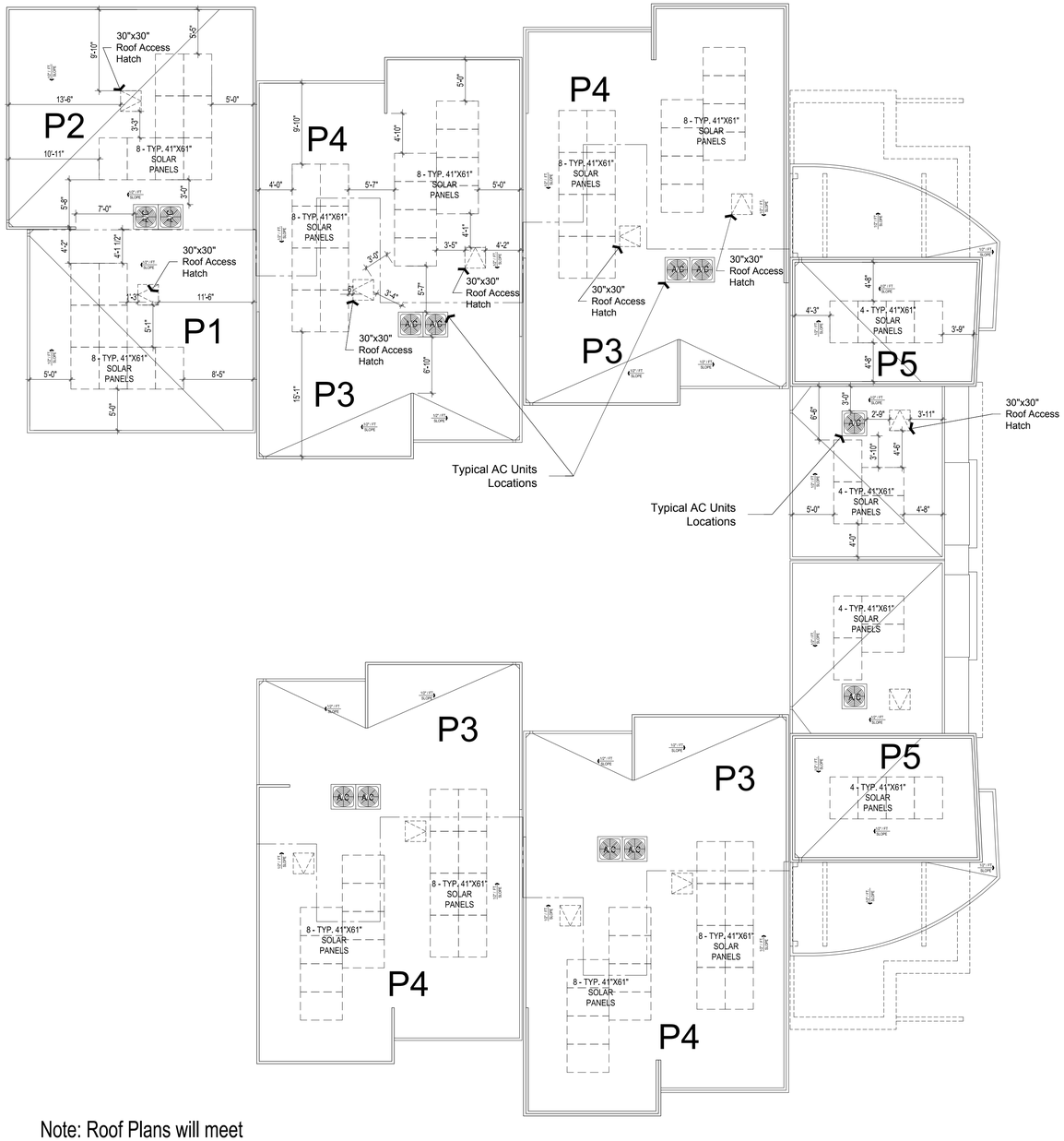
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BC-101 BUILDING PLANS
12-PLEX

A2.10

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694



ROOF PLAN

Note: Roof Plans will meet the Cal Green code and will provide the number of solar panels needed.



THIRD FLOOR

Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

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12826 PILADELPHIA STREET, WHITTIER, CA
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WHITTIER, CA # 2023-0840

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BC-101 BUILDING PLANS
12-PLEX

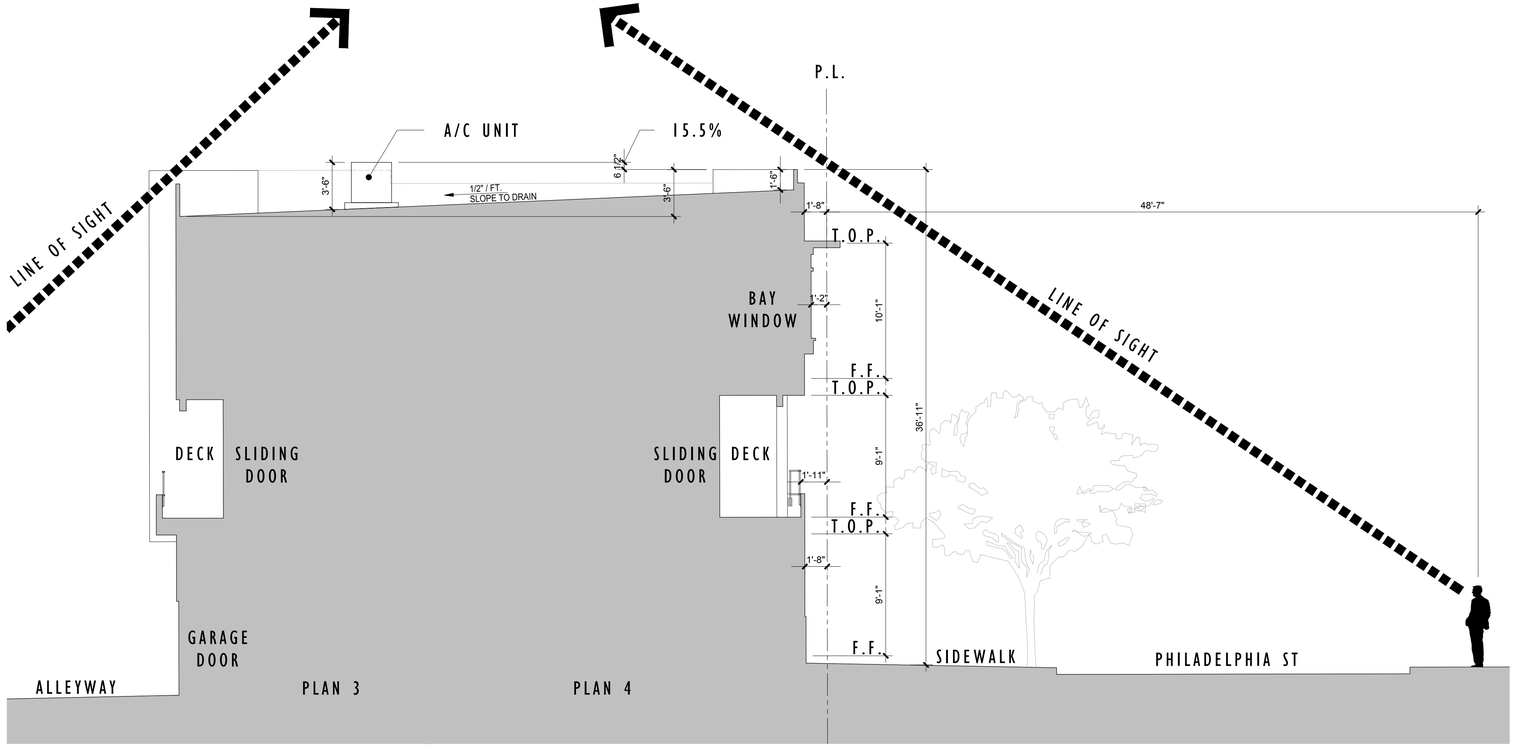
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12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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LINE OF SIGHT VIEW
(as shown from across the street on Philadelphia St)



SECTION

12826 PILADELPHIA STREET, WHITTIER, CA
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CROSS SECTION

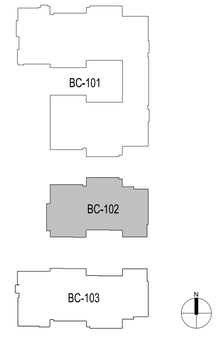
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LEGEND

1 Stucco (16/20)
2 Brick Modern (Long) Veneer
3 Concrete Cap to Match Stone Veneer
4 Aluminum or Metal Awning
5 Decorative Metal Flashing Cap at Parapets
6 Recessed Vinyl Window, 2" Min.
7 Header/Sill Trim at Brick Openings
8 Metal Post /Beam
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13 Trim
14 Decorative Exterior Lights & Raised Address Sign
15 Metal Utility Doors
16 Metal Sectional Garage Door
17 1/8" Expansion Joints, Where Occurs (W.O.)
18 Decorative Up-lighting
19 Adhered Dry Stack Stone Veneer Wainscoting
20 Leader Box & Downspout Location (To Match Metal Color, See Sheets A6.01, A7.00, A7.01)
21 Bay Window



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BC-102
EXTERIOR ELEVATIONS

A3.00



P6

EAST

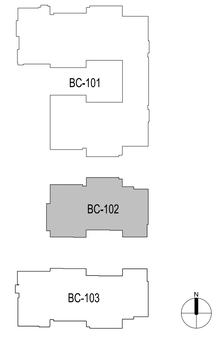


P3 P4

WEST

LEGEND

1. Stucco (16/20)
2. Brick Modern (Long) Veneer
3. Concrete Cap to Match Stone Veneer
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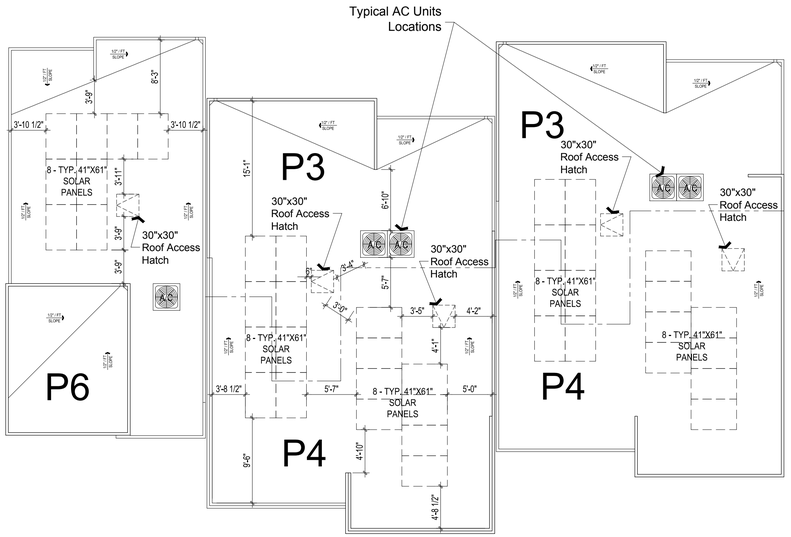
12826 PILADELPHIA STREET, WHITTIER, CA
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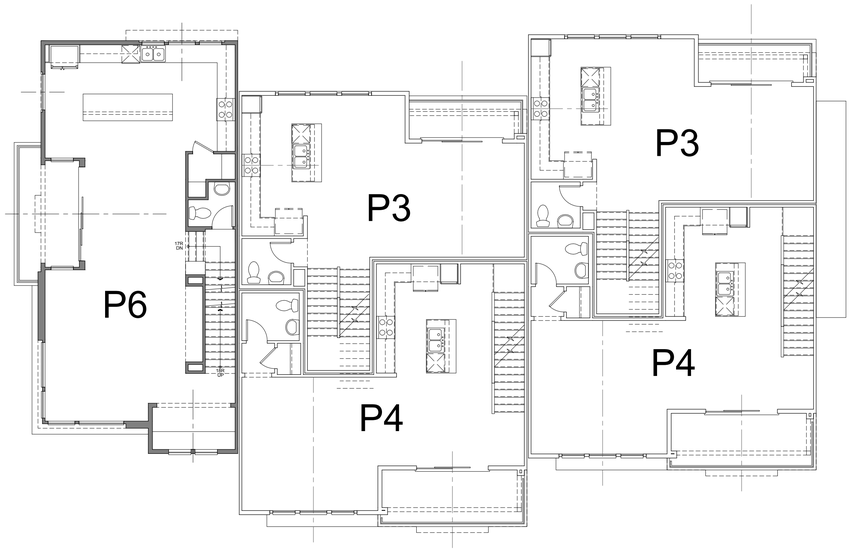
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BC-102
EXTERIOR ELEVATIONS

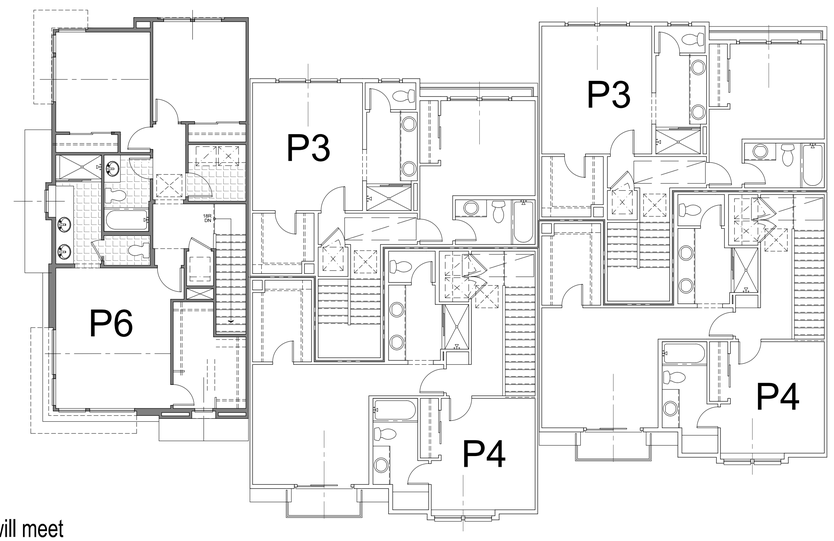
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ROOF PLAN

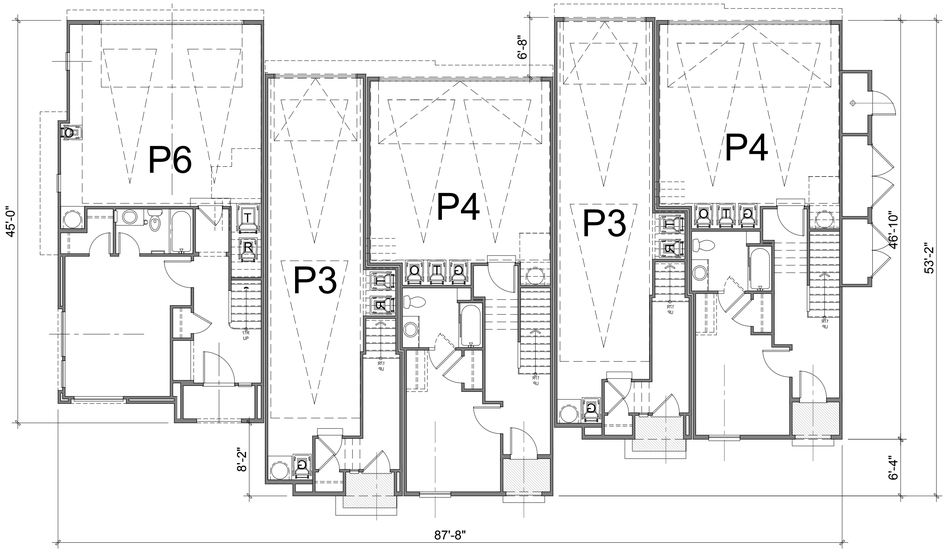


SECOND FLOOR PLAN



Note: Roof Plans will meet the Cal Green code and will provide the number of solar panels needed.

THIRD FLOOR PLAN



FIRST FLOOR PLAN

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WHITTIER, CA # 2023-0840

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0 4 8 16

BC-102 BUILDING PLANS
5-PLEX

A3.10

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

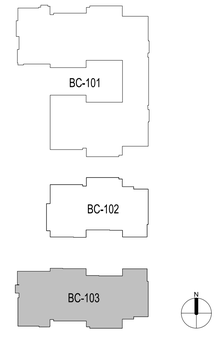
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LEGEND

1. Stucco (16/20)
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21. Bay Window



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BC-103
EXTERIOR ELEVATIONS

A4.00

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COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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P1 P2

WEST

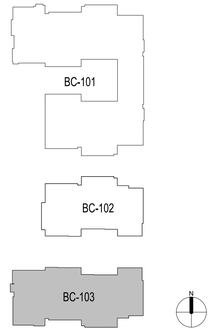


P6

EAST

LEGEND

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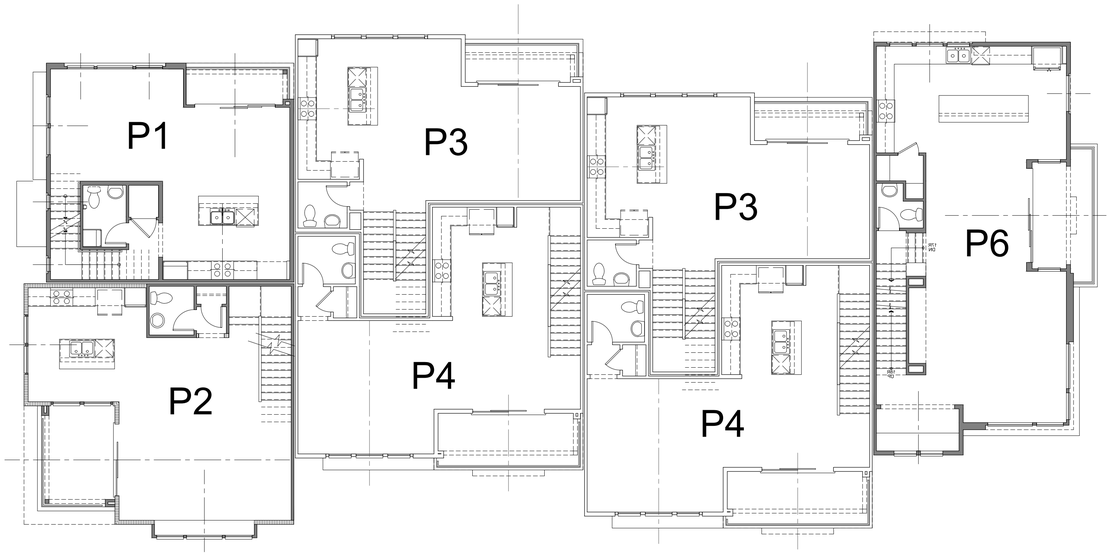
12826 PILADELPHIA STREET, WHITTIER, CA
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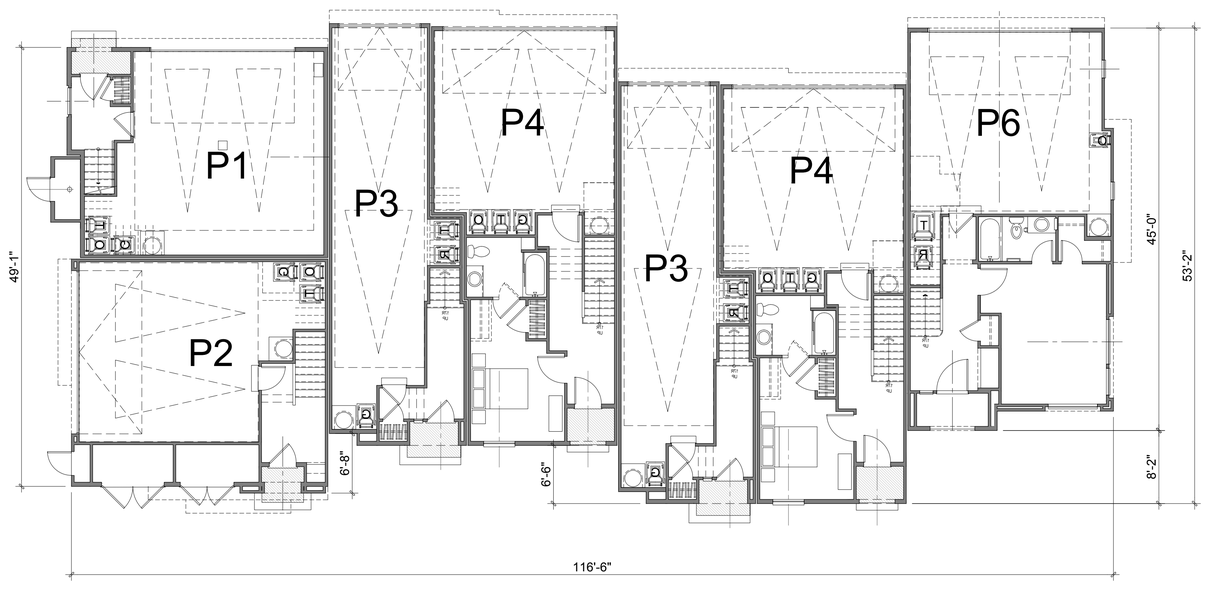
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BC-103
EXTERIOR ELEVATIONS

A4.01



SECOND FLOOR PLAN



FIRST FLOOR PLAN

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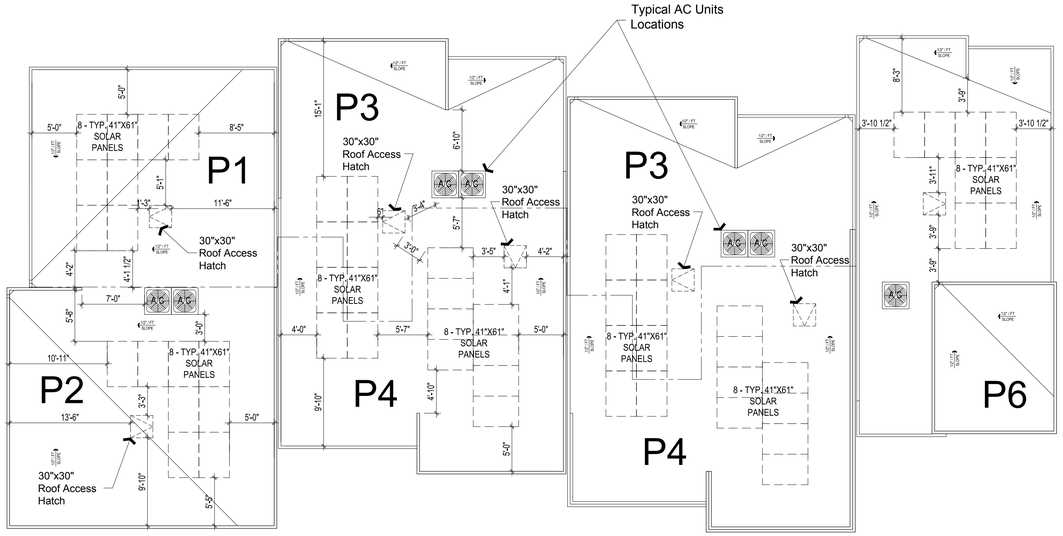
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BC-103 BUILDING PLANS
7-PLEX

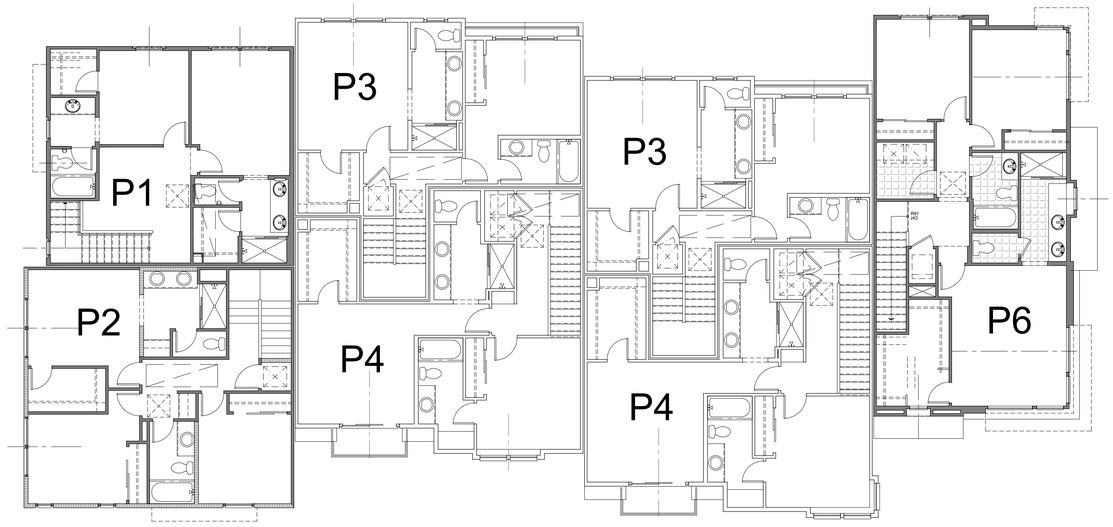
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12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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ROOF PLAN



THIRD FLOOR PLAN

Note: Roof Plans will meet the Cal Green code and will provide the number of solar panels needed.

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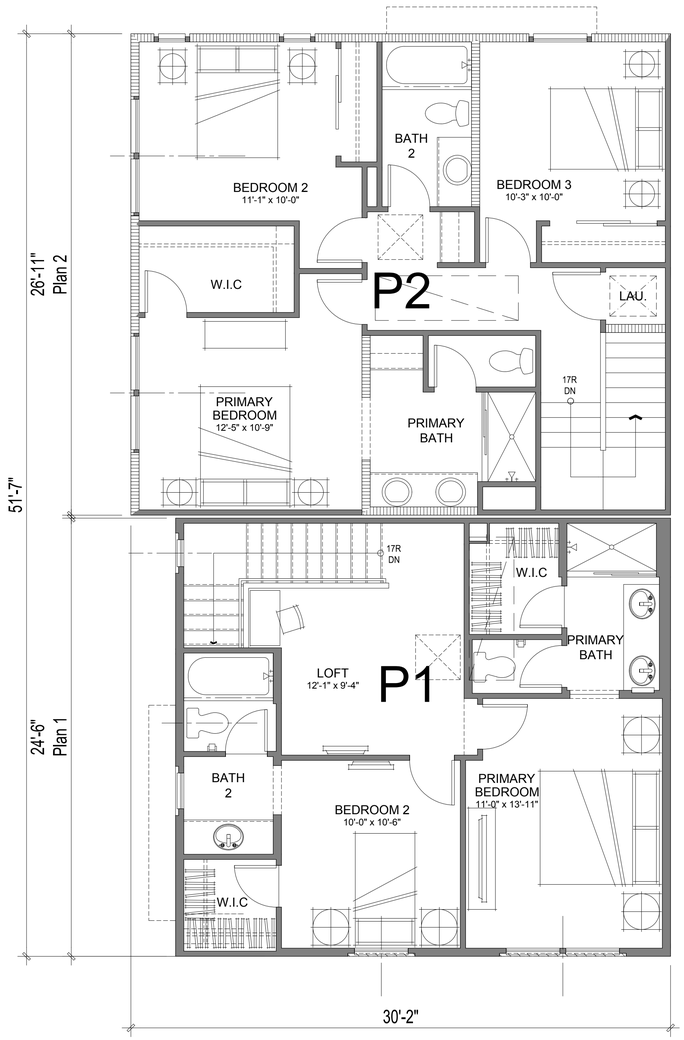
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BC-103 BUILDING PLANS
7-PLEX

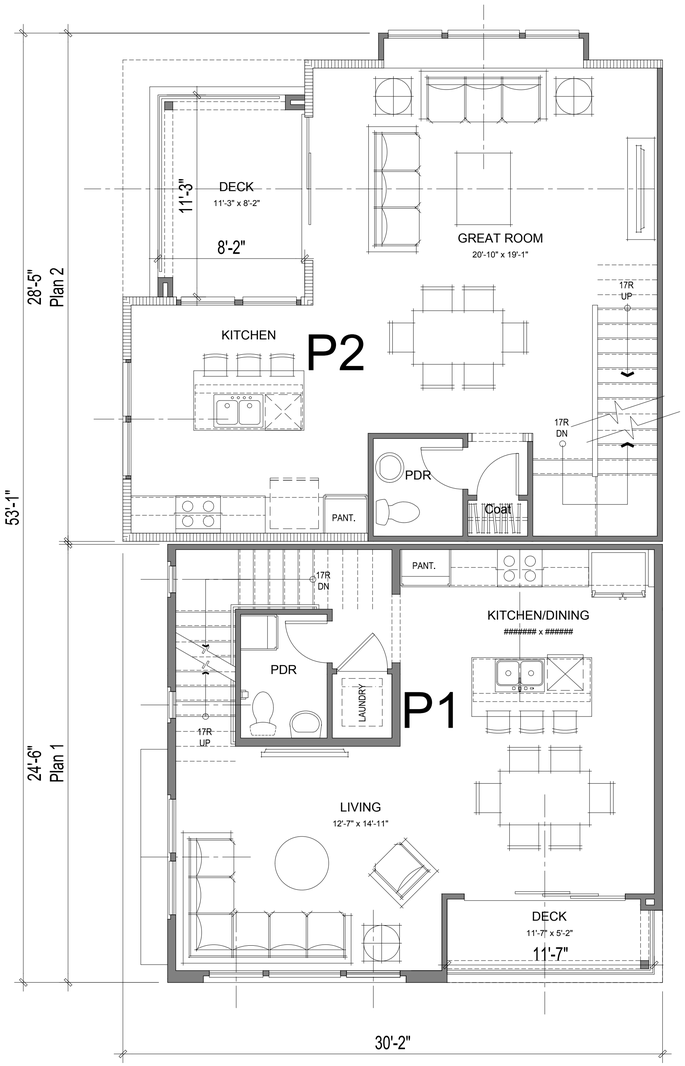
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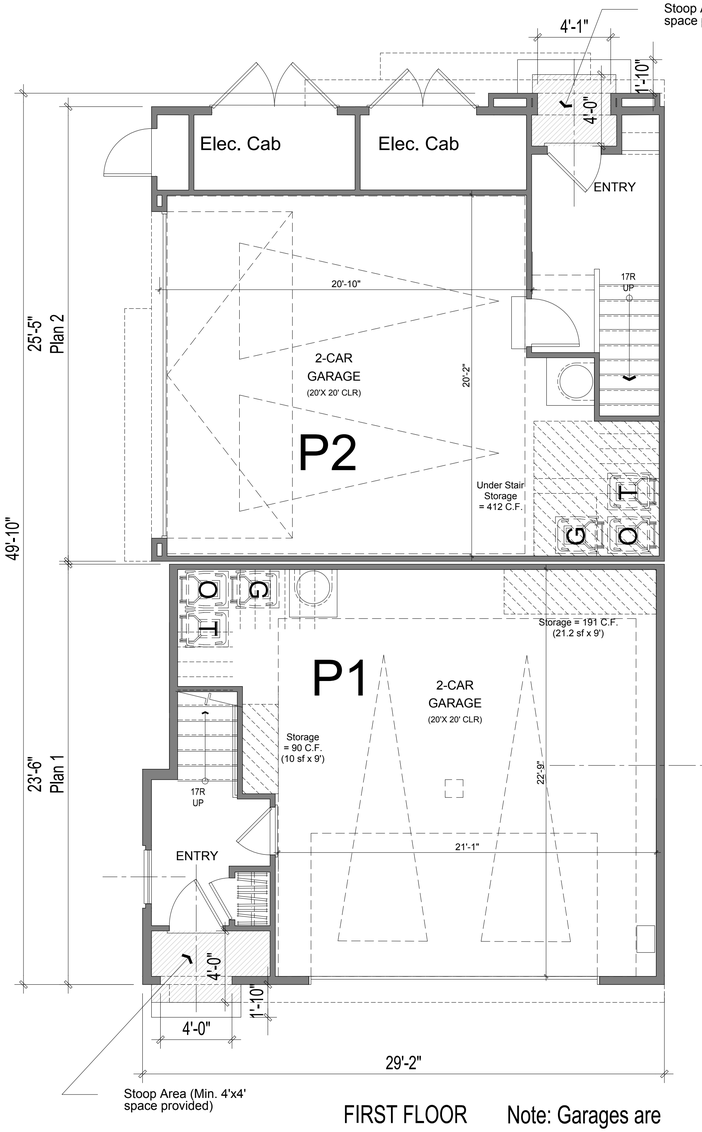
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THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

Note: Garages are EV Ready per Cal Green code

P1 - GROSS AREA	
2 BR / LOFT / 2.5 BATH	
1ST FLOOR	148 SQ. FT.
2ND FLOOR	622 SQ. FT.
3RD FLOOR	623 SQ. FT.
TOTAL LIVING	1393 SQ. FT.
PORCH	N/A
DECK	68 SQ. FT.
GARAGE	562 SQ. FT.

P1 - NET AREA	
2 BR / LOFT / 2.5 BATH	
1ST FLOOR	124 SQ. FT.
2ND FLOOR	633 SQ. FT.
3RD FLOOR	583 SQ. FT.
TOTAL LIVING	1340 SQ. FT.
PORCH	N/A
DECK	60 SQ. FT.
GARAGE	531 SQ. FT.

P2 - GROSS AREA	
3 BR / 2.5 BATH	
1ST FLOOR	157 SQ. FT.
2ND FLOOR	694 SQ. FT.
3RD FLOOR	752 SQ. FT.
TOTAL LIVING	1604 SQ. FT.
ELEC. CABINET	103 SQ. FT.
DECK	102 SQ. FT.
GARAGE	503 SQ. FT.

P2 - NET AREA	
3 BR / 2.5 BATH	
1ST FLOOR	140 SQ. FT.
2ND FLOOR	633 SQ. FT.
3RD FLOOR	712 SQ. FT.
TOTAL LIVING	1485 SQ. FT.
ELEC. CABINET	86 SQ. FT.
DECK	87 SQ. FT.
GARAGE	483 SQ. FT.

STORAGE AREA REQUIRED: 250 C.F.

STORAGE AREA PROVIDED:

PLAN 1 - 281 C.F.

PLAN 2 - 412 C.F.

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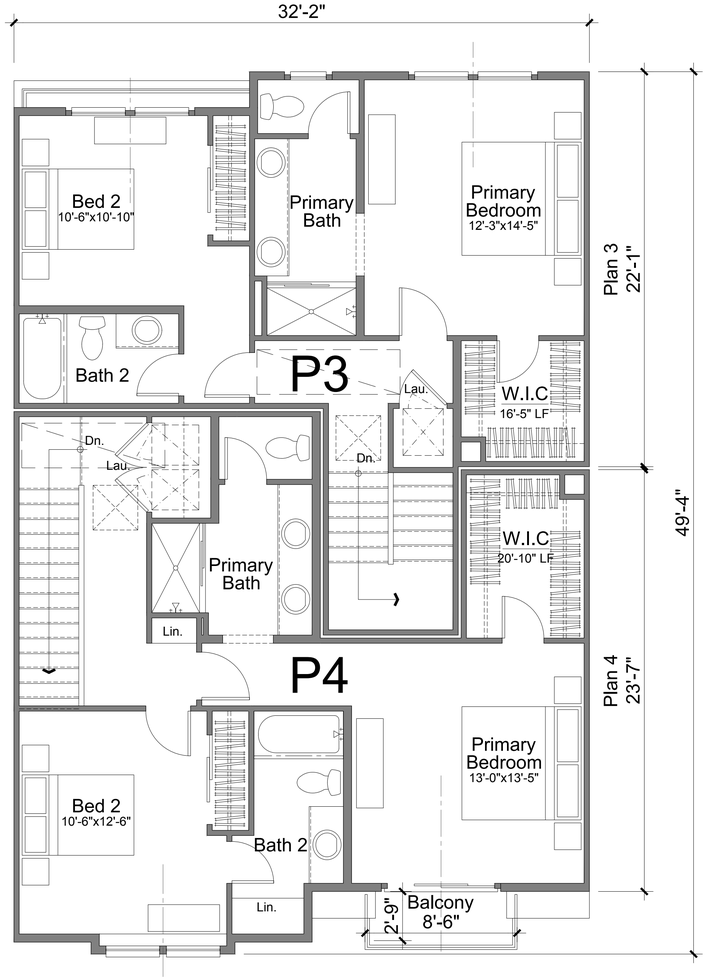
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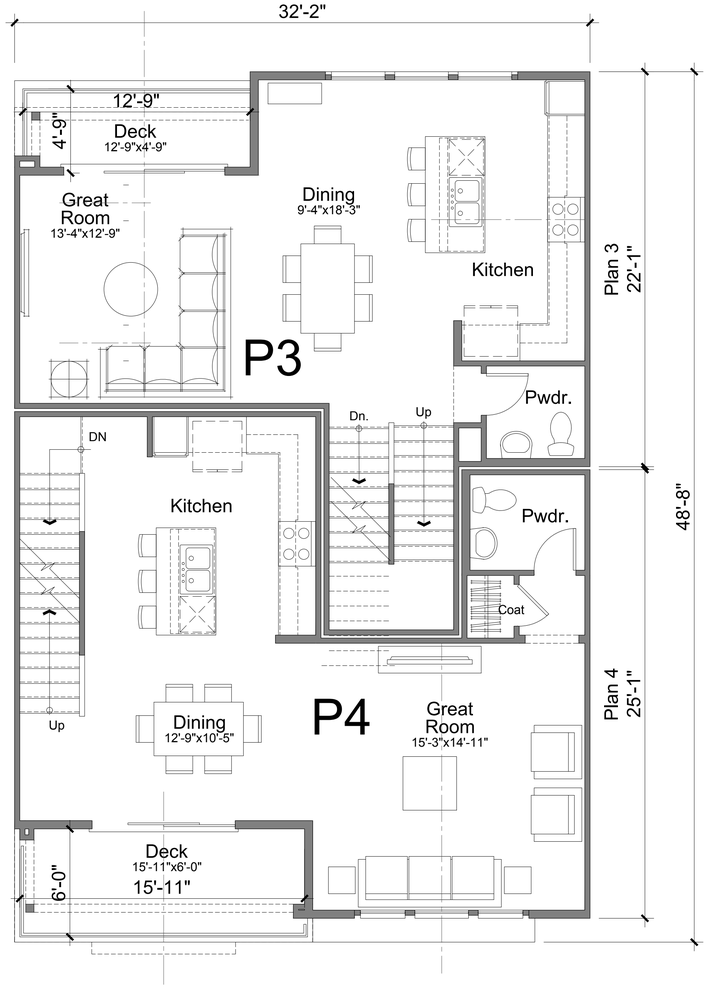
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PLAN 1 & 2 UNIT PLANS

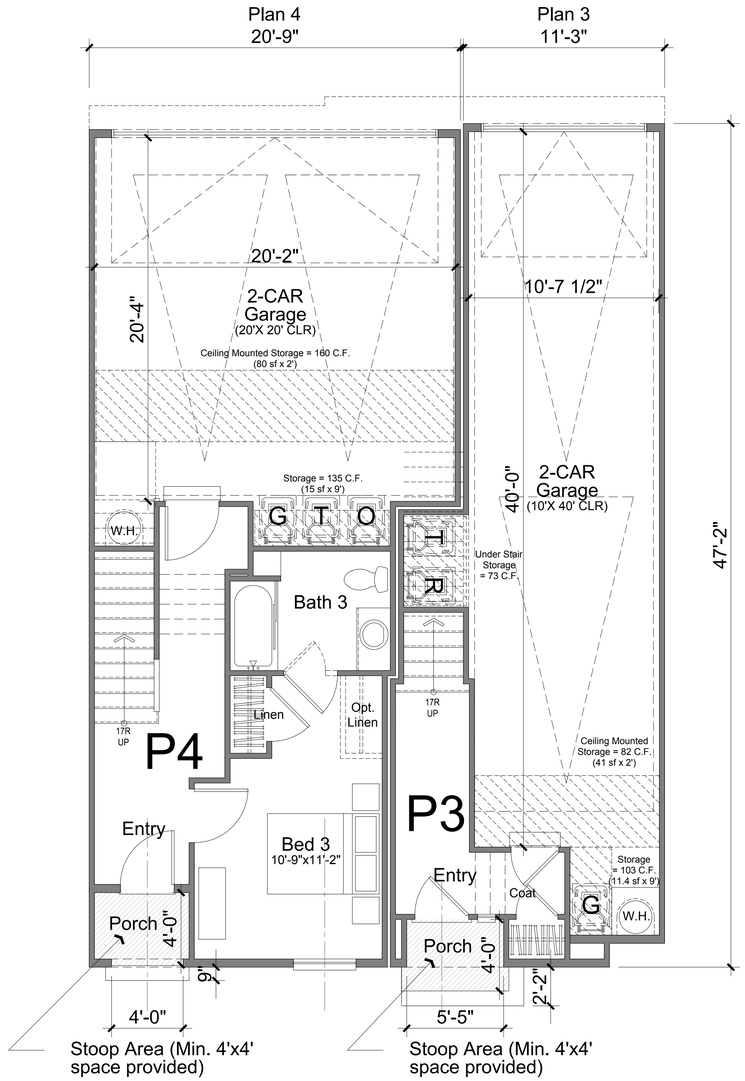
A5.00



THIRD FLOOR



SECOND FLOOR



Stoop Area (Min. 4'x4' space provided)

Stoop Area (Min. 4'x4' space provided)

FIRST FLOOR

Note: Garages are EV Ready per Cal Green code

PLAN 3 GROSS S.F. 2 BR/2.5 BA	
1ST FLOOR	144 SQ. FT.
2ND FLOOR	655 SQ. FT.
3RD FLOOR	630 SQ. FT.
TOTAL LIVING	1429 SQ. FT.
PORCH	15 SQ. FT.
DECK	68 SQ. FT.
GARAGE	496 SQ. FT.

PLAN 3 NET S.F. 2 BR/2.5 BA	
1ST FLOOR	130 SQ. FT.
2ND FLOOR	611 SQ. FT.
3RD FLOOR	595 SQ. FT.
TOTAL LIVING	1336 SQ. FT.
PORCH	14 SQ. FT.
DECK	60 SQ. FT.
GARAGE	448 SQ. FT.

PLAN 4 GROSS S.F. 3 BR/3.5 BA	
1ST FLOOR	408 SQ. FT.
2ND FLOOR	707 SQ. FT.
3RD FLOOR	732 SQ. FT.
TOTAL LIVING	1848 SQ. FT.
PORCH	23 SQ. FT.
BALCONY	103 SQ. FT.
DECK (UPPER)	26 SQ. FT.
GARAGE	461 SQ. FT.

PLAN 4 NET S.F. 3 BR/3.5 BA	
1ST FLOOR	385 SQ. FT.
2ND FLOOR	660 SQ. FT.
3RD FLOOR	684 SQ. FT.
TOTAL LIVING	1729 SQ. FT.
PORCH	20 SQ. FT.
BALCONY	91 SQ. FT.
DECK (UPPER)	23 SQ. FT.
GARAGE	438 SQ. FT.

STORAGE AREA REQUIRED: 250 C.F.

STORAGE AREA PROVIDED:

PLAN 3 - 258 C.F.

PLAN 4 - 295 C.F.

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MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

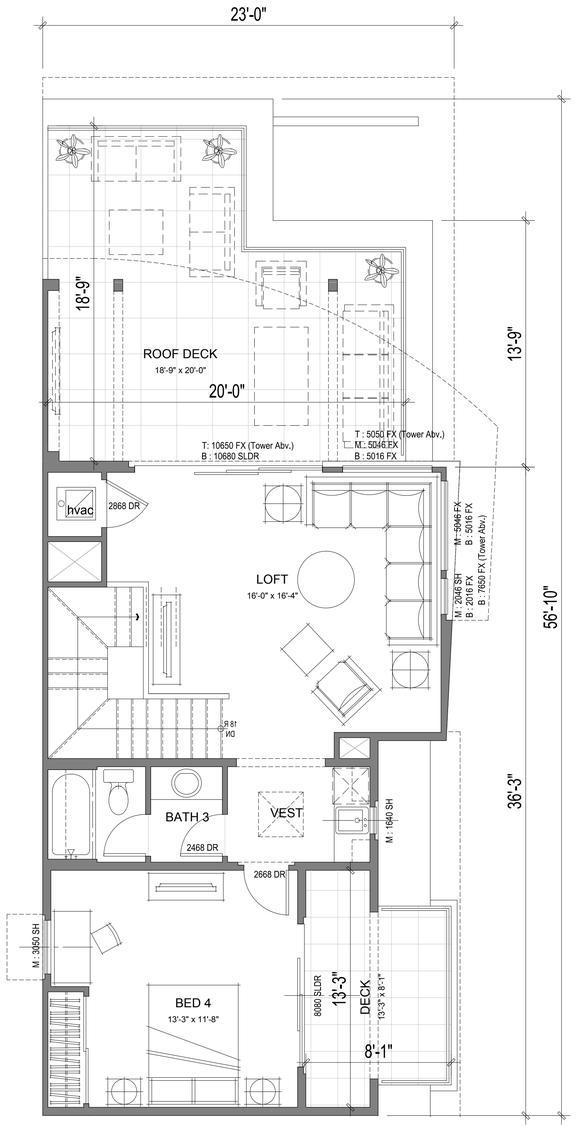
12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

Plot Date: 09.23.2024
2nd Planning Submittal: 04.30.2024
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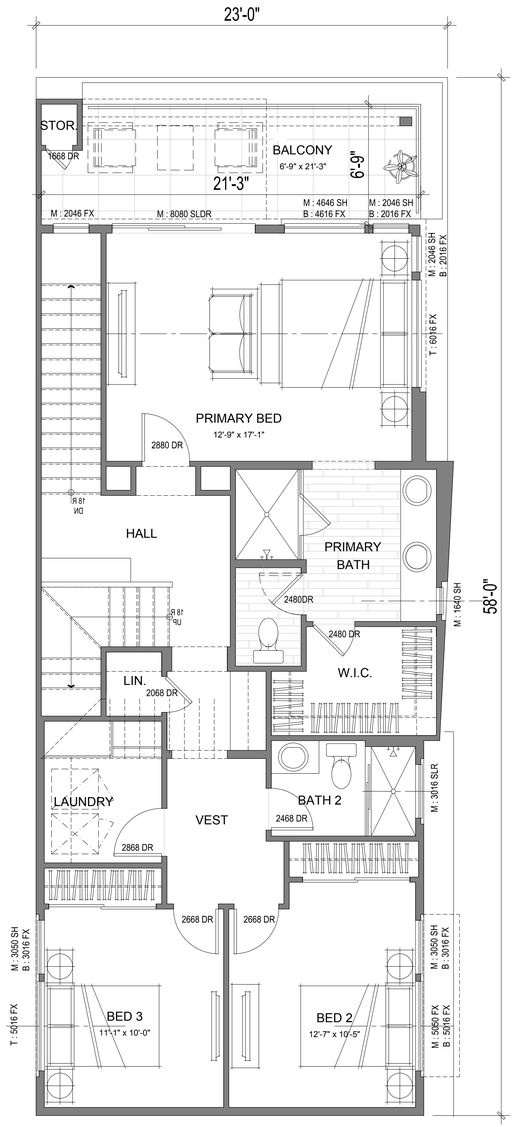
0 2 4 8

PLAN 3 & 4 UNIT PLANS

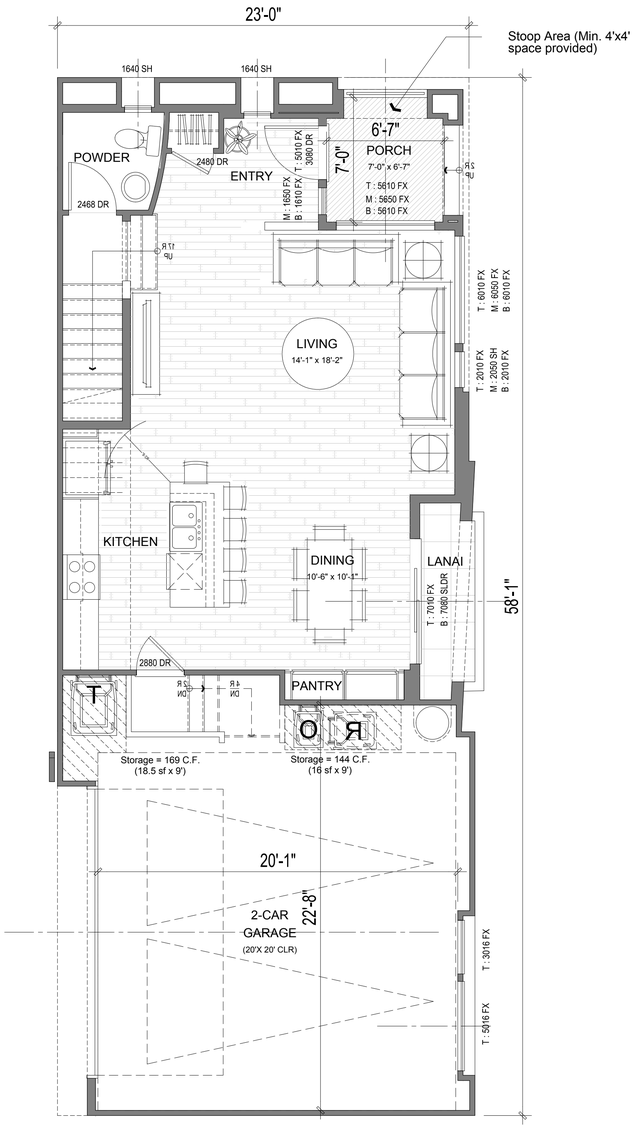
A5.10



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

Note: Garages are EV Ready per Cal Green code

P5 - GROSS AREA	
1ST FLOOR	693 SQ. FT.
2ND FLOOR	1096 SQ. FT.
3RD FLOOR	612 SQ. FT.
TOTAL LIVING	2402 SQ. FT.
PORCH	56 SQ. FT.
BALCONY	153 SQ. FT.
DECK (UPPER)	96 SQ. FT.
ROOF DECK	331 SQ. FT.
GARAGE	519 SQ. FT.

P5 - NET AREA	
1ST FLOOR	652 SQ. FT.
2ND FLOOR	1039 SQ. FT.
3RD FLOOR	561 SQ. FT.
TOTAL LIVING	2251 SQ. FT.
PORCH	43 SQ. FT.
BALCONY	136 SQ. FT.
DECK (UPPER)	89 SQ. FT.
ROOF DECK	312 SQ. FT.
GARAGE	495 SQ. FT.

STORAGE AREA REQUIRED: 250 C.F.

STORAGE AREA PROVIDED:

PLAN 5 - 313 C.F.

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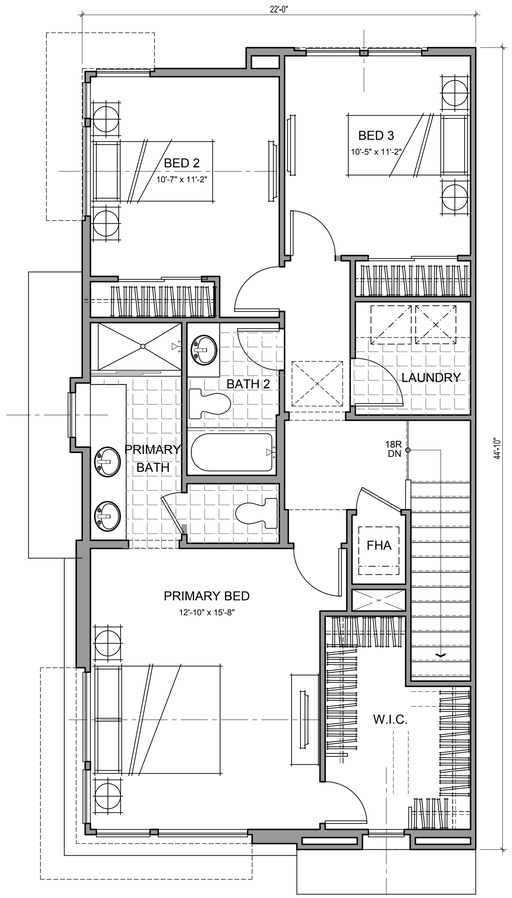
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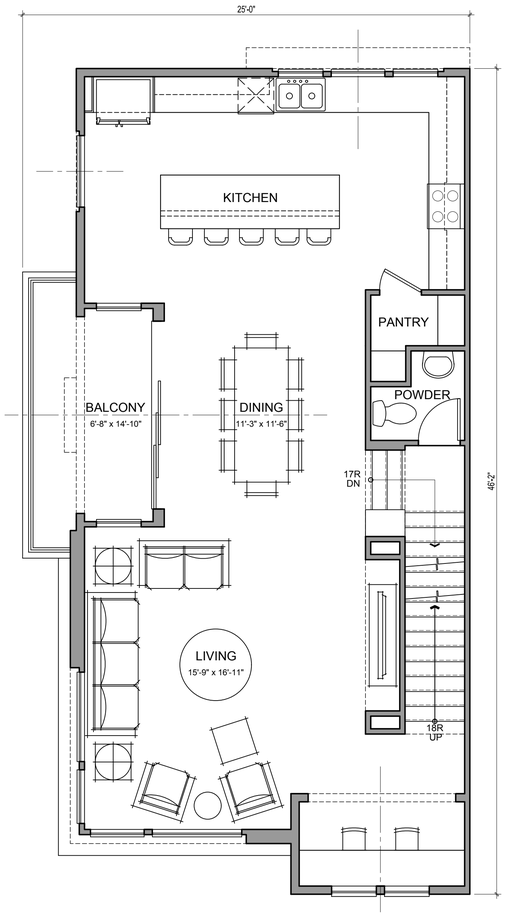
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PLAN 5 UNIT PLANS

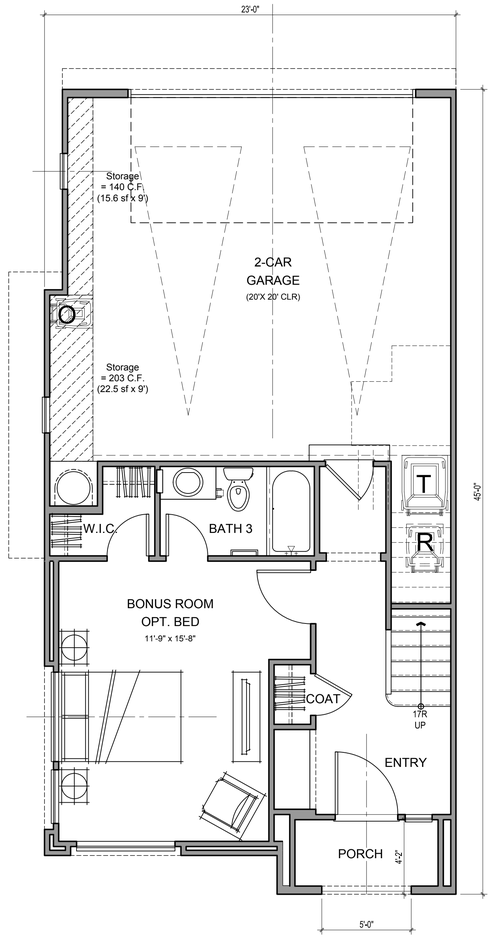
A5.20



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

Note: Garages are EV Ready per Cal Green code

P6 - GROSS AREA	
1ST FLOOR	470 SQ. FT.
2ND FLOOR	927 SQ. FT.
3RD FLOOR	905 SQ. FT.
TOTAL LIVING	2302 SQ. FT.
PORCH	36 SQ. FT.
BALCONY	99 SQ. FT.
GARAGE	503 SQ. FT.

P6 - NET AREA	
1ST FLOOR	451 SQ. FT.
2ND FLOOR	868 SQ. FT.
3RD FLOOR	857 SQ. FT.
TOTAL LIVING	2177 SQ. FT.
PORCH	30 SQ. FT.
BALCONY	87 SQ. FT.
GARAGE	478 SQ. FT.

STORAGE AREA REQUIRED: 250 C.F.

STORAGE AREA PROVIDED:

PLAN 6 - 343 C.F.

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0 2 4 8

PLAN 6 UNIT PLANS

A5.30

BARKELEY 16" TALL OUTDOOR WALL SCONCE BY MILLENNIUM LIGHTING



WALL SCONCE 01

AMBIANCE 2 LIGHT, 25" OUTDOOR WALL SCONCE BY JUSTICE DESIGN GROUP



WALL SCONCE 02

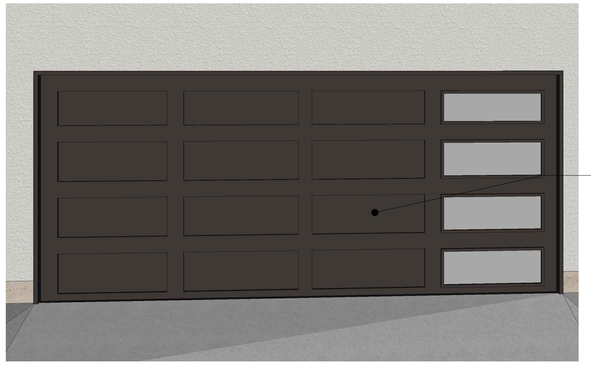
FAUX CONCRETE HEADER

FIBERGLASS WINDOW

CONCRETE SILL



RECESSED WINDOW



METAL SECTIONAL GARAGE DOOR

GARAGE DOOR

ALUMINUM OR METAL AWNING

FIBERGLASS WINDOW

WOOD TRIM



BAY WINDOW & AWNING

ALUMINUM OR METAL AWNING

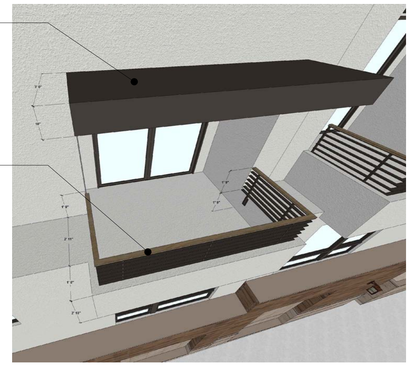
FIBERGLASS WINDOW



WINDOW AWNING

ALUMINUM OR METAL AWNING

METAL HORIZONTAL FLAT BAR RAILING OVER LOW WALL WITH BRICK VENEER OVER LOW WALL



BALCONY 01



ALUMINUM OR METAL AWNING

SLIDING DOOR

METAL HORIZONTAL FLAT BAR RAILING OVER LOW WALL WITH BRICK VENEER

BALCONY 02

ALUMINUM OR METAL AWNING

FAUX CONCRETE HEADER

FIBERGLASS WINDOW

ADHERED STONE VENEER



STOOP ENTRY PORCH 01



ALUMINUM OR METAL AWNING

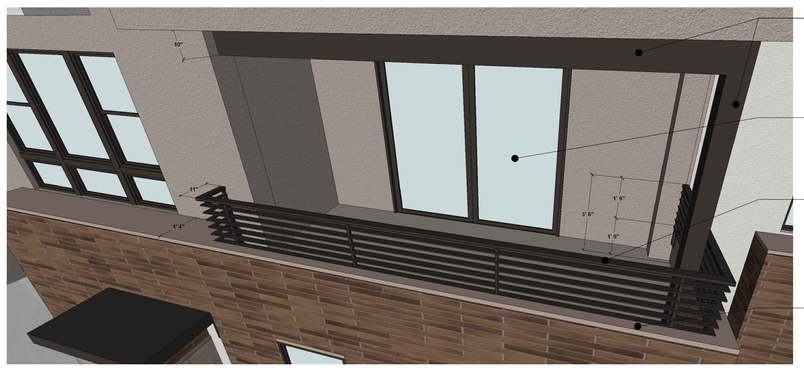
FAUX CONCRETE HEADER

BRICK VENEER

ADHERED STONE VENEER

TYP. DEEP RECESS AT DOOR

STOOP ENTRY PORCH 02



METAL POST & BEAM

SLIDING DOOR

METAL HORIZONTAL FLAT BAR RAILING OVER LOW WALL WITH BRICK VENEER

CONCRETE CAP

BALCONY 03

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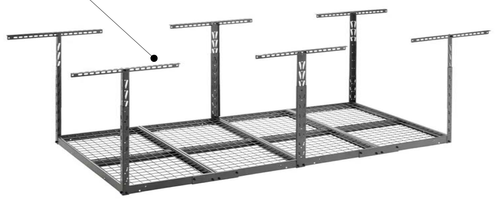
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DETAILS

A6.00

OVERHEAD GEARLOFT STORAGE RACK, VARY IN SIZES



CEILING MOUNTED STORAGE

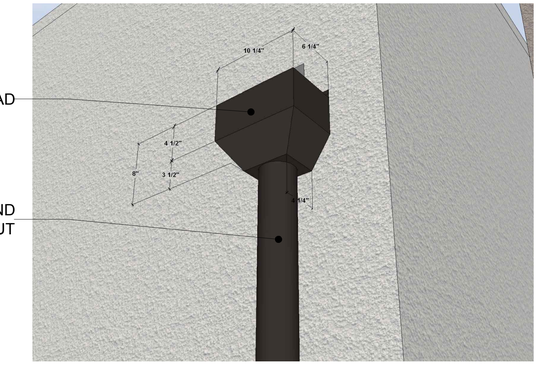
THE BASIC SMALL CONDUCTOR HEAD,
WIDTH: 10.25"
DEPTH: 6.25"
HEIGHT: 8"



LEADER HEAD

LEADER HEAD

ROUND DOWNSPOUT



LEADER HEAD WITH DOWNSPOUT
To Match Metal Color (See Sheets A7.00, A7.01)

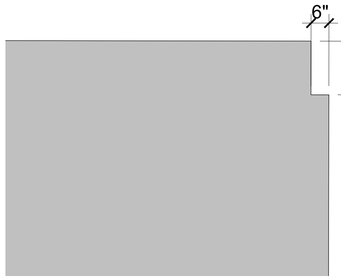
ADHERED STONE VENEER

DECORATIVE METAL FLASHING CAP

BRICK VENEER



STEPPED CROWN CORNICE AT PARAPET



STEPPED CROWN CORNICE AT PARAPET SECTION

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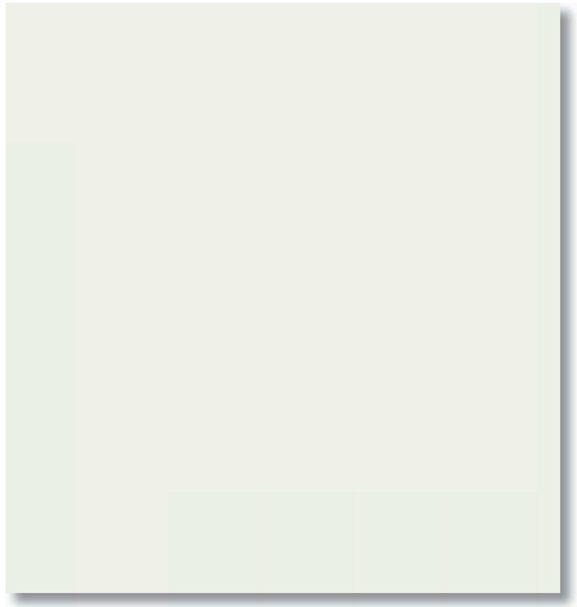
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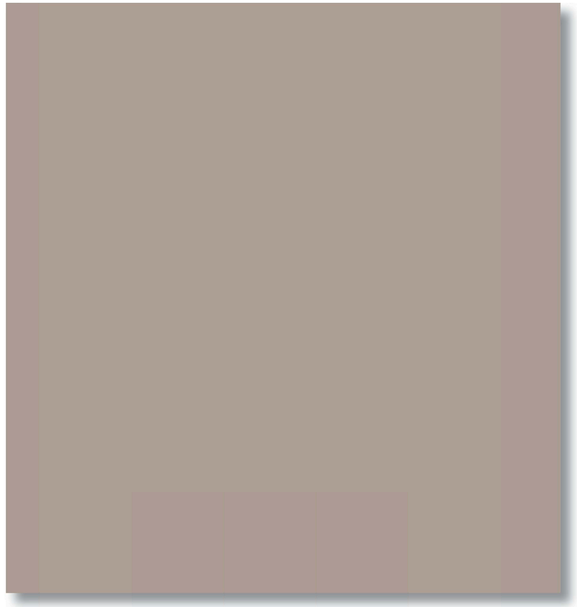
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DETAILS

A6.01



STUCCO 1 - 20/30 FINISH
EXTRA WHITE (SW7006)



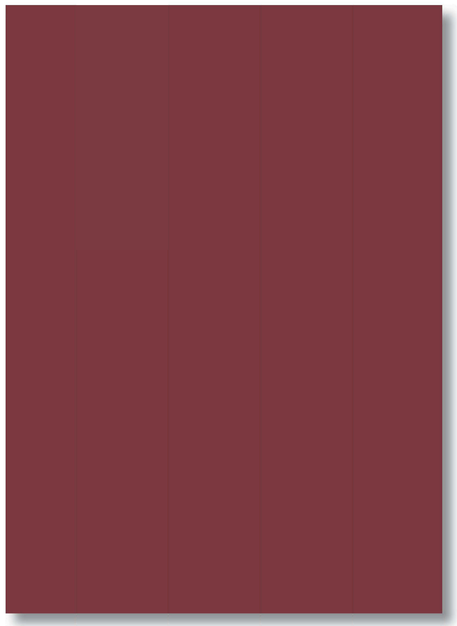
STUCCO 2 - 20/30 FINISH
PALISADE (SW7635)



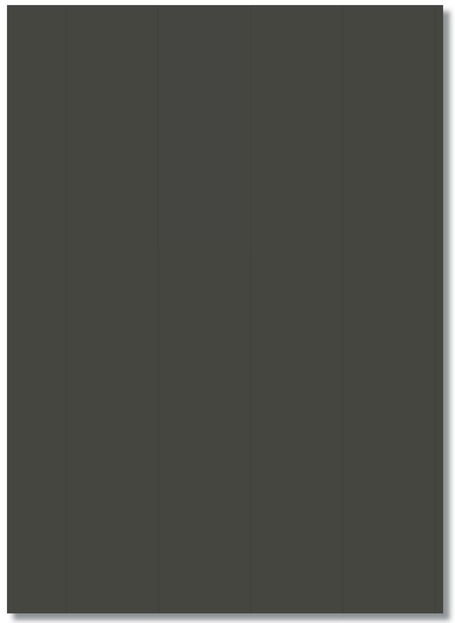
BRICK MODERN (LONG) VENEER
ENDICOTT NORMAN THIN BRICK 2-1/4 x 11-5/8
COPPERTONE



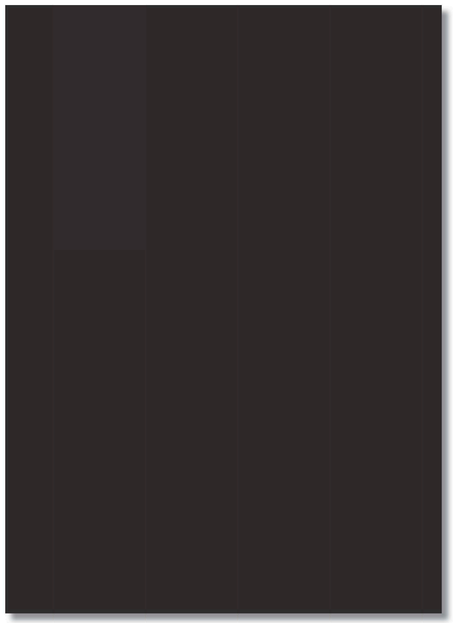
STONE VENEER
SONORA SANDSTONE DRY STACK
COUNTRY BEIGE



ACCENT- ENTRY DOOR
RED THEATRE (SW 7584)



METAL GARAGE DOOR/ UTILITY DOOR
IRON ORE (SW7069)



FIBER-CEMENT POST TRIM
CAVIAR (SW6990)



METAL AWNING/ POST/ BEAM/ BALCONY
BLACK MAGIC (SW6991)



WINDOW FRAME
MILGARD - BLACK

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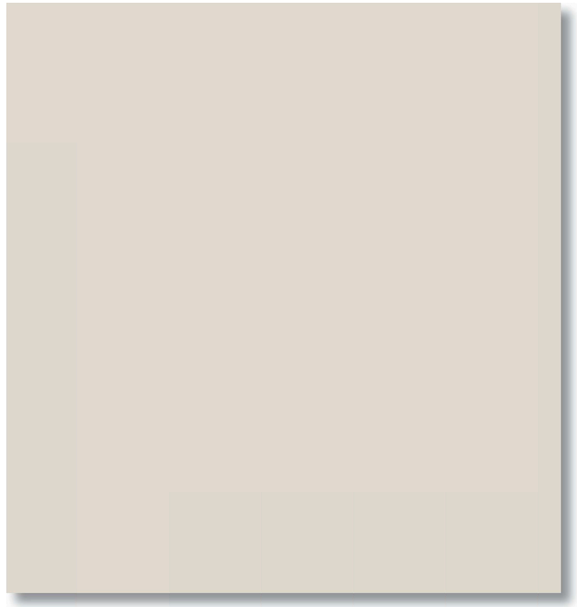
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COLOR AND MATERIAL BOARD
SCHEME 1

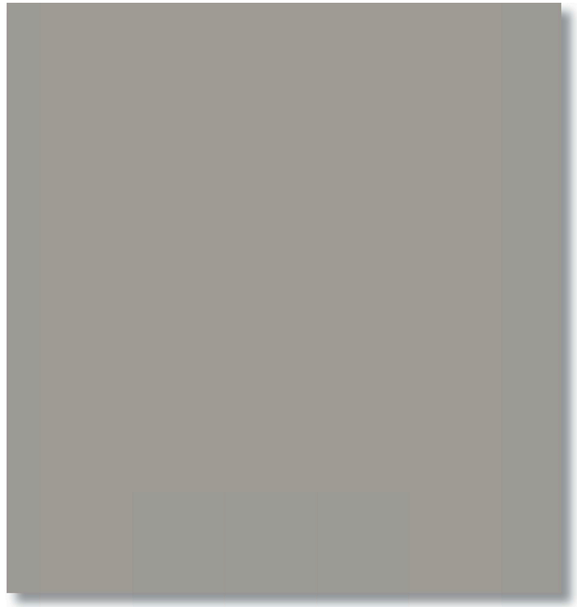
A7.00

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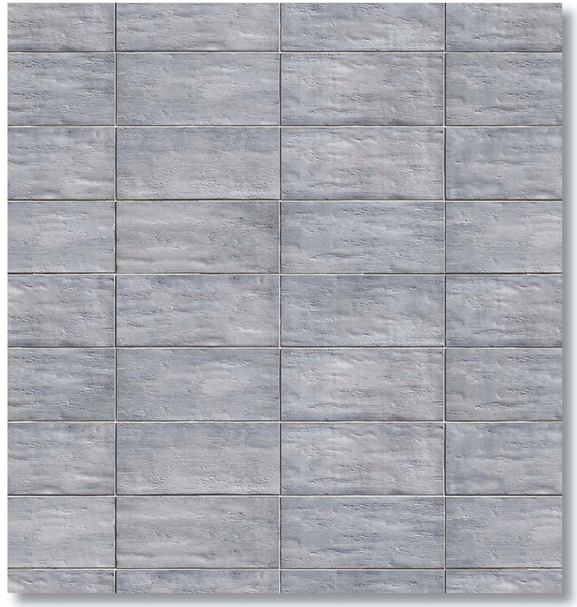
STUCCO 1 - 20/30 FINISH
EGRET WHITE (SW7570)



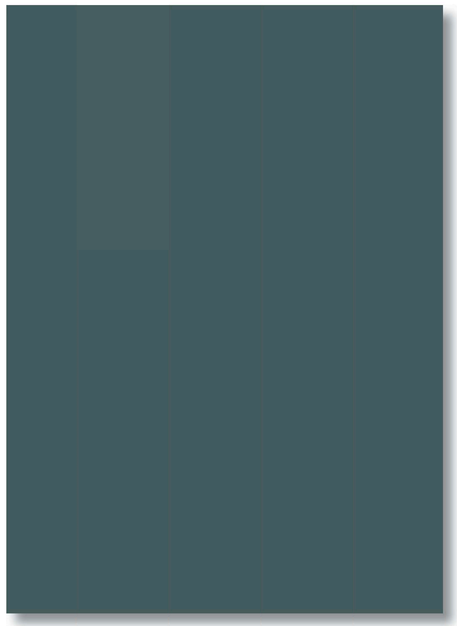
STUCCO 2 - 20/30 FINISH
PEWTER CAST (SW7673)



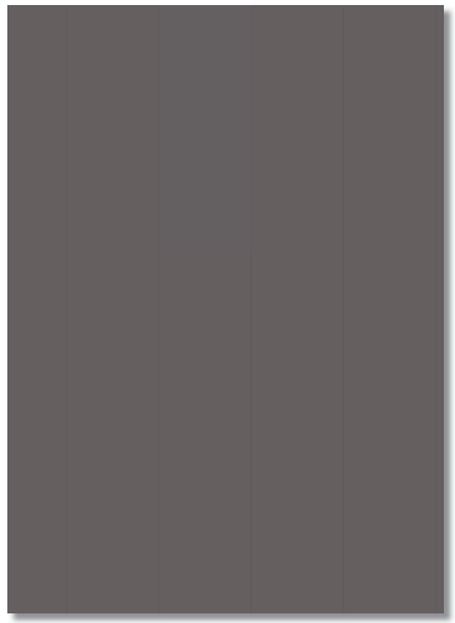
BRICK MODERN (LONG) VENEER
ENDICOTT NORMAN THIN BRICK 2-1/4 x 11-5/8
GOLDEN BUFF



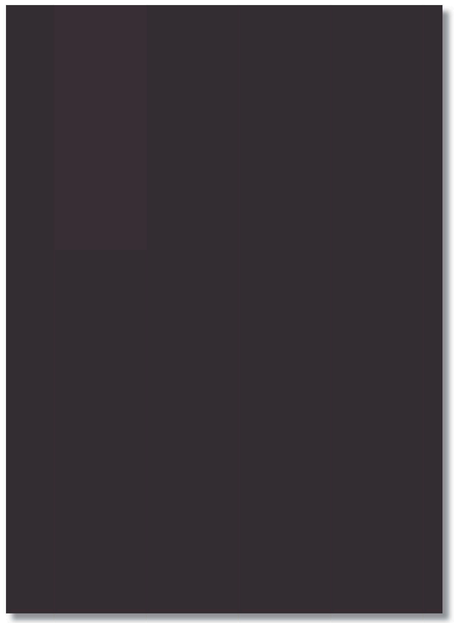
STONE VENEER
SONORA SANDSTONE DRY STACK
BLUE HERON



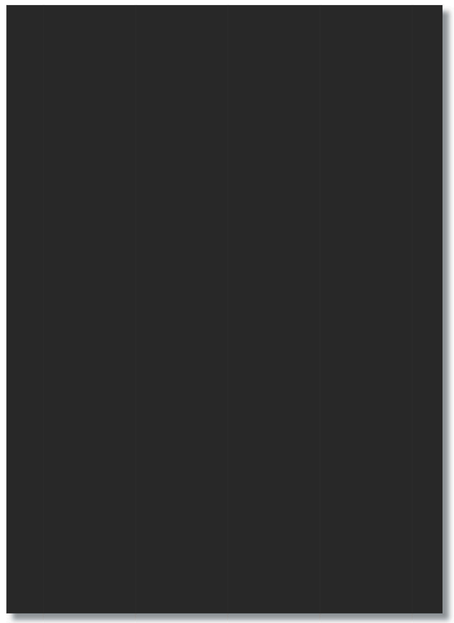
ACCENT- ENTRY DOOR
STILL WATER (SW 6223)



METAL GARAGE DOOR/ UTILITY DOOR
PEPPERCORN (SW7674)



FIBER-CEMENT POST TRIM
DOMINO (SW6989)



METAL AWNING/ POST/ BEAM/ BALCONY
TRICORN BLACK (SW6258)



WINDOW FRAME
MILGARD - BLACK

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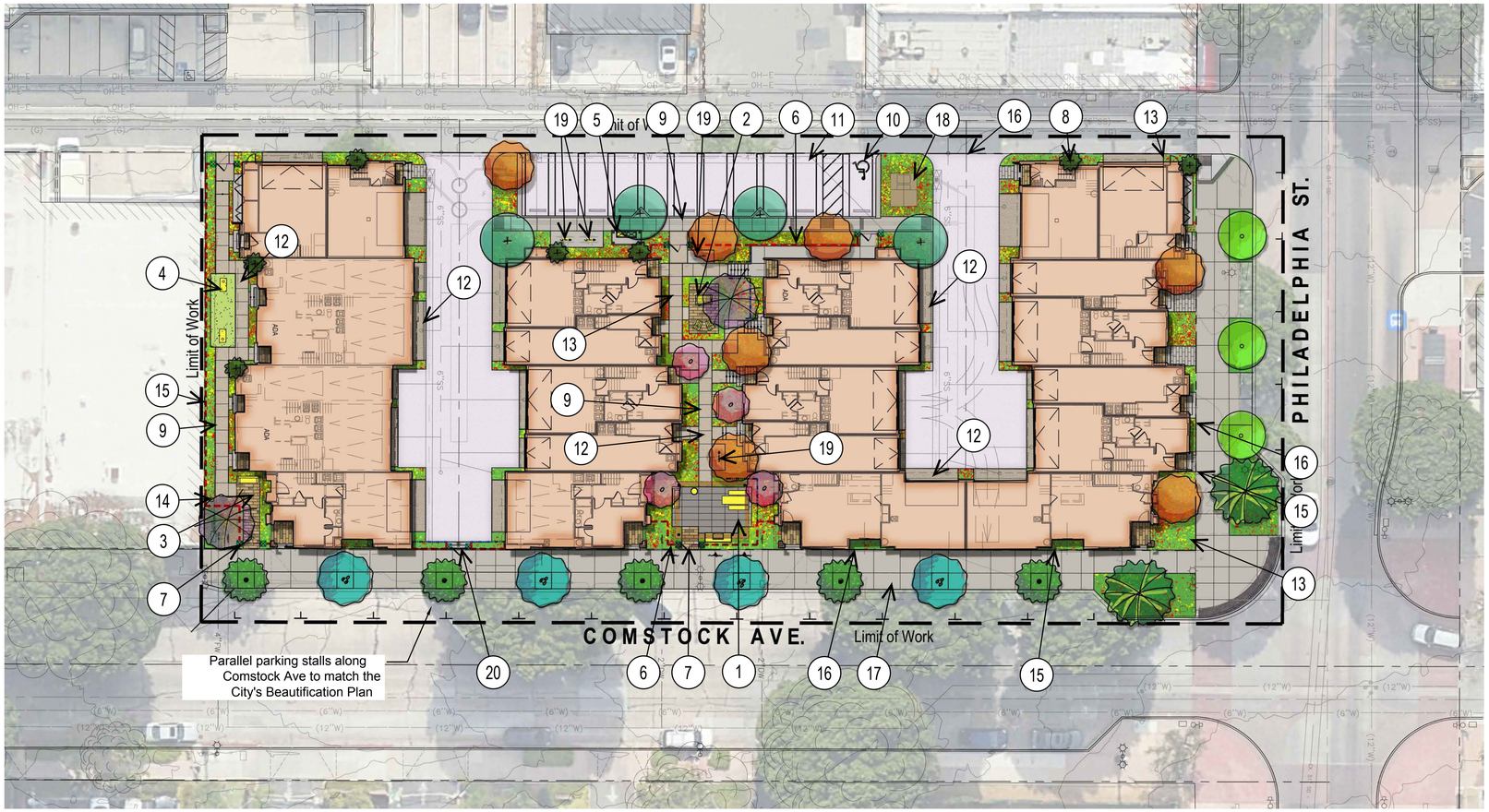
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COLOR AND MATERIAL BOARD
SCHEME 2

A7.01



LEGEND

1. East central courtyard open space amenity area with shade structure, BBQ, table and bench seating, see Enlargement L-2.
2. Central courtyard open space amenity area with Adirondacks and foosball table, see Enlargement L-2.
3. East paseo open space amenity area with tree pocket and bench seating, see Enlargement L-2.
4. West paseo open space amenity area with corn hole set on artificial turf area, see Enlargement L-2.
5. Two community cluster mailboxes, per USPS review and approval.
6. Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.
7. Enhanced paving (integral colored concrete or stained concrete) at main pedestrian project entry.
8. Proposed tree, per Planting Plan.
9. 4' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
10. Accessible parking stall and striping, per Civil plans.
11. Guest parking stall.
12. Stained or colored concrete driveway/paseo walk, with light broom finish and tooled joints.
13. Common area landscape, builder installed and HOA maintained.
14. Community dog bag station (black in color), for pet owners.
15. Property line.
16. Public street R.O.W.
17. Public street sidewalk, per Civil plans.
18. Transformer to be screened with landscape, quantity and final locations to be determined.
19. Short term bike parking (4 bike rack to accommodate 8 bike stalls).
20. Gate for fire access only, with Knox Box



*Conceptual image of Mailbox CBUs, Salsbury Industries, dark bronze color with pedestal and decorative cap (Mailboxes.com).



*Conceptual image of Bike Rack ring, Model: Bike Rack 292 , black or dark bronze color (Dumor.com).





*Conceptual images (provided herein are conceptual and subject to change)

0 10' 20' 40'
Scale: 1" = 20'

Schematic Landscape Plan

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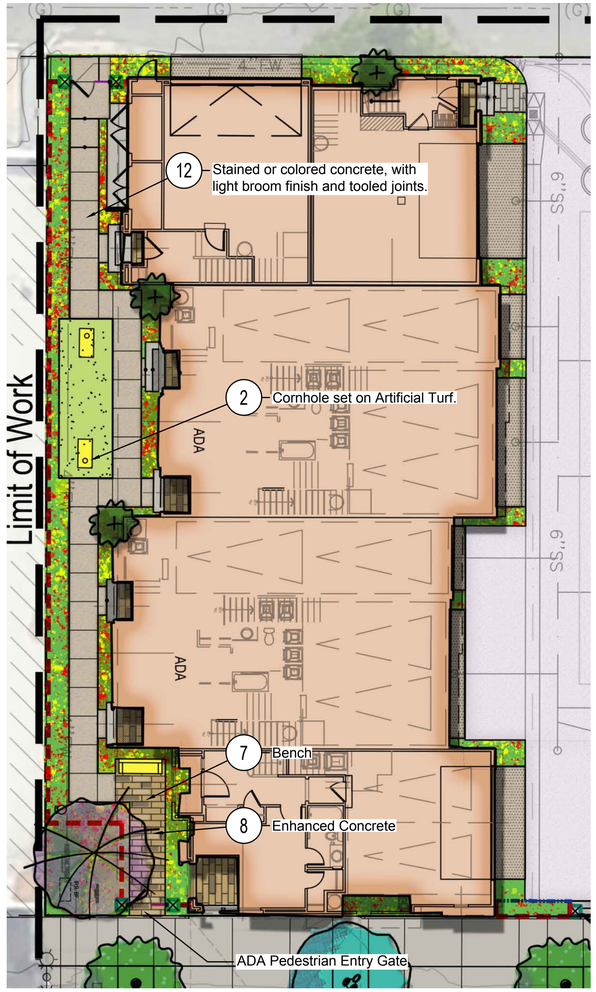
MW INVESTMENT GROUP

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27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

L-1



Paseo Amenity Area - Plan View



1

*Conceptual image of center table, (White color, model# Lakeside Coffee Table, by Polywood.com)



1

*Conceptual image of Adirondack, (Tangerine color, model# Designer Series, by Polywood.com)



1

*Conceptual image of Outdoor concrete foosball table, Item #: FT543236-1 color: Natural concrete gray (www.anovafurnishings.com)



3

*Conceptual image of propane BBQ (PGS T40 Commercial Cast Aluminim Propane Gas Grill With Timer) & built-in counter. Maybe electric BBQ - TBD in future phase.



4

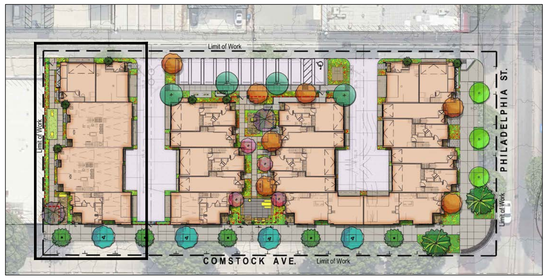
*Conceptual image of ADA Picnic Table (model # SG207P, black or dark brown color by WabashValley.com)



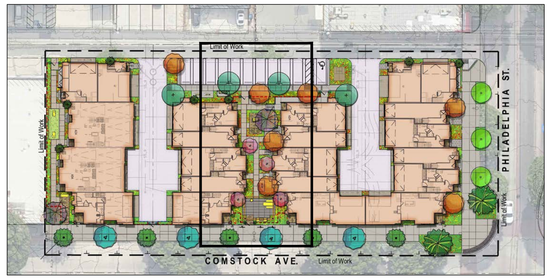
5

Flat Top

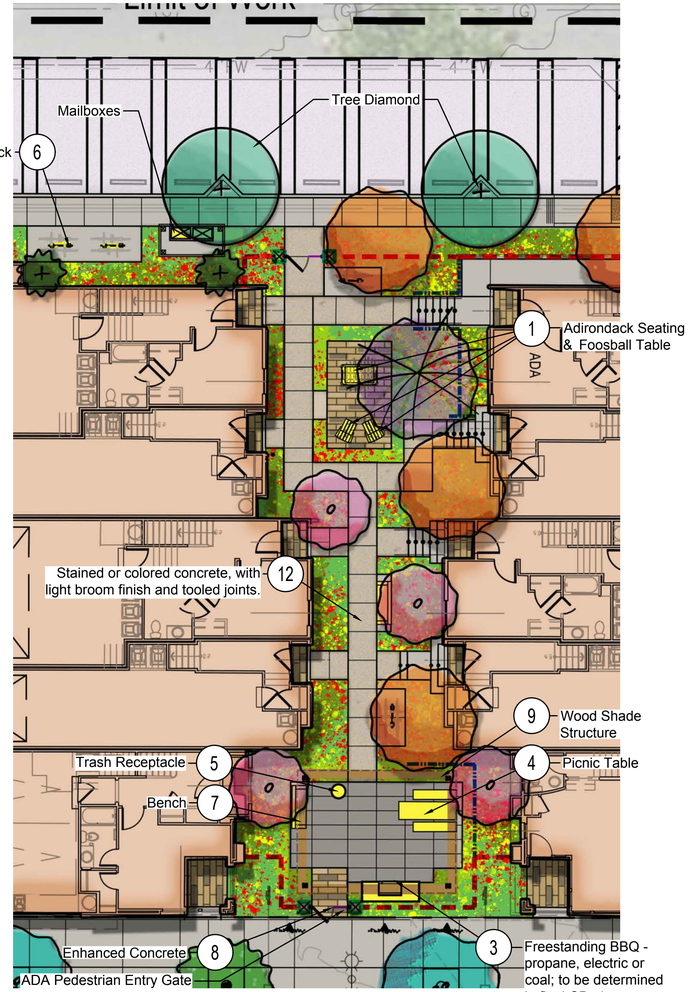
*Conceptual image of Trash Receptacle, Model# TJ3F43P, black or dark brown color (WabashValley.com).



Paseo Amenity Area - Key Map



Courtyard Amenity Area - Key Map



Courtyard Amenity Area - Plan View



2

*Conceptual image of corn hole set, Item #: BYOB5531 color: Natural gray (outdoorconcretegames.com)



7

*Conceptual image of Bench, Bench 500 , black or dark brown color (Dumor.com).



6

*Conceptual image of Bike Rack ring, Model: Bike Rack 292 , black or dark bronze color (Dumor.com).



9

Wood Color - Walnut



9

*Conceptual image of wood or metal shade structure, Lumber or Alumawood, black or dark bronze color (Alumawood.com).



9



8

Enhanced Colored Concrete Paving - Davis Color 'Palomino 5447' in Light Broom Finish & Saw-cut Joints.

*Conceptual images (provided herein are conceptual in nature)

Schematic Paseo & Courtyard - Enlargement Plan

0 10' 20' 40'

Scale: 1" = 20'

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

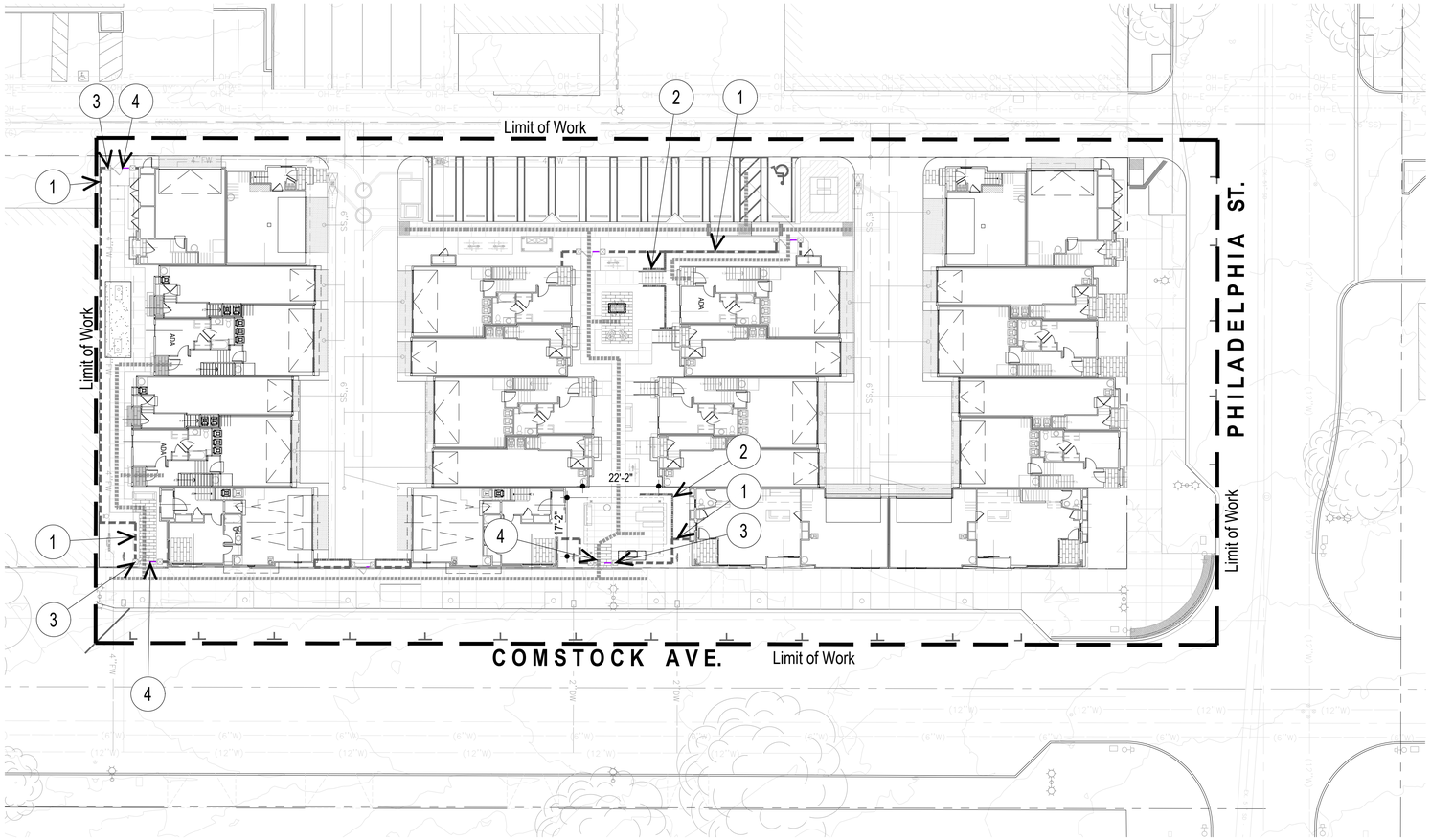
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MJW INVESTMENTS, LLC.
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

L-2



WALL LEGEND

1 — 5'-0" High stucco over CMU wall, with decorative / enhanced / brick cap.

2 — ±3'-0" High stucco over CMU retaining wall, with enhanced concrete stone / brick cap.

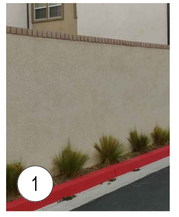
3 — 5'-6" High (18" sq.) brick over CMU pilaster, with enhanced concrete stone / brick cap.

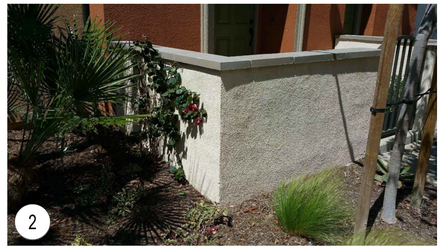
4 — 5'-0" High T.S. ADA pedestrian gate (black color).

ADA Path of Travel

* See Sheet L-4 for details, materials & colors specifications.













0 10' 20' 40'

Scale: 1" = 20'

Schematic Wall & Fence Plan

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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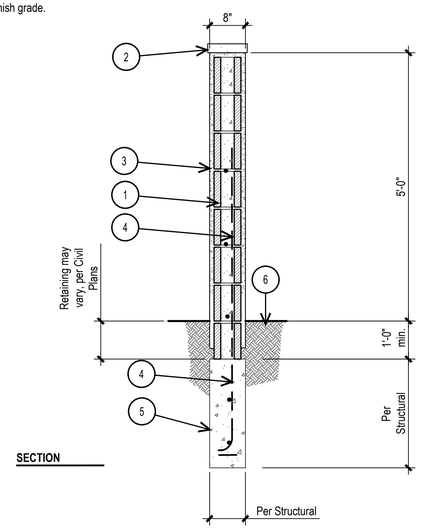
Project No.: MJW10-D
Date: Sept. 20, 2024

LEGEND

1. 6"x8"x16" CMU Block.
2. Decorative / brick cap.
3. Stucco finish both sides of wall.
4. Reinforcements per Structural.
5. Concrete footing.
6. Finish grade.

NOTES

A. Refer to Walls & Fence Plan for information.
B. Refer to Structural drawings for footing and reinforcement requirements.
C. Further development to be provided in future Construction Plan submittals.



SECTION

Patio Stucco Wall .dwg

1 5'-0" STUCCO WALL

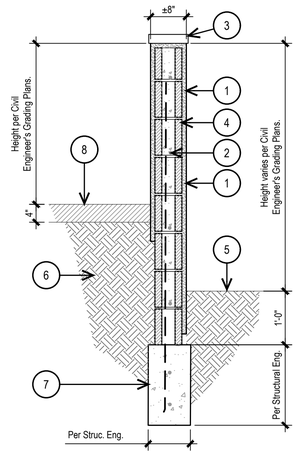
Scale: 3/4"=1'-0"

LEGEND

1. Stucco finish.
2. Reinforcement per Structural Engineer.
3. Decorative stone or brick cap.
4. 6x8x16" CMU block.
5. Finish grade.
6. 90% compacted gravel.
7. Foundation footing per civil.
8. Adjacent finish surface, per plan.

NOTES

A. Refer to Walls & Fence Plan for information.
B. Refer to Structural drawings for footing and reinforcement requirements.
C. Further development to be provided in future Construction Plan submittals.



Stucco Wall @ Stoops .dwg

2 +-3' HIGH RETAINING STUCCO WALL

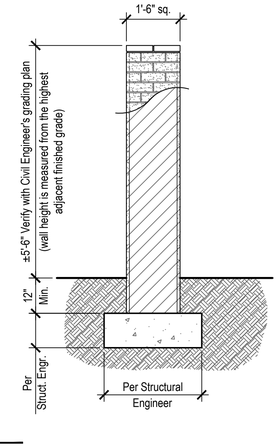
Scale: 3/4"=1'-0"

LEGEND

1. Decorative stone or brick cap (to match Architecture).
2. Brick over CMU block and reinforcing.
3. 90% Compacted sub-grade.
4. Concrete footing.
5. Finish grade.

NOTES

A. Contractor shall refer to Structural Engineer and Soils reports for all CMU, reinforcing, connections, and footing requirements.
B. Further development to be provided in future Construction Plan submittals.



Section

Tall CMU Pilaster .dwg

3 5'-6" HIGH BRICK PILASTER

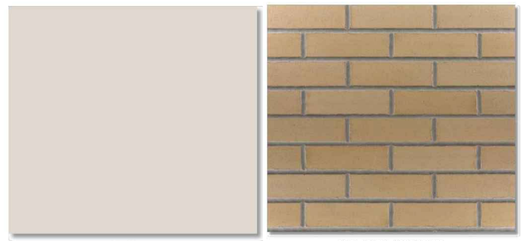
Scale: 1/2" = 1'-0"

WALL LEGEND

1 — 5'-0" High stucco over CMU wall, with decorative / enhanced / brick cap.

2 — ±3'-0" High stucco over CMU retaining wall, with enhanced concrete stone / brick cap.

3 — 5'-6" High (18" sq.) brick over CMU pilaster, with enhanced concrete stone / brick cap.



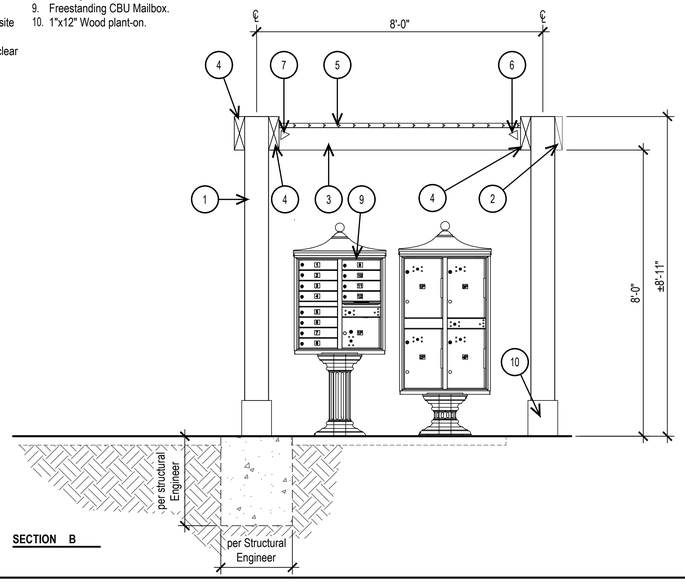
STUCCO 1
EGRET WHITE (SW7570)

BRICK MODERN (LONG) VENEER
ENDICOTT NORMAN THIN BRICK 2-1/4 x 11-5/8
GOLDEN BUFF

Stucco color and brick caps, to match architecture.

LEGEND

1. 8x8 wood post.
2. 3x12 wood fascia.
3. 4x8 wood beam.
4. 4X12 wood beam.
5. 2"x6"x6' tongue & groove wood composite board with wood grain pattern facing down-sloped to drain. (RUn a bead of clear silicon at each board seam.)
6. Down light.
7. Adjacent finish surface, per plan.
8. Finish grade.
9. Freestanding CBU Mailbox.
10. 1"x12" Wood plant-on.



SECTION B



*Conceptual image of wood mailbox shade structure, Lumber dark brown stain color.

Wood Color - Walnut



*Conceptual image of decorative mailbox unit

MAILBOX SHADE STRUCTURE

Schematic Wall Elevations, Materials & Details Plan

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COMSTOCK PLACE
WHITTIER, CA # 2023-0840

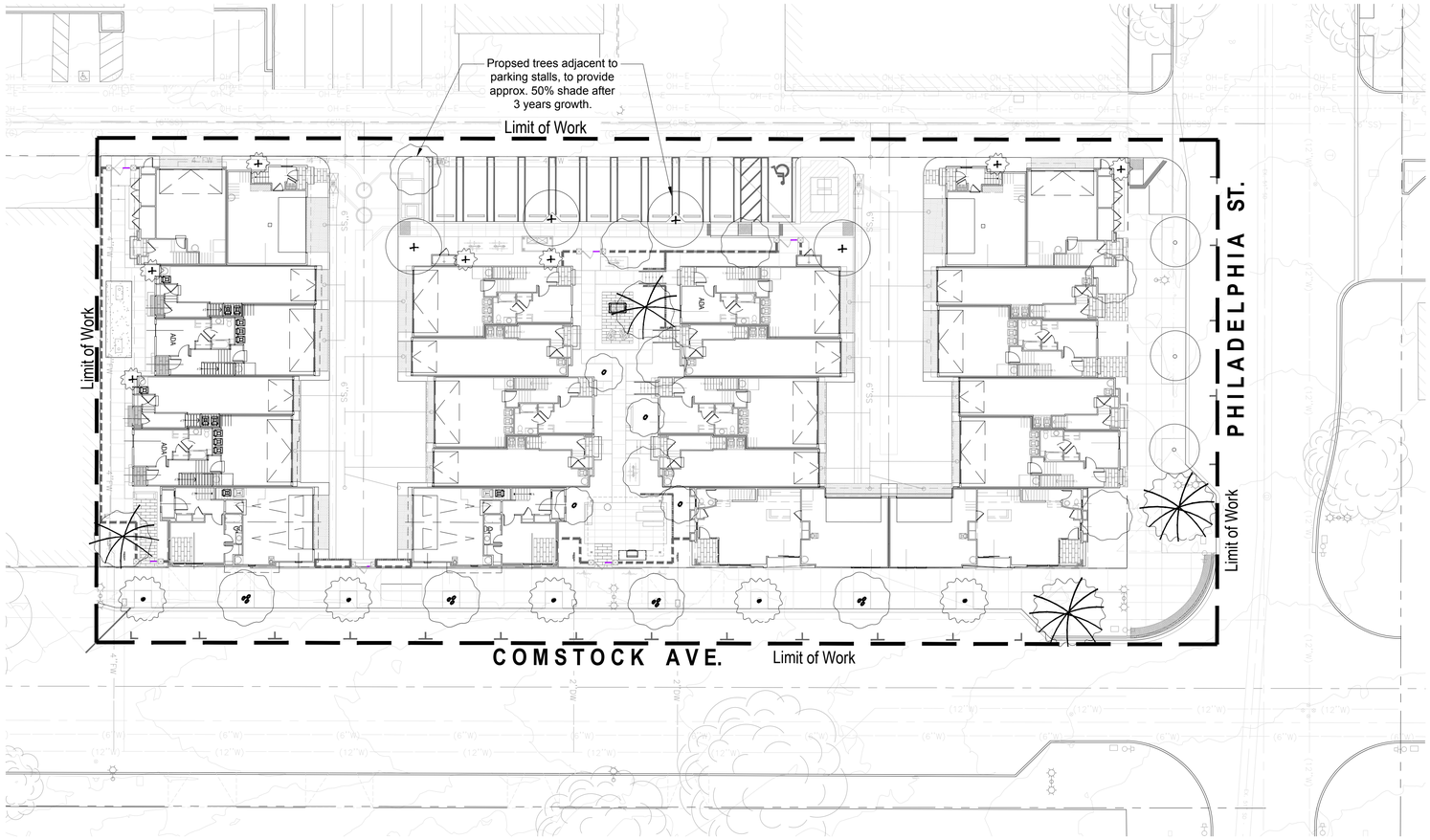
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27702 Crown Valley Parkway
Suite D-4--197
Ladera Ranch, CA 92694

studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

L-4



PLANTING LEGEND

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Canopy @ 3 Yr. (W'xH')	Qty.
		Botanical Name (Common Name)					
	TREES						
	Specimen	Acacia stephenophila (Shoestring Acacia)	Single	36" Box	Low	6'x15'	2
	Evergreen	Arbutus u. 'Marina' (Marina Strawberry Tree)	Single	24" Box	Low	4'x12'	4
	Street Tree	Tristania conferta (Brisbane Box)	Single	24" Box	Mod	6'x20'	4
	Medium	Geijera parvilflora (Australian Willow)	Single	24" Box	Low	5'x15'	7
	Columnar	Podocarpus henkelii (Long Leafed Yellow-wood)	Columnar	15g	Mod	3'x15'	7
		Prunus caroliniana 'Monus' (Bright n Tight)	Columnar	15g	Low	3'x12'	
						Total =	29

PLANTING LEGEND - Street Trees

* Per City of Whittier Beautification Plan

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Canopy @ 3 Yr. (W'xH')	Qty.
		Botanical Name (Common Name)					
	Corner of Comstock Ave & Philidelphia St.	Ginkgo biloba (Maiden Hair Tree)	Single	36" Box	Mod	6'x15'	2
	Philidelphia St.	Lagerstroemia x 'Natchez' (White Crape Myrtle)	Single	36" Box	Mod	5'x12'	3
	Comstock Ave	Pistacia chinensis (Chinese Pistache)	Single	36" Box	Mod	6'x12'	4
	Comstock Ave	Cassia leptophylla (Gold Medallion Tree)	Single	36" Box	Mod	5'x10'	5
						Total =	14

* 16 total 36" box trees provided to comply with City of Whittier tree removal requirements
* Per Arborist Report, all existing parkway trees will be removed and replaced.

PLANTING LEGEND - Vines

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Canopy @ 3 Yr. (W'xH')	Qty.
		Botanical Name (Common Name)					
	VINES						
	Vine	Bougainvillea x 'Barbara Karst' (Barbara Karst Boug.)	Single	5g	Low		3
						Total =	3

GENERAL PLANTING / IRRIGATION NOTES (For Future Construction Document Phase):

1. Irrigation (including spray and/or drip) will be provided, in the Construction Document phase, and to be installed per local California water regulations (AB1881) and City of Whittier Water Efficiency standards.
2. Transformers, back-flow preventers & other above-ground utilities to be screened with landscape as permitted per local codes & regulations.
3. The plant palette listed provides a list of plant materials and sizes to select from when preparing final landscape construction documents for this project. However, substitutions may be required due to availability, soils tests, or other conditions.
4. All trees within 5' of hardscape to be installed with (24") deep root barriers.
5. SHRUB MIX: 50% 15 GAL, 50% 5 GAL
6. GROUNDCOVER MIX: 50% 1 GAL, 50% 4" Potted

POLICE DEPARTMENT RECOMMENDATIONS:

Landscaping

All landscaping including but not limited to, walkways planters and the parking lot, should follow the 2' x 6' rule in order to provide natural surveillance, as poor landscaping can reduce visibility. It is recommended all landscaping should meet the minimum, Crime Prevention Through Environmental Design (CEPTED) Guidelines as follows:

1. All shrubs or ground cover vegetation should be no higher than 2 feet in height.
2. Tree canopies should be no lower than 6 feet in height.
3. Avoid creating areas of potential concealment by using "lacy" vegetation.
4. Avoid using vegetation that requires constant maintenance and upkeep as to avoid excessive growth potentially compromising the 2' x 6' rule.

SHRUBS and GROUND COVER		WUCOLS (R3)
Anigozanthos	Kangaroo Paw	Low
Agave sp.	Agave	Low
Aloe sp.	Aloe	Low
Bougainvillea sp.	Bougainvillea	Low
Callistemon citrinus 'Little John'	Dwarf Bottlebrush	Low
Carex divulsa	Berkeley Sedges	Low
Carissa m. 'Green Carpet'	Dwarf Natal Plum	Low
Chamaerops humilis	Mediterranean Fan Palm	Low
Cordyline 'Pink Passion'	Pink Passion Dracaena Palm	Low
Dasylirion longissimum	Mexican Grass Tree	Low
Delosperma cooperi	Trailing Ice Plant	Low
Dianella revoluta 'Little Rev'	Little Rev™ Flax Lily	Low
Iris sp.	Iris	Low
Kalanchoe thyrsiflora	Flapjack Paddle Plant	Low
Lavandula stoechas 'Larkman Hazel'	Hazel™ Spanish Lavender	Low
Ligustrum japonicum "Texanum"	Japanese Privet	Low

SHRUBS and GROUND COVER		WUCOLS (R3)
Nassella pulchra	Purple Needlegrass	Low
Muhlenbergia rigens	Deer Grass	Low
Rhaphiolepis indica 'Clara"	India Hawthorn	Low
Rosmarinus p. 'Huntington Carpet'	Groundcover Rosemary	Low
Trachelospermum jasminoides	Star Jasmine	Low
Westringia sp.	Westringia	Low
Xylosma congestum 'Compact'	Compact Xylosma	Low
Yucca gloriosa	Spanish Dagger	Low
VINES & ESPALIERS		WUCOLS (R3)
Bougainvillea 'Monka' (Oo-La-La® Bougainvillea)	Bougainvillea	Low
Macfadyena unguis-cati	Cat's Claw Vine	Low

Schematic Planting Plan

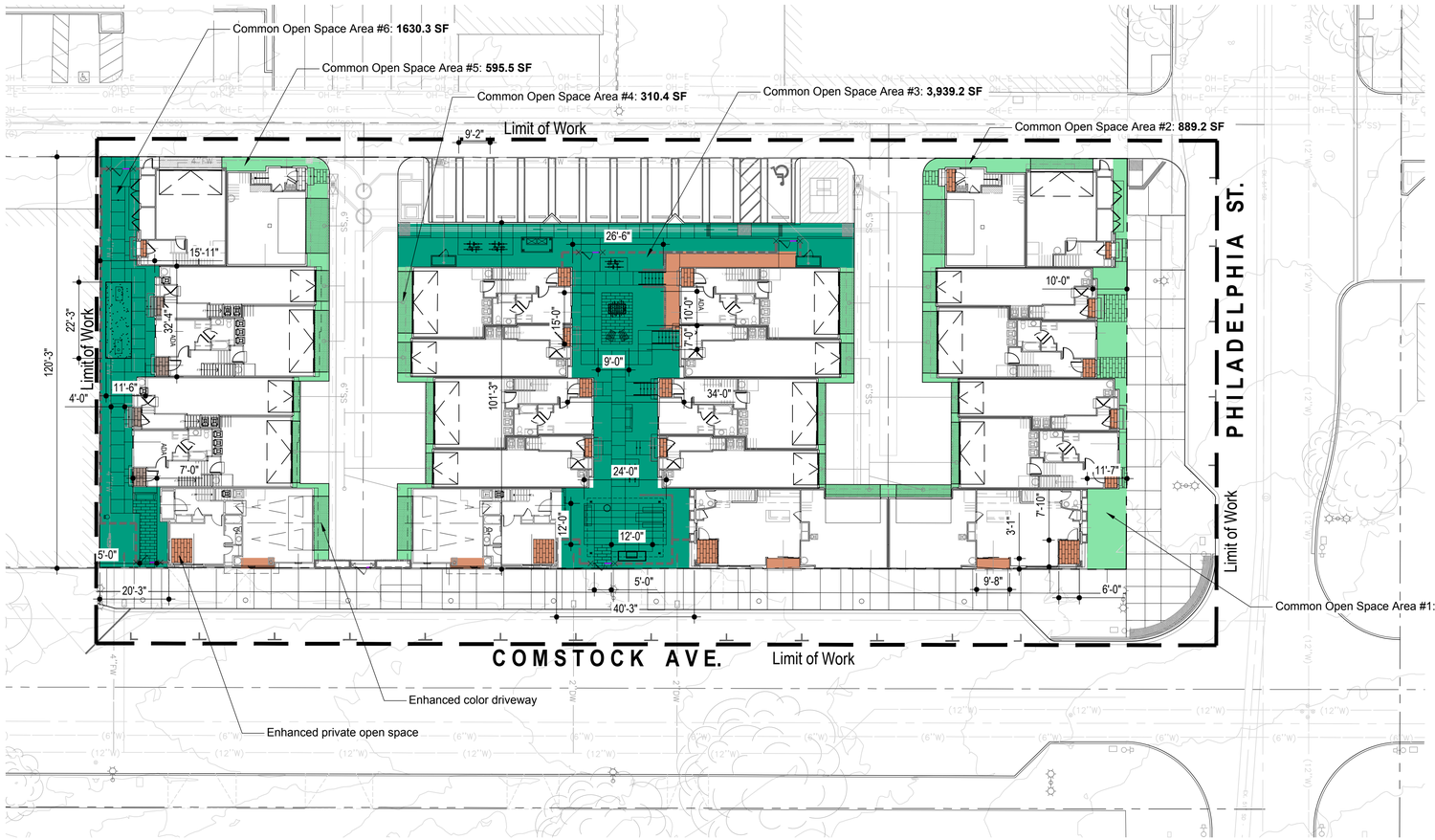
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Scale: 1" = 20'

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD
Project No.: MJW10-D
Date: Sept. 20, 2024



OPEN SPACE LEGEND

OPEN SPACE - PROGRAMMED
Courtyard & Paseo Amenities

Takeoff: 5,569 sf

COMMON OPEN SPACE
Builder installed & HOA maintained.

Takeoff: 2,546 sf

PRIVATE OPEN SPACE - GROUND LEVEL
Homeowner exclusive use and maintained.

Takeoff: 835 sf

Total Private Deck Open Space = 3,240 SF (per Architect's Plans)
- Breakdown per unit:
  - Plan 1 (120 SF)
  - Plan 2 (174 SF)
  - Plan 3 (480 SF)
  - Plan 4 (1,072 SF)
  - Plan 5 (1,160 SF)
  - Plan 6 (234 SF)

Total Open Space = 12,190 sf.

TOTAL SITE AREA: 35,980 SF

OPEN SPACE - PROGRAMMED:
Required: 5,397 SF (15% of total site area)
Provided: 5,569 SF (15.5% of total site area)

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COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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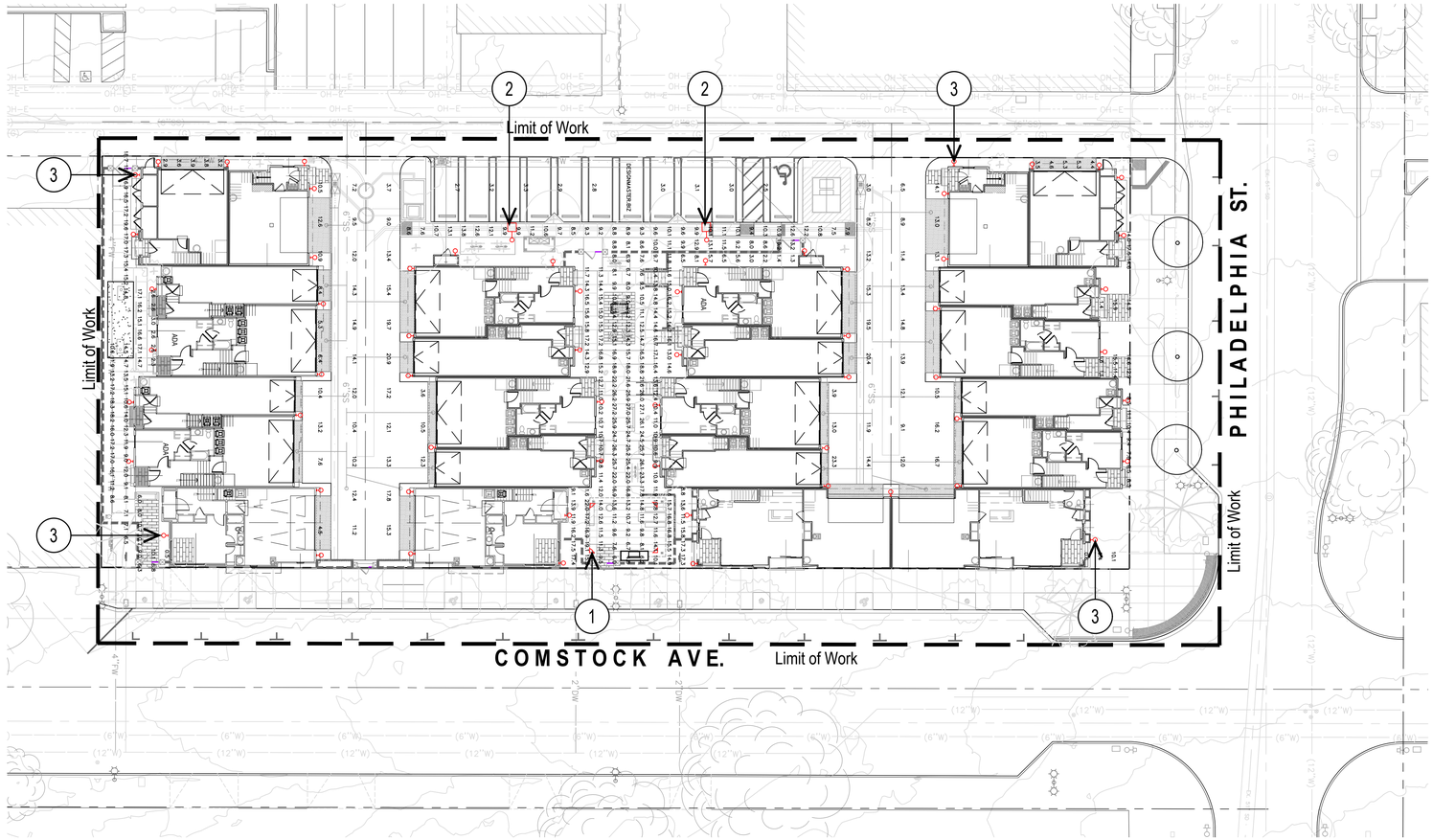
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studio PAD

0 10' 20' 40'
Scale: 1" = 20'

Project No.: MJW10-D
Date: Sept. 20, 2024

Schematic Open Space Calculations Plan



Internal Driveways & Parking Area	
AVERAGE FOOT–CANDLES	9.97
MAXIMUM FOOT–CANDLES	23.3
MINIMUM FOOT–CANDLES	2.5
FOR EVALUATION USE ONLY	0.11
MAXIMUM TO MINIMUM FC RATIO	9.44
AVERAGE TO MINIMUM FC RATIO	4.04

Open Space Areas & Walks	
AVERAGE FOOT–CANDLES	12.82
MAXIMUM FOOT–CANDLES	27.2
MINIMUM FOOT–CANDLES	0.5
MINIMUM TO MAXIMUM FC RATIO	0.02
MAXIMUM TO MINIMUM FC RATIO	50.51
AVERAGE TO MINIMUM FC RATIO	23.78

NOTES:
1. Site lighting & landscape up-lights, down-lights, path lights/bollards, etc.) to be shielded to not allow more than .01 foot-candle beyond property line when adjacent residential dwellings.
2. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
3. See sheet L-7B for Lighting spec sheets.
4. Final electrical plans to be prepared by Electrical Engineer in future Construction Documents phase.

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	QUANTITY
Down–SS (1)		(1) COOL WHITE LED	2–3/8"DIA. X 9"H. UPLIGHT LUMINAIRE3 COOL WHITE LED, CUSTOM CHROME PLATED PARABOLIC REFLECTOR AND TEXTURED LENSFLAT TEMPERED GLASS LENS	ELECTRONIC	WALL/CEILING	FX LUMINAIRE, JB–3LED–BZ	120V 1P 2W	12V, Low Voltage		4
Pole (2)		(36) 36 WHITE LIGHT EMITTING DIODES (LEDS), BASE UP.	FABRICATED METAL HOUSING, 1 LED MODULE CONSISTING OF:	ELECTRONIC	POLE	U.S. ARCHITECTURAL LIGHTING, DSAP20–PLED–III–W–36LED –350mA–WW–HS.	120V 1P 2W	Arm: 'XPK' Mounting Style. Pole Ht.: 12ft, RNTS 124 – 11.	Provide House–shields to minimize light from trespassing off property.	2
Wall–Sconce (3)		(1) 1W A19 AC 120V/60Hz 15W 2700K	Trans Globe Lighting, Wall Lattern. Item# 514–01–BK (Black). MaxLite Bulb.	ELECTRONIC	WALL	Maxlite Inc., E11A19D927/JA8S	120V 1P 2W	LUMENS 1150. 3000K. 1–18 LAMP/WATTS. Aluminum, 9.00 x 8.00 x 14.00". Glass : Frosted Seeded Glass Panels.	Keep 6'–6" min. clearance when fixture is above hardscape.	61

Schematic Photometrics Lighting Plan

0 10' 20' 40'
Scale: 1" = 20'

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WHITTIER, CA # 2023-0840

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Ladera Ranch, CA 92694

studio PAD
Project No.: MJW10-D
Date: Sept. 20, 2024

L-7A

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	QUANTITY
Down-SS (1)		(1) COOL WHITE LED	2-3/8"DIA. X 9"H. UPLIGHT LUMINAIRE3 COOL WHITE LED, CUSTOM CHROME PLATED PARABOLIC REFLECTOR AND TEXTURED LENSFLAT TEMPERED GLASS LENS	ELECTRONIC	WALL/CEILING	FX LUMINAIRE, JB-3LED-BZ	120V 1P 2W	12V, Low Voltage		4
Pole (2)		(36) 36 WHITE LIGHT EMITTING DIODES (LEDS), BASE UP.	FABRICATED METAL HOUSING, 1 LED MODULE CONSISTING OF:	ELECTRONIC	POLE	U.S. ARCHITECTURAL LIGHTING, DSAP20-PLED-III-W-36LED -350mA-WW-HS.	120V 1P 2W	Arm: 'XPK' Mounting Style. Pole Ht.: 12ft, RNTS 124 - 11.	Provide House-shields to minimize light from trespassing off property.	2
Wall-Sconce (3)		(1) 1W A19 AC 120V/60Hz 15W 2700K	Trans Globe Lighting, Wall Lattern. Item# 514-01-BK (Black). MaxLite Bulb.	ELECTRONIC	WALL	Maxlite Inc., E11A19D927/JA8S	120V 1P 2W	LUMENS 1150. 3000K. 1-18 LAMP/WATTS. Aluminum, 9.00 x 8.00 x 14.00". Glass : Frosted Seeded Glass Panels.	Keep 6'-6" min. clearance when fixture is above hardscape.	61

NOTES:

1. See sheet L-7A for Photometric Lighting Plan

FXLuminaire

JB LED Down Light DESIGNER PLUS



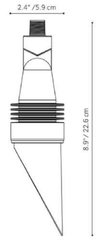
PROJECT

CATALOG #

TYPE

NOTES

The JB is FX Luminaire's original LED Down Light. The JB solves the problem of changing lamps in complicated areas by providing long-life LEDs. The pure color of the LED allows you to add the supplied blue lens to create a natural moonlight effect.



Quick Facts

- Die-cast aluminum
- Two-layer marine-grade anodization and powder coat finish
- Lumileds® Integrated LEDs
- ProAim™ adjustability
- Beam angle lenses
- Compatible with Luxor® technology
- Phase and PWM dimmable
- Input voltage: 10-15V

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1

SOLID STATE AREA LIGHTING

DSAP SERIES-PLED

PROJECT NAME:

FIXTURE TYPE:

FEATURES

Luminaire
Upper housing is heavy gauge cast aluminum (min. .125" wall; alloy >0.2% Cu for DSAP25) or spun aluminum with reveal (.125" min. wall for DSAP20). Lower housing is 0.080" thick spun aluminum with integrated LED module seat. Lower housing is vented at top and bottom for convective cooling of LED module. Top Driver chamber is barriered from LED Module chamber. Trulevel ball coupling mount is welded to housing and facilitates quick leveling and installation.

PLED™ Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED Emitters
High output LED's are utilized with drive currents ranging from 350mA to 875mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED Driver
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50.60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field installation.)

Amber LED's
PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

Finish
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.



DSAP25

Patent pending



DSAP20

(Formerly DSAP1)

Patent pending

U.S. Pole Co Inc. | 600 West Avenue O, Palmdale, CA 93551 Phone (661) 233-3000 Fax (661) 233-3001 www.USPOLE.com

2021090

U.S. ARCHITECTURAL LIGHTING

2

Trans Globe Lighting

51401 BK



Wall Lantern

Width (in): 8

Height (in): 14.875

Depth (in): 9.125

Glass Type: Frosted

Bulb Type: Medium Base (E26)

Number of Bulbs: 1

Wattage: 60

Finish Shown: Black (BK)

Available Finishes: Black (BK)

UL Listed: Wet

Country of Origin: China

Material: Metal, Glass, Electrical

E11A19D927/JA8S



Order# 105481

FIND A REP

ADD TO QUOTE

DOWNLOADS

PERFORMANCE

Watts (W)	11
Voltage (V)	120
Delivered Lumens (lm)	1100
Efficacy (lm/W)	100
Color Rendering Index (CRI)	≥90
Color Temperature (K)	2700
Beam Angle	220
Power Factor	0.90
Min. Ambient Temp (°F)	-4
Max. Ambient Temp (°F)	104

LISTINGS

Energy Star®	Y
Title 20	Y

Job Name:	Job Type:	Contact:
Fixture Location:	Quantity:	Additional Notes:

Shipping Box	Width	Height	Depth	Ship Wt	Method	Oversize	Case QTY
Ship QTY: 1 ea					Ground	No	
UPC: by finish		Finish:		Warranty: 1 year limited parts, repair, and replacement			

28104 Witherspoon Pkwy | Valencia, CA 91355
TEL (818) 768-5511 | FAX (818) 768-2326
www.tglighting.com

3

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COMSTOCK PLACE
WHITTIER, CA # 2023-0840

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Suite D-4-197
Ladera Ranch, CA 92694

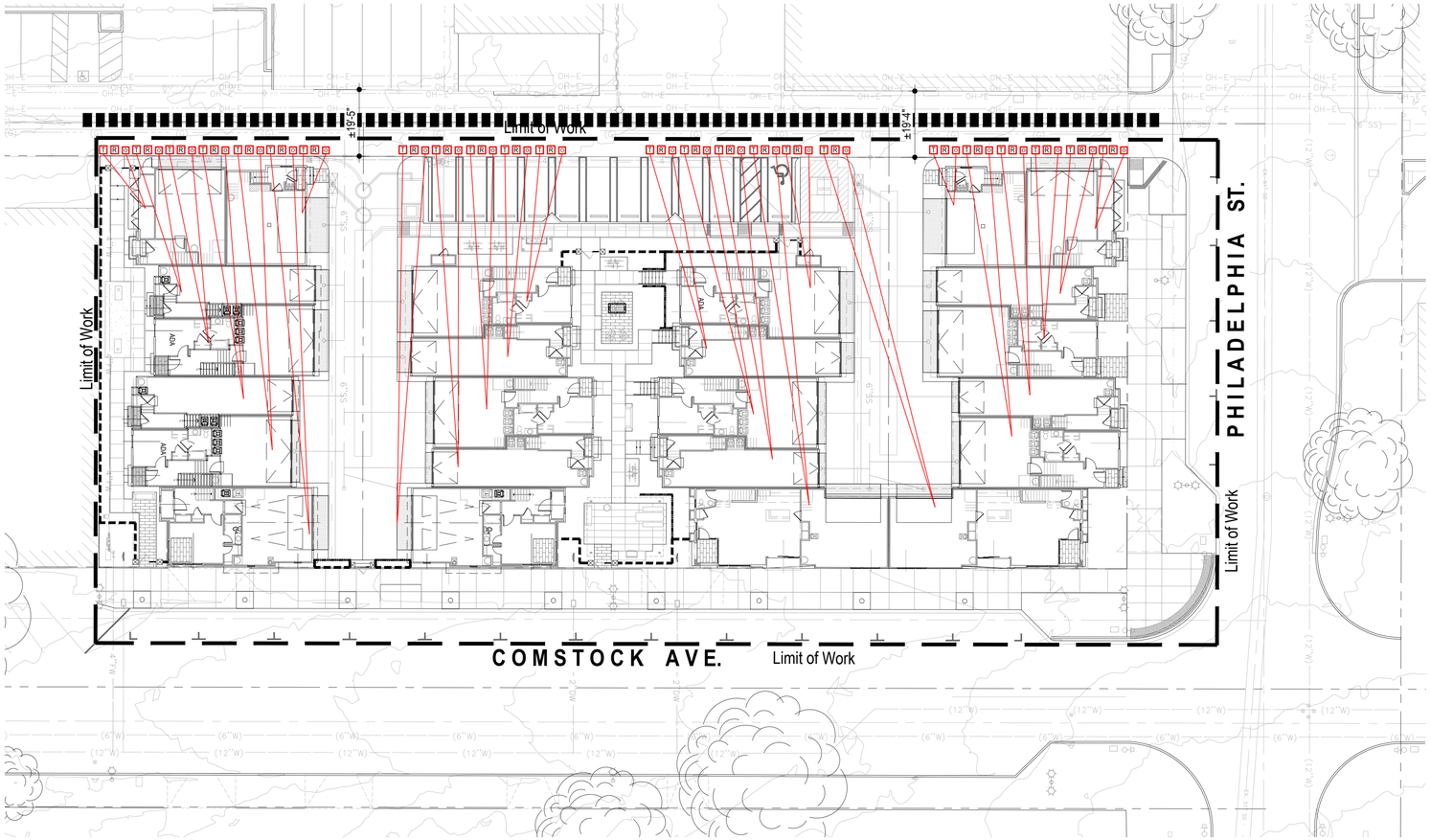
studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

0 10' 20' 40'
Scale: 1" = 20'

Schematic Lighting Specification & Cut Sheets

L-7B



LEGEND

- Regular trash bin.
- Recycle bin.
- Organic waste bin.
- Trash hauler path of travel.

*Trash bin / cart container sizes per local Whittier / Athens Trash Service specifications (https://athensservices.com/).

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

MW INVESTMENT GROUP

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD

0 10' 20' 40'
Scale: 1" = 20'

Project No.: MJW10-D
Date: Sept. 20, 2024

Schematic Trash Bin Layout & Hauler Circulation Plan

VESTING TENTATIVE TRACT MAP NO. 84431

FOR CONDOMINIUM PURPOSES

IN THE CITY OF WHITTIER, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF WHITTIER IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1:
LOTS 7, 8, 9 AND 10 OF NICHOL'S SUBDIVISION, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 31 PAGE 81 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.EXCEPT THEREFROM THE INTEREST CONVEYED TO THE CITY OF WHITTIER OVER THE EAST 20 FEET OF LOT 7, BY DEED RECORDED IN BOOK 3404 PAGE 367, OFFICIAL RECORDS.

PARCEL 2:
LOTS 11 AND 12 OF NICHOLS SUBDIVISION, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 31 PAGE 81 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 3:
LOT 3 IN BLOCK 22, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 21 PAGES 55 AND 56 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.EXCEPT THE EAST 20 FEET THEREOF, AS DEEDED TO THE CITY OF WHITTIER FOR STREET PURPOSES BY DEED RECORDED IN BOOK 4050 PAGE 187 OFFICIAL RECORDS.

PARCEL 4:
THE NORTH 15 FEET OF LOT 4 IN BLOCK 22 OF TOWNSITE OF WHITTIER, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 21 PAGES 55 AND 56 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.EXCEPT THE 20 FEET THEREOF, AS DEEDED TO THE CITY OF WHITTIER FOR STREET PURPOSES BY DEED RECORDED IN BOOK 3150 PAGE 399 OFFICIAL RECORDS.

PARCEL 5
THE SOUTHERLY 35 FEET OF LOT 4 AND ALL OF LOT 5 IN BLOCK 22 OF WHITTIER, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 21 PAGES 55 AND 56 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.
EXCEPT THE 20 FEET THEREOF, AS DEEDED TO THE CITY OF WHITTIER FOR STREET PURPOSES BY DEED RECORDED IN BOOK 3150 PAGE 399 OFFICIAL RECORDS.

PARCEL 6:
LOT 6 IN BLOCK 22 OF WHITTIER, IN THE CITY OF WHITTIER, AS PER MAP RECORDED IN BOOK 21 PAGES 55 AND 56 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF
SAID COUNTY.EXCEPT THE EASTERLY 20 FEET THEREOF CONVEYED TO THE CITY OF WHITTIER FOR STREET PURPOSES.

APN: 8139-024-027

SITE ADDRESS:

12826 PHILADELPHIA STREET
WHITTIER, CA 90601

VESTED OWNER:

BEVERLY PROFESSIONAL COMPANY, LLC

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING NORTH 60°20'17" EAST BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, CSRC, CONTINUOUSLY OPERATING REFERENCE STATIONS, CORS, "BKMS" AND "RHCG".

DATUM STATEMENT:

ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 5, (2017.50 EPOCH), IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A COMBINATION SCALE FACTOR OF 1.000002377 WAS USED FOR THIS PROJECT AT NORTHING 1814491.611, EASTING 6550035.407. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BENCHMARK STATEMENT:

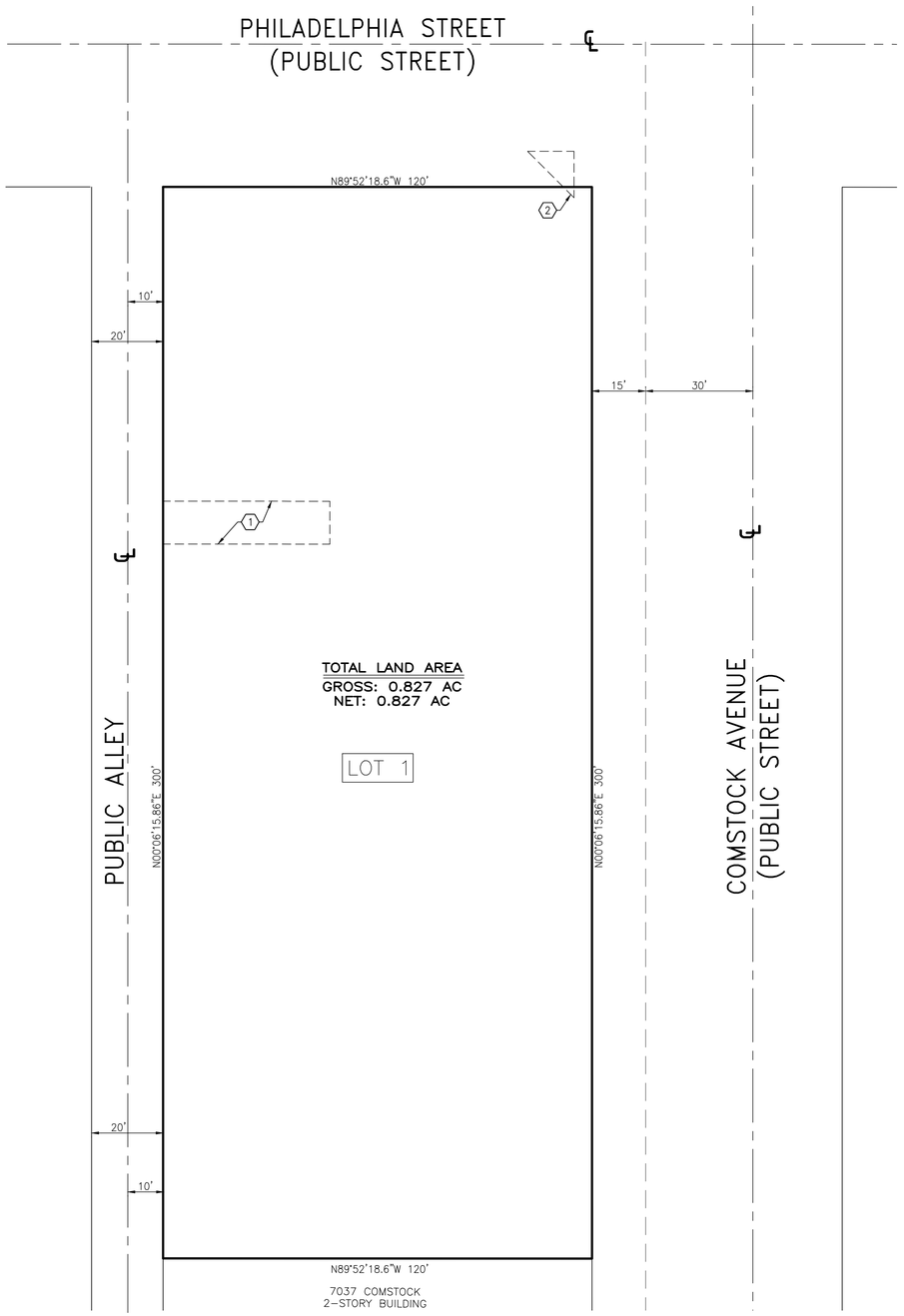
LOS ANGELES COUNTY BENCHMARK NO. SY6631
ELEV: 231.721' (NAVD88)
DESCRIBED AS: RDBM TAG IN NLY CB (SERV RD) WHITTIER BLVD 125FT W/O C/L @ OR NR C/L PROD PENN ST

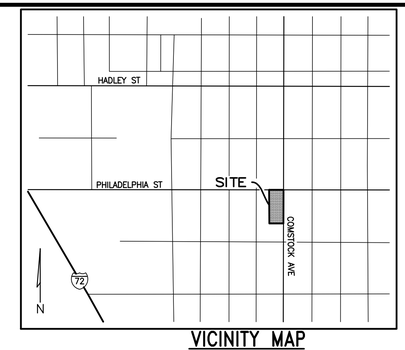
FLOOD NOTE:

THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X (UNSHADED), CONSIDERED TO BE AN AREA OF MINIMAL FLOOD HAZARD AND AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP NO. 06036C1835F, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

LAND USE SUMMARY:

GROSS AREA: 0.827 AC
NET AREA: 0.827 AC
TOTAL PROPOSED PARCELS: 1
TOTAL PROPOSED DWELLING UNITS: 24





VICINITY MAP
NTS

CIVIL ENGINEER:

C&V CONSULTING, INC.
9860 IRVINE CENTER DRIVE, CA 92630
T (949) 916-3800

SUBDIVIDER:

MW INVESTING GROUP, LLC
27702 CROWN VALLEY PARKWAY,
STE. D-4-197
LADERA RANCH, CA 92694
T: (626) 710-6377
CONTACT: MATT WAKEN

SHEET INDEX:

1 VESTING TENTATIVE TRACT MAP
2 PRELIMINARY GRADING & DRAINAGE PLAN
3 PRELIMINARY UTILITY PLAN
4 PRELIMINARY FIRE ACCESS & HYDRANT LOCATION PLAN

UTILITY PURVEYORS

ELECTRICITY:
SOUTHERN CALIFORNIA EDISON
PH. (800) 655-4555

TELEPHONE:
AT&T
PH. (800) 255-5288

SEWER:
LA COUNTY SANITATION DISTRICTS
1955 WORKMAN MILL ROAD
WHITTIER, CA 90601
PH. (562) 908-4288

LA COUNTY DEPT. OF PUBLIC WORKS
SEWER MAINTENANCE DIVISION
900S. FREMONT AVE.
ALHAMBRA, CA 91803
(626) 458-5100

GAS:
THE SOUTHERN CALIFORNIA GAS COMPANY
PH. (800) 427-2200

WATER:
CITY OF WHITTIER WATER UTILITY
13230 PENN STREET
WHITTIER, CA 90602
PH. (562) 567-9200

FIRE PROTECTION AGENCY:
LOS ANGELES COUNTY FIRE AUTHORITY
1320 N. EASTERN AVE.
LOS ANGELES, CA 90063
PH. (323) 881-2411

CABLE TV:
TIME WARNER CABLE
PH. (800) 861-9941

EXISTING EASEMENTS:

(#) DENOTES PLOTTED ITEM.

(1) AN EASEMENT FOR INGRESS AND EGRESS TO THE ADJACENT PROPERTY AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED IN BOOK 1839 OF DEEDS, PAGE 285.
(TO BE QUITCLAIMED)

(2) AN EASEMENT FOR STREET AND HIGHWAY AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED MAY 02, 1974 AS INSTRUMENT NO. 3648 OF OFFICIAL RECORDS.

NOTE:
1) PURSUANT TO SUBDIVISION MAP ACT SECTION 66456.1(a), MULTIPLE FINAL MAPS MAY BE FILED ON THIS TENTATIVE MAP.

LEGEND:

——— ℄ ———	CENTERLINE
———	SUBDIVISION BOUNDARY
- - - - - - - - - -	EASEMENT
— — — — —	EX. LOT LINE
———	EX. R/W

1" = 20'
0 10 20 40

SURVEYOR'S STATEMENT:

THE SURVEY ON WHICH THIS VESTING TENTATIVE MAP IS BASED WAS DONE BY ME, OR UNDER MY DIRECTION. FIELDWORK WAS COMPLETED ON JANUARY 10, 2024.

DANE P. MCDOUGALL, L.S. 9297

ENGINEER'S STATEMENT:

THIS VESTING TENTATIVE MAP WAS PREPARED BY ME, OR UNDER MY DIRECTION ON JULY 16, 2024.

DANE P. MCDOUGALL, R.C.E. 80705

PREPARED FOR:
MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY,
STE. D-4-197
LADERA RANCH, CA 92694
(626) 710-6377
MW INVESTMENT GROUP

PREPARED BY:
C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9860 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3500
INFO@CVC-INC.NET
WWW.CVC-INC.NET

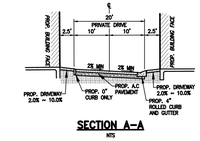
CITY OF WHITTIER
DEPARTMENT OF PLANNING AND DEVELOPMENT

VESTING TENTATIVE TRACT MAP NO. 84431
VESTING TENTATIVE TRACT
12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA 90601

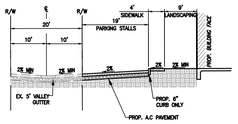
PROJECT NO.
MWIG-006

SHEET 1 OF 4

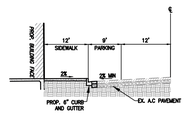
PLAN SET: PCM
DATE: 9/23/2024
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BY: ANGEL OZAMO



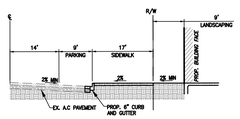
SECTION A–A
NTS



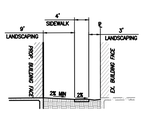
SECTION B–B
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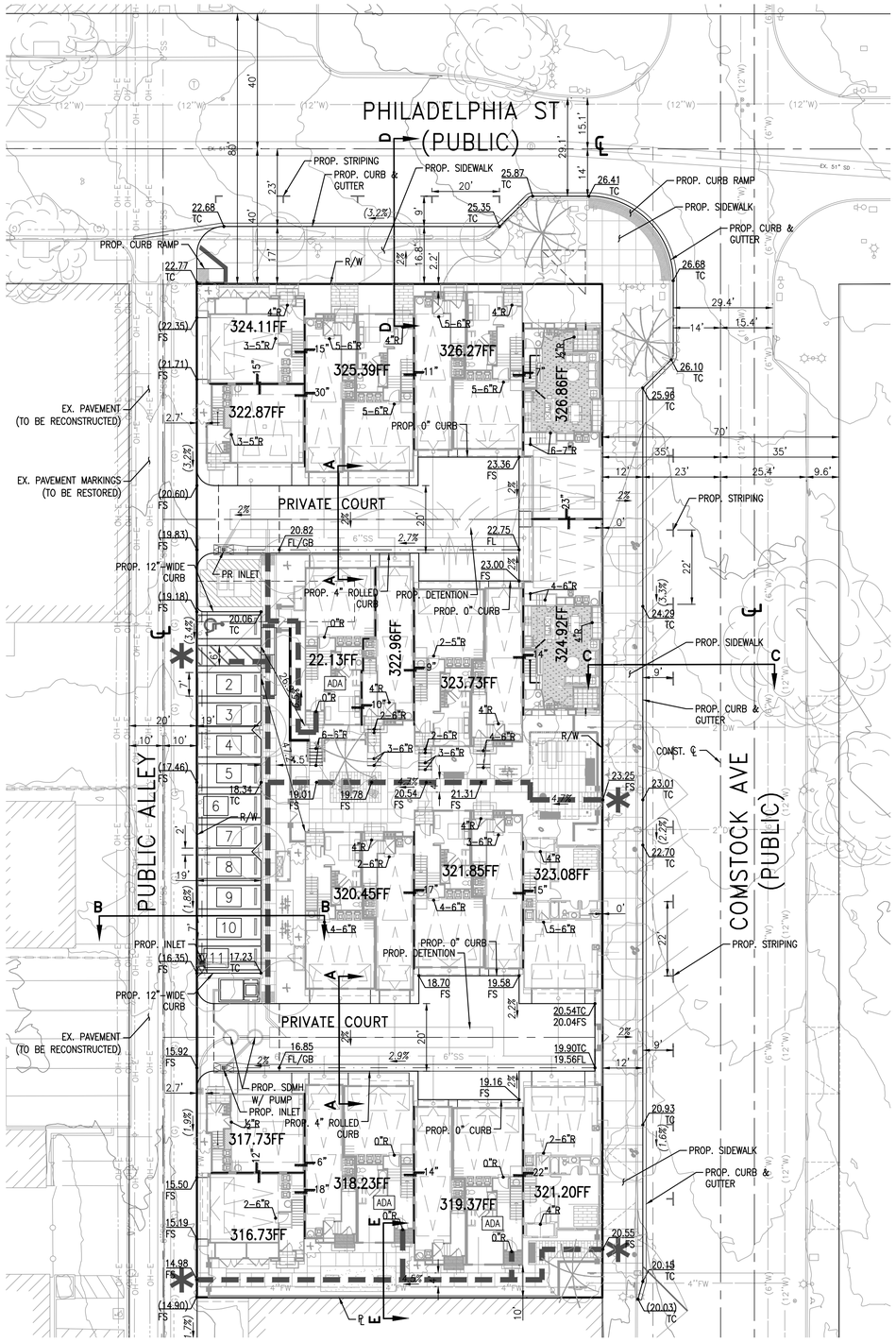
SECTION C–C
NTS



SECTION D–D
NTS



SECTION E–E
NTS



	UNITS	MIN. # OF SPACES PER UNIT	SPACE REQ.	GARAGE SPACE PROV.
PLAN 1 – 2 BR	2	2	4	4
PLAN 2 – 3 BR	2	2.5	5	4
PLAN 3 – 2 BR	8	2	16	16
PLAN 4 – 3 BR	8	2.5	20	16
PLAN 5 – 4 BR	2	2.5	5	4
PLAN 6 – 4 BR	2	2.5	5	4
TOTAL	24		55	48
STALLS REQ. (GUEST +0.25/UNIT)	61			
GARAGE PARKING STALLS PROVIDED	48			
SURFACE PARKING PROVIDED	11			

NOTE: ALL PARKING STALLS SHALL BE DOUBLE STRIPED PER CITY STD.

	UNITS	MIN. # OF SPACES PER UNIT	SPACE REQ.	GARAGE SPACE PROV.
PLAN 1 – 2 BR	2	2	4	4
PLAN 2 – 3 BR	2	2.25	4.5	4
PLAN 3 – 2 BR	8	2	16	16
PLAN 4 – 3 BR	8	2.25	18	16
PLAN 5 – 4 BR	2	2.25	4.5	8
PLAN 6 – 4 BR	2	2.25	4.5	8
TOTAL	24		51.5	48
STALLS REQ.(+1 GUEST/4 UNITS)	57.5			
GARAGE PARKING STALLS PROVIDED	48			
SURFACE PARKING PROVIDED	11			

LEGEND:

ADA UNIT — ADA

ADA PATH — – – –

FRONT DOOR — ●

OPEN PARKING — 12

ADA CONNECTION TO PUBLIC R/W — *

1" = 20'

0 10 20 40

PREPARED FOR:

MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, STE. F-4 197
LADERA RANCH, CA 92694
(626) 710-6377

MW INVESTMENT GROUP

PREPARED BY:

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3500
INFO@CVC-INC.NET
WWW.CVC-INC.NET

PROFESSIONAL ENGINEER
DANE McDOUGALL
C 80705
CIVIL
CALIFORNIA

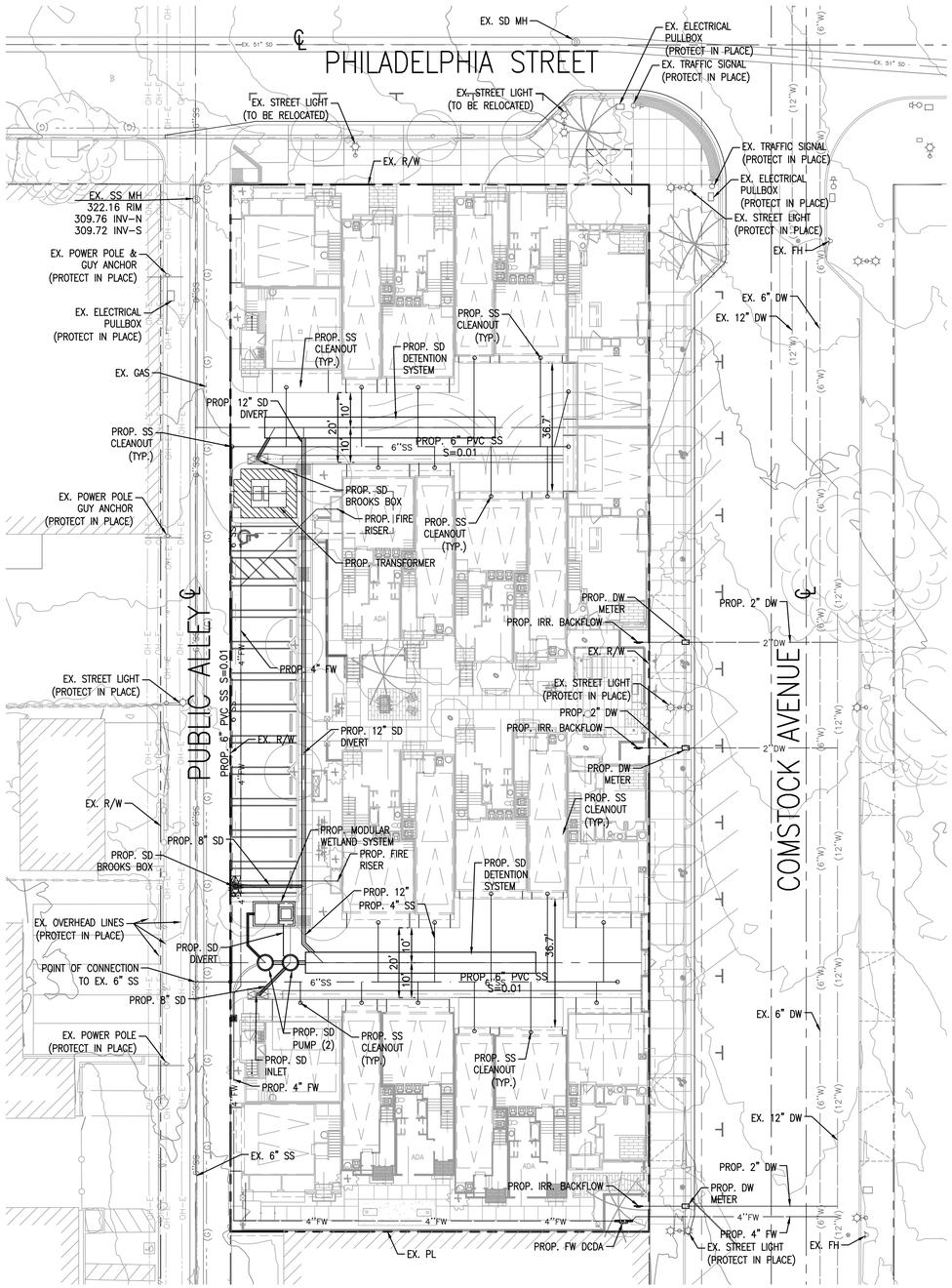
CITY OF WHITTIER
DEPARTMENT OF PLANNING AND DEVELOPMENT

VESTING TENTATIVE TRACT MAP NO. 84431
PRELIMINARY GRADING & DRAINAGE PLAN
12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA 90601

PROJECT NO.
MWIG-006

SHEET
2
OF
4

PLAN SET: PSD4
DATE: 9/23/2024
J:\PLANS\--DGN\MWIG\SHEETS\TVTM-PP-1S1-GRDNG.DWG
BY: ANGEL CISNEROS



ABBRIVIATION:

DW	DOMESTIC WATER
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
EX.	EXISTING
FW	FIRE WATER
IRR	IRRIGATION
PROP.	PROPOSED
PL	PROPERTY LINE
SD	STORM DRAIN
SS	SANITARY SEWER
TYP.	TYPICAL

1" = 20'

0 10 20 40

PREPARED FOR:

MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, STE. J-147
LADERA RANCH, CA 92694
(626) 710-6377

MW INVESTMENT GROUP

PREPARED BY:

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9630 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3500
INFO@CVC-INC.NET
WWW.CVC-INC.NET

PROFESSIONAL ENGINEER * REGISTERED * CIVIL * STATE OF CALIFORNIA
MCDOUGALL
DATE: C 80705

CITY OF WHITTIER
DEPARTMENT OF PLANNING AND DEVELOPMENT

VESTING TENTATIVE TRACT MAP NO. 84431

PRELIMINARY UTILITY PLAN

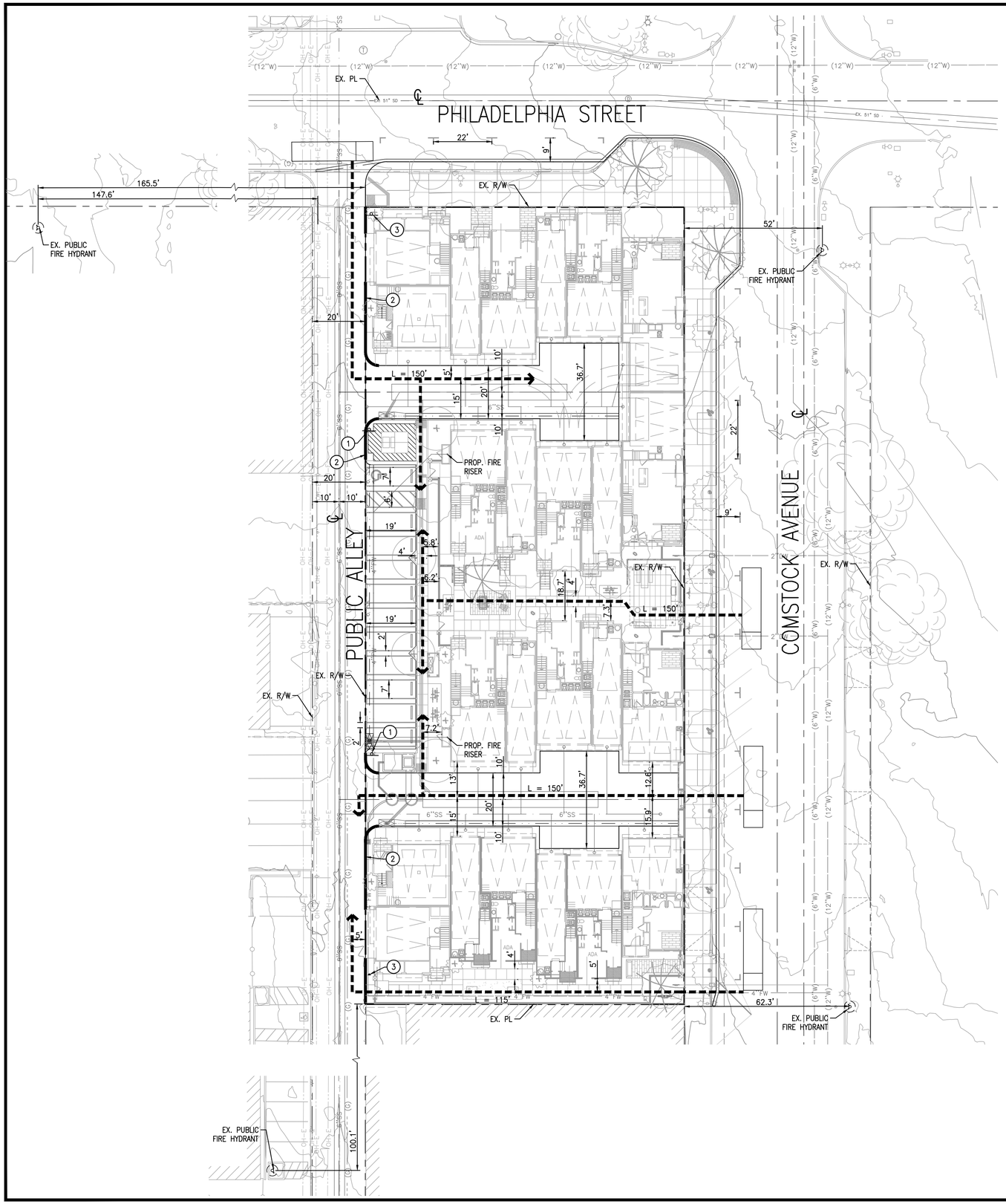
12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA 90601

PROJECT NO.
MWIG-006

SHEET
3
OF
4

PLAN SET: PCM
DATE: 9/23/2024

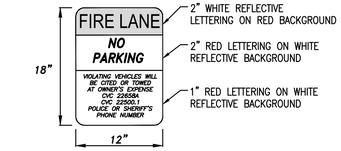
J:\PUBWRC-SOUV\MWIG\SHEETS\TM\TM-PP-03-UTILITY.DWG
Plotted: 23 Sep 2024 - 8:47am By: ANGEL CISNEROS



LEGEND

- EXISTING STREET LIGHT
- EXISTING FIRE HYDRANT
- FIRE TRUCK
- HOSE PULL
- EX. PROPERTY LINE
- EX. RIGHT OF WAY
- RED CURB STRIPING

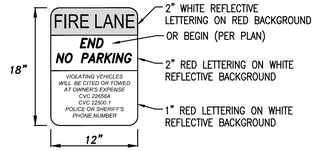
FH	FIRE HYDRANT
PROP.	PROPOSED
EX	EXISTING
PL	PROPERTY LINE
R/W	RIGHT OF WAY
TYP.	TYPICAL



ALL SIGN AND LETTERING DIMENSIONS ARE MINIMUMS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL.

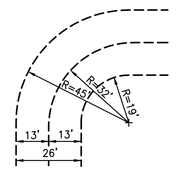
1 NO PARKING SIGN
NOT TO SCALE



ALL SIGN AND LETTERING DIMENSIONS ARE MINIMUMS.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL.

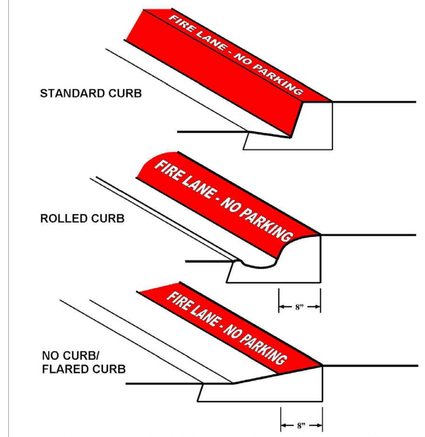
3 BEGIN & END NO PARKING SIGN OR BEGIN (PER PLAN)
NOT TO SCALE



FIRE LANE TURNING RADIUS TYPICAL DETAIL
NOT TO SCALE

ATTACHMENT 9

Fire Lane Identification – Red Curbs



1. Fire lane entrance sign(s) shall also be provided per Attachment 10 or 11.
2. Curbs shall be painted OSHA safety red.
3. "FIRE LANE – NO PARKING" shall be painted on top of curb in 3" white lettering at a spacing of 30' on center or portion thereof.

1. CURBS SHALL BE PAINTED RED
2. "FIRE LANE – NO PARKING" SHALL BE PAINTED ON TOP OF CURB IN 3' WHITE LETTERING AT A SPACING OF 30' ON CENTER OR PORTION THEREOF.

2 RED CURB PAVEMENT MARKING
NOT TO SCALE

CONSTRUCTION NOTES:

1. INSTALL "FIRE LANE" SIGN PER DETAIL 1 HEREON.
2. FIRE LANE IDENTIFICATION–RED CURBS PER DETAIL 2 HEREON.
3. INSTALL "FIRE LANE" SIGN BEGIN OR END PER DETAIL 3 HEREON.

PROJECT GENERAL NOTES:

1. ALL FIRE ACCESS LANES MEET LACoFD MINIMUM REQUIREMENTS 18' & 46' RADII.
2. THIS PROJECT DOES NOT HAVE ANY FUEL MODIFICATION OR WILD LAND EXPOSURES AND IS NOT IN A VERY HIGH FIRE HAZARD ZONE.
3. THIS PROJECT IS DESIGNED IN CONFORMANCE WITH THE CBC, 2013 EDITION.
4. ALL FIRE ACCESS ROADS SHALL BE ALL WEATHER, MEET THE CRITERIA OF AN ALL WEATHER DRIVING SURFACE AND COMPLY WITH LACoFD GUIDELINE FOR FIRE APPARATUS ROADS.
5. LARGEST BUILDING SQ. FOOTAGE = 14,992 SQ. FT.
6. BUILDINGS ARE DESIGNATED TYPE–VB.
7. BUILDING OCCUPANCIES ARE R–2 FOR ATTACHED MULTI–FAMILY UNITS.
8. THE BUILDING HEIGHTS VARY BETWEEN 21'–8/12" TO 43'–3/12" MAX.
9. ALL R–2 BUILDINGS WILL BE SPRINKLERED PER NFPA–13.
10. BUILDING ADDRESS NUMBER SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL BE A MINIMUM 4 INCHES HIGH, 1 INCH WIDE WITH A 1/2 INCH STROKE. FOR BUILDINGS SET BACK MORE THAN 150 FEET FROM THE STREET, THE NUMBERS SHALL BE A MINIMUM 5 INCHES HIGH, 2 INCHES WIDE WITH A 1/2 INCH STROKE. FIRE CODE 908.4.4.
11. THE REQUIRED FIRE FLOW FOR PUBLIC FIRE HYDRANTS AT THIS LOCATION IS 3,250 GALLONS PER MINUTE, AT 20 PSI RESIDUAL PRESSURE, FOR A DURATION OF 3 HOURS OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND. FIRE CODE 507.3 AND APPENDIX B105.1.

1" = 20'
0 10 20 40

PREPARED FOR:
MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, STE. F-147
LADERA RANCH, CA 92694
(626) 710-6377
MW INVESTMENT GROUP

PREPARED BY:
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CIVIL ENGINEERING
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9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3500
INFO@CVC-INC.NET
WWW.CVC-INC.NET

REGISTERED PROFESSIONAL ENGINEER * MICHAEL J. MCDOUGALL * C 80705 * CIVIL * STATE OF CALIFORNIA

CITY OF WHITTIER
DEPARTMENT OF PLANNING AND DEVELOPMENT

VESTING TENTATIVE TRACT MAP NO. 84431
PRELIMINARY FIRE ACCESS & HYDRANT LOCATION
12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA 90601

PROJECT NO.
MWIG-006

SHEET
4
OF
4

PLAN SET: PCFA
DATE: 9/23/2024
F:\PJ\MWIG-006\DWG\SHEETS\TTM-FIG-04-FLOWC
BY: ANGEL ESTAMED

APPENDIX 2

UPTOWN WHITTIER SPECIFIC PLAN

Whittier, California

Approved: November 18, 2008

Amended: June 24, 2014





Moule & Polyzoides, Architects and Urbanists
For the City of Whittier, California

Planners and Architects

Moule & Polyzoides Architects and Urbanists
180 East California Boulevard
Pasadena, California 91105-3230

Stefanos Polyzoides, Principal
Aseem Inam, Project Manager
Anthony Perez
Xiaojian He
Jason Claypool
Fannie Rodriguez
Francisco Arias
Jim Kumon
Terrence Chew

David Day, Architect
Bill Dennis, Architect
Mark Gangi, Architect
Juan Pablo Rosales, Architect

Codes and Environmental Impact Report

Crawford Multari & Clark Associates
641 Higuera Street, Suite 302
San Luis Obispo, California 93401

Paul Crawford, Principal
Chris William Clark, Principal
Nicole Carter, Associate

Economics

Economic Research Associates
10990 Wilshire Boulevard, Suite 1500
Los Angeles, California 90024

David Bergman, Principal
Amitabh Barthakur, Senior Associate

Retail

Gibbs Planning Group
330 East Maple Street, No. 310
Birmingham, Michigan 48009

Bob Gibbs, Principal

Landscape

Fong Hart Schneider + Partners
930 West 16th Street, Suite A-2
Costa Mesa, California 92627-4337

David Schneider, Partner

Parking and Transportation

TND Engineering
430 Richards Avenue
Portsmouth, New Hampshire 03801

Rick Chellman, Principal

Historic Resources

Historic Resources Group
1728 Whitley Avenue
Hollywood, California 90028-4809

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Planning Commission recommendation to City Council: July 24, 2008

Date of Adoption: November 18, 2008

City Council Resolution: No. 8165





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Uptown is the historic retail core of the City of Whittier. The Uptown Specific Plan area covers approximately 185 acres and 35 city blocks, with each block measuring about 300 feet by 600 feet. The Specific Plan is based on two fundamental sets of principles. One is an in-depth understanding of the area derived from photographic documentation, analytical diagrams, economic and demographic analysis, public outreach and stakeholder interviews, study sessions with city staff and elected officials, and a week-long public design charrette. The second set of principles is for healthy and livable town center design, including pedestrian orientation, mix of land uses, infill development, interconnected street system, quality of public realm, distinct character, housing choice, and smart transportation and parking.

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The illustrative plan visualizes the possible build-out scenario of Uptown in 20 years, and integrates the priorities identified in the analytical portion of the planning process. The Plan also leverages Uptown's assets, including numerous historic structures and a highly walkable environment, into six catalytic strategies for its redevelopment into the jewel of Whittier. The strategies are: strengthening existing retail and introducing new national-brand retail, an efficient shared parking system, an increase in housing choice, especially ownership types, transforming churches and their properties into catalysts for affordable housing and mixed use development, economic and social partnerships with Whittier College, and developing a distinct sense of identity through high design standards for development, improved landscaping, and increased sense of safety with the presence of a vibrant resident population.



Aerial photograph of Uptown and surrounding neighborhoods



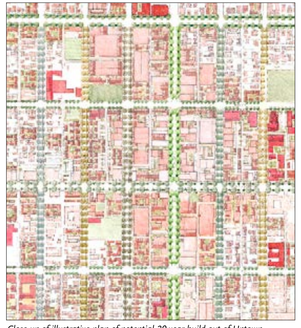
Historic image of Greenleaf and Philadelphia intersection



Presentation on final day of public design charrette



Outdoor eating on a paseo off Greenleaf Avenue



Close-up of illustrative plan of potential 20-year build out of Uptown



Courtyard housing and park option on Bailey at Comstock

CHAPTER 3: IMPLEMENTATION	Page
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The Plan proposes a development strategy driven by private investors and public support. Plan-wide policies of the City of Whittier focus on historic preservation, retail and employment, shared parking, the public realm, affordable housing, civic initiatives, and specific plan-implementation initiatives such as fast-tracking desirable development and recruiting and/or training city planning staff in design expertise. Private sector development will be driven by residential, retail, and commercial market demand, and by the attraction of public improvements, streamlined entitlement processes, and Uptown's unique and desirable character within the southern California region.

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The form-based code regulates development over time to produce a town center of high design quality based on historic character, a desirable public realm, and zones of varying development intensities, ranging from the Uptown Core zone to the Uptown Edge zone. A wide range of building types—from single family dwellings to mixed-use and commercial buildings—populate each zone according to existing geographies and desired urban forms. The Code is lavishly illustrated with examples of plans, axonometric drawings, and photographs in order to serve as a proactive guide to high standards for future development.

APPENDIX	Page
A.1 Analytical Diagrams	A:1 - A:7

A sample of the extensive set of analytical diagrams utilized to understand the Uptown area includes local context, reverse figure-field, topography, civic, institutional, and places of worship, districts and boundaries, churches and church-owned properties, parking network, and town comparisons. The analytical diagrams constituted the vital first step of documenting, analyzing, and identifying priorities for the Uptown Whittier Specific Plan area.

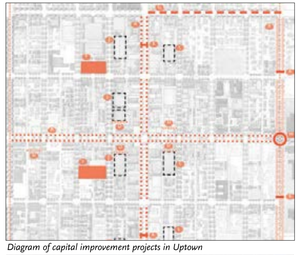


Diagram of capital improvement projects in Uptown



Example of street which requires minor modifications: Greenleaf Avenue



Regulating plan and development zones



Example of building type which is appropriate for Uptown



Existing figure-field diagram



Existing parking lots diagram



Existing civic and open spaces



Existing topography diagram

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LIST OF ORDINANCES/RESOLUTIONS AMENDING THE UPTOWN WHITTIER SPECIFIC PLAN

Ordinance/Resolution Number	Date of Adoption	Effective Date	Changes
Resolution No. 8631	6-24-14	6-24-14	Amendment to Table 4-1 Allowed Land Uses and Permit Requirements for the Uptown Zones

Uptown is the historic retail core of the city of Whittier. The Uptown Specific Plan area is bound by the northern edge of the north side of Hadley Street to the north, Painter Avenue to the east, Penn Street to the south, and Pickering Avenue to the west. The area covers approximately 185 acres and 35 city blocks, each block measuring about 300 feet by 600 feet.

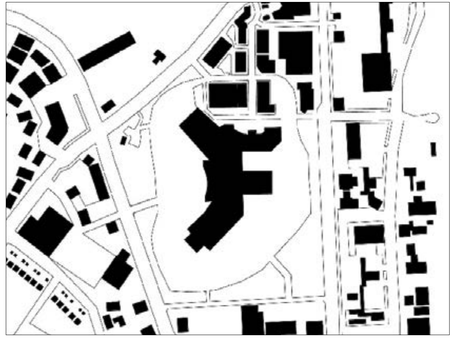
1.1.1 Purpose

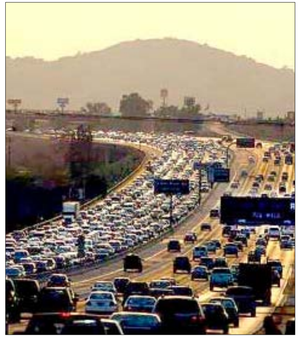
Uptown has the potential of becoming the jewel of Whittier: a source of pride for its citizens, a sense of identity from its historic roots, and a place of great character and attraction due to its unique urban form and diversity of activities. Uptown possesses a number of valuable assets. First, it is highly walkable due to its compact size, mix of land uses, and relatively small scale of its buildings and streets. Second, its filled with numerous locally-owned stores, restaurants and services. Third, it contains or is in close proximity to many churches and civic institutions which serve as anchors of the community. And fourth, Uptown is known for a number of historic buildings and houses which have been restored and are in active use. The goal of the Uptown Whittier Specific Plan is to leverage these assets, and shape the area into a destination and urban experience. In order to achieve this goal, the Specific Plan is guided by a number of principles for designing town centers, which stand in contrast to sprawl development.

1.1.2 Conventional Sprawl Development

Sprawl development is characterized by homogeneous, single-use zones, with the housing tract, shopping center and the business park as its basic elements. These segregated use-areas are connected by a discontinuous system of wide thoroughfares designed for the rapid movement of cars. Within such a homogeneous urban structure, dull and repetitive buildings are typically designed without any particular obligation to define a realm of public space. The vast majority of such places designed since the 1940s are architecturally undistinguished and urbanistically destructive, as they eliminate the local, historic landscape while generating a generic and inferior fabric of buildings.

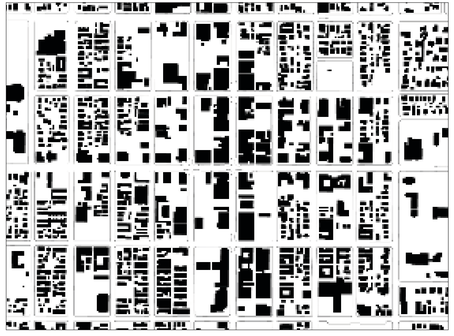
This kind of bleak development pattern can be observed all over California. The walled tracts, the excessively wide streets, McMansions, ugly strip retail development, the absence of sidewalks on streets, cul de sacs, three-car garage houses with invisible front doors, are all symptoms of the dominance of sprawl thinking in contemporary development practice. It is time to reverse both the physical patterns and the social and economic consequences of sprawl by returning to a pattern of community development based on the traditional American ideas of the neighborhood, the district and the corridor.





Left: The post World War II automobile-oriented environment of large highways and long commutes has led to fragmented and generic patterns of urban development. Due to these patterns, residents have to increasingly rely upon their vehicles and travel often unreasonable distances to live, work, shop and play.

Far left: Retail centers built over the last 50 years are large, inhuman objects surrounded by a sea of surface parking.





Above: An example of the generic automobile-oriented environment, consisting of excessively wide roads and extremely similar houses dominated by large car garages in the front. Such residential developments discourage pedestrian activities and lack spaces for social gathering.

Left: Historic retail centers, such as Uptown, are pedestrian-friendly due to their compact size and dense fabric.

1.1.3 Principles of Uptown Whittier Specific Plan

New Urbanism promotes the creation and restoration of diverse, walkable, compact, vibrant, mixed-use communities composed of the same program components as conventional development, but assembled in a more integrated fashion, in the form of complete communities. These contain housing, work places, shops, entertainment, schools, parks, and civic facilities essential to the daily lives of the residents, all within easy walking distance of each other. New Urbanism is the revival of our lost art of place-making, and is essentially a re-ordering of the built environment into the form of complete cities, towns, villages, and neighborhoods—the way communities have been built for centuries in our country.

A. Principles of Town Center Design

1. Pedestrian Orientation

Compact size, human scale and multiple destinations within close proximity: Most daily uses should be with a 5 minute walk from home and work. Development that adheres to this principle will: locate buildings to define street edges and corners, enliven street frontages to enhance the pedestrian experience, and create memorable places for people.

2. Mix of Land Uses

Synergistic relationships between a variety of destinations and activities: Such diversity uses land efficiently, provides for neighborhood convenience and contributes to unique urban experiences. Development that adheres to this principle encourages a compatible mix of uses at the town center scale, and identifies opportunities for shared uses. This yields a mix of stores, offices, apartments, houses, and civic institutions within the area.

3. Infill Development

Effective use of existing land and infrastructure: Instead of spreading out, development fills in to create higher densities and a more vibrant center. More people within walking distance of many uses enables a more efficient use of services and resources, and creates a more convenient place to live and work.

4. Interconnected Street System

Multiple access points and routes: Places need to be easy to get to and integrated physically and visually with their surroundings. This requires attention to how to get around on foot, by bicycle, public transport and the car. Interconnected streets also help disperse traffic rather than concentrating it only on a few major arteries.

5. Quality of the Public Realm

An appealing place with attractive and successful outdoor areas: A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use. Public open space is designed as a series of outdoor rooms and a few special places are treated as civic art. The public realm serves as places of movement, gathering, and celebration.

6. Distinct Character

A place with its own distinct identity: Preservation and renewal of historic buildings, districts, and landscapes affirm the continuity and evolution of urban society. New development should enrich the quality of existing urban places. This means encouraging a distinctive response that arises from and complements its setting, including an emphasis on beauty, comfort, and creating a sense of place.

7. Housing Choice

Housing that fulfills both policy goals and market demand: Within the town center, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community. A variety of dwelling types—houses, bungalow courts, row houses, live/work units, lofts and apartments—ensure that younger and older people, singles and families, the moderate income and the wealthy may find places to live.

8. Smart Transportation and Parking

Choices and quality in modes of transportation: Streets are more than simply utilitarian channels for the movement of vehicles. They are also places for people with narrow widths and slow speeds, curbside parking, lined with trees, and parking lots and garages in the back. There is also a greater choice of modes of transportation, with an emphasis on the most affordable and least environmentally destructive ones: walking and bicycling, and public transit such as buses and vans.



Left: Uptown already possesses several elements crucial to smart transportation and parking, such as streets with trees, slow speeds, diagonal parking on the two primary retail streets of Greenleaf and Philadelphia, walkable sidewalks, and an interconnected street grid which allows multiple access points for vehicular traffic.



Left: Much of Uptown is pedestrian friendly with multiple civic, institutional and retail destinations with a 5-minute walk. The special paving for crosswalks on Greenleaf and Philadelphia, trees that provide shade and contribute to urban form, and buildings which orient themselves to entrances on the street (rather than to parking at the back) contribute significantly to the area's pedestrian orientation.

1.1.4 Process

A. Study of Previous Plans

In preparation for this Specific Plan, the consultants reviewed and incorporated, as applicable, the following documents:
Uptown Whittier Specific Plan, adopted 1989
Whittier General Plan, adopted 1993
City of Whittier Natural Hazards Mitigation Plan, adopted 2004
Whittier Boulevard Specific Plan, adopted 2005
Whittier Municipal Code, electronic version passed 2006

B. Field Tour: May 15, 2006

The consultant team facilitated a day-long tour of places and projects for stakeholders from Uptown Whittier. The purpose was to compare and contrast the potential of Uptown with these places, and to draw specific lessons about possible strategies to embrace as well as to avoid. The tour included the following places in southern California within driving distance of Whittier:

1. Downtown Fullerton
Downtown Fullerton is a center of culture and home to financial, religious, and government institutions, as well as 70 historic buildings, 2,500 parking spaces, 350,000 square feet of retail, and 275,000 square feet of retail. The regional transportation center serves 350,000 passengers per year.

2. Seven Fountains, West Hollywood
Seven Fountains is the first new building in 75 years in the urban courtyard housing tradition that has a distinguished history in the Los Angeles region. Housing units are organized around private gardens, public courtyards, and live/works spaces in a relatively dense, urban setting.

3. Moule & Polyzoides Architects and Urbanists office, Pasadena
A visit to the lead consultants' office including a presentation on the "Architecture of Density", and a discussion on housing types, density ranges, and architectural form.

4. Old Pasadena
Currently a thriving area, Old Pasadena was a depressed neighborhood 20 years ago. The turnaround was due to a combination of factors: a comprehensive, revenue-generating parking strategy, major investment in national-level retail, restoration and renovation of historic structures, and financing mechanisms for the operation and maintenance of the area.

5. Mission Meridian, South Pasadena
Sixty-seven condominiums, 5,000 square feet of retail space, and a bicycle storage facility are designed next to the Gold Line light rail station. Buildings of various types are arranged on the 1.65-acre site, including courtyard housing, single-family houses, duplexes, and mixed-use lofts.



The stakeholder interviews and public outreach meetings consisted of dialogue between the consultant team and citizens of Whittier. The discussions, mostly conducted in the Historic Train Depot, above, focused on documentation and analysis of Uptown, explaining the planning approach, and soliciting citizen concerns and desires with regard to the future of the Specific Plan area.



The Pre-Charrette Study Session was held in the presence of a packed audience in the City Council Chamber, above, of City Hall next to Uptown Whittier. After presenting findings from the field tour and public outreach, and principles for town center design, the consultant team answered questions and provided explanations about the strategy for the Specific Plan.



The consultant team was led by the City of Whittier's Director of Community Development on a walking tour of Uptown on the first day of the charrette.



The multidisciplinary team integrated multiple issues and concerns about Uptown into hand-drawn and computer-generated drawings, policy recommendations, and implementation strategies at the charrette.



An essential component of the charrette is the discussion between different experts such as those in landscape architecture, transportation engineering, architecture and urban planning which leads to an integrated approach in the Specific Plan.

C. Public Outreach: May 2006

The lead consultants, in collaboration with City of Whittier planning staff, conducted meetings with 112 individuals representing 34 stakeholders. The purpose was three-fold: to explain the planning process for Uptown Whittier, to solicit concerns, desires, and questions about major issues, and to initiate a longer dialogue between the planning team and the stakeholders. Representatives from the following stakeholder groups participated in the public outreach meetings.

Citizens of Whittier
Whittier City Council
City of Whittier Heads of Departments
Assistant City Manager
Community Development Director
Community Services Manager
Library Director
Parks Director
Police Chief
Public Works Director
Whittier Planning Commission
Whittier Design Review Board
Whittier Historic Resources Commission
Whittier Parking and Transportation Commission
Boys and Girls Club of Whittier
Developers, Property Owners and Brokers
First Christian Church
First Day
Presbyterian Intercommunity Hospital
Skills Foundation
St. Matthias Episcopal Church
Whittier Chamber of Commerce
Whittier City School District
Whittier Coalition
Whittier College
Whittier Conservancy
Whittier High School
Whittier High School Alumni Association
Whittier Historic Neighborhood Association
Whittier Union High School District
Whittier Uptown Association
YMCA of Greater Whittier

A number of critical issues emerged from the public outreach meetings and stakeholder interviews:
- Recognizing the assets of Uptown, and building upon the architectural traditions of Whittier
- A perceived lack of safety in Uptown, and enhancing the appearance of the public realm
- The crucial economic and symbolic role of the historic retail core of Whittier, while introducing a greater range of retail choices
- Inadequate public amenities, and improving utilities and street infrastructure
- A continuing demand for residential development, and the need for quality in design
- A concern about youth in the area, and strategies for integrating them into Uptown
- Creating a unique destination and rich urban experience. These issues were presented at the Pre-Charrette Study session for discussion and further input from stakeholders.

D. Pre-Charrette Study Session: May 25, 2006

The session presented findings of the field tour and public outreach, and New Urbanist principles for town center design as applicable to Uptown. The presentations were followed by a public discussion, including a question and answer session

E. Charrette: June 4 – 9, 2006

The consultant team and city staff organized an intense week-long design workshop in the heart of Uptown, at the Crystal Marquis Ballroom, from June 4th through 9th, 2006 to develop an integrated multidisciplinary design strategy for the Uptown Whittier Specific Plan. Participants included a team of architects, urban designers, planners, landscape architects, economists, retail consultants, and transportation engineers, with input from city staff, stakeholder groups, and citizens. The charrette is a forum to work on design together with political consensus in a short, focused manner rather than in a more drawn-out process that takes several months or more. Most crucially, the charrette served as a public format for discussion and debate about planning issues and strategies, and as a transparent decision making process.

Each day was a 12 – 14 hour work session devoted largely to drawing the plan by hand and on computers, creating a three-dimensional computer model of Uptown, testing ideas and strategies, and multidisciplinary collaboration on designing a Specific Plan. Highlights of each workday are noted below:

Sunday, June 4th:
- Set-up of charrette space, including furniture, computers, equipment, and posters displaying site analyses and major issues
- Walking tour of Uptown for consultant team
- Dinner and discussion with consultant team at local restaurant

Monday, June 5th:
- Introductions and consultant briefing with city staff
- Lunch time presentation and discussion: Retail Development

Tuesday, June 6th:
- Morning briefing with city staff
- Lunch time public presentation: Parking and Transportation
- Evening progress review: Retail strategies, historic preservation

Wednesday, June 7th:
- Morning briefing with city staff
- Lunch time public presentation: Zoning and Form-Based Codes
- Evening progress review

Thursday, June 8th:
- Morning briefing with city staff
- Lunch time presentation discussion: Finance and Implementation
- Evening progress review: Rough draft of Specific Plan proposals

Friday, June 9th:
- Morning briefing with city staff
- Afternoon open house: Public presentation and discussion of Specific Plan draft

Right: Lunch time presentations and discussions, such as this one on form-based codes, enabled city staff, leadership, and citizens to learn about different aspects of the Plan, such as retail, transportation, historic preservation, and finance and implementation.



Right: The final presentation was held in the same location as the rest of the charrette, the Crystal Marquis Ballroom, located in the heart of Uptown. The format of the presentation was an open house; that is, an overview presentation open to all, followed by question-and-answer sessions in small groups focused around specific issues and concerns. The products of the charrette were displayed on large boards for stakeholders and citizens to examine.



For decades, the City of Whittier has acknowledged and protected its historic resources, preserving the history written in the built environment. A detailed analysis of Uptown, along with the community charrette, reinforces this commitment to identify and reuse the City's historic assets and highlights the need for a planning strategy based on historic preservation, adaptive reuse, and compatible infill that respects the scale and architectural quality of the existing fabric.

Historic Uptown, characterized by residential districts clustered around a central commercial core, enjoys the pedestrian scale, intermixing of uses, and spatial connectivity that has come to be highly valued as an alternative to automobile-oriented sprawl. This historic pattern is as important to Uptown's special character as its individual resources or architectural features. Preserving and reinforcing the historic character and pedestrian nature of Uptown is fundamental to the success of its transformation.

Successful urban districts often generate appeal by seriously leveraging their historic resources, enabling new development to occur within a solid and recognizable framework. The historic pattern sets the foundation for compatible future development, blending new infill and historic rehabilitation. This requires clear and articulate guidance, as well as adherence to the Secretary of the Interior's standards for rehabilitation. These standards advocate that related new construction respect historic buildings and their character-defining features with compatibility in massing, size, scale and architectural detail. The goal is to protect the essential form and integrity of historic buildings and their environment while allowing for well-designed new development.

Title 18 'Zoning', Division IV 'Historic Resources' of the City of Whittier Municipal Code governs the preservation of historic resources. Chapter 18.84 'Historic Resources' specifies designation of historic landmarks and districts, certificate of appropriateness—economic hardship, Mills Act agreement, maintenance and demolition, and historic preservation. Chapter 18.87 and Chapter 18.88 describe the standards of the two historic districts within the Uptown Whittier Specific Plan area, the Hadley/Greenleaf Historic District, and the Central Park Historic District.

The Specific Plan recognizes that Whittier's considerable historic assets are a vital part of the future growth of Uptown by seeking to:

- Identify and evaluate historic assets to be consistent with definitions under California Environmental Quality Act (CEQA), existing surveys, and with Whittier's landmarks and district ordinances.
- Identify existing and potential districts which gives Uptown its historic and cultural character
- Adaptively reuse existing buildings
- Use existing buildings as catalysts for future development
- Plan for infill with appropriate size, scale, massing and design compatible with historic structures
- Use the existing historic built form to influence new buildings
- Use existing historic land use patterns to inform future decisions (e.g. civic, institutional, residential, and commercial)

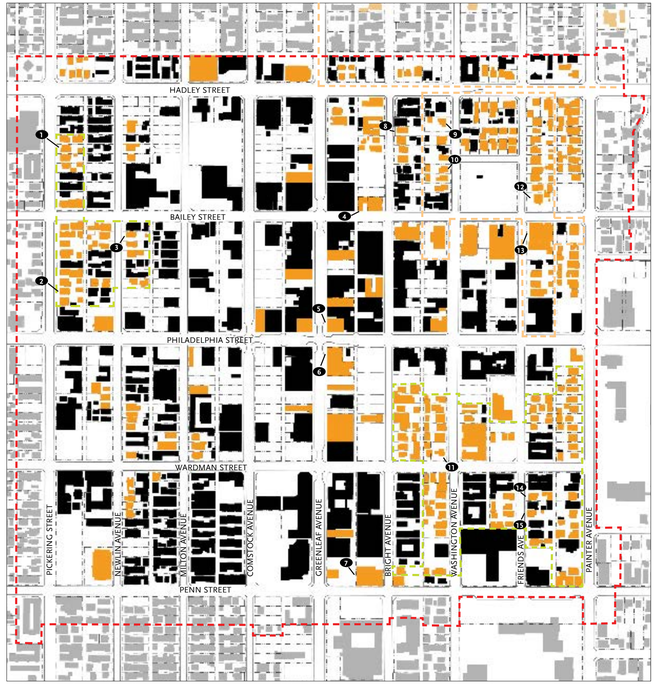
The three dimensional models and accompanying photographs on the following page illustrate the immense possibilities of using historic resources to guide a possible 20-year build out of Uptown.

Key

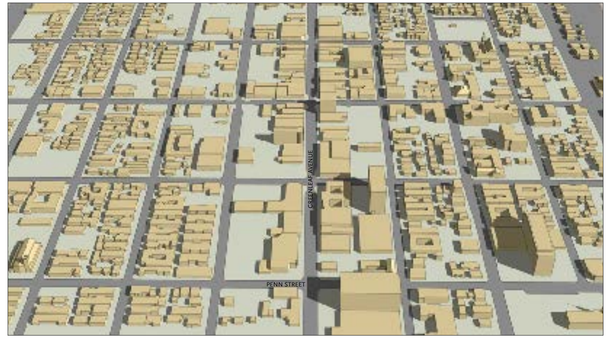
- Uptown Specific Plan Area Boundary
- Existing Historic District
- Proposed Historic District
- Historic Asset

Examples of Historic Architectural Styles

1. 6526 Pickering Avenue
2. 6736 Pickering Avenue
3. 6706 Newlin Avenue
4. Monterey Building
5. Bank Building
6. Bank of America (National Bank of Whittier)
7. Standard Oil Building
8. 6516 Bright Avenue
9. 6513 Washington Avenue
10. Charles House
11. 7055 Washington Avenue
12. 6554 Friends Avenue
13. Whittier Women's Club
14. 7212 Friends Avenue
15. 7222 Friends Avenue



Uptown has a wealth of historic properties, which are the communities major character defining features. These historic assets serve as the starting point for the design of the specific Plan.



Left: This computer model of Uptown looking north highlights opportunities for historically compatible infill. Strategic projects on a vacant lot, surface parking lots, and city owned property will act as a catalysts for future infill development.



Above: This aerial from 1925 illustrates Uptown Whittier near the peak of its historic development. The scale, placement and proportion of many properties within the core remain unchanged. This authentic pre-WWII pattern is remarkably rare in southern California and is a distinguishing characteristic of Whittier.

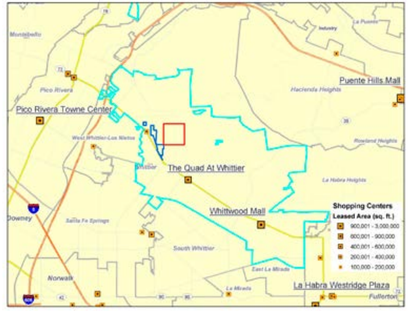


Left: The same view as above, with infill build-out indicated in the lighter colored buildings. The most intensive zone of development in terms of scale of buildings occurs along Greenleaf Avenue where the upper limits of the urban form are dictated by two historic buildings: the Beaux-Arts style former First National Bank and Bank of America building (1928), which is on the local official register of historic resources, and the Spanish Colonial Revival style Hoover Hotel (1929), whose 2001 renovation received several awards.



Philadelphia Street looking east in the 1930s.

Above: Philadelphia Street has historically been one of the major streets of Uptown, and the intersection with Greenleaf Avenue--marked by the former First National Bank and Bank of America building--has long been considered the heart of Uptown. The Specific Plan respects the historic nature of this pattern by concentrating the retail core around this intersection and specifying the highest intensity development along Philadelphia and Greenleaf.



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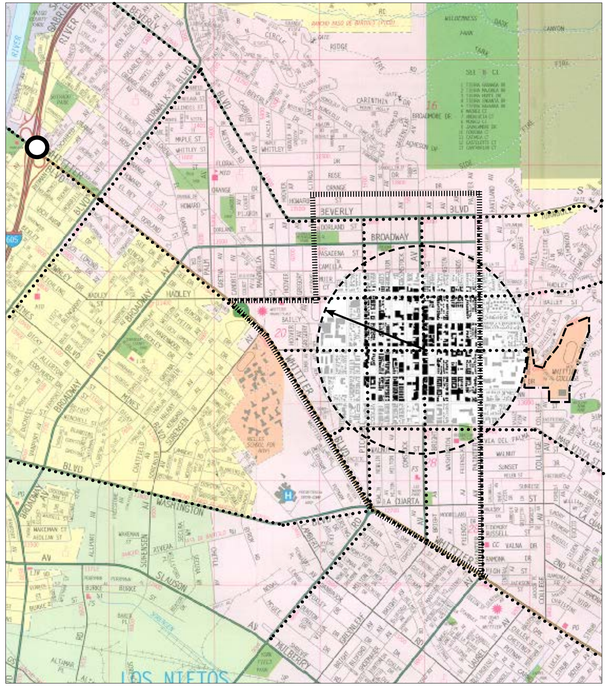
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Above: The table of projected regional growth estimated by the Southern California Association of Governments (SCAG). The calculations indicate that over the next 25 years, Uptown Whittier could very well capture over 1,200 new households as potential residents with an aggressive trajectory–such as the one embodied in this Specific Plan–and one which is reflected in a strong regional demand for housing. Uptown's potential for capturing this regional housing demand is particularly significant due to an increasing number of households who are rediscovering the benefits of a town center lifestyle.

Left, top: A regional map of the retail centers surrounding Uptown Whittier, shown in red in the center. Uptown's comparative advantage is two-fold: an authentic 100-year old history, and a unique urban experience. Uptown's many historic buildings, some of which have been restored and renovated, lends a genuine character to its fabric. Similarly, Uptown constitutes an attractive urban experience thanks to its compact size, walkable systems of blocks and streets, and relatively dense fabric–all of which is being rediscovered by consumers weary of generic, automobile-oriented retail centers. At present, the retail in Uptown is vastly under-performing, but has the potential to improve with the introduction of national brand anchor retail, strengthening of existing local retail, and public improvements.

Right: As this regional location map indicates, Uptown Whittier possesses both advantages and disadvantages in the context. Among its many advantages is its location in close proximity to the heart of a global metropolitan region, downtown Los Angeles, and its proximity to major regional access points such as interstate highway 605 and Whittier Boulevard. At the same time, Uptown requires a greater visual and physical presence on the arteries, for example, by announcing a 'gateway' off Whittier Boulevard via development which follows Uptown character: historically sensitive, denser than surrounding development, and with an urban orientation that fronts on to the street and creates a pedestrian-friendly environment.



Key

- Freeway Entry Points
- Local Arterials or Connectors
- Original Whittier Township
- Area of Influence
- City of Whittier
- Uptown Whittier Specific Plan Area

1.4 LOCAL CONDITIONS

The Uptown Specific Plan area consists of approximately 185 acres and 35 city blocks in the historic retail core of Whittier. The area encompasses the Central Park Historic District and includes part of the Hadley Greenleaf Historic District. The Central Park Historic District contains 6 properties on the local register of historic places, but Uptown on the whole contains many more historic structures, as the diagram on page 1:5 indicates. Buildings in Uptown range from 1-story single family houses to mid-rise multistory buildings. A number of streets in Uptown are heavily traveled by vehicles, including those running north-south: Pickering, Greenleaf, and Painter, and others running east-west; Hadley, Philadelphia, and Penn.

Retail is concentrated in a 4-block area along Greenleaf Avenue and its intersection with Philadelphia Street, and is surrounded by local services, offices, and smaller retail. The primary retail destinations include a multi-screen cinema and several restaurants. Uptown can also derive greater benefit from the presence of several civic and institutional anchors such as 12 churches, City Hall, Whittier College, Whittier High School, Public Library, Police Station, Post Office, and YMCA.

Uptown faces a number of challenges. There are several vacant properties, an excessive number of surface parking lots for a potentially vibrant town center, an under-performing retail sector, vandalism in the form of graffiti and glass etching, a perception of lack of adequate safety, and poor quality of architecture in recent development. As result of these factors and its under-performing retail sector, Uptown captures only 6% of the City of Whittier's total retail sales.

1.5 RELATIONSHIP TO WHITTIER GENERAL PLAN

The Uptown Specific Plan is consistent with and implements many relevant policies of the Whittier General Plan by facilitating the continuing enhancement of the Uptown core area and adjacent neighborhoods within the plan area. Specific plan recommendations and requirements providing for new mixed-use development and its additional housing resources, an overall pedestrian-orientation, an improved environment for successful retail, and the preservation of historic resources are all consistent with key goals and policies in several General Plan elements.



Above: The skyline of Uptown Whittier looking toward the northwest with the Hoover Hotel on the left, shows its eclectic mix of architecture and building types, from single family houses in the foreground to the movie theater in the middle ground and the multistory building in the background.

Below: The diagram of income levels in and around Uptown indicates not only a wide range of disposable incomes but also concentrations of middle to high income neighborhoods that can benefit retail in Uptown.





Above: Among the challenges Uptown faces is a plethora of large–for a town center area–surface parking lots which can either generate greater revenue as Park Once structures, or be redeveloped into mixed-use development such as retail and residential.





Above: Streets such as Greenleaf Avenue are generally pedestrian-friendly but also contain an excessive number of planters which make sidewalks sometimes too narrow, and are also covered with gum and dirt. The excessive size and number of planters tends to diminish the width of the sidewalk in places, and a lack of adequate lighting on the exterior of storefronts contribute to a perception of a lack of safety.

Left: One of the most unique aspects of Uptown is that it has several historic examples of well-designed and well-built single family houses within a traditional retail core. Most of these houses are well restored and contribute to the quality of the public realm through appropriate street frontages and landscape quality.



Illustrative plan of Uptown Specific Plan area and adjacent neighborhoods showing potential 20-year build out

The illustrative version of the Uptown Whittier Specific Plan indicates the possible future of development based on existing conditions and available opportunities. The illustrative plan is a 20-year view of what could be built in Uptown, lot by lot, building by building. This overall vision of the total build out enables a study of the consequences for parking, street layout and traffic flow, retail opportunities, infrastructure requirements, housing choices, and investments in the public realm. The incremental introduction of projects over time will likely change many of the specific details of this illustration, but its fundamental objectives, qualities, and overall character will remain intact. This is because the bedrock of the plan will remain the fundamental principles of great town center design described in detail in Chapter 1:

- Pedestrian orientation
- Mix of land uses
- Infill development
- Interconnected street system
- Quality of public realm
- Distinct character
- Housing choice
- Smart transportation and parking

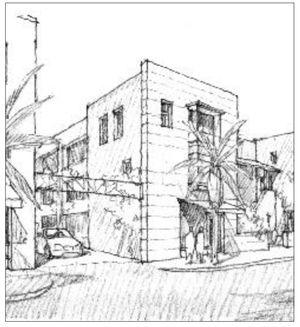
The Specific Plan incorporates these principles into the particular needs and context of Uptown Whittier through six catalytic strategies that will help transform Uptown into the jewel of Whittier:

- Retail Development: An urban design and economic development strategy to strengthen local retail and attract national-level retail to Uptown
- Park Once System: An approach to consolidate parking, share it amongst different land uses, and generate revenue for improving and maintaining Uptown
- Housing Development: An aggressive policy-based strategy to attract a wide range of housing types, especially ownership models, that will create the vibrancy of a town center and a customer base for retail in Uptown
- Churches as Catalysts: As property-owners, anchors in the community, and non-profit organizations, churches can leverage their assets to develop affordable housing and mixed-use projects, including community services and facilities in Uptown
- College as Stakeholder: Whittier College can bring to bear its significance as a civic institution with a long history and major presence on the eastern edge of the plan area to create a mutually beneficial economic and social relationship with Uptown
- Sense of Identity: A series of small-scale interventions to mark Uptown as a distinct destination that is memorable to residents and visitors alike

The subsequent sections in this chapter describe these strategies in greater detail.



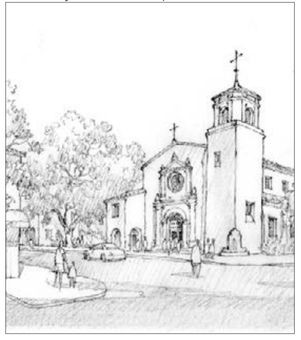
Introduction of new retail on Philadelphia Street



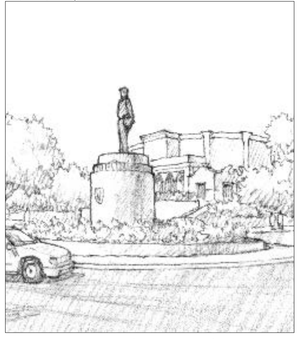
Proposed parking structure lined with retail and residential uses



New courtyard housing integrated into existing residential areas



Church properties converted into campus like settings with housing



Landmark serves as a marker for the college and for Uptown



Mixed use projects interject economic and social vitality

2.1.1 Retail Development

The retail industry has recently discovered that outdoor retail in an urban setting better fits the lifestyle of consumers, often yielding more regular trips and higher sales volumes than standard shopping centers or malls. Retailers are therefore encouraged to facilitate pedestrian storefront shopping. The retail core of town centers is typically located around a pattern of streets accommodating cars and on-street parking. Off-street parking is located in shared, Park-Once lots and/or structures, convenient but compatible to the scale of a Main Street. The retail core typically includes at least one anchor tenant, and a mix of national and local vendors to broaden its appeal and success over the long-term while capturing vehicle trips that would otherwise generate more vehicle miles. What makes this type of retail appealing to consumers is that it is part of an overall pedestrian-friendly, lively urban experience.

In this regard, Uptown is a rare asset with its historic urban fabric, human scale buildings, and tree-lined streets. Furthermore, retail cores with the historic and pedestrian-friendly character of Uptown are scarce—which is one of the reasons why retail developers are trying desperately to recreate these qualities in newer centers such as Victoria Gardens in Rancho Cucamonga or The Grove in Los Angeles. Another characteristic which makes retail attractive in Uptown is the availability of relatively large lots of land and buildings within a historic core. The introduction of new residential and office development and new residents and workers in Uptown will strengthen existing businesses and attract new businesses—especially national chains—to fill up vacant storefronts, including responding to market demand for a new boutique grocery store and a new bookstore to serve both Whittier College and the Uptown area. In addition, existing small businesses--especially independent retailers--will benefit from practicing more competitive management practices. The retail core will focus on Greenleaf Avenue and the area around its intersection with Philadelphia Street, within the proposed Uptown Core (U-CO) zone.

A retail analysis found that Uptown has pent-up market demand to attract another 40,000 to 50,000 square feet of retail and restaurant development by the year 2011. During the public outreach process for this Plan, many residents, workers, and visitors indicated that they would increase spending in the area if the quantity and mix of retail were to be expanded. The potential trade area has a reach of about 5 miles to the east, south, and west, and includes around 70,000 households. The Whittier market has sales leakage of apparel, art, books, cinema, electronics, garden home furnishings, jewelry, restaurants, and sporting goods.

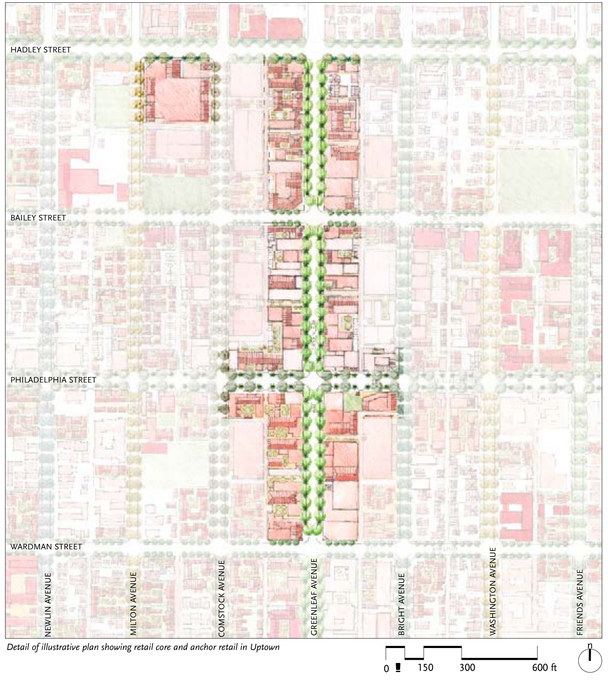
If current conditions are allowed to continue, Uptown could face a downturn due to a number of factors. Older shopping centers will continue to redevelop to attract more popular retailers that may saturate the market. Whittier Boulevard has several vacant or under-utilized properties that could accommodate major new retail development. The greater Whittier market is also large enough to appeal to a major new multi-screen cinema complex, and should this new complex locate close to Uptown, it is likely to have a profoundly negative effect not only on Uptown's existing cinema, but also its restaurants.

In light of these conditions, recommended initiatives for strengthening existing local retail and attracting national retail include:

- Urgent improvements: Re-paint storefronts and street furniture, wash store windows and sidewalks, and create more consistent, predictable and longer store hours
- Short term improvements: Upgrade streets, sidewalks, and storefronts, install electronic payment machines for parking in core retail area, establish a signage program directing visitors to and within Uptown, improve landscaping, and establish better street lighting as well as leaving lights on the exteriors of stores
- Long term improvements: Establish a business recruitment and retention program, and introduce more residential development to increase the customer base for retail



Key plan highlighting core retail area around Greenleaf and anchor retail off Hadley.



Detail of illustrative plan showing retail core and anchor retail in Uptown





Example of awnings that provide shade and signage for retail on Greenleaf



Example of elegant and well-designed retail frontage on Greenleaf Avenue

A. Immediate Term Retail Improvements: 1 month - 1 year

- Clean graffiti, and repaint all public signs, planter fences, utility boxes, light poles, etc. to freshen their appearance
- Coordinate a program to repaint the first level store fronts of all Uptown retailers in the core four block area
- Coordinate program for greater consistency in store hours.
- Wash all storefront windows
- Coordinate a program for all Uptown businesses to turn their storefront window lights on until 10:00 pm every night
- Begin strict enforcement of on-street parking regulations, especially the short-term parking zones
- Remove all damaged Uptown gateway signs
- Power wash all Uptown sidewalks and alleys on a weekly basis, and work with appropriate environmental agencies

B. Short Term Retail Improvements: 1 - 5 years

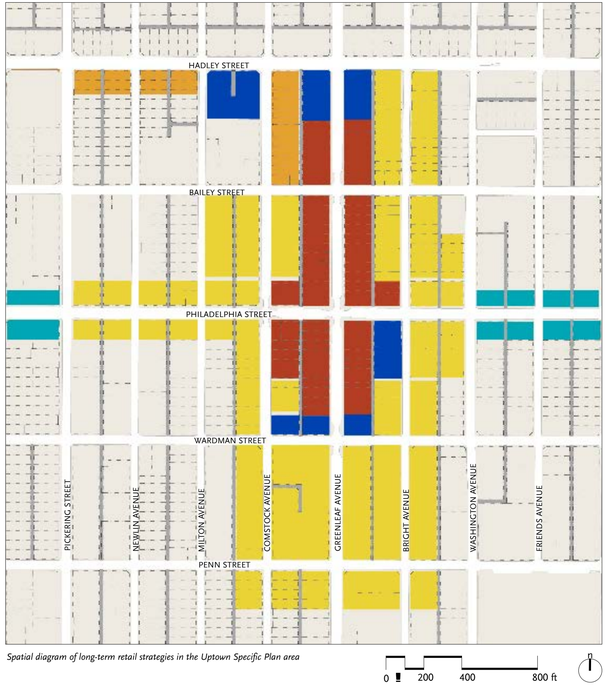
- Install way-finding signage system to direct vehicular traffic into the Uptown area and Park Once structures from surrounding region including Whittier Boulevard and the interstate highways
- Implement storefront improvement program to assist existing small business and property owners to upgrade building facades and signage
- Implement Park Once strategy with regular parking enforcement, new parking payment machines in the retail core, and the introduction of new Park Once structures
- Expand public safety patrols in Uptown
- Entice national-level bookstore along Philadelphia, a few blocks west of the College
- Begin strict enforcement of existing regulations on permitted business types
- Establish regulations to permit outdoor seating areas for cafes and restaurants, in conjunction with remove or modify existing planters as necessary to enhance pedestrian walkability
- Encourage integration of artists throughout Uptown via live/work housing, art galleries, and public art programs
- Offer a business merchandising program to assist small business owners to understand and adapt modern best retail practices as is practical for their individual issues
- Expand an existing or implement new retail marketing campaign to expand market awareness and market share for the Uptown businesses
- Install additional pedestrian lighting in Uptown
- Implement a plan to allow for existing local businesses to remain, expand or relocate within the Uptown area
- Establish a business retainment plan to maintain the existing Uptown businesses, including methods for property ownership and expansion or relocation services if necessary
- Implement a new business recruitment plan to identify and attract appropriate new--especially national brand--businesses
- Improve sidewalks in conjunction with street tree replacement programs

C. Medium Term Retail Improvements: 5 - 10 years

- Implement new building and storefront building standards per the Specific Plan.
- Continue to aggressively cultivate new medium to high density residential construction in Uptown as per the Specific Plan
- Establish new retail and restaurant anchors as regional magnets, including:
  - Arts and Crafts
  - Book Sellers
  - Department Stores
  - Discount Department Stores
  - Electronics and Appliances
  - Hardware
  - Home Furnishings
  - Junior Department Stores
  - Office Supply
  - Organic / Specialty Grocery Stores
  - Pet Supply
  - Restaurants Clusters
  - Sporting Goods
  - Unisex Apparel Stores

D. Long Term Retail Improvements: 10 - 20 years

- Assess status of retail in Uptown, and revisit city objectives and retail strategies as per community desires and market realities
- Continue to aggressively cultivate new medium to high density residential construction in Uptown as per the Specific Plan
- Ensure fully functioning Business Improvement District and Park Once District with revenues invested in regular cleaning, extra safety patrols, improved lighting and landscape, events, and continuing education for small businesses to remain competitive



Spatial diagram of long-term retail strategies in the Uptown Specific Plan area



Right, top: National chains, especially clothing stores, serve as destination points and generate foot traffic for the rest of the retail area. National chains are also increasingly aware of the uniqueness of urban contexts and are learning to respect the scale and character of historic districts.

Right, bottom: Uptown possesses a number of unique destinations, such as a movie theater, which need to be strengthened through interventions on the building scale (e.g. updating interiors, refurbishing exteriors) and on the urban scale (e.g. widening sidewalks by removing excessively large planters and planting trees in the triangular spaces formed by diagonal parking, improved lighting in on the exterior of the buildings).





2.1.2 Park Once System

A Park Once District consists of several well-designed parking structures integrated into a town center that serve to significantly reduce the number of vehicular trips for a given amount of economic activity. In the conventional sprawl development pattern, the disconnected nature of destinations for work, live, shop, and play requires that every visit require a separate trip. In the Park Once District trips are combined or replaced by walking trips to multiple stores or multiple destinations for living and shopping in the same area. Similarly the quantity of parking required is reduced or shared amongst different uses, rather than devoted to each separate destination. Finally, parking spaces are used more efficiently in shared parking structures—for shopping and working during the day, for cultural and leisure activities in the evening, and for residents of Uptown at night.

In a Park Once District, parking is dispersed into a number of parking structures and visible parking entrances and signs that assure drivers of available parking within easy walking distance to multiple destinations. A critical element of the Park Once District is concealing the actual parking structures by locating them in the interior of the blocks, by designing the exterior to disguise their interiors, and most significantly by fronting the structure with other uses such as retail or residential, as seen in the Liner building type described in Chapter 4.

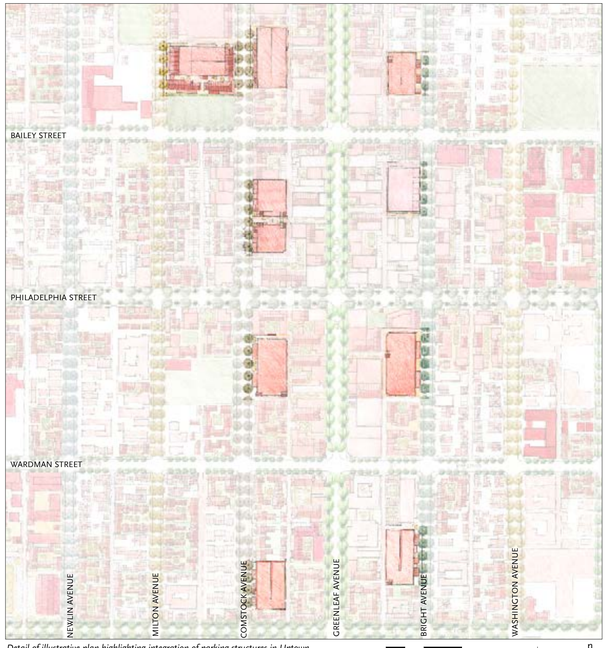
The transformation of drivers into walkers is the immediate generator of pedestrian life: crowds of people that animate public life in the streets and generate the patrons of street-friendly retail businesses. It is this "scene" created by pedestrians in appropriate numbers, that provides the energy and attraction to sustain a thriving town center. In Uptown, this transformation begins with the design of parking structures which are neighborly towards residential, retail, and civic buildings, and are built on existing parking lots, vacant properties, and city-owned land.

Recommended initiatives towards a revenue-generating Park Once strategy:

- Establish Park Once District stretching from the northern properties fronting Hadley, to mid-block between Friends and Washington, Penn on the south, and mid-block between Milton and Newlin on the west
- Establish short-term parking fees for on-street parking to encourage long-term parking in structures rather than on streets
- Eliminate parking requirements for each site
- Maintain parking exemptions for new retail and commercial development, and require in-lieu fees to help fund the new parking structures
- Require new residential development to either provide parking underground, as a podium garage or in small lots behind buildings
- Install electronic parking payment machines on both sides of Greenleaf Avenue on the blocks between Pickering Street and Painter Avenue, and on both sides of Philadelphia Street on the blocks between Hadley Street and Penn Street
- Re-furbish the façade and uses on the existing Bright Avenue parking structure, and upgrade street furniture and new landscape, including street trees on Bright
- Design parking structures as Liner building types; that is, parking garages lined with retail and commercial uses that are also architecturally sensitive to neighboring buildings
- Construct Park Once structures on vacant lots, existing parking lots, and city-owned property
- Projects beyond the Park Once boundary can be annexed into the system by application to the Planning Commission and City Council.



Key plan highlighting Park Once district, in red dotted line, around core retail area, stretching from the northern properties fronting Hadley, to mid-block between Friends and Washington, Penn on the south, and mid-block between Milton and Newlin on the west.



Detail of illustrative plan highlighting integration of parking structures in Uptown



Conceptual perspective veiw of proposed Park Once structure on Bright Avenue lined with retail and residential uses as a Liner building type



Above: Parking structure integrated with retail and commercial uses in a Liner building type with pedestrian scale facades and clearly marked parking signage and entrance.



Below: A Park Once structure with retail on the first floor and an architecture that is sensitive in scale and materials to the surrounding urban fabric.

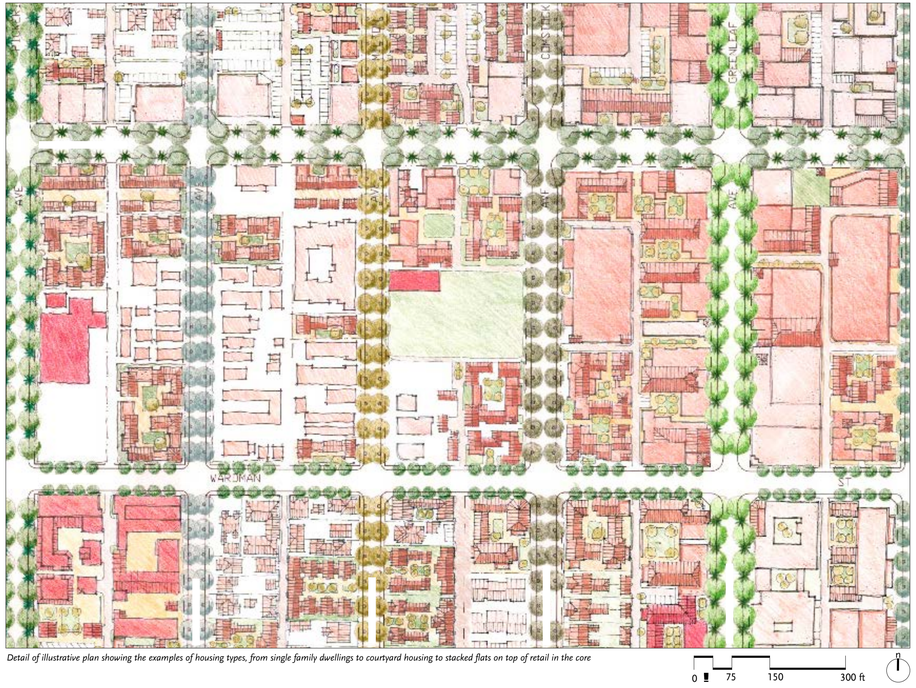
2.1.3 Housing Development

As a town center matures and its livability and economic value increase, a more diverse set of housing choices attract an increasingly varied and prosperous resident population. It is not unusual to encounter lofts, live/work buildings, courtyard housing, row housing, and even duplexes, triplexes and quadplexes in nearly completely developed districts. All of these dwelling types are also typically provided in rental or ownership configurations. The variety is necessary for vitality over the long-term and is enabled by the various building types and blocks in the Specific Plan.

In addition to strong market demand for housing in the southern California region, Uptown Whittier possesses a number of characteristics that make it attractive as a location for introducing an increased variety of housing choices. Whittier has the advantage of being located in close proximity to employment-rich centers such as Los Angeles, Long Beach, and the Inland Empire. Nearby Presbyterian Intercommunity Hospital, which serves more than 800,000 residents in 11 cities within southeastern Los Angeles County and portions of the San Gabriel Valley and Orange County, is expanding and will attract a large number of doctors, nurses, and other health care workers looking for a wide range of housing locally, from entry-level units to large condominiums and houses. Furthermore, Whittier College has expressed an interest in more affordable housing for recruiting new faculty. There is available land in Uptown to accommodate a greater variety of housing than currently exists, including more ownership units, more upscale housing, as well as more affordable units for young professionals and families, and empty-nesters.



Key plan highlighting a number of examples of blocks with housing



Detail of illustrative plan showing the examples of housing types, from single family dwellings to courtyard housing to stacked flats on top of retail in the core

Recommended initiatives to increase the quantity, variety, and quality of housing in Uptown:

- Use vacant lots, city-owned lots, and parking lots to develop a wide range of housing types, including single-family, carriage houses, duplex/triplex/quadplex, bungalow court, rosewalk, row house, live-work, courtyard housing, commercial block and liner (see chapter 4 for detailed descriptions)
- Introduce residential development into mixed-use developments, in conjunction with retail and commercial development
- Intensity and type of development depending upon regulating zone, from the most intense (such as stacked flats and lofts on top of retail and commercial in the Uptown Core zone) to the least (single family homes in the Uptown Edge zone)
- Make sure mix of residential types responds to both regional market demand (e.g. upscale condominiums) and City of Whittier public policy (e.g. rental and ownership for moderate income families)



Above: Courtyard housing of about 20 - 35 units per acre, designed with live/work spaces around a series of courtyards and gardens within an urban context.



Conceptual perspective view of possible new courtyard housing interspersed with existing single family housing on the eastern side of Newlin Avenue, north of Philadelphia Street

2.1.4 Churches as Catalysts

Spiritual life has been a founding principle since Whittier's formal incorporation in 1887, and religious institutions have been a significant land use in Uptown. The Baileys held the first Friends services in their ranch house in 1887. The second building erected in Whittier was the first Friends Church at the corner of Comstock Avenue and College (now Wardman Street). In 1893 a small St. Mary's Catholic church was erected, followed by St. Mathias Episcopal Church (1896), Christian Church (1898), First Church of Christ Scientist (1904), Federated Presbyterian (1906), and Church of the Nazarene (1907). Many other religious congregations were established in Whittier, and by 1924 the town boasted twenty-seven religious organizations, many with their own houses for worship.

Once a piece of land was developed for a house of worship, this became a constant over time for Uptown's religious institutions. For example, after a decade the Friends congregation outgrew its space and a new Friends Church was erected at the corner of Philadelphia Street and Washington Avenue in 1905. A structure continues as the site of this congregation as new structures have been erected over the decades. Another example is the First United Methodist Episcopal Church, which was established two years after the town's founding. Its house of worship was erected at the corner of Friends Avenue and Bailey Street in 1904, and replaced in 1952. The corner of Bright Avenue and Bailey Street boasts a First Baptist Church that was dedicated in 1922, yet has been the site of a congregation since 1889.

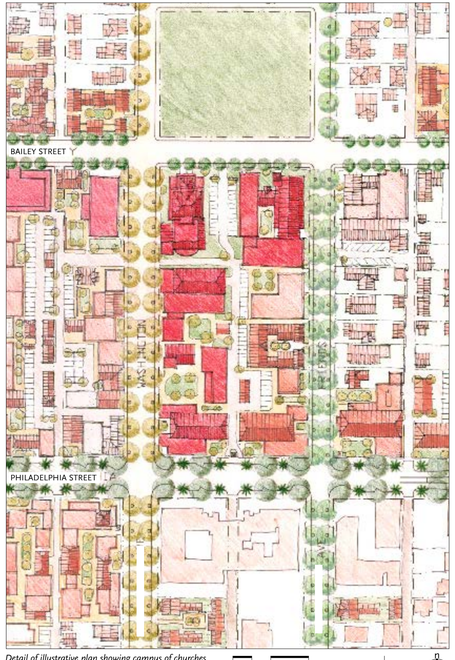
Churches continue to maintain a significant presence in Uptown. There are 12 churches in the Uptown Specific Plan area, and own over 12% of property within its boundaries. Some of these properties are sizable, as is the number of people who congregate on Sunday mornings. Churches can also take advantage of the Park Once strategy to fulfill their parking needs, rather than occupying increasingly large surface lots. And churches can develop affordable and moderate income housing on surplus land.



Above: The First United Methodist Church on Bailey Street south of Central Park, serves as a landmark with its tall spire mounted by a cross and a pedestrian-friendly facade with its orientation towards the street.



Key plan highlighting concentration of church properties south of Central Park



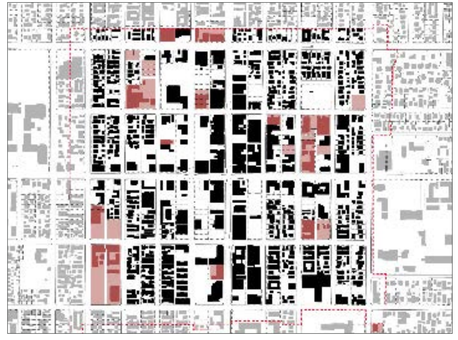
Detail of illustrative plan showing campus of churches

Recommended initiatives to benefit from the significant presence of churches in Uptown:

- City should pay special attention in the land use regulations and form-based code to churches including frontage and signage requirements, that are different from those governing retail, commercial, or residential development
- Churches attract thousands of congregates every Sunday morning for services, and retail establishments and restaurants should take advantage of this potential customer base
- Churches are encouraged to use surplus land to build affordable housing
- Given the multifaceted services offered by many churches—ministries, social services such as assisting the homeless, education and day care centers—they should develop their properties more in the form of small landscaped campuses rather than as isolated structures with parking in between.



Left: Good Shepherd Church on Bailey Street across from the Post Office, an example of a building which is both appropriately monumental in its entrance as an institutional building, and more modest in scale in its side wings and thus sensitive to the surrounding residential neighborhoods.





Conceptual perspective of new church building on Washington Avenue in a campus-like setting with street trees, landscape, and affordable housing next door.

2.1.5 College as Stakeholder

The presence of a nationally recognized institution of higher learning adjacent to a historic retail core is a rare opportunity for building town/gown synergies that benefit both areas. A college is a center of great intellectual activity, including public events such as evening classes, public lectures, exhibitions, and conferences. College faculty, staff, and students are often active in the local community, as tax-paying and voting citizens, housing residents, retail consumers, and community service volunteers. Similarly, a civic and retail center serves as a resource for the college by providing financial and personal service, stores and restaurants, entertainment attractions, civic activities, and off-campus housing.

Whittier College is a four-year independent residential liberal arts college distinguished by its small size, nationally recognized liberal arts curriculum, and innovative interdisciplinary programs. The campus houses 29 academic and administrative facilities, a performing arts center, a chapel, a library, athletic fields and facilities, and seven residence halls. The College has a diverse body of approximately 1,500 students, including 42 percent American minorities, and 5 percent international students. The College has been intimately tied to the history of Whittier and of Uptown as far back as 1893, when Whittier College began construction of its first building, Founders Hall, on its campus overlooking Uptown.

Uptown and Whittier College can derive greater mutual benefit from an improved economic and physical relationship.

Recommended initiatives for improving the Uptown/Whittier College relationship:

- Mark the intersection of Painter Avenue and Philadelphia Street as a gateway for both Uptown and Whittier College with a landmark (e.g. a statue of a poet), pilasters on the four corners, archways, and/or special paving for pedestrian crosswalks
- Introduce traffic calming on Painter Avenue, including tree wells at the edges of the vehicular pavement with on-street parking stalls
- Facilitate greater pedestrian flow between the College and Uptown through signaled mid-block crossings on Painter Avenue, and the aforementioned traffic calming measures as well as the special paving for pedestrian crosswalks at Painter and Philadelphia
- Introduce campus-related retail, such as cafes, bookstore, grocery store, and clothing stores on Philadelphia Street east of Greenleaf Avenue to attract students, faculty, and staff into Uptown
- Introduce a greater variety of housing types, including live/work units and more affordable ownership and rental housing (e.g. for new faculty and staff)



Above: A retail area can thrive due to the presence of a college or university, as seen on Nassau Street next to Princeton University in New Jersey.



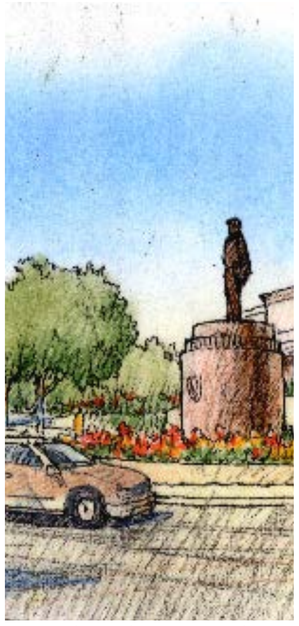
Key plan highlighting eastern edge of Uptown along Painter Avenue



Detail of illustrative plan showing relationship with Whittier College campus to the east



Perspective view of an example of pilaster at intersection marking a gateway.



Perspective view of an example of a monument (e.g. a statue of a poet) at an intersection.



Above: An aerial view of the Whittier College campus in the foreground and the eastern edge of Uptown in the background with Painter Avenue as the dividing--and connecting--line.



Above: The Whittier College campus contains a number of elegant buildings--such as Deihl Hall--and green open spaces, which serve as excellent neighbors to Uptown.

2.1.6 Sense of Identity

A place with a sense of identity is perceived as a district with a distinct character and is memorable to those who experience it. In other words, a destination is attractive to people, activities, and development because it has a sense of identity. A number of elements contribute to a sense of identity: historic architecture, pedestrian scale buildings, wide sidewalks, and a vibrancy that emerges out of a mix of land uses for living, working, shopping, and recreation. At the same time, what appear to be minute issues—such as lighting and cleanliness—can affect the character of a place as much as the quality of its architecture.

Uptown possesses several significant assets: a grid system of interconnected streets and service alleys, a compact size, blocks which are of easily walkable dimensions, numerous historic buildings, an overall pedestrian-scale urban fabric, and distinctive retail offerings. Many of these assets, however, are lost in the shuffle of vacant lots, an over-supply of free parking and an excessive number of surface parking lots, buildings which are insensitive to their surroundings, inadequate variety of retail destinations, and issues of lack of a perception of safety, poor lighting on some streets, dirty sidewalks, and inconsistent design quality both in the buildings and the landscape.

Recommended initiatives for transforming Uptown into a place with a greater sense of identity:

- Improve the design quality of Uptown, through rigorous enforcement of the form-based code (see chapter 4) and a similarly rigorous design review process for modification of existing structures and the construction of new ones
- Improve the landscape quality of Uptown (see Section 2.2.) through the planting of more street trees, two new parks, and a proactive tree succession plan for Greenleaf Avenue and Philadelphia Street
- Mark the edges of Uptown through the intense planting of trees along Hadley Street, Painter Avenue (using bulbouts), Penn Street, and Pickering Avenue (see Section 2.2)
- Mark the gateways to Uptown by designing landmarks and special paving at the four intersections of Hadley/Greenleaf, Philadelphia/Painter, Penn/Greenleaf, and Pickering/Philadelphia, plus access from the major regional artery of Whittier Boulevard at Philadelphia Street
- Increase safety in Uptown by attracting more residents and "eyes on the street", increased number of visitors through destination-type national retail stores, external lighting at night on each store, and more safety patrols funded by parking revenue, such that it becomes a destination during the day and in the evening
- Incorporate public art, especially by local artists, in the form of murals and sculptures at key intersections, near the entrances to the Park Once structures, and in public spaces
- In order to encourage longer visits, consider incorporating public rest rooms where practical and safe, including considerations for supervision and cleanliness



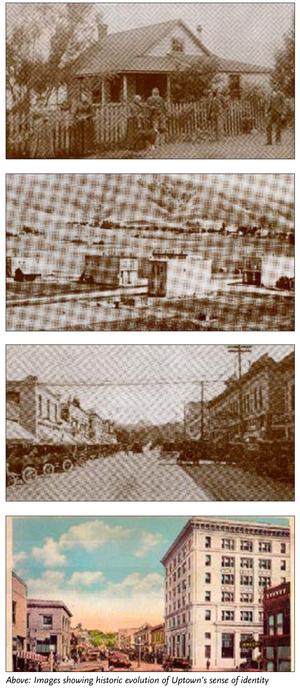
Illustrative plan with elements highlighted that will help give Uptown a greater sense of identity, such as edges marked with intensely-planted tree lined streets and gateways at Whittier and Philadelphia and Painter and Philadelphia



Above: Children playing on the John Greenleaf Whittier statue in Central Park: Uptown Whittier is an historic area which continues to evolve over time, and embraces its past as well as its future as an attractive destination for both young and old.



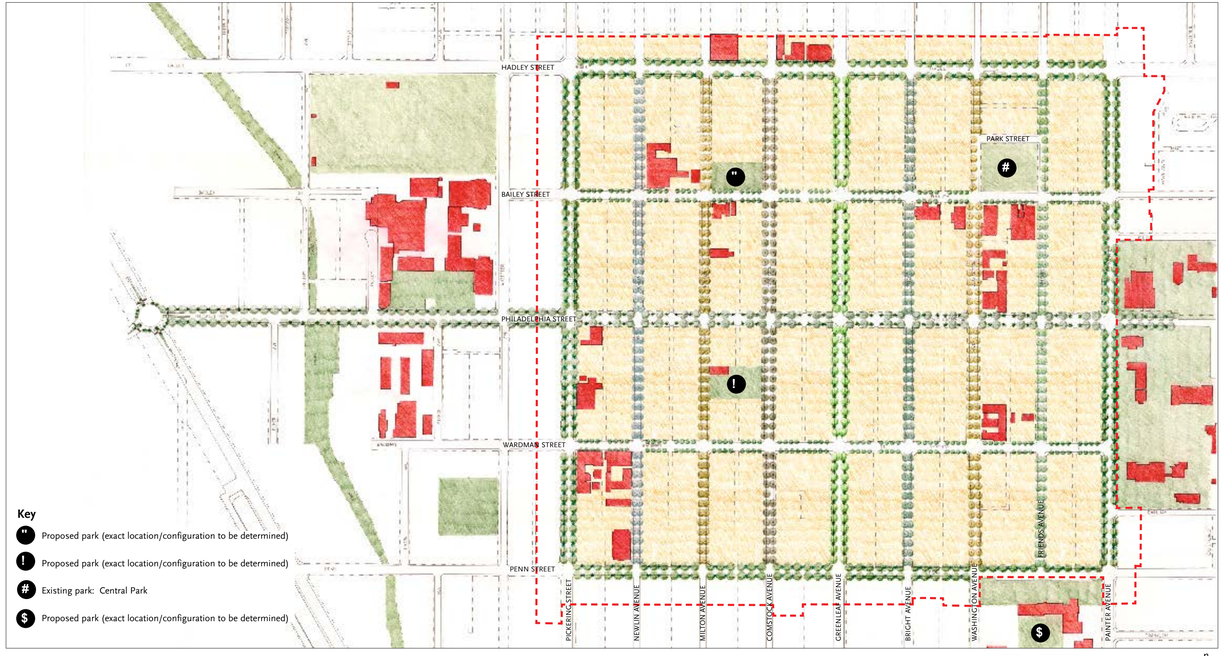
Above: A sense of identity is most evident during the day, but also at night as seen in the historic night-time photograph of Christmas lighting in Uptown on the left. Today, on the right, Uptown attracts visitors in the evening to its restaurants and bars, and in order to become more of a night time destination, it will require better street lighting, increased lighting on the exteriors of buildings and stores, and an improved sense of safety through a variety of measures, including public safety patrols and an increase presence of people on the sidewalks.



Above: Images showing historic evolution of Uptown's sense of identity



Conceptual perspective view of distinctive new courtyard housing with park in front, and retail and Park Once structure behind, on Bailey Street



An illustrative plan of the public realm, especially the landscape of open spaces, parks and street trees, including connections to the Greenway Trail and Whittier Boulevard.

2.2.1 Parks

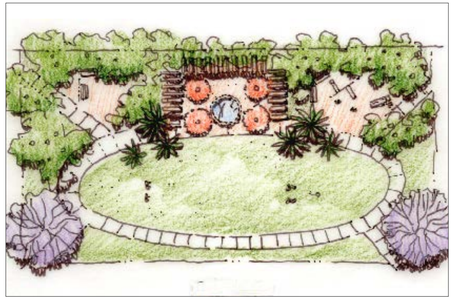
The neighborhood park system has been conceived as a series of small highly specialized parks within 5 minutes walk of all residents within Uptown. The specialized parks will concentrate on specific needs such as playgrounds/ tot lots, athletic courts, and gaming areas. The plan recognizes that many of the parks will remain open space for impromptu athletic uses for all ages such as soccer/kickball, throwing and playing. Designs for the parks should include structures or tree bosques for cool shady seating areas. Plant material selections for parks shall emphasize native, drought tolerant and naturalized plantings for cultural and educational values, as seen in the following lists of acceptable plant materials:

A. Trees
- Cercis occidentalis / Western Redbud
- Fraxinus raywoodii / Raywood Ash
- Fraxinus velutina / Modesto Ash
- Platanus racemosa / California Sycamore Tree
- Quercus agrifolia / Coast Live Oak
- Quercus douglesii / Douglas Blue Oak
- Schnius molle / California Pepper
- Umbellularia californica / California Bay
- Washingtonia filifera / California Fan Palm

B. Tall Shrubs
- Abelia grandiflora / Glossy Abelia
- Buddleia davidii / Butterfly Bush
- Heteromelies arbutifolia / Toyon
- Escallonia fradesii / Escallonia
- Pittosporum tobira / Tobira
- Pittosporum undulatum / Victoria Box
- Photinia fraseri / Photinia
- Rhus ovata / Sugarbush
- Rhus integrifolia / Lemonade Berry
- Romneya coulteri / Matilija Poppy

C. Low Shrubs and Groundcovers
- Arctostaphylos Sp / Manzanita
- Camellia sasanqua / Camellia
- Ceanothus Sp. / California Lilac
- Cistus salvifolius / Rockrose
- Carpenteria california / NCN
- Erigeron karvinskianus / Santa Barbara Daisy
- Euryops pectinatus / Golden Shrub Daisy
- Felicia amelliodes / NCN
- Hemerocallis Hyridus / Hybid Daylily
- Heuchera sanguinea / Coral Bells
- Kniphofia uvaria / Red Hot Poker
- Lavandula stoechys / Spanish Lavender
- Lavandula angustifolia / English
- Pittosporum 'Wheelers Dwarf' / Dwarf Tobira

D. Grasses
- Juncus patens / California Grey Rush
- Heliototrichon sempervirens / Blue Oat Grass
- Miscanthus sinensis / Maiden Grass
- Muhlenbergia rigens / Deer Grass
- Pennisetum setaceum ' rubrum' / Red



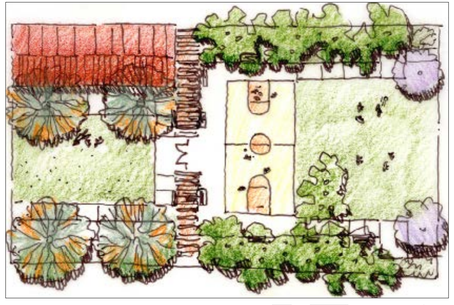


Above: The City of Whittier has a number of small parks, such as Broadway Park, in a residential neighborhood just north of the Uptown Specific Plan area. This park accommodates a small children's play area, for the many families which reside nearby, and is surrounded by numerous shaded trees which provide welcome respite from the warm summer sun.

Right: One of Uptown's greatest assets is historic Central Park, a true urban park: surrounded by and within easy walking distance of residential neighborhoods and civic amenities, able to accommodate a variety of passive and active human behaviors (e.g. sitting, playing, music), and with a variety of landscape (e.g. shaded trees, open air lawn, planters, paved areas).



Above: Proposed park on the south side of the site between Milton Avenue, Bailey Street, and Comstock Avenue. The park could be part of a mixed-use development on the larger site, and would serve the northwest quadrant of Uptown. The tenor of this park would be more passive, with a large grassy areas and pockets for sitting and gathering shaded by trees and a trellis in the center.

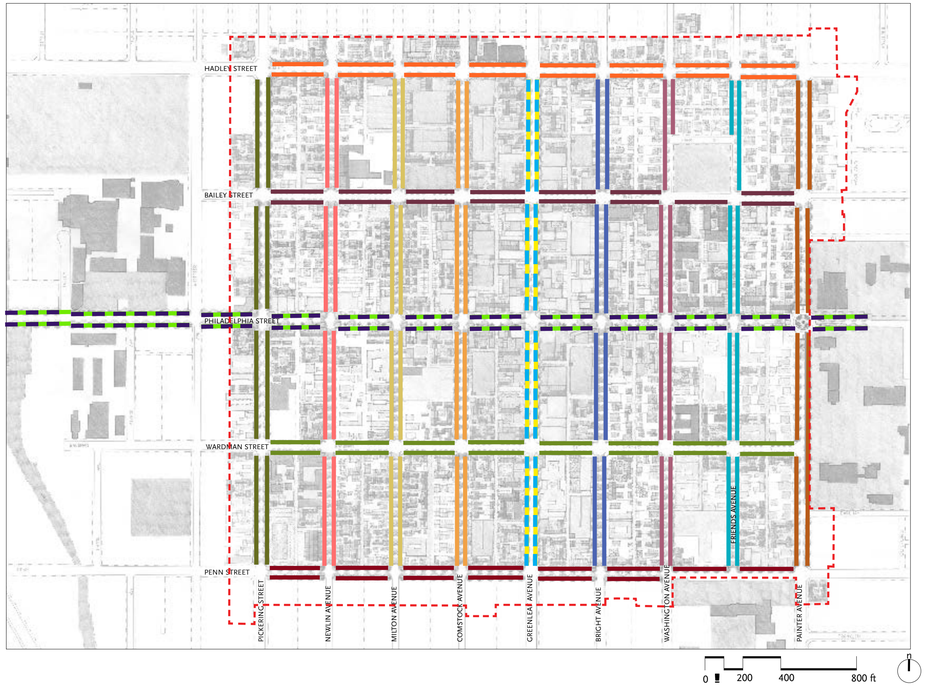


Right: Proposed park mid-block on the site south of Philadelphia Street, between Milton Avenue and Comstock Avenue, incorporating an existing building. The park is intended to be easily accessible from the southwest quadrant of Uptown, and contains a basketball court in addition to shaded trees and grassy fields.

2.2.2 Street Trees

The role of the street tree plan is to establish a visual and environmental order within the framework of Uptown. Future tree planting and streetscape work will be guided by the objectives and standards in this section, ensuring that individual projects will contribute to the overall public realm in a coherent manner.

Street trees provide numerous environmental and cultural benefits for citizens and visitors. The greatest of these is spatial definition of the street, which is created by the continuous and regular spacing of trees close to the curb. This results in an alteration of the scale of the street and a perceived reduction of street width. Visual cues and context of the street is improved. Street trees create a humanizing experience, informing us that a place is walkable and pedestrian friendly. Environmental benefits of trees include: (a) deciduous trees provide shade in summer and sun in winter, reducing heat islands and cooling the ambient temperature; (b) trees reduce sun glare from paving; and (c) precipitation falling on leaves, branches and bark is intercepted by trees and temporarily stored in the leaves, branches and bark, effectively reducing stormwater runoff. Cultural benefits include: (a) mature street trees can increase property values; (b) enclosure provided by street trees signals drivers to reduce speed. As the context of the street becomes more human, people naturally slow down; (c) produce oxygen and improve local air quality; and (d) tree canopies have a calming effect, reducing the perception of traffic noise.



Key

		SCIENTIFIC NAME OF TREE
	Cm	Cinnamomum camphora 'Camphor'
	Cl	Cassia leptophylla "Gold Medallion'
	Gp	Geijera parviflora 'Australian Willow'
	Gts	Gleditsia triacanthos 'Sunburst'
	Gtsh	Gleditsia triacanthos 'Shademaster'
	Kp	Koelreuteria paniculata 'Golden Rain'
	Mg	Magnolia grandiflora 'Majestic Beauty TM'
	P	Pinus canariensis 'Canary Island Pine'
	Pc	Pistacia chinensis 'Chinese Pistache'
	Pa	Platanus acerifolia 'Yarwood'
	Pc	Pyrus calleryana 'Bradford'
	Sj	Sophora japonica 'Japanese Pagoda'
	Cc	Cercis canadensis 'Eastern Redbud'
	L	Lophostemon confertus 'Brisbane Box'
	Ta	Tabebuia impetiginosa 'Pink Trumpet'
	F	Ficus (existing)
		Uptown Specific Plan Area Boundary



Cm *Cinnamomum Camphora*

A. Cinnamomum camphora
Camphor Tree

This beautiful broad dome evergreen tree has glossy foliage that is light green in color. The new foliage comes in with a tinted red color. Eventually, this tree becomes quite large in size 50-60' tall and 60' wide. This excellent boulevard tree can create a full canopy over most streets. Provide ample 8 foot wide parkway for tree.



Height: 50-60 feet
Urban Form: Vase



Cl *Cassia Leptophylla*

B. Cassia leptophylla
Gold Medallion Tree

Gold Medallion Tree is an evergreen subtropical tree that reaches 30' tall and 35' wide, with glossy leaves and upright, 1' long clusters of large, bright yellow flowers. Its bloom period occurs in the summer. The plant should be grown in sun with average to little summer watering.



Height: 30 feet
Urban Form: Umbrella



Gp *Gejera Parvifoia*

C. Geijera parviflora
Australian Willow

This evergreen tree reaches a height of 35' and 30 'diameter with 3-6" long, medium green colored leaves that are narrow. Its main branches sweep up and out, while the smaller branches tend to hang down. The form of the leaves produces a weeping effect excellent for softening residential neighborhoods.



Height: 35 feet
Urban Form: Ball



Gts *Gleditsia Triacanthos Sunburst*

D. Gleditsia triacanthos "Sunburst"
Sunburst Honey Locust

A deciduous tree reaching a height of 25'-40' with a 35'-40' spread. The golden yellow color of new foliage is characteristic of this variety. Its leaves turn green when they mature, which are showy against a dark background. It is a thornless and seedless variety.



Height: 35-70 feet
Urban Form: Oval



Gtsh *Gleditsia Triacanthos Shademaster*

E. Gleditsia triacanthos "Shademaster"
Shademaster Locust

A deciduous tree reaching a height of 25'-40' with a 25'-40' spread. Leaves pinnately compound and late leafers in spring. Light shade during summer months. Golden fall color. Leaf drop causes no litter. This is a thornless and seedless locust, which grows faster and in a more upright fashion. Soak twice monthly during the heat of summer in low desert. Drought tolerant as well as soil adaptable.



Height: 35-70 feet
Urban Form: Oval



Kp *Koelreuteria Paniculata*

F. Koelreuteria paniculata
Golden Rain Tree

This is a medium-sized tree which produces lacy foliage and upright yellow flower clusters in the summer. It is tolerant of both urban conditions and various soil types. This is an excellent street tree for retail areas due to its open lacy nature. Tree size 30-40' tall with 35-40' spread.



Height: 30-40 feet
Urban Form: Vase

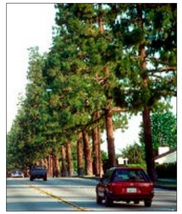


Mg *Magnolia Grandiflora*

G. Magnolia grandiflora 'Majestic Beauty TM'
Southern Magnolia

This broad tree will reach about 40' tall with equal spread, its large, simple leathery appearance makes the pyramidal magnolia grandiflora perfect for either a street or lawn tree. Its leaves are 4-8" long, and its powerfully fragrant blooms are carried throughout the summer and fall. If these plants are grafted, they are more predictable. Restricted root areas or heavy soils will slow the growth process.

Height: 40 feet
Urban Form: Oval



P *Pinus Canariensis*

H. Pinus canariensis
Canary Island Pine

This graceful, slender-growing pine has a pyramidal form to about 70'. Its needles are long and drooping in bundles of 3. The foliage is a blue-green color, maturing to a dark green shade.

Height: 70 feet
Urban Form: Pyramid



PC *Pistachia Chinensis*

I. Pistachia chinensis
Chinese Pistache

The Pistacia chinensis is a deciduous tree with broad, spreading growth to 50' in height. Its leaves have 10-16 leaflets, and the fall coloring arrives in beautiful shades of red, orange and yellow. The young trees are often gawky, but some become shapely with age.

Height: 50 feet
Urban Form: Vase



Pa *Platanus Acerfolia*

J. Platanus acerifolia 'Yarwood'
London Plane Tree

This tree is 50' high x 40' wide and has a broad pyramidal to rounded shape. Its very large leaves show off fall colors of yellow and brown, and it has a very high resistance to powdery mildew.

Height: 50 feet
Urban Form: Pyramid



Cv *Pyrus Calleryana*

K. Pyrus calleryana 'Bradford'
Bradford Callery Pear

The 'Bradford' is a deciduous tree that grows to a size of 30-35' with equal spread. Profuse clusters of single white flowers are borne in the spring from noticeably sweeping branches. This is an excellent flowering tree for streets.

Height: 30-35 feet
Urban Form: Vase



Sj *Saphora Japonica*

L Sophora japonica
Japanese Pagoda Tree

The Japanese Pagoda Tree is a deciduous tree that grows to 25' with a round head and green bark. In the late summer, lovely panicles of white flowers will be seen. This plant is a dependable, small shade tree and shoule be grown under sunny conditions.

Height: 25 feet
Urban Form: Ball



Cc *Cercis Canadensis*

M. Cercis Canadensis
Eastern Redbud

This small, deciduous tree with a rounded head is covered with small flowers of a rose pink color in the spring before the appearance of heart-shaped leaves. Broads shaped tree reaching a height of 25 feet with a spread of 30-35 feet.

Height: 25-50 feet
Urban Form: Ball



L *Lophostemon confertus*

N. Lophostemon confertus
Brisbane Box

This evergreen tree will grow 30-45' tall and 25' wide. It has leathery, glossy dark green leaves and inconspicuous white flowers in summer. The reddish brown, flaky bark resembles Eucalytpus, while the foliage resembles Ficus.

Height: 100 feet
Urban Form: Ball



Tb *Tabebuia impetiginosa*

O. Tabebuia impetiginosa
Pink Trumpet Tree

This slender-trunked tree will grow 25-50' high with 25-30' spread and produces beautiful purplish/pink blooms in spring. It does best in full sun and moist soil.

Height: 50-75 feet
Urban Form: Ball



F *Ficus microcarpa 'Nitida'*

O. Ficus microcarpa 'Nitida'
Indian Laurel Fig

Ficus microcarpa 'Nitida' reaches a height of 50'-75' with a spread of 50'-60'. The growth rate is fast and has a rounded, spreading or vase shaped urban form. The tree is evergreen with leaf litter continuously dropping though out the year. This plant tolerates drought, occasional wetness and some salt. Suitable soil is well-drained/loamy, sandy or clay.

Height: 50-75 feet
Urban Form: Ball



Above: Neighborhoods in Whittier have a historic tradition of intensive tree planting along streets.



Above: Street trees of the same species not only provide aesthetic pleasure and shade in the California sun, they also serve one of the catalytic strategies of this Specific Plan by creating a sense of identity, for example as distinctive street edges to the Uptown area.

2.3.1 Parking Strategy

The parking structures that are essential to the Park Once strategy are imbedded in blocks or lined with shops at the street, and brightly illuminated with sunshine during the day and with lighting during the night and for cloudy weather. The degrees of intensity of the pink shaded areas in the accompany diagram suggest the levels of cost from the lowest to the highest in the most intense areas of development.

The Park Once strategy results in significant savings in daily trips and overall number of required parking spaces for three reasons:

Park Once: Those arriving by car follow the Park Once pattern, generating just 2 vehicle movements, parking just once, and completing multiple tasks on foot.

Shared Parking Among Uses with Different Peak Times: Spaces can be efficiently shared between land uses with differing peak hours, peak days, and peak seasons of parking demand (such as office, retail, restaurant, and entertainment), lowering the total number of spaces required.

Shared Parking to Spread Peak Loads: The parking supply can be sized to meet average parking loads (instead of the worst-case ratios needed for isolated suburban buildings), since the common supply of parking allows stores and offices with above-average demand to be balanced by other stores that have below-average demand or are temporarily vacant.

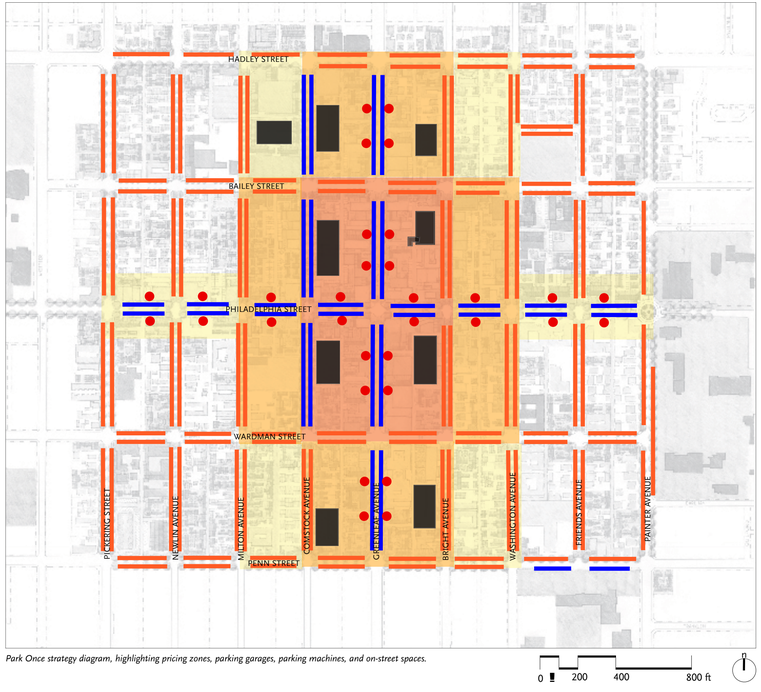
Studies indicate that parking required for a mature mixed-use district typically ranges from 1.4 to 2.5 spaces per 1,000 square feet of non-residential built space, or 1/3 to 1/2 of that required for conventional suburban development. The traditional downtown pattern also generates more pedestrian traffic accompanied by less vehicular congestion. Daily trips can be reduced by 1/2 or more.

Key

- Highest Parking Rate Zone
- Medium Parking Rate Zone
- Lowest Parking Rate Zone
- Parking Garage
- Parallel Street Parking
- Diagonal Street Parking
- Parking Payment Machine

Price Zones	On-Street	Off-Street	Total Spaces
Highest	618	1,185	1,803
Medium	962	1,047	2,009
Lowest	450	313	763
Free	1,271	-	1,251
Total Parking Spaces	3,281	2,545	**5,826**

Note: Numbers do not include spaces in individual residential projects.



Park Once strategy diagram, highlighting pricing zones, parking garages, parking machines, and on-street spaces.

The parking system, including the Park Once strategy, should be managed, including fees that should be charged for parking during the week all day and into the evening (7AM to 9PM to start with for example). When parking is provided without apparent cost, employees tend to occupy valuable spaces--such as those in front of their stores and offices--and spaces that could otherwise generate significant retail revenue become occupied for hours--or even all day long--by cars parked there by those who will not be shopping or patronizing restaurants and businesses.

As a start, for example, the City could charge a modest rate with a 2 hour maximum in the areas closest to the 100% corner of Philadelphia Street and Greenleaf Avenue. These rates should be adjusted over time as demand increases with more retail and residential development. Over time, all parking within the most intense zones (such as Uptown-Core and Uptown-Center in the regulating plan in Chapter 4) should become paid-for parking located on-street or in garages. The City should consider building and maintaining the parking structures using fees from these and on-street parking for Uptown enhancements.

Depending on the local development community, public/private development opportunities may also exist, where the city could enter into an agreement with entrepreneurs to construct and maintain the Uptown parking supply.

Priority	Type of parking
Most convenient spaces for customers and highest will-	2-hour on-street parking near retail destinations
Medium level of convenience for longer visits	3-hour parking in mid-block parking structures and lots
Least convenient/longest duration for employees & park-and-ride commuters	All day parking on upper garage floors or on the periphery

Above: Diagram showing the relationship between priority for providing parking, type of parking, and degree of convenience for drivers.



Left: Diagonal parking on "Main Street" type streets such as Philadelphia Street in Uptown is appropriate because it accommodates more cars than parallel parking, is easier to enter and exit each stall, and serves as traffic calming for cars which slow down due to the presence of parked cars and for pedestrians who feel a higher degree of safety and comfort with the buffer of parked cars between them and the moving traffic.



Above: Limited on-street parking on street in residential neighborhoods such as the one around Central Park in Uptown is intended for short-term use by residents and visitors, and is usually free of cost.





Above: Clear, legible, and well-designed signage makes the parking structures easy to find for visitors.

Left: Centrally located parking machines, instead of conventional parking meters, offer numerous advantages. These include an ability to more easily monitor use and to adjust parking prices according to demand, and greater convenience in collecting fees from far fewer machines rather than many more meters along a street.

Below: The heart of the Park Once system lies in the parking structures embedded within Liner building types, as shown below, and further described in Chapter 4. From an urban design perspective, retail or commercial uses on the building frontage combined with context-sensitive architecture make such structures 'good neighbors'.



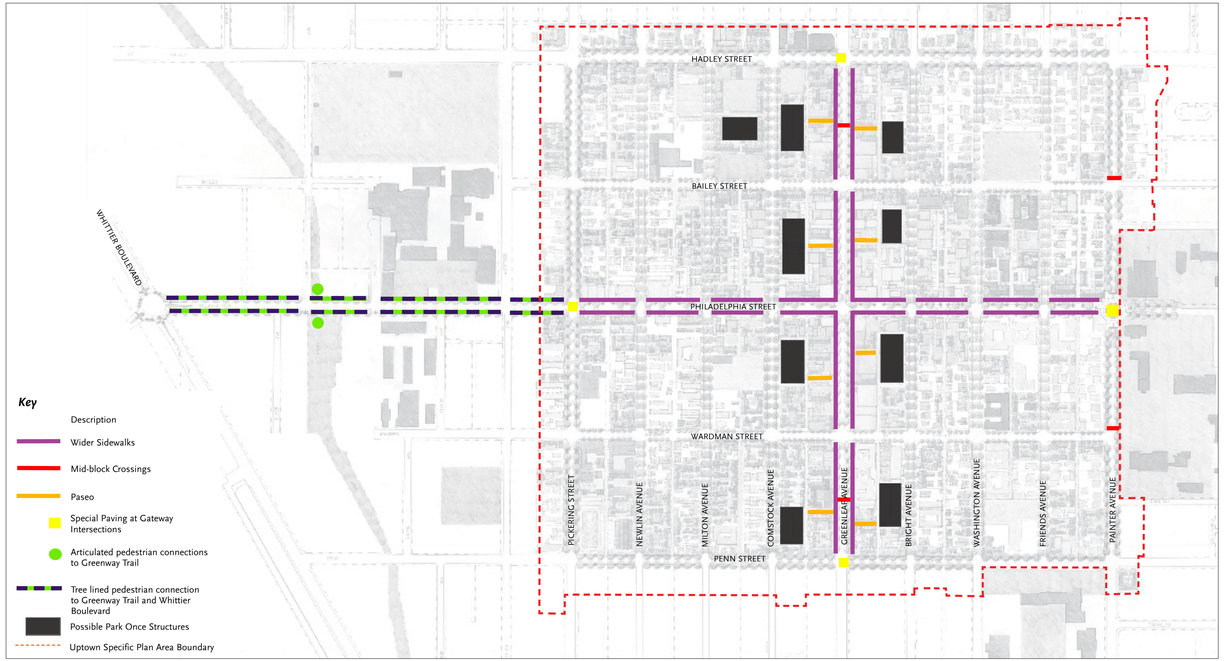


Diagram of pedestrian improvements, including wider sidewalks, mid-block crossings, paseos, special paving, and connections to Greenway Trail.

2.3.2 Pedestrian Paths

Uptown is an area that has real promise to become an even more vibrant and inviting urban alternative to the sprawling suburban development that surrounds it. To accomplish this, it will need to focus on pedestrian enhancements, because pedestrians are the lifeblood of town centers.

In a setting such as Uptown, the sidewalks are the principal pedestrian spaces, and it is important to detail them appropriately. Unfortunately at present, many of them are not well detailed from the pedestrian's perspective. Downtown sidewalks function as three areas: the window-shopping space immediately adjacent to the buildings; the walking space for pedestrians to pass through; and the curbside space where amenities such as benches, signs and parking meters or machines are located.

Vibrant downtown areas have sufficient space for pedestrian flows. The notion of "sufficient space" varies with location and intensity of adjacent land uses, but a clear walking width of 5 feet is the minimum. In many instances, obstacles in the sidewalks, including shrubs and planters, constrain the sidewalks well below this minimum, to the point that in some locations pedestrians cannot comfortably pass by each other.

In Whittier, many of Uptown's sidewalks have been detailed with shrubs and planters that occupy all three of the sidewalk areas described above, in differing degrees. This is a more of a suburban treatment and is inappropriate for all of the Uptown streets because sidewalk space is not abundant enough to allow it. In addition, the large sidewalk planters are potentially unsafe for the visually-impaired, amounting to an unexpected feature in an urban sidewalk.

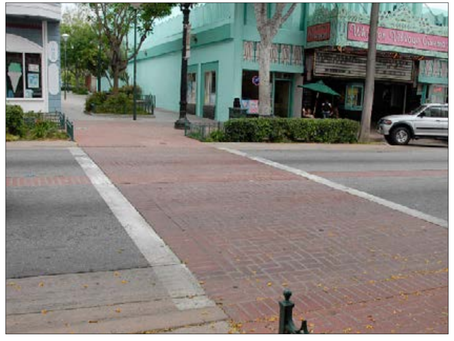
Instead of increasing the sidewalk width by the moving the curbs out into the vehicular right-of-way, it is recommended that Whittier strive to make the most of its sidewalk space: remove excessively large planters and the fencing around them, place benches at the curb, not with an unuseable 1-2 feet behind the bench and the curb; place signs, parking control devices and utility features at the back of curbs; and eliminate sidewalk shrub gardens.



Right: In an urban setting such as Uptown, the quality of sidewalks (width, amenities, cleanliness) correlates directly with the degree of pedestrian-friendliness and inducements for people to walk (rather than drive).



Above: A paseo (also known as a passage or breezeway) in Uptown illustrates some of its desirable elements: activity-generating land uses on one or both sides, landscape, and lighting to make it safe at night. Paseos are ideal as open public spaces that server dual purposes: passageways on narrow lots from destinations--such as from a parking garage to a retail street, and as gathering spots for intimate food-and-drink or retail activities.



Left: An example of a mid-block crossing on Greenleaf Avenue next to the movie theater and leading into a paseo. The special paving and markings on the pavements signal to the automobile driver to slow down. In cases of higher-speed thoroughfares, such as Painter Avenue, signals are required at mid-block crossings to ensure pedestrian safety.



Right: Signage at or just above eye-level is crucial for the system of paths, because it enables wayfinding. Also important are curb levels at intersections which facilitate street crossings by senior citizens and the disabled, as well as landscape which adds character to the streetscape without creating overly-narrow sidewalks or obstacles for heavier pedestrian traffic flows.

2.3.3 System of Streets

Uptown has a grid of east-west and north-south streets which provide multiple access points, and thus have the ability to absorb and move through surprisingly high amounts of vehicular traffic. Philadelphia Street and Greenleaf Avenue are the two primary streets through the heart of Uptown, as seen in the higher-intensity land uses bordering them and landscape treatments, such as planters and trees. On the edges Painter and Hadley are the widest, with Pickering and then Penn in descending order.

Key

Description
Add tree-well bulbouts
Uptown Specific Plan Area Boundary

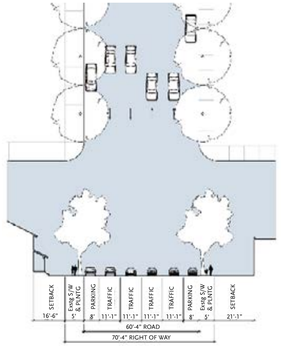
Street Types

	Name / Type	R.O.W.	Design Speed
1	Painter Avenue	70'-4"	30 mph
2	Hadley Street	80'	25 mph
3	Greenleaf Avenue	80'	25 mph
4	Philadelphia Street	80'	25 mph
5	Typical Alley	20'	10 mph
6	Typical Paseo (not shown)	20'-40'	n.a.



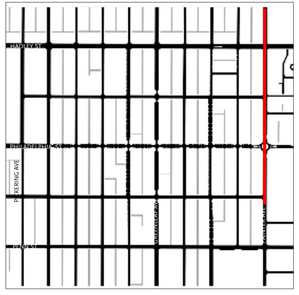
Diagram of street system modifications, including alley diversions and additional tree wells.

1 PAINTER AVENUE





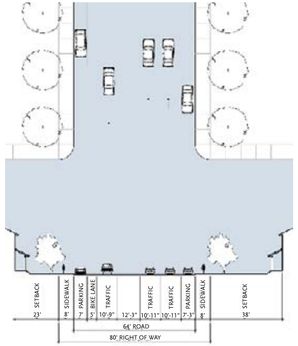
Illustrative Photo of Painter Ave at Wardman St



MOVEMENT / SPEED	Free/ 30 mph
CROSSING TIME	12 seconds
ROW WIDTH	70'-4"
TRAVEL LANES	44'-4"
PARKING	Both sides - parallel parking
CURB TYPE	Vertical
CURB RADIUS	10'
SIDEWALK WIDTH	5' west & 5' east side
PLANTER TYPE	tree-well
PLANTING	tree in planter
MODIFICATIONS	Add signaled mid-block crossing on Painter Avenue between Penn and Hadley Streets.

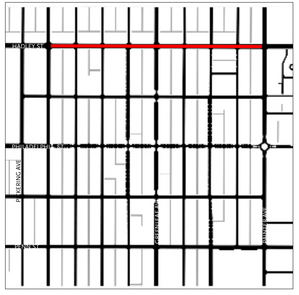
Key
STREET SECTION

2 HADLEY STREET





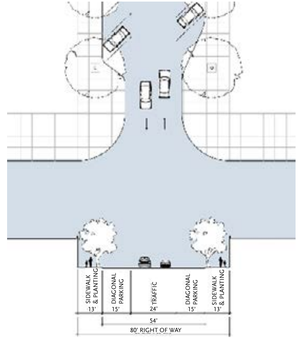
Illustrative Photo of Hadley St. west of Friends Ave



MOVEMENT / SPEED	Free/ 25 mph
CROSSING TIME	12.5 seconds
ROW WIDTH	80'
TRAVEL LANES	36'
PARKING	Both sides
CURB TYPE	Vertical
CURB RADIUS	10'
SIDEWALK WIDTH	13'
PLANTER WIDTH	6'
PLANTER TYPE	tree-well
PLANTING	tree in planter
MODIFICATIONS	

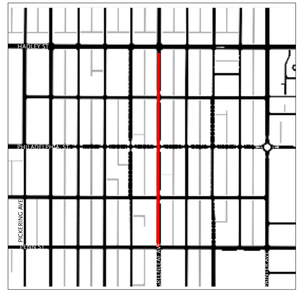
Key
STREET SECTION

3 GREENLEAF AVENUE





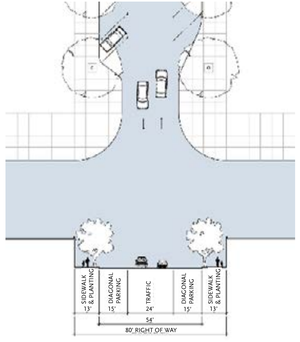
Illustrative Photo of Greenleaf Ave South of Philadelphia St



MOVEMENT / SPEED ..... Free/25 mph
CROSSING TIME ..... 12.5 seconds
ROW WIDTH ..... 80'
TRAVEL LANES..... 24'
PARKING ..... Diagonal both sides
CURB TYPE ..... Vertical
CURB RADIUS ..... 10'
SIDEWALK WIDTH ..... 8'
PLANTER WIDTH ..... 5'
PLANTER TYPE ..... Tree-well
PLANTING ..... Trees in planter
MODIFICATIONS..... Add pedestrian crossing with signs on Greenleaf Ave. between Penn st. and Hadley st. Remove planters to increase sidewalk are; Plant trees in triangular and diagonal parking spots; Keep lighting below tree level.

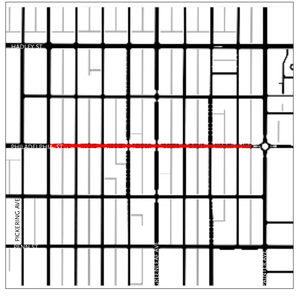
Key
STREET SECTION

4 PHILADELPHIA STREET





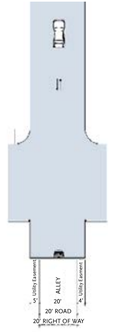
Illustrative Photo of Philadelphia St East of Greenleaf Ave



MOVEMENT / SPEED ..... Free/25 mph
CROSSING TIME ..... 12.5 seconds
ROW WIDTH ..... 80'
TRAVEL LANES..... 24'
PARKING ..... Diagonal both sides
CURB TYPE ..... Vertical
CURB RADIUS ..... 10'
SIDEWALK WIDTH ..... 8'
PLANTER WIDTH ..... 5'
PLANTER TYPE ..... Tree-well
PLANTING ..... Tree in planter
MODIFICATIONS..... Add roundabout at Philadelphia St. and Painter Ave., remove planters to increase sidewalk area, plant trees in triangular end of diagonal parking spots, keep street lighting below tree level.

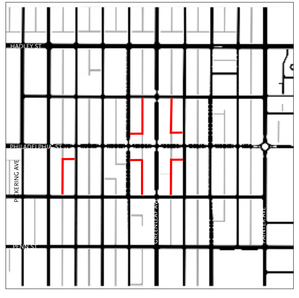
Key
STREET SECTION

5 ALLEY
Typical





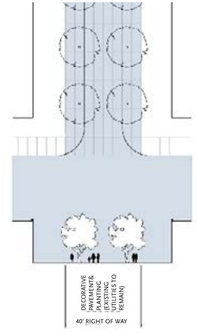
Illustrative Photo of Typical Alley



MOVEMENT / SPEED ..... Slow/10 mph
CROSSING TIME ..... 5.5 seconds
ROW WIDTH ..... 20'
TRAVEL LANES..... 20'
PARKING ..... none
CURB TYPE ..... Vertical
CURB RADIUS ..... 10'
SIDEWALK WIDTH ..... none
PLANTER WIDTH ..... none
PLANTER TYPE ..... none
PLANTING ..... none
MODIFICATIONS..... Turn alleys near the Greenleaf and Philadelphia intersection onto Bright and Comstock to avoid further congestion at this intersection and to prevent the use of alleys as short-cut/thoroughfare alternatives to Greenleaf

Key
STREET SECTION

6 PASEO
Typical





MOVEMENT / SPEED ..... n.a.
CROSSING TIME ..... n.a.
ROW WIDTH ..... 20' min., 40' max.
TRAVEL LANES..... n.a.
PARKING ..... n.a.
CURB TYPE ..... n.a.
CURB RADIUS ..... n.a.
SIDEWALK WIDTH ..... n.a.
PLANTER WIDTH ..... 5' x 5'
PLANTER TYPE ..... wells
PLANTING ..... as appropriate
GUIDELINES:

- Every Park Once structure should have a paseo attached to it.
- Paseos should be negotiated on a project by project basis.
- Design elements should be based on these considerations:
  - Specialized paving treatment
  - Storefront frontage types
  - Niche planters along blank walls
  - Awnings that project no more than 8 feet into the right of way
  - Accommodating bicycle racks wherever possible



Left: Lower-intensity residential streets provide landscaping between the street curb and narrow sidewalks.

Right: A recessed storefront on higher-intensity streets with zero setbacks allows for restaurant seating.

Below: Wide sidewalks allow for restaurant seating within the public realm.





An important aspect of the street system and street improvements is the public realm of the town center that is Uptown Whittier, as constituted by sidewalks and paseos. Sidewalk treatment can vary from lower-intensity residential areas filled with landscaping such as trees, grass, and plants to higher-intensity retail, commercial, and mixed-use areas with outdoor seating. Street furniture should be carefully selected to be both durable and aesthetically pleasing: benches, planters, bicycle racks, trash cans, lamp posts, and paving materials. A town center is used at different times of the day and night, and thus the lighting of storefronts, landscape, and pedestrian areas is crucial in creating a safe and lively environment.

Paseos should be similarly treated as an integral part of the public realm, even though they are narrower, shaded passages which may be quieter than sidewalks. Paseos should be encouraged and negotiated on a project by project basis.





Left and Above: Paseos tend to be narrow and provide pedestrians with a quieter setting than the street where automobiles are present.

2.3.4 Transit

Uptown is presently served by several bus systems and routes, including from its own service, by neighboring cities such as Montebello and Norwalk, and the regional Metropolitan Transit Authority (MTA). As many of the Specific Plan features are implemented, residential densities will increase, and more pedestrians will be found in Uptown. And as the Uptown area becomes more urban in its development intensities, all forms of transit will be more viable as dense walkable areas have the highest transit ridership potentials. Uptown will attract those--younger singles and professionals, empty nesters--who have lower levels of automobile ownership and who prefer the more walkable transit-oriented urban lifestyle. Thus, at least a part of Uptown's success will be correlated with two-fold improvements in the transit service: a greater choice of routes, especially to regional destinations such as larger retail centers or entertainment venues, and more frequent service to regular destinations such as centers of employment, including the hospital.



Above: A critical design feature of providing convenient transit is improving the layout and amenities at existing bus stops, which should include covered and lit shelters, amenities such as benches and trash containers, and additional offerings such as newspaper kiosks and public telephones.



Above: As the cost of automobile ownership increases in terms of gasoline and operating costs, and in terms of increasingly longer commutes, transit--such as the bus services to Uptown--will be seen as a viable alternative. This requires additional investment in transit to improve the frequency and quality of services to town centers such as Uptown.

Key: ***Public Transit Bus Routes***

Description

- Norwalk Transit Route 6
- Norwalk Transit Route 7
- Norwalk Transit Route 8
- MTA Metro Local Route 270
- Montebello Bus Lines Route 10
- Montebello Bus Lines Route 50

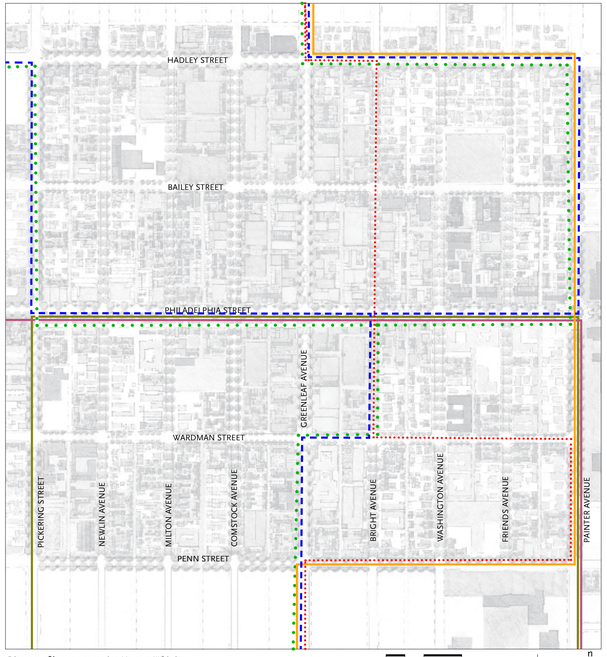


Diagram of bus routes serving Uptown Whittier

This chapter describes the implementation framework of the Uptown Whittier Specific Plan as addressed through: 1. Plan-Wide Policies, 2. Phasing, 3. First Steps and Tasks, 4. Implementation Projects and Tools, 5. Financing of Public Improvements, and 6. Redevelopment and Tax Increment Potential. The plan calls for projects to support and enable redevelopment in Uptown. These project range from street and infrastructure improvement, to shared parking structures and long term retail strategies. Many of the projects in the Specific Plan will be funded through private investment. There are also several capital improvements and programs that require at least partial public funding early in the process to stimulate private sector investment.

3.1.1 Plan-wide Policies

There are several public policies that need to be established to meet Specific Plan objectives.

A. Invest in Historic Preservation

The following measures will establish the role of historic structures in leveraging existing resources for the ultimate benefit of the entire Uptown Plan area:

1. Promote existing facade improvement and restoration program

2. Promote building rehabilitation grants

3. Encourage property owners to leverage Federal Tax Credits, Mills Act agreements, and facade improvements to promote historic preservation and adaptive reuse of eligible and listed historic structures

B. Expand Retail and Employment

The following measures will expand retail and employment opportunities in Uptown:

1. Promote the plan area to retailers and employers--especially at the regional and national levels

2. Leverage the relationship between retail, employment and housing as a quality of life issue for those wanting to live and work in a vital, mixed-use town center

3. Use city investments in a strategic manner; that is, to promote areas such as Uptown, which is not only an under performing retail district, but is a vital part of Whittier's history and identity

4. Uptown requires strong leadership in business planning, recruitment, and retention from property owners, Uptown merchants, and City of Whittier. The leadership should yield concrete actions in the short term (e.g. cleaning of sidewalks and storefronts, improved signage and lighting, longer and more consistent store hours) and long term outcomes (e.g. new anchor retail, prosperous business improvement district-with revenues from parking fees). The leadership requires a full partnership and sharing of responsibilities between the three groups.

C. Invest in Shared Parking

To enable the development potential identified in this Specific Plan, parking must be addressed as a shared, public responsibility. To reduce overall parking demand, its need for excessive land, and to spark redevelopment, a 7-step parking and transportation strategy is proposed. This strategy proceeds in ascending order from low cost, readily implementable measures to more higher-cost and time-consuming measures. If redevelopment proceeds rapidly, many of the following steps should be pursued simultaneously:

1. Make better use of existing parking areas and vacant lots
The City of Whittier (e.g. through a Park Once District that can be formed as a CFD under California law) should purchase or lease existing private surface parking areas and vacant lots for two purposes. In the immediate to short term, these lots will provide parking for the district; and in the medium to long term, they can be transformed into parking structures, or desired civic buildings, or eventually sold to developers based on Requests For Proposals (RFPs). By making strategic purchases now, the City can secure the pieces of ground that are crucial for the future success of Uptown.

2. Value retail customers for parking convenience
A Park Once District, which has the authority to operate and enforce both on street parking and public parking lots, has a critical role to play in ensuring that convenient, on-street short-term parking is readily available. Short-term parking that is strictly enforced creates rapid turnover, and gives the motorist a reason to stop on for a short visit, adding to the retailers' profits. Business owners and their employees must therefore relinquish the best spaces to customers in the interest of business profitability, and park instead in upper garage floors, or in all-day spots at the periphery, where spaces can be less expensively provided. As Uptown grows, transitions from free to paid parking, parking prices and validated parking programs must be set to reward short-term, sales-tax generating customer trips (e.g. free or low-cost parking for the first 20 minutes), and discourage long-term employee parking in the best spots.

3. Within the Park Once district, abolish minimum parking requirements for each non-residential development and establish a shared market for parking
Developers should be allowed to build as much or as little parking as they choose, subject to design standards in Chapter 4. This is important to make it feasible to redevelop the area as a compact, lively and pedestrian friendly District. If they choose to build little or no on-site parking, they must be able to purchase permits for public lots from the District for resale to their tenants' employees. Whether parking is built on-site or rented in public lots, each development's conditions of approval should encourage parking costs to be "unbundled" from the cost to buy or lease building space: that is, parking spaces are required to be sold or rented at full cost, as a separately charged item, so that building tenants can buy or rent as much or as little parking as they choose. Conditions of approval must also require that building tenants make the true costs of parking visible to their employees by either charging their employees full market-rate for parking, or offering employees free parking in conjunction with the option of taking the cash value of the parking space instead. In-lieu fees for parking can be based on the parameter of 3 spaces per 1,000 square feet of space. This step is key in the eventual abolition of current parking standards and a transition to parking obligations in Uptown Whittier within the Park Once district.

4. Form a Park Once district from the northern properties on Hadley, mid-block between Washington and Friends, Penn, and mid-block between Newlin and Milton.
Parking must be managed as a public utility, like streets and sewers, with public parking provided in strategically placed municipal lots and garages, and shared between nearby uses. A Park Once District, with authority to determine parking rates, collect parking revenue, and allocate parking revenues, is essential for this purpose. The District should be able to allocate parking revenues for a wide range of improvements in Uptown Whittier, including parking construction and operations, streetscape improvements; transit, bicycle and pedestrian improvements, transportation demand management programs, and other programs, such as security, street cleaning, and marketing. The other option is for the District to keep revenues for operating costs as well as revenues from parking enforcement, and then allocating any surplus revenues to a BID such as the Uptown Association for safety, street cleaning, lighting, and events. An implementation strategy for the Park Once strategy will have to be prepared by a specialized parking consultant in order to describe in greater detail the steps outlined on this page.

5. Implement full package of transportation demand management strategies
Providing employees with incentives to leave their cars at home can be substantially cheaper than the cost to build and operate a new parking structure space. Many new employees can be expected to work in the future Uptown at build-out, so that demand management strategies can create substantial savings on parking construction costs. Here as well, a Park Once District should play an important role in implementing, funding and operating these programs, providing buying power and economies of scale for the many small employers in the district.

6. Build public parking garages
For the longer term, parking garages for non-residential development will be needed at key locations. With no minimum parking requirements imposed on new development projects, these new structures can be funded with a mix of sources. Developers needing parking for new buildings can sign leases with the Park Once District (e.g., for 100 spaces) and then sublease the spaces to their tenants. Individuals employees or residents can also lease monthly spaces. The Park Once parking garages will be utilized for retail and office uses, while residential parking will be provided on site for residential projects, either in underground garages or in small, landscaped surface parking lots.

7. Encourage shared and joint use parking outside the Park Once district
For areas in the Uptown Whittier Specific Plan west of mid-block between Milton and Newlin and east of mid-block between Washington and Friends, sharing and joint use parking facilities will be encouraged within 500 feet of the primary destination. The facilities will follow the standards in Section 4.9.1 Parking Design and 4.9.2 Landscape Standards of this Specific Plan.

D. Encourage a property-owner based business improvement district

It is highly recommended that a property owner BID be established in the area in order to increase funding and stability of the BID. After petitioning the city to form a BID, passage requires a 50 percent approval by property owners in the area. Once formed, BIDs are governed by a board of directors elected by property owners rather than residents. The board ensures that all BID property owners contribute to the district.

BID revenues are intended to act as additional revenue rather than a replacement for general funding from the city. For this reason, BID fees are required to stay within the district. Fees are collected from the city, and all assessment funds are returned to the district through annual contract agreements. Fees vary among businesses and are often assessed according to the property's size and location. Collected revenue provides varying services, including park and open space maintenance and private security forces. Some BIDs in California also use BID fees for marketing their respective areas through brochures, tourist information, and special events. California law limits a BID's existence to 5 years, after which the BID must be renewed or terminated.

One of the challenges in forming a property-owner-based BID is when a larger share of the property owners is non-local, especially when they are reside outside the metropolitan area or the state. An inventory of property ownership is likely reveal the mix of ownership in the area. The City and/or the retailers may have to initially engage the property owners through some advocacy efforts in communicating the overall benefits of forming a BID, and how it can leverage self assessed revenues as well as a common decision making platform to attract a much larger customer base, reap higher profits, and yield higher returns on property and small business investments.

E. Invest in the Public Realm

To achieve the Specific Plan objectives, the public realm needs to be addressed as a unique resource. The following measures establish a quality public realm in Uptown:

1. Implement the street plan, including the tree succession plan on Greenleaf and Philadelphia, and intense tree-planting on all other streets

2. Create more space on sidewalks by removing excessively large planters and shrubs on Greenleaf and Philadelphia

3. Realize civic open space in the northwest, southwest, and southeast quadrants of Uptown (e.g. parks, plazas)

4. Enhance vital pedestrian connections between Whittier College and Uptown, to the Greenway Trail and to the Whittier Boulevard/Philadelphia Street intersection further east of Uptown

F. Promote creation of affordable housing

Help promote the creation of affordable housing through a variety of existing tools:

1. Different housing improvement programs

2. Inclusionary housing ordinance

3. Density bonus ordinance

4. Maintaining a state-certified housing element

5. Actively adopt ordinance to comply with state affordable housing requirements

G. Invest in Civic Initiatives

The following measures establish civic facilities and activities as a vital component for longer-term viability:

1. Establish civic uses in Uptown--for example, as part of a mixed use development on the site between Hadley and Bailey (former Alpha-Beta site), and reinvigorate the Civic Center complex on the southern edge of Uptown through investment in public open space.

2. Establish places for a variety of civic events throughout the year.

3. Continue the public process of the Specific Plan to annually identify priorities, create agreements, revisit phasing of projects, and generate civic pride through public dialogue

H. Implementation

To realize the aesthetic and economic potential of this Specific Plan, it is necessary to consistently identify actions and proposals that realize its vision through one crucial measure:

Enhance City expertise in design: Use the services of a city architectural consultant and/or city planning staff trained in design to assist in reviewing projects and working with the private sector to realize the best results.



Example of Park Once structure lined with retail uses in an urban setting

3.1.2 Phasing

A general sequencing of the various items is indicated by the order in which they appear within each phase. Many implementation measures may occur simultaneously and appear in sequence for organizational purposes alone. Adjustments to this strategy are inevitable and subject to the needs and priorities of the community over time. These components should be reevaluated and updated annually. Because of the numerous individual ownerships in the plan area, the phasing identified below is less tied to geography within the plan and more concerned with the prioritization of key components necessary for success. The general phases are:

A. Phase 1: Immediate Term (1 month – 1 year)

- Clean or paint over graffiti [1]
- Replace etched storefront windows with film-covered ones [3]
- Power wash all Uptown sidewalks on a weekly basis [4]
- Strictly enforce all on-street parking regulations, especially for short-term parking [1]
- Light storefronts until at least 10:00 p.m. every night, and maintain consistent hours among different stores [4]
- Remove or repair all signs at gateways to Uptown, and establish newly designed signage, including on Interstate 605[1]
- Establish Park Once District and fees [1]
- Commence intensive planting of trees around the periphery of Uptown prior to commencing the tree succession plan on Philadelphia and Greenleaf.

B. Phase 2: Short Term (1 – 5 years)

- Revisit or expand façade improvement program to facilitate existing small businesses and property owners to upgrade storefronts and building façade [1]
- Establish incentives for renovation, rehabilitation, and adaptive reuse of historic buildings [1]
- Work with Uptown Association and Chamber of Commerce to establish business merchandising education program for small businesses to make them more effective and profitable[4]
- Work with professional retail consultant to attract national retailers to serve as anchor destinations in Uptown, including a boutique food store, bookstore, and clothing stores [3]
- In conjunction with tree succession plan, remove excessively large planters, widen sidewalks, and permit small outdoor seating areas to enliven sidewalks and attract more visitors [1]
- Promote development of former Bank of America building at Greenleaf/Philadelphia [2]
- Issue RFP for first residential project located on the site at Wardman and Bright [2]
- Establish a property-owner-based BID
- Issue RFP for Park Once structure at Philadelphia/Bright as a Liner building type with retail and commercial uses [2]
- Issue RFP for mixed-use development on site bound by Hadley/Comstock/Bailey/Milton: [2]
  - Option A: Anchor retail and parking structure, with smaller neighborhood retail and housing as liner uses
  - Option B: New public library with residential, retail on Hadley, and public park
- Install up to 32 electronic parking payment machines [1]
- Upgrade sewage lines in phases [1]
- Upgrade water supply pipes in phases [1]
- Work with cable company to upgrade cable network and Wi-Fi in phases in conjunction with infrastructure upgrading [1]
- Refurbish parking garage on Bright, between Philadelphia and Bailey [2]
- Design and build monumentation to mark gateways to Uptown at key intersections [1]
- Implement mid-block crossings [1]
- Design and build park as part of development on the block bound by Hadley, Comstock, Bailey, and Milton [1]
- Begin implementation of tree-planting plan in Section 2.2.2 (Street Trees) of the Plan prior to commencing tree succession plan on Greenleaf and Philadelphia [1]
- Begin tree succession plan on Greenleaf and Philadelphia[1]

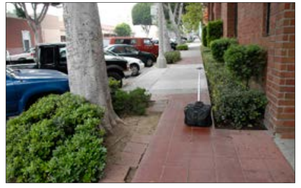
C. Phase 3: Medium Term (5 – 10 years)

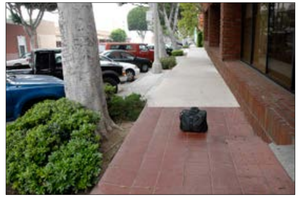
- Design and build park in southwest quadrant of Uptown [1]
- Design and build up to 4 new Park Once structures [1]
- Explore potential to develop church properties into affordable housing and mixed-use (such as commercial and social services) in partnership with non-profit developers
- Completion of first residential projects with new residents increasing safety with "eyes on the street", providing an enlarged customer base for local businesses, and fulfilling increased housing choices [5]
- Continue tree succession plan on Greenleaf and Philadelphia [1]
- Completion of new tree planting on all streets [1]

D. Phase 4: Long Term (10 – 20 years)

- Design and build park in southeast quadrant of Uptown [1]
- Design and build 2 new Park Once structures [2]
- Aim for full build out, including:
  - Up to 1,035 residential units in all 10 building types, from single family dwellings to apartments and lofts in liner buildings [5]
  - approximately 800,000 square feet of new retail, including national brands to serve as anchor destinations [5]
  - approximately 700,000 square feet of new commercial, including offices and services [5]
  - approximately 6,000 total parking spaces, with about 2,500 of those in Park Once structures [1, 2, 5]
  - 3 new neighborhood parks, including one each serving the northwest, southwest, and southeast quadrants of Uptown [1]
  - fully operational property-owner based BID, with operating costs and parking ticket revenues accruing to the City of Whittier. Any additional parking revenues accruing to BID for regular cleaning and power washing, extra safety patrols, landscape maintenance, improved lighting, events, and continuing education programs for small businesses to remain competitive over time [3]
  - fully functioning Park Once district with up to 8 parking structures, including the refurbished structure on Bright just north of Philadelphia [1]
  - full involvement of Whittier College in Uptown, including commercial partnerships with the City of Whittier and Uptown Association, and property investment and mixed-use development [7]

Lead organizations:
[1] City of Whittier
[2] Whittier Redevelopment Agency
[3] Property Owners Association (property-owners business improvement district - PBID)
[4] Merchants Association (Uptown Association / business improvement district - BID)
[5] Private Property Owners
[6] Churches and Social Service Organizations
[7] Whittier College





Before and after images of additional space on sidewalks after removal of excessively large planters and addition of more openings on the street.

3.1.3 First Steps and Tasks

A Promote private sector interest in Uptown Whittier

The vision and benefits of the Specific Plan need to be communicated to the private sector and potential investors. This will fully enable the ability of each property owner to realize the individual economic and land use potential of their property while contributing to the overall revitalization effort.

Step 1	Step 2	Step 3	Step 4	Step 5	Comments
• Visit major stakeholder and community groups to communicate adopted plan • Prepare cable TV interview with Mayor/City Council and Director of Community Development discussing the plan	• Convert Uptown Association from tenant-based Business Improvement District (BID) to property-owner-based BID	• Advertise and promote the plan among industry groups	• Enhance appearance of Uptown via graffiti removal, cleaning of sidewalks, replacement of etched storefronts, strict enforcement of short term parking regulations, keep storefronts lit until at least 10 p.m. every night, and maintain consistent store hours	• Establish Park Once District and fees	• Ongoing public planning process and Uptown beautification process generates momentum demonstrating that implementation of Plan has already started

B Improve public realm through public investment

A major element of Uptown's identity and future is its public realm, especially its landscape--street trees, plantings, and sidewalks. Smaller, phased investments will attract more visitors and retail customers for more frequent and longer visits, and create an attractive physical environment for private investment. Prior to commencing the tree succession plan, the City will commence the planting of street trees around the periphery of Uptown.

Step 1	Step 2	Step 3	Step 4	Step 5	Comments
• Prepare streetscape plan identifying tree replacement species, tree planting design, hardscape treatments, etc.	• Identify first blocks on Greenleaf and/or Philadelphia for aging/damaged trees for replacement in tree succession plan. Begin planting replacement trees on select blocks of Greenleaf and Philadelphia	• Identify first set of excessively large planters on Greenleaf and Philadelphia for removal to widen sidewalks, and in appropriate places, provide small outdoor seating areas for restaurants and cafes	• Remove all large planters on Greenleaf and Philadelphia • Establish permitting process for outdoor seating areas at eating establishments • Begin implementation of street tree replacement planting plan	• Complete tree bulb outs on in diagonal parking on Greenleaf and Philadelphia	• Work closely with community groups interested in street landscape and street tree issues, and with Uptown Association for providing outdoor seating areas

C Establish Park Once District

The Park Once concept is crucial to the success of Uptown, and needs to be established early on. Park Once structures make more effective use of surface parking lots and vacant lots, share parking needs among different land uses, and make Uptown friendly to both automobiles and pedestrians.

Step 1	Step 2	Step 3	Step 4	Step 5	Comments
• Strictly enforce existing parking regulations, and increase revenues from parking • Establish Park Once district and fee structure	• Use existing surface lots and city-owned vacant lots as temporary surface parking lots with fees to accommodate parking while construction of new parking structures begins • Purchase land for future Park Once structures	• Issue RFP for mixed-use development--including Park Once structures lined with residential, retail and/or commercial uses--on former Alpha Beta site and/or on Bright Avenue just south of Philadelphia street	• Fund, design and construct at least one city-owned Park Once structure	• Introduce parking machines for high-demand on-street diagonal parking in the retail core area surrounding the Greenleaf/Philadelphia intersection and adjust parking fees to reach the 85% parking occupancy rate	• Based on the recommendations of the Specific Plan, Uptown Whittier will require a fully developed and detailed Park Once strategy, including regulations, fees, and professional management

D Strengthen the Role of Retail in the Revitalization of Uptown

In addition to private investment, public realm improvements, and a Park Once strategy, the fourth crucial first step is the role of retail: strengthening local retail through storefront improvements, consistent hours, better lighting, and more effective merchandising, and attracting national retail, especially an anchor food store, book and music store, or a clothing store

Step 1	Step 2	Step 3	Step 4	Step 5	Comments
• Work with Uptown Association, Chamber of Commerce and retail consultant to initiate small business education program in Uptown, beginning with simple, effective measures to improve storefront visibility, lighting, and hours	• Strengthen, or revisit, existing retail facade program to help new local retail and assist existing retail with improvements such building facades, storefront redesign, and outside lighting	• Work with Uptown Association, Chamber of Commerce, and retail consultant to convert existing tenant-based Business Improvement District into property-owner based BID and reap benefits of improved property values, higher profits, and over time, increased rents	• Work with Uptown Association, Chamber of Commerce, and retail consultant to revisit existing national retail recruitment strategy, modify approach, and target a retail anchor based on vision of Specific Plan, strong regional housing demand, and ongoing improvements in Uptown	• Establish financial arrangement for Park Once revenues (after operating costs and parking ticket revenues accruing to City of Whittier) to be utilized by BID for ongoing cleaning, safety, landscape maintenance, events, and continuing merchandising education	• Retail strategy needs a systematic and sustained effort with assistance from the most accomplished national retail consultants to help transform the economic vitality of Uptown

3.1.4 First Steps

A. Projects

The table on the next page describes a menu of capital investment initiatives for the Specific Plan area. The choice of the particular initiative will depend on policy priorities and market interest in Uptown Whittier. At the time of preparation of the Specific Plan, the underlying market economics of the area were favorable, with development interest and pressures from a variety of private sources. A key opportunity created by the adoption of the Specific Plan is the increase in intensity and density allowable for development within the Plan area. The City of Whittier should concurrently develop policies and procedures that recapture the value associated with this rezoning. The table on this page lists the actors primarily responsible for each capital investment initiative.

An important step is for the City to adopt a Community Facilities Districts (CFD) that would cover all or part of the Uptown Specific Plan area and require new development to occur under a CFD. An ordinance would create a CFD on a parcel by parcel basis such that as new development projects are negotiated through development agreements, they would be required to participate in the CFD. The ordinance establishing this should be adopted roughly concurrently with the adoption of the Specific Plan.

B. Project Costs and Resources

The table on the next page, Menu of Capital Investment Initiatives, includes planning-level cost estimates for major projects and public improvements. The table also identifies funding sources and financing methods. Key implementation resources include the Whittier Redevelopment Agency (WRA), as follows:

- Portion of the existing 2005 bond issue
  - » $6 to $7 million: Earthquake area
  - » $2 to $3 million: Greenleaf area
- Portion of the new 2007 bond issue
  - » Approximately $8 million: Earthquake area
- Net new increment from the Specific Plan area
  - » Approximately $15 million

It is neither expected nor desirable to spend all these monies on Uptown.

In order for the Plan implementation to move forward, the WRA will have to issue new debt based on the value of the entitlements vested from the Uptown Whittier Specific Plan. This should yield approximately $15 million in supportable debt, which can be combined with existing WRA capital to make public improvements in the Plan area. The $15 million is to be raised through existing scheduled bond issues through approximately 2 year cycles.

In addition to these WRA funds, it will be important to bring in community facilities assessments, including benefit assessment districts and other approaches. A 0.65 to 0.85 levy on net new investment within the Specific Plan area would keep the overall tax burden under 2 percent. The Plan area has the capacity to raise an additional $25 to $35 million to support CFD funded improvements within the Plan area, such as parks and a Park Once district.

The Specific Plan has the capacity to produce $40 to $50 million from new investment generated from the both the net new tax increment plus CFD capacity. In addition, there are other funding sources that could be accessed to support public improvements, some of which could be based on a rational nexus test. These include a broad variety of impact fees which could be directed towards parking, storm water, and other related improvements. Over time, there may be opportunities to access external funding sources for public improvements over the life of the Plan, particularly in the area of transportation and park acquisition as projects can apply opportunistically for State of California support and for other occasional resources from the U.S. government, such as CDBG.

C. Park Once Structures

A major component of the Specific Plan's implementation are the Park Once structures. The Illustrative Plan in Section 2.1 suggests a number, location, and building footprints of the Park Once structures, but their actual implementation will occur via the thresholds listed in the table on this page, Sequencing of Park Once Structures. Park Once structures shown in the illustrative plan and transportation diagram are only suggestive, and do not engender any specific expectation on the that particular property. The actual location of each Park Once structure will be conditioned by the geographic pattern of private investment, and a parking structure catchment area of approximately 600 feet in radius from the structure itself.

The calculations in the accompanying table are based on a ratio of 3 parking spaces per 1,000 square feet of retail and commercial space, and a conceptual parking structure of 240 spaces. The conceptual 240 parking-space Park Once structure is an approximate number to determine average dimensions and estimated costs, and is based on a size and scale that is appropriate to the fine-grained fabric of Uptown.

Parking for the first projects in Uptown may be accommodated in a number of ways: as part of the development on the Alpha-Beta site; as a shared agreement with another off-site parking facility nearby; or on the site as a landscaped parking court.

Responsibilities for Capital Investment Initiatives[1]

City of Whittier	Whittier Redevelopment Agency	Public-Private Partnerships	Property-Owner Business Improvement District	Whittier College
	Tree succession plan		Tree succession plan	
	1st Park Once structure	1st Park Once structure		
Mid-block pedestrian crossings				
Install electronic parking payment machines				
	2nd Park Once structure	2nd Park Once Structure		
		Park on/adjacent to former Alpha-Beta site		
Park in southwest quadrant of Uptown	Park in southwest quadrant of Uptown			

[1] Capital investment initiatives are described in table on next page

Sequencing of New Park Once Structures in Uptown

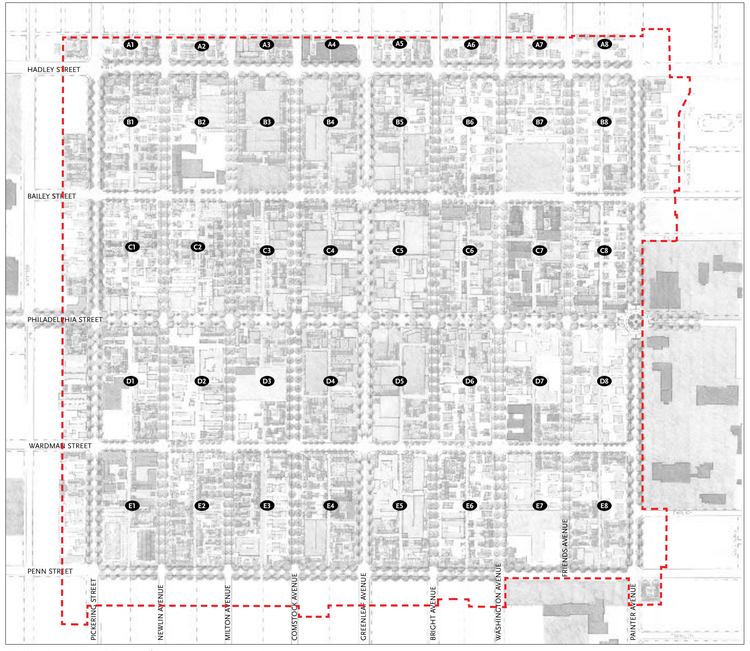
Threshold for Introducing New Structure	Possible Location of New Structure	Notes
1. At least 80,000 square feet of new retail and commercial development (including on former Alpha-Beta site)	Within approximately 600 feet of concentration of new development (including on/adjacent to former Alpha-Beta site)	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures
2. At least 160,000 square feet of new retail and commercial development (including next to and adaptive reuse of old Bank of America building)	Within approximately 600 feet of concentration of new development (including adjacent to old Bank of America building)	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures
3. At least 240,000 feet of new retail and commercial development	Within approximately 600 feet of concentration of new development, especially in close proximity to Greenleaf Avenue and Philadelphia Street	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures
4. At least 320,000 feet of new retail and commercial development	Within approximately 600 feet of concentration of new development, especially in close proximity to Greenleaf Avenue and Philadelphia Street	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures
5. At least 400,000 feet of new retail and commercial development	Within approximately 600 feet of concentration of new development, especially in close proximity to Greenleaf Avenue and Philadelphia Street	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures
6. At least 480,000 feet of new retail and commercial development	Within approximately 600 feet of concentration of new development, especially in close proximity to Greenleaf Avenue and Philadelphia Street	See Illustrative Plan in Section 2.1 and Park Once Strategy Diagram in Section 2.3 for possible locations of Park Once structures

Menu of Capital Investment Initiatives

Name of Capital Investment Initiative	Planning-Level Cost Estimate[1]	Public Share	Private Share	Explanatory Notes	Funding Sources	Funding Mechanisms
Tree succession plan on Greenleaf Avenue and Philadelphia Street	Greenleaf: $ 3,400,000 Philadelphia: $ 3,400,000	$ 6,800,000	To be negotiated	Step 1: Replace every other ficus tree with new tree planted at end of diagonal parking spaces Step 2: Remove remaining trees, plant new trees, and complete sidewalk and curb work Note: Cost estimate does not include improved lighting or site furniture	Whittier Redevelopment Agency (WRA) Property-Owner Business Improvement District (PBID)	50% from 2007 WRA bond issue 50% from 2008 Uptown bond issue Enforced via PBID formation agreement with City of Whittier
Design and build first new Park Once structure either on/adjacent to former Alpha-Beta site, or adjacent to old Bank of America building	$ 8,580,000	$ 5,100,000	$ 3,400,000 [to be negotiated]	Cost estimate is based on the design of a medium-size parking structure that is appropriate to the scale, fabric, and streets of Uptown Whittier: A structure with approximately 240 spaces, 114,400 square feet, and 4 levels of parking, including the roof Note: Structure to be lined with retail, commercial, or residential uses that are not included in the cost estimate	Whittier Redevelopment Agency Public-private partnerships	Request for Proposals Development Agreement [plus some from existing 2005/2007 bond issue]
Implement mid-block pedestrian crossings	$ 560,000	$ 560,000	0	Two signalized mid-block pedestrian crossings on Painter at Bailey and Wardman, and two pedestrian mid-block crossings with signs on Greenleaf between Penn and Wardman and between Bailey and Hadley	City of Whittier	Capital Improvement Program
Install up to 32 electronic multi-space parking payment machines	$ 320,000[2]	$ 320,000	0	Solar powered pay and display parking machines to be installed along Greenleaf and Philadelphia, starting with the retail core at the center of Uptown	City of Whittier	Capital Improvement Program
Design and build second new Park Once structure, either on/adjacent to former Alpha-Beta site, or adjacent to old Bank of America building	$ 8,580,000	$ 5,100,000	$ 3,400,000 [to be negotiated]	Cost estimate is based on the design of a medium-size parking structure that is appropriate to the scale, fabric, and streets of Uptown Whittier: A structure with approximately 240 spaces, 114,400 square feet, and 4 levels of parking, including the roof Note: Structure to be lined with retail, commercial, or residential uses that are not included in the cost estimate	Whittier Redevelopment Agency Public-private partnerships	Request for Proposals Development Agreement [plus some additional amount from 2008 Uptown bond issue]
Design and build park on/adjacent to former Alpha-Beta site	$ 900,000	0	$ 900,000	Estimated park size is approximately 45,000 square feet	Public-private partnerships	Development Agreement
Design and build park in southwest quadrant of Uptown	$ 1,008,000	$ 1,008,000	0	Estimated park size is approximately 50,400 square feet	City of Whittier Whittier Redevelopment Agency	City-wide park impact fees Community Benefits Assessment Dist.
Design and build between 1 and 4 new Park Once structures, depending on amount of retail and commercial development, and trip generation in Uptown	Cost of each: $ 8,580,000	$ 5,100,000	$ 3,400,000 [to be negotiated]	Cost estimate is based on the design of a medium-size parking structure that is appropriate to the scale, fabric, and streets of Uptown Whittier: A structure with approximately 240 spaces, 114,400 square feet, and 4 levels of parking, including the roof Note: Each structure to be lined with retail, commercial, or residential uses that are not included in the cost estimate	Whittier Redevelopment Agency Public-private partnerships	Request for Proposals Development Agreement [plus some additional amount from 2008 Uptown bond issue]
Design and build park in southeast quadrant of Uptown	$ 800,000	$ 800,000	0	Estimated park size is approximately 40,000 square feet	City of Whittier Whittier Redevelopment Agency	City-wide park impact fees Community Benefits Assessment Dist.

Notes:
[1] Cost estimates for tree succession plan and parks are based on numbers provided by the landscape architecture firm of Fong Hart Schneider + Partners.
[2] Cost estimate is provided only as a guide and is based on similar solar powered pay and display machines installed in Sacramento, CA in 2007.
All other estimates are provided by the civil engineering firm of Danjon Engineering.
All figures are planning-level estimates for identifying a general range of potential costs only, and are subject to further refinement during the life of this Specific Plan.

The diagram on this page and the table on the following page describe the programmatic capacities of the Uptown Specific Plan area, as envisioned by the scenario of the illustrative plan. The capacities are measured in gross square footage, and include the following categories: retail, commercial (e.g. office and services), residential, and civic and institutional (including public and non-profit properties, such as those owned by churches, Whittier College, and the school district). The square footage calculations are subject to change, depending on public policy decisions and market demand conditions. The programmatic capacities calculations are nonetheless useful for estimating funding requirements, revenues generated, and environmental impacts. The capacities in the table are approximately 80% of the full development capacity of the Uptown Whittier Specific Plan area.



Block by Block Uptown Whittier Specific Plan Programmatic Capacities Diagram

Key:

Description

A1 Block reference

Uptown Specific Plan area boundary

Block #	Retail sq. ft.		Commercial sq. ft.		Residential sq. ft.		Civic and Institutional sq. ft.	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
A1	-	5,400 sf	-	-	*6,600 sf*	5,800 sf	-	-
A2	-	-	-	-	*16,300 sf*	-	-	-
A3	-	10,800 sf	-	-	-	10,800 sf	*20,400 sf*	-
A4	-	-	-	-	*39,000 sf*	-	*57,500 sf*	3,700 sf
A5	-	-	*8,100 sf*	-	*13,400 sf*	18,200 sf	-	-
A6	-	-	*2,500 sf*	-	*1,000 sf*	11,000 sf	-	-
A7	-	-	*26,000 sf*	-	*7,000 sf*	-	-	-
A8	-	-	*6,300 sf*	-	*12,200 sf*	-	-	-
B1	-	9,200 sf	-	-	*78,600 sf*	49,500 sf	-	-
B2	-	5,500 sf	-	-	*10,100 sf*	15,800 sf	*35,400 sf*	-
B3	-	133,000 sf	-	-	-	54,600 sf	-	-
B4	*7,000sf*	-	-	-	-	110,600 sf	-	-
B5	*2,300 sf*	47,900 sf	*18,900 sf*	21,500 sf	*8,000 sf*	84,500 sf	-	-
B6	-	-	-	-	*42,200 sf*	41,000 sf	-	-
B7	-	-	-	-	*28,000 sf*	-	*500 sf*	-
B8	-	-	-	-	*45,400 sf*	19,600 sf	-	-
C1	*10,100 sf*	-	-	-	*52,200 sf*	28,900 sf	*14,900 sf*	-
C2	*21,800 sf*	5,000 sf	-	-	*34,400 sf*	42,000 sf	-	-
C3	*26,400 sf*	22,300 sf	-	46,200 sf	-	65,400 sf	*25,500 sf*	-
C4	*19,300 sf*	38,900 sf	*19,300 sf*	33,000 sf	-	57,600 sf	-	-
C5	*37,700 sf*	35,800 sf	*28,700 sf*	35,800 sf	-	55,800 sf	-	-
C6	*14,500 sf*	40,500 sf	*11,500 sf*	55,800 sf	-	-	*24,500 sf*	4,500 sf
C7	-	-	-	-	-	39,400 sf	*119,800 sf*	-
C8	-	18,100 sf	*16,100 sf*	35,600 sf	*23,500 sf*	2,100 sf	*36,100 sf*	-

Block #	Retail sq. ft.		Commercial sq. ft.		Residential sq. ft.		Civic and Institutional sq. ft.	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
D1	-	-	-	7,500 sf	*18,000 sf*	72,500 sf	*16,900 sf*	-
D2	*3900 sf*	-	-	3,800 sf	*91,000 sf*	28,100 sf	-	-
D3	-	2,200 sf	-	12,400 sf	*4,400 sf*	89,200 sf	*4,300 sf*	-
D4	*4,400 sf*	68,700 sf	-	69,000 sf	*34,300 sf*	126,800 sf	-	-
D5	*41,100 sf*	29,900 sf	*100,600 sf*	22,200 sf	-	81,900 sf	-	-
D6	-	15,700 sf	-	-	*25,900 sf*	51,000 sf	-	-
D7	*30,400 sf*	-	-	-	*64,600 sf*	24,900 sf	*29,300 sf*	-
D8	*14,600 sf*	-	-	-	*36,800 sf*	9,800 sf	*6,500 sf*	-
E1	-	-	-	-	-	22,700 sf	*64,700 sf*	-
E2	-	-	-	-	*75,700 sf*	69,700 sf	-	-
E3	-	-	-	-	*60,700 sf*	64,600 sf	-	-
E4	-	39,000 sf	-	4,400 sf	-	109,800 sf	41,500 sf	-
E5	*68,700 sf*	15,600 sf	*69,800 sf*	-	*97,300 sf*	35,800 sf	-	-
E6	-	-	-	-	*69,400 sf*	53,800 sf	-	-
E7	-	-	*14,800 sf*	16,700 sf	*55,800 sf*	10,600 sf	-	-
E8	-	-	*23,900 sf*	-	*42,200 sf*	59,800 sf	-	-
	302,200 sf	543,500 sf	346,500 sf	363,900 sf	1,094,000 sf	1,623,600 sf	433,100 sf	8,200 sf
TOTAL	845,700 sf		710,400 sf		2,717,600 sf		506,000 sf	
	4,779,700 sf							

Note: The land use area square footages in the above table are approximate and are meant to convey orders of magnitude (rather than specific quantities) of each type of land use on each city block. The numbers are compiled from a variety of sources, including the 2006 Los Angeles County Tax Assessor's website, 2004 aerial photographs of Uptown, and the build-out scenario proposed in the illustrative plan shown in Chapter 2 of this Specific Plan.

3.3.1 Funding and Implementation

The improvements encapsulated in the Uptown Whittier Specific Plan will be financed through a variety of partnerships and private capital investment. As Uptown transitions in the mix and intensity of land uses, there will be corresponding incremental public improvements that can support and facilitate the development. All of the Plan area is within two of the City's existing redevelopment project area boundaries and will be eligible to access tax increment financing (TIF) as part of the overall redevelopment strategy for the plan funding priorities. The majority of the plan area falls within the Whittier Earthquake Redevelopment Project, while approximately 3 blocks fall within the Greenleaf Avenue Redevelopment Project.

The goal of the Specific Plan is to require that development "pay for itself" by accessing public and private financing mechanisms that can be used to pay for public improvements. There are a number of issues when relying on redevelopment TIF revenues:

- A significant up-front investment via redevelopment revenues is possible only if the agency has access to 'uncommitted' cash flows resulting from existing tax increments (TI).
- New development will generate TI that can recourse back to fund public improvements related to that development; however, this can happen only when actual projects have been identified.
- The agency may issue new bonds to pay for some of the up-front costs; however, this is unlikely if these bonds are not related to specific project-driven improvements, or related to housing.

3.3.2 Financing Options

All the capital funding requirements in the Specific Plan should be used in a descending order of preference, as follows:

A. Tax Increment Created By New Investment

The net available tax increment (less affordable housing set-aside where relevant) generated directly by project capital investment in Uptown should be redirected to public improvements for implementation of the Specific Plan, rather than towards public improvements elsewhere in the redevelopment project area outside of the Plan area.

B. Tax Increment Generated by the Entire Project Area

The Specific Plan area should be identified as the development priority for the two redevelopment project areas and any net new increment generated by private investment or any existing unencumbered free cash flow available to the Redevelopment Agency that is currently being generated within the Project Area (less pass-throughs and the affordable housing set-aside where relevant) should be directed to support public improvements within the Specific Plan Area. Additional tax increment revenues will need to be dedicated beyond what is generated within the Specific Plan boundaries.

C. Community Facilities Districts

Use of community facilities district (Mello-Roos) financing should be made available to all private investment that occurs within the Specific Plan area. Mello-Roos financing is a discretionary financing mechanism which the City of Whittier may extend to qualifying projects. The developer or property has access to capital at sub-market rates to provide for infrastructure and public improvements associated with the eventual debt associated with those capital investments being recourse back to the property owner rather than to the City of Whittier. Mello-Roos community facilities district is a financing tool used throughout California and may be a tool for the residential components of the Specific Plan.

D. Benefit Assessment Districts

This is a set of special annual ongoing assessments that function as overrides over and above the existing property tax assessment limitations imposed by Proposition 13 and its various amendments. When a benefit assessment district is adopted, its annual collections can be used for ongoing operations and maintenance of landscaping, lighting, street sewer maintenance, and other public costs, as well as the financing of major capital improvements. This will be the key tool in overcoming operating cost funding gaps identified in the fiscal analysis section.

E. Property Owner Based Business Improvement District (BID)

Although the Uptown retail district has a Tenant BID, it is highly recommended that a property owner BID be established in the area in order to increase funding and stability of the BID. Unlike ad valorem property tax programs, BIDs seek to add specific benefits within a selected business area. They are financed through special assessments on commercial property within a designated district. After petitioning the city to form a BID, passage requires a 50 percent approval by property owners in the area. Once formed, BIDs are governed by a board of directors elected by property owners rather than residents. The board ensures that all BID property owners contribute to the district, though their powers are often limited to an annual budget review.

BID revenues are intended to act as additional revenue rather than a replacement for general funding from the city. For this reason, BID fees are required to stay within the district. Fees are collected from the city, and all assessment funds are returned to the district through annual contract agreements. Fees vary among businesses and are often assessed according to the property's size and location. Collected revenue provides operational expenses and varying services, including park and open space maintenance and private security forces. Some BIDs in California also use BID fees for marketing their respective areas through brochures, tourist information, and special events. California law limits a BID's existence to 5 years, after which the BID must be renewed or terminated.

One of the challenges in forming a property-owner-based BID is when a larger share of the property owners is non-local, especially when they are reside outside the metropolitan area or the state. An inventory of property ownership is likely reveal the mix of ownership in the area. The City and/or the retailers may have to initially engage the property owners through some advocacy efforts in communicating the overall benefits of forming a BID, and how it can leverage self assessed revenues as well as a common decision making platform to attract a much larger customer base, reap higher profits, and yield higher returns on property and small business investments.

F. Impact Fees

The City of Whittier currently does not levy any development impact fees (excluding seismic instrumentation fees, a general plan update fee, and a public art funding fee). In order to be able to provide high quality amenities, fees and assessments tied directly to the construction of new dwelling units or the addition of new square footage of retail and commercial use should also be considered as part of the implementation strategy in order to offset capital costs. Impact fees are subject to a test of "rough proportionality" and would require a more detailed cost analysis, depending on the types of impacts that are anticipated to be mitigated through the development process. Impact fees can be especially effective in offsetting capital costs related to parks and open space acquisition and development, parking facilities, and public and civic facilities.

G. Grants and Other Public Resources

A number of grants and other public resources will need to be leveraged to realize the vision for Uptown Whittier, including:

1. Federal Historic Preservation Tax Credits In general, a dollar of tax credit reduces the amount of income tax owed by one dollar. The Federal Historic Preservation Tax Credits can be availed under two categories :

- The 20% rehabilitation tax credit equals 20% of the amount spent in a certified rehabilitation of a certified historic structure.
- The 10% rehabilitation tax credit equals 10% of the amount spent to rehabilitate a non-historic building built before 1936.

2. Community Development Block Grants (CDBG) The CDBG program by the U.S. Department of Housing and Urban Development (HUD) is a flexible program that provides communities with resources to address a range of community development needs. The CDBG program provides annual grants on a formula basis to units of local government and states. As a community of more than 50,000 people, Whittier is entitled to receive funds directly from HUD annually. Whittier's FY 2006 CDBG allocation was $982,825. In addition Whittier also received funds under separate HUD programs totaling $478,108. Although these funds are likely to be earmarked for current projects, future CDBG funds should be at least partially directed to the Uptown Specific Plan area, subject to authorization within the Plan area (e.g. for affordable housing co-developed with churches) and adjacent areas.

3.3.3 Redevelopment and Tax Increment Potential

To determine the supportable capital costs associated with the net new investment implied by the Specific Plan, Economic Research Associates (ERA) undertook an analysis of the assessed valuation implied by the Plan's development program. In this analysis the following assumptions were made:

- Prices for capital costs are expressed in constant 2006 dollars
- California redevelopment laws regarding pass-throughs and the financial transactions of redevelopment agencies do not change over the forecast period.
- Development phasing occurs in the order that is described within the Specific Plan document.
- New product is absorbed by the market at rates equivalent to 2006 prices.

A. Development Program

This represents the total development capacity associated with plan entitlements. This analysis is based on identifying the total potential development that could be physically accommodated within the plan area, given its land use and urban design strategy. It is not clear that this full amount will be absorbed in the manner described, and trade-offs between one or more land uses may occur as differing program types are exchanged within the parameters of the form-based code and market conditions.

Table 3-1, at right, shows the development program by phase and type of development product, including residential and nonresidential land uses. In total, the project is anticipated to add approximately 1,000 new dwelling units at build-out and approximately 1.8 million square feet of non-residential (i.e. retail and commercial) land uses. Table 3-2 translates this development program into an estimate of assessed valuation based on average sales prices or construction costs associated with each of the categories of the program. ERA anticipates that there will be just under $530 million in total net new residential assessed valuation and approximately $230 million in net new nonresidential assessed valuation created by the Specific Plan project at build-out.

B. Redevelopment Analysis

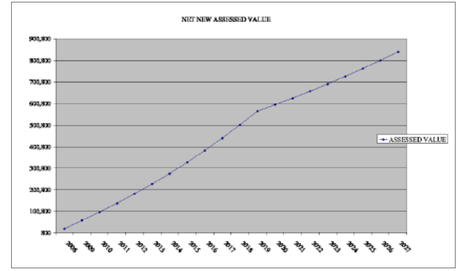
The Uptown Specific Plan area is contained within two separate project redevelopment project areas. The majority is contained within the boundaries of the Earthquake Recovery Project Area and a second smaller portion in the south end of the plan area is contained within the Greenleaf /Uptown Project Area. This will mean that public improvements that are required for this Specific Plan can be funded in part by tax increment financing based on the value of the new private investment that occurs within the plan area. This section will illustrate the available cash flow that will be generated by this development by phase and at build out. Each new investment in properties within the project area will generate new assessed valuation that can be captured (the tax increment) to fund the infrastructure, streetscape, civic buildings and public works that have been identified elsewhere in the plan.

Figure 3-1 shows the growth in assessed valuation for the development program given the limitations imposed by proposition 13 measured against a 3 percent appreciation rate for all real property and a 5% annual turnover rate which accounts for sales of properties which will result in reassessments over time. This new private investment would generate cash flow to the redevelopment project areas over time. Table 3-3 shows the results of this analysis for both project areas and includes existing uncommitted cash flow that is available to the agency.

If the project develops to its maximum capacity it can be expected to generate average annual revenues of over $7.9 million to the redevelopment agency. Over a 20-year time frame this would result in a total committable cash flow of over twenty years of around $158 million. This cash flow, depending on interest rates and credit quality would potentially be able to support between $63 and $83 million in bonded indebtedness by the redevelopment agency. This cash flow is illustrated in Table 3-3 as a time series based on the anticipated phasing described in the development program.

Total Development Program

			Phase 1	Phase 2	Phase 3	Phase 4	Total
Private Investment							
Residential							
Accessory	DU		0	0	9	18	27
Multi Flex	DU		0	42	81	0	105
Rose Walk	DU		0	0	8	8	15
Bungalow Court	DU		0	34	34	0	105
Live Work	DU		0	0	22	22	44
Courtyard	DU		0	173	174	0	347
Flats	DU		0	81	81	124	240
Loft	DU		74	37	0	0	111
TOTAL			74	370	410	172	1026
Non Residential							
Retail	Sq. Ft.		0	217,000	178,500	140,000	540,500
Commercial	Sq. Ft.		0	2,200	110,157	251,535	363,900
TOTAL			0	220,100	288,457	401,535	937,433



Assessed Valuation

			Sq. ft	Sq.ft	Average $ Per Unit	Phase 1	AV Phase 2	Phase 3	Phase 4	TOTAL
Residential										
Accessory	DU		625	350	225,000	-	-	2,025,000	4,050,000	6,075,000
Multi Flex	DU		1,350	900	450,000	-	21,870,000	44,550,000	0	66,420,000
Rose Walk	DU		1,200	800	450,000	-	-	3,420,000	3,420,000	6,840,000
Bungalow Court	DU		1,000	650	810,000	-	29,160,000	29,160,000	-	58,320,000
Live Work	DU		2,100	650	720,000	-	-	15,840,000	15,840,000	31,680,000
Courtyard	DU		1,500	900	540,000	-	93,420,000	93,960,000	-	187,380,000
Flats	DU		1,200	800	450,000	-	36,450,000	36,450,000	53,595,000	126,495,000
Loft	DU		950	640	333,000	23,982,000	11,988,000	-	-	35,970,000
TOTAL						23,982,000	192,888,000	214,455,000	76,971,000	508,296,000
Non Residential										
Retail	Sq. Ft.			150		-	28,927,500	22,013,000	18,480,000	70,055,000
Commercial	Sq. Ft.			185		-	362,000	17,655,750	40,345,250	58,234,000
TOTAL						-	29,873,000	40,918,750	58,891,250	128,679,000

Above, left: Table 3-1: Total development program, based on illustrative plan

Above: Figure 3-1: Graph showing net new assessed value over time

Left: Table 3-2: Assessed valuation based on average sales price or construction costs

Note: DU = Dwelling Units
Sq. Ft. = Square Feet

Below: Table 3-3: Flow of funds

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Combined New AV	$ 20,317	$ 57,755	$ 97,191	$ 138,385	$ 181,362	$ 227,207	$ 275,121	$ 327,291	$ 383,938	$ 441,071	$ 501,523	$ 565,751	$ 635,112	$ 625,821	$ 657,858	$ 674,494	$ 726,567	$ 753,207	$ 781,424	$ 811,430
Earthquake Recovery Project Area [1]	$ 1,071	$ 1,132	$ 1,200	$ 1,429	$ 1,657	$ 1,791	$ 1,989	$ 2,194	$ 2,408	$ 2,588	$ 2,735	$ 4,152	$ 4,412	$ 4,552	$ 4,521	$ 5,039	$ 773	$ 771	$ 773	$ 775
Greenleaf Uptown Project Area [1]	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 84	$ 157	$ 152	$ 156	$ 231	$ 285	$ 210	$ 185	$ 105	$ 113	$ 113	$ 58	$ -
Total funds collected	$ 1,071	$ 1,132	$ 1,200	$ 1,429	$ 1,657	$ 1,791	$ 1,989	$ 2,278	$ 2,565	$ 2,740	$ 2,891	$ 4,383	$ 4,697	$ 4,762	$ 4,706	$ 5,144	$ 886	$ 884	$ 831	$ 775
Cumulative cash flow by Agency (non-leasing)	$ 1,071	$ 1,132	$ 1,200	$ 1,429	$ 1,657	$ 1,791	$ 1,989	$ 2,278	$ 2,565	$ 2,740	$ 2,891	$ 4,383	$ 4,697	$ 4,762	$ 4,706	$ 5,144	$ 886	$ 884	$ 831	$ 775

Cumulative committable cash flow	$ 48,801
Average annual cash flow	$ 2,439
Supportable Capital Costs	28,422 High Estimate (58.2%)
	14,414 Low Estimate (29.5%)

~$63 million from existing financing capacity

Net Present Value at 8%	$58,736

Source: [1] Hdl, Coupanies 2007Y analysis of net new increment

3.3.4 Fiscal Impact Analysis

The objective of the fiscal impact analysis is to estimate the net fiscal costs or revenues to the City of Whittier during a stable operating year, at build out of the Uptown Specific Plan. The costs and revenues are based on the City's current operating scenario using information from the adopted 2005-06 budget. This is a preliminary analysis, with the primary objective of identifying the order of magnitude impacts and gauging any gaps in cost coverage. These impact calculations are based on the net new growth in the proposed Specific Plan area as represented by the illustrative plan scenario (see Chapter 2). It is important to note that the illustrative plan represents a build out scenario of development capacity in the area, and is not necessarily a representation of what may actually be absorbed by the market. For the purposes of this analysis, however, ERA has made certain preliminary absorption assumptions for the residential and non-residential uses as illustrated in the RDA revenue calculation section. Net fiscal impacts to the City's General Fund are presented on an annual basis over a 20-year period.

A. Revenue Factors

As shown in Table 3-4, we have identified revenue streams that are likely to be affected by incremental growth in the project area and allocated a pro-rata share attributed to land use type. We have derived this share by converting non-residential uses to an Equivalent Dwelling Unit (EDU) format. As the project is in a Redevelopment Project area no property tax revenues are assumed to flow into the General Fund. A number of other revenue streams are calculated separately based on project specifics.

B. Retail Sales

Table 3-5 presents taxable retail sales calculations for the project area (presented in 5-yearly increments). There are two components of taxable retail sales. The first is the potential retail expenditures from new residents, captured in the City of Whittier, outside the project area, and the second is net new taxable retail sales generated within the project area. ERA has assumed a capture rate of 25 percent in terms of new taxable expenditures from residents, and has assumed retail sales of $200/s.f. for new retail space within the project area – net of any internal transfers.

General Fund Revenue

		Adopted (2005-06)	Affected by Growth	Pro-Rata Factor	Per * EDU	Per Employee
Taxes						
Property Taxes	$	2,758,984	n.a	n.a		
Sales and Use Tax		9,896,810	Y	Calculated Separately		
Franchise Tax		1,841,000	Y	EDU	29.85	
Utility Users Tax		7,288,000	Y	EDU	206.66	
Transient Occupancy Tax		350,000	Y	n/a		
Business Licenses		810,000	Y	Employees		23.14
Fines and Forfeitures		672,500	Y	EDU	19.33	
Motor Vehicle in lieu		5,456,337	Y	Calculated Separately		
Use of Money & Property		885,540	N	-		
SFS Policing Contract		3,820,221	N	-		
Charge for Services						
Current Gov't.		1,334,725	Y	EDU	44.63	
Others		2,972,040	Y	EDU	85.31	
Other Misc. Revenues		3,447,843	Y	EDU	156.37	
Transfers In		1,294,550	N	-		
	$	43,481,520			$342.15	$ 23.14

* EQUIVALENT DWELLING UNIT

Above: Table 3-4: General Fund Revenues

Note: Numbers in tables are based on budget at the time of the preparation of the Specific Plan.

Below: Table 3-6: General Fund Expenditures

General Fund Expenditures

		Adopted (2005-06)	Affected by Growth	Variable 15yr	Variable Units	Pro Rata Factor	Per EDU
City Council	$	451,583	Y	35%	$ 22,854	EDU	$ 0.66
City Attorney		264,044	Y	35%	92,415	EDU	2.65
City Manager		1,379,224	Y	35%	482,743	EDU	-
City Clerk / Treasurer		1,308,450	Y	35%	457,958	EDU	13.14
Human Resources		595,011	Y	35%	208,254	EDU	5.98
Community Development		1,538,184	Y	65%	1,012,828	EDU	29.07
Library		2,881,974	Y	100%	2,881,974	EDU	82.72
Parks		4,064,752	Y	100%	4,064,752	EDU	117.25
Community Services		3,023,206	Y	75%	2,275,430	EDU	65.31
City Controller		1,228,807	Y	35%	430,262	EDU	12.06
Public Works		5,718,771	Y	90%	5,150,684	EDU	147.77
Police					-		-
Administration		16,456,363	Y	100%	16,456,363	EDU	472.38
SFS Policing Team		5,827,916	N		-		-
Code Enforcement / Liens		385,186	Y	100%	385,186	EDU	11.06
Whitwood Mall		149,564	Y	100%	149,564	EDU	4.29
Local Law Enforcement Block Grant		71,871	N		-		-
CSUFS in School		341,780	Y	100%	341,780	EDU	9.81
	$	45,313,316			$ 34,433,199		$ 973.86

* EQUIVALENT DWELLING UNIT

Retail Sales

		Year 1 2008	Year 5 2012	Year 10 2017	Year 15 2022	Year 20 2027
Residential (Units)						
Armacost	27	0	0	5	15	27
Math Flat	136	0	28	99	136	136
Rose Walk	16	0	0	6	11	16
Bungalow Court	108	0	36	84	108	108
Live Work	44	0	0	14	33	44
Courtyard	347	0	115	277	347	347
Flats	246	0	40	97	167	246
Loft	111	74	99	111	111	111
Total Units	1035	74	319	693	926	1035
HH Income ($KHH)		$3,180	$51,382	$72,981	$98,199	$118,119
Retail Expenditures ($KHH)	35%	1,813	17,854	25,543	34,370	38,052
Capture Outside SFA ($KHH)	15%	$ 272	$ 1,078	$ 3,832	$ 5,155	$ 5,708
Cumulative Retail s.f.	Sales/s.f. $200.00	-	145,267	323,683	458,188	543,508
On Site Retail Sales @		$ -	$ 28,153	$ 64,736	$ 91,638	$ 108,702
Total Taxable Sales ($KHH)		$ 272	$ 30,733	$ 68,568	$ 96,193	$ 114,410
Sales Taxes		$ 2,720	$ 307,332	$ 685,675	$ 961,928	$ 1,144,097

Above: Table 3-5: Retail Sales

Below: Table 3-7: Project Annual Fiscal Impacts

PROJECT ANNUAL FISCAL IMPACTS ($000s)

		Year 1 2008	Year 5 2012	Year 10 2017	Year 15 2022	Year 20 2027
Population		111	717	1,456	2,222	2,458
Dwelling Units		74	319	693	926	1,035
Employees		-	285	843	1,491	2,127
EDU[1]		74	368	856	1,173	1,390
Property Taxes[2]	$	3	$ 25	$ 62	$ 169	$ 217
Sales Taxes		3	307	686	932	1,144
VLFA.s[3]		20	176	428	638	816
MVLF[4]		1	5	11	14	16
Other Revenues[5]		40	200	432	657	756
TOTAL REVENUES	$	66	$ 713	$ 1,618	$ 2,411	$ 2,966
TOTAL EXPENDITURES[6]	$	72	$ 359	$ 812	$ 1,144	$ 1,356
NET IMPACTS	$	(6)	$ 354	$ 806	$ 1,267	$ 1,597

[1]Based on Property Tax 'Pass Through' to the City

[2]EDU = Equivalent Dwelling Unit assuming 1 employee equals 0.5 residents

[3]Vehicle License Fee Adjustment Amount (Property Tax backfill based on Assessed Value Increases)

[4]Motor Vehicle License Fees (Based on SCO Data)

[5]Based on Citywide EDU factors for revenues and costs from the Adopted 2005-06 Budget

C. Cost Factors

Table 3-6 presents current General Fund expenditures incurred by the City of Whittier. Fire protection is provided through LA county through a district, and fire prevention services are paid through property taxes. Note that the City does not have any Fire Protection expenditures since it is a County responsibility. In order to calculate per-unit cost factors allocated by land use (pro-rated on an EDU basis), ERA has adjusted the total current departmental expenditures to reflect variable costs only. This adjustment allows for more realistic marginal cost increases and economies of scale; for example, certain departmental costs will remain fixed irrespective of physical growth (primarily associated with administrative functions).

D. Net Impact – Current Scenario

Table 3-7 and Figure 3-2 present total fiscal revenues generated from the plan area under current conditions. As seen in the Table, new growth will contribute approximately $4 million in annual fiscal revenues. The estimated expenditures are approximately $1.7 million annually. ERA has estimated motor Vehicle License Fee (VLF) and VLF adjustment amounts from the state as separate line items based on the latest data from the California State Controller's Office. Note that the significant amount of VLF adjustment is generated by the property tax backfill from the State based on assessed valuation increases in the City. The net fiscal impact to the City's General Fund based on the above scenario is approximately $2.3 million at build out, which increases marginally over future years VLF adjustment amounts increase due to AV increases from turnovers. The General Fund will receive property tax revenues after the Redevelopment Projects expire.

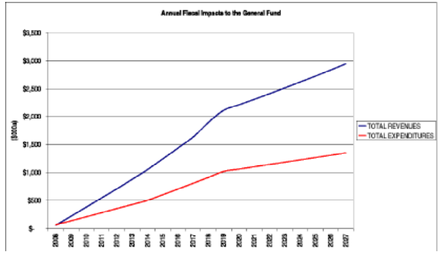


Figure 3-2: Annual Fiscal Impacts to the General Fund

E. Statement of Consideration

Traffic demand increases generated by the Specific Plan will result in the need for intersection, roadway and pedestrian improvements in various locations of the City as detailed in the traffic study. The identified mitigation measures, if implemented, will maintain operations within City standards of acceptability.

Determining when various mitigation measures are required will necessitate the development of a traffic monitoring program by the City. The program will measure roadway service levels on a yearly or semi-annual basis. When an intersection or roadway segment is determined to be operating below the acceptable threshold, the City will make a determination as to the implementation of the appropriate mitigation measure (as generally set forth in the traffic study). Measures for pedestrian improvements will also be determined by the City Council.

Payment for the improvements shall be determined by the City Council. The City currently has no traffic management impact fee program to charge such costs against future development. Prior to the determination of need for the mitigation the City will investigate and determine appropriate mechanisms for funding improvements.

The mitigation measures identified are standard roadway improvements, therefore they are feasible for implementation. However, because the City does not have financing mechanisms identified currently that will provide for mitigation implementation, there could be significant and unavoidable impacts to traffic from development of the Specific Plan.

3.4.1 Water Supply

A. Existing Conditions

The Uptown Whittier Specific Plan area is served by water distribution piping ranging in size from 4 inches to 12 inches. Water supply is provided by the City of Whittier.

B. Proposed Improvements

To support the potential development of the Plan, the following necessary:

Penn Street: Install a 12-inch pipeline from Whittier Boulevard on the west to Painter Avenue on the east.

C. Estimated Costs

The estimated cost of installing the new water supply pipe is $1,969,000.

3.4.2 Sewage Disposal

A. Existing Conditions

The Uptown Whittier Specific Plan area is served by the City of Whittier's sanitary sewer system. This system contains sewage collection piping ranging in size from 6 inches to 10 inches.

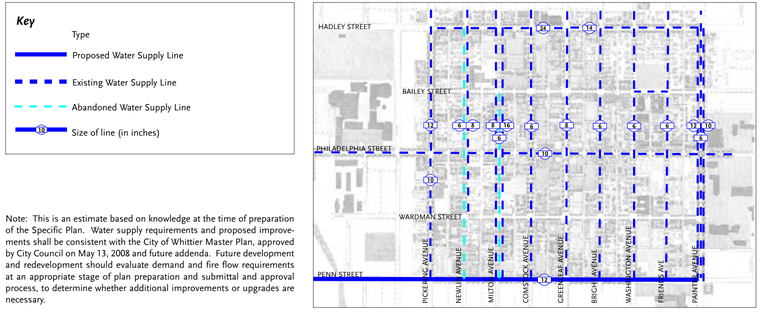
B. Proposed Improvements

To support the potential development of the Plan, the following necessary:

1. Alley just east of Newlin, between Wardman and Philadelphia: Replace 6 inch pipe with 10 inch pipe at lower profile elevation
2. Alley just east of Milton, between Wardman and Bailey: Replace 6 inch pipe with 10 inch pipe at lower profile elevation
3. Alley just east of Greenleaf, between Wardman and Hadley: Replace 6 inch pipe with 10 inch pipe at lower profile elevation
4. Alley just east of Bright between Wardman and Hadley, connecting to alley just north of Park until Friends: Replace 6 inch pipe with 10 inch pipe at lower profile elevation
5. Alley just east of Washington, between Wardman and Bailey: Replace 6 inch pipe with 10 inch pipe at lower profile elevation

C. Estimated Costs

The estimated cost of installing the new sewage disposal pipes is $1,674,000.



Note: This is an estimate based on knowledge at the time of preparation of the Specific Plan. Water supply requirements and proposed improvements shall be consistent with the City of Whittier Master Plan, approved by City Council on May 13, 2008 and future addenda. Future development and redevelopment should evaluate demand and fire flow requirements at an appropriate stage of plan preparation and submittal and approval process, to determine whether additional improvements or upgrades are necessary.



Note: This is an estimate based on knowledge at the time of preparation of the Specific Plan. This sewage plan shall be consistent with the City master plan currently underway.

3.4.3 Stormwater Drainage

A. Existing Conditions

The Uptown Whittier Specific Plan area is served by a stormwater drainage system consisting primarily of 8 inch diameter pipes.

B. Proposed Improvements

The area has a history of draining well within the street right-of-way, and thus no new drainage facilities are proposed.

3.4.4 Other Utilities

A. Natural Gas

The Uptown Whittier Specific Plan area is served by the Southern California Gas Company, which has indicated that the existing infrastructure is a grid pattern of gas facilities in a range of sizes, and is adequate to serve the proposed development.

B. Electricity

The Uptown Whittier Specific Plan area is served by the Southern California Edison Company, which was unable to provide the labor and material cost necessary to serve the increased density. The civil engineering firm, Danjon Engineering, estimates the cost of underground lines and additional transformers to be approximately $1,500,000.

C. Telephone

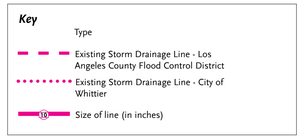
The Uptown Whittier Specific Plan area is served by Verizon, which has indicated that they service the area via a grid pattern and no change in the existing infrastructure is required for the proposed development.

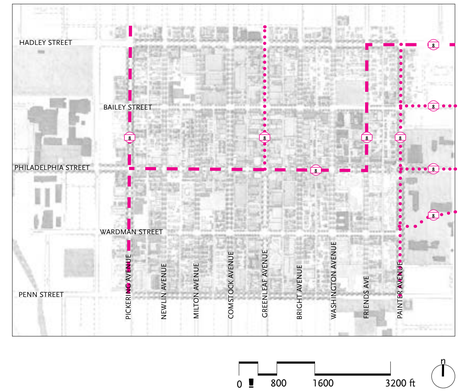
D. Cable (including internet connections)

The Uptown Whittier Specific Plan area is served by Charter Communications with existing overhead CATV and fiber-optics cable. To support the development of the Plan, approximately 4.5 miles of CATV and fiber optic cable is required. The estimated cost of installing the conduits is approximately $1,500,000.

3.4.5 Financing

Improvements to infrastructure should be made as additional capacity is required, and should be financed through user fees.





4.1.1 Introduction

This Chapter of the Uptown Whittier Specific Plan provides detailed regulations for development and land uses within the specific plan area, and describes how these regulations will be used as part of the City's development review process. This Code is intended to provide for the continuing evolution of Whittier's core into a place where:

A. A mixture of land uses includes stores, workplaces, residences, and civic buildings within walking distance of one another;

B. Streets are attractive to pedestrians and also conveniently and efficiently accommodate the needs of cyclists and the automobile;

C. Transit (e.g. bus) is leveraged to create and serve this district and the greater community; and

D. New and remodeled buildings work together to define the pedestrian-oriented space of the public streets within the downtown, and are harmonious with each other and the desired character, as described in this Specific Plan.

4.1.2 Applicability of Development Code Standards

Proposed development, subdivisions, and new land uses within the specific plan area shall comply with all applicable requirements of this Code, as follows:

A. Regulating Plan (Section 4.3.1)

The Regulating Plan defines the zones within the specific plan area, identifies the parcels included within each zone, and describes, zone by zone, the standards for building placement, design, and use consistent with the allowable uses identified in Table 4-1.

B. Use Standards (Section 4.3.2)

This section identifies the land use types allowed by the City in each of the zones established by the Regulating Plan. A parcel within the specific plan area shall be occupied only by land uses identified as allowed within the applicable zone by Section 4.3.1, subject to the type of City approval (for example, Development Review, Conditional Use Permit, etc.).

C. Urban Standards (Sections 4.3.3, 4.3.4, 4.3.5, and 4.3.6)

This section regulates the features of buildings that affect the public realm. The urban standards regulate building placement, height, and facade design, and vary according to the zone for the parcel applied by the Regulating Plan. Proposed development and land uses shall comply with all applicable standards in Chapter 4.

D. Architectural Standards: Building Types, Frontage Types, and Architectural Guidelines (Sections 4.4. 4.5, and 4.6)

Beyond the regulations about where buildings can be placed and how they need to behave to positively shape the public realm, the Building Standards regulate the manner in which individual parcels and blocks are developed to create diverse and finely-grained development. This is accomplished through the use of three main components: a) Building Types (e.g., single house, duplex, rowhouse, courtyard housing, etc), b) Frontage Types (e.g., front yard/porch, stoop, arcade, storefront), and c) Architecture Style Guidelines (i.e. Mediterranean Revival, Craftsman, Victorian, Main Street Commercial, and Art Deco).

E. Subdivision and Open Space Standards (Section 4.7)

This section regulates the creation and maintenance of a finely grained and walkable network of blocks punctuated by integral and varied open spaces. The resulting blocks are subject to the development potential identified on the Regulating Plan and the applicable chapters of this Code.

F. Signage Standards (Section 4.8)

This section regulates all signage within the Specific Plan area to be consistent with the character described for each zone.

G. Other Project Design and Development Standards (Section 4.9)

This section regulates parking, landscape, and walls, fences, and screens within the Specific Plan area to be consistent with Uptown's intended form and character.

H. Glossary (Section 4.10)

This section identifies and defines the terms used in this Specific Plan.

I. Effect on existing development and land uses

Development and land uses that were lawfully established, and exist within the plan boundaries as of the effective date of this specific plan are affected by this code as follows:

1. Existing development and land uses that comply with all applicable requirements of this code shall continue to operate, and may be altered or replaced, only in compliance with this code.
2. Development or a land use that was legal, nonconforming with respect to the requirements of the City's codes that applied before the adoption of this specific plan, and also does not comply with the requirements of this code, may continue to operate, and may be sold or otherwise transferred in compliance with the city's regulations for non conformities in the Whittier Municipal Code.
3. An existing nonconforming building or structure may be modified in the following manner:
   a) A building facade of an existing building may be remodeled or reconstructed subject to complying with the Architectural Style Guidelines in this document to the greatest extent feasible;
   b) An existing building may be expanded by up to 35% of the building's gross floor area subject to incorporating development standards and Architectural Style Guidelines to the greatest extent feasible;
   c) Buildings being expanded by more than 35% of the building's gross floor area shall comply with all requirements of the Whittier Specific Plan.

J. Effect on properties designated for civic buildings or parking structures

A property designated by the Regulating Plan as a potential site for a civic building or parking structure may continue to be used as follows:

1. Existing land uses and development may continue on the site in compliance with Subsections B and C above;
2. The property owner may choose to propose new development or land uses in compliance with this code; and
3. The property owner may choose to work with the City to jointly develop the proposed public facility.

4.1.3 Administration

The standards and other requirements of this Code shall be administered and enforced by the City of Whittier Department of Community Development and other departments in the same manner as the provisions of the City's Municipal Code. Unless specified otherwise, the provisions of this specific plan take precedence over the applicable municipal provisions.

A. Application Requirements
Applications within the Uptown Whittier Specific Plan area shall clearly demonstrate compliance with the applicable requirements of Chapter 4: Development Code, including use standards, urban standards, building type standards, frontage type standards, subdivision and open space standards, signage standards, and architecture style guidelines, as indicated in Section 4.2.

When a development issue arises that is not covered under the provisions of this Specific Plan, the City of Whittier Municipal Code shall apply.

Should a development provision within this Specific Plan be inconsistent with any development provision found elsewhere in this Specific Plan, the Director of Community Development shall determine which provision shall be applicable.

B. Administering the Architecture Style Guidelines
The architecture styles of buildings in Uptown Whittier are governed by five levels of control in order to ensure an eclectic and historically-sensitive mix of styles:

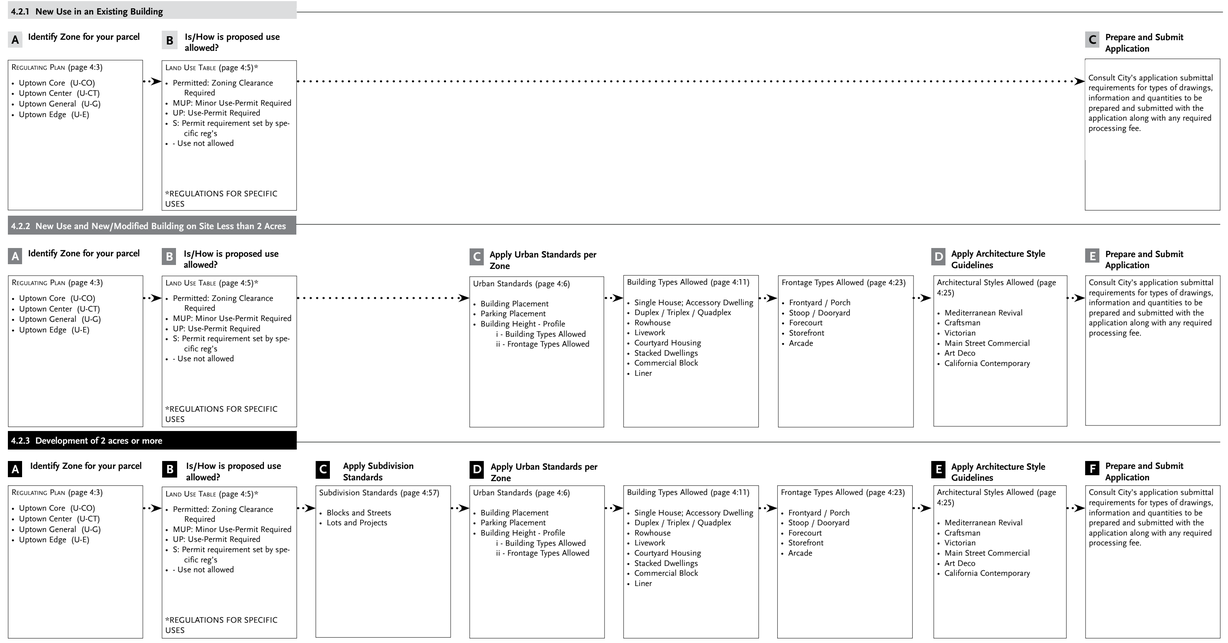
1. The concentration of the most historic buildings and neighborhoods are protected by existing historic district designations and procedures in the City of Whittier municipal code: Hadley/Greenleaf Historic District (Chapter 18.87) and Central Park Historic District (Chapter 18.88).
2. The Form-Based Code ensures the proper urban quality of all construction by regulating building types, height, setback, frontage type, lot sizes, access, open space, and landscape.
3. Architecture Styles are allocated by building type, thus ensuring appropriate use of style by size and type of building. For example, Victorian styles can only be applied to smaller scale buildings such as single houses, duplexes, bungalow courts, and rowhouses, while the Art Deco style is only to be used for larger scale buildings such as courtyard housing, commercial block, and liner buildings.
4. The Architecture Styles are themselves extremely well-researched and thoroughly presented so as to be a common reference tool for all involved in the development process, both at the City and in the private sector.
5. Much as the Specific Plan itself, the Architecture Style Guidelines will be utilized proactively to guide development and have a process of stewardship and implementation. Whittier has a clear process of shepherding projects through the Guidelines and the Plan is a clear guide for this process: (1) staff, (2) Planning Commission, and (3) City Council.

C. Findings for Approval

All architectural projects designed in any of the permitted styles shall be subject to consideration of the following findings for approval as part of a Development Review application:

1. Appropriateness of the architectural design and building type to the location within Uptown
2. Site design incorporates necessary parking, landscaping, hardscape, utilities, and other site amenities and improvements consistent with the intent of the Specific Plan.
3. Site and building architectural design is compatible with neighboring buildings
4. Building and site design includes a rich array of architectural elements, building materials and treatments, and finishes and colors that are properly composed and consistent with the architectural style
5. Building/site design, systems, and materials show sensitivity to sustainable design concepts.

4.2. Code Organization and Use



4.3.1 Introduction

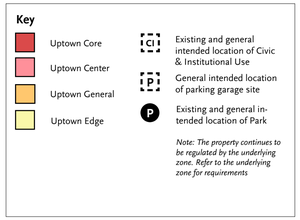
A. Purpose

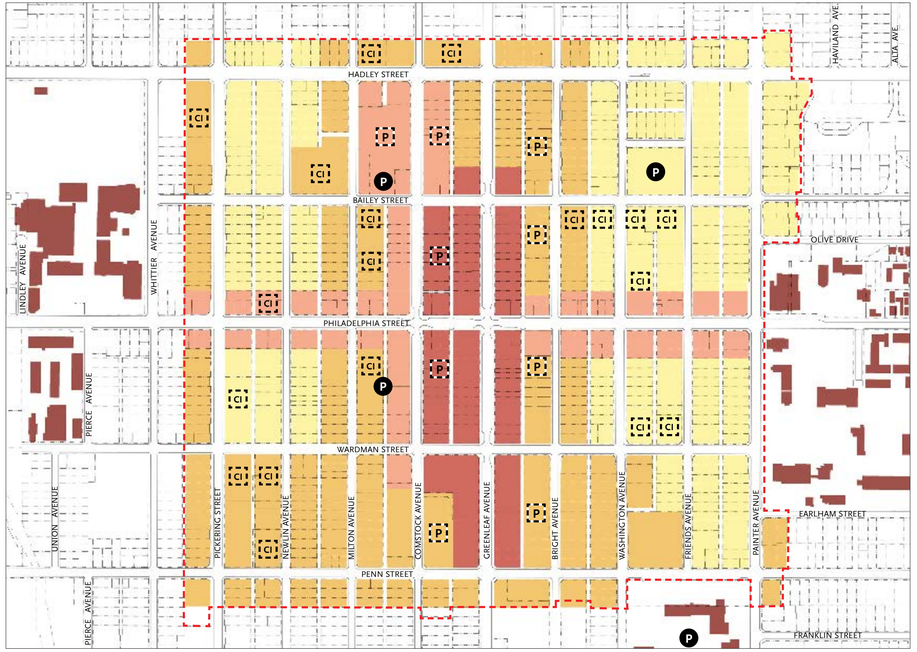
This section establishes the zones applied to property within the Specific Plan area by the Regulating Plan. The Regulating Plan divides the Specific Plan area into separate zones that are based on a transect of intensity that ranges from the most urban types of development and land use within the Specific Plan area to the least urban types, with most of the zones providing for a significant mixture of land uses within them.

This approach differs from conventional zoning maps that typically divide cities into zones that rigidly segregate residential, commercial, industrial, and institutional uses into separate areas, and thereby require residents to drive or use public transportation for nearly all daily activities. The use of zones based on development intensity (instead of land use zones) as the spatial basis for regulating development, directly reflects the functions of, and interrelationships between each part of the Specific Plan area. The zones also effectively implement the City's urban design objectives for each part of the Specific Plan area, to establish and maintain attractive distinctions between each zone. The zones of this regulating plan allocate architectural types, frontage types, and land uses within the Specific Plan area, as well as providing detailed standards for building placement, height and profile.

B. Development Code

The standards and requirements of this Specific Plan Chapter constitute the Uptown Whittier Development Code. This Development Code provides for the implementation of the Specific Plan through detailed standards for the planning and design of development proposed within the Specific Plan area.





Regulating Plan indicating zones of varying intensities and types of development

1. Applicability
The requirements of this Development Code apply to all proposed development, subdivision, and land uses within the Specific Plan area. All proposed development and new land uses within the Specific Plan area shall comply with all applicable standards and requirements of this Development Code. No Building Permit or Grading Permit shall be issued by the City and no subdivision shall be approved, unless the proposed construction complies with all applicable requirements of this Development Code.

2. Relationship to Municipal Code
a. Because this Development Code provides requirements for development and land uses appropriate and specific to the Uptown Whittier Specific Plan area, the standards in this Development Code will be the primary requirements considered by the City in the review and approval of development within the area it covers. This Chapter supersedes and replaces provisions of the Whittier Zoning Regulations regarding zoning districts, allowable land uses, permit requirements for allowable land uses (i.e., permitted or conditional uses), and site design and development standards within the Specific Plan area.
b. The standards of the Zoning Regulations which address topics of development and land use regulation not covered by this Development Code, remain applicable to development within the Specific Plan area.

3. Redevelopment Law
Those areas within the Uptown Whittier Specific Plan boundaries that are redevelopment project areas shall comply with the requirements of the redevelopment law.

4. Conflicting requirements
If a conflict occurs between requirements of this Development Code, the most restrictive requirement shall control. If a conflict occurs between a requirement of this Development Code and the City of Whittier Municipal Code, or other regulations of the City, the requirements of this Development Code shall control.

5. State, County, local agency, and school district sites and facilities
The requirements of this Development Code shall apply to all sites and facilities of the State of California, the County of Los Angeles, and any school district or other local agency to the maximum extent allowed by law.

6a. Civic and institutional buildings
Civic and institutional buildings are subject to review by and recommendation from the Director and approval by the Planning Commission and City Council. It is intended that the architectural quality of civil buildings exceed the general standard for residential and commercial buildings within the Specific Plan area.

6b. Civic and Institutional Uses
Such uses are allowed as identified in Table 4-1 subject to the applicable requirements.

7. Minimum and exclusive standards
The requirements of this Development Code regarding site development and massing, materials, construction methods, forms and colors are mandatory. The requirements of this Development Code are also minimum standards that may be made more restrictive through Conditional Use Permit or subdivision review by the review authority.

8. Appeals
Any decision or determination of the Community Development Director or Zoning Administrator may be appealed to the Planning Commission and any decision or determination of the Planning Commission may be appealed to the City Council as provided for in the Whittier Municipal Code for the appropriate entitlement application.

9. Development Entitlements and Amendments
Variance, Conditional Use Permit, Development Review, and other zoning entitlements shall be filed, processed, and decided by the appropriate approval authority as specified in the Whittier Municipal Code. The process of amending a specific plan is the same as that for a general plan (State of California §65350-§65358).

10. Responsibility for Administration
This Development Code shall be administered by: the Whittier City Council, hereafter referred to as the "Council;" the Planning Commission, referred to as the "Commission;" the Community Development Director and/or designees of the Director, referred to as the "Director;" and the Community Development Department, hereafter referred to as the "Department." These are also individually and collectively referred to in this Development Code as the "review authority."

C. Zones and Their Purposes

This Article establishes the zones applied to property within the Specific Plan area, and provides the Regulating Plan which shows the specific lots to which the zones are applied. The zones then refer to the urban standards in Section 4.3 which regulate building placement, design, and use.

The area subject to this Specific Plan shall be divided into the following zones, which shall be applied to property within the Specific Plan area as shown on the Regulating Plan.

1. Uptown Core (U-CO) zone
The U-CO zone is applied along segments of Greenleaf Avenue generally between Bailey and Penn Streets, as shown on the Regulating Plan. This zone is intended to establish an attractive and economically vital, pedestrian-oriented area that is defined by multi-story urban building types (commercial blocks, and liner buildings) accommodating a mixture of retail, office, light service, and upper floor residential uses. The standards of this zone are in tended to reinforce the form and character of Uptown represented by pre-World War II buildings through restoration, rehabilitation, and infill. The standards also facilitate the replacement or improvement of post-war development that eliminated the pedestrian orientation of various Uptown blocks. The landscape style is urban, emphasizing shading and accent street trees in sidewalk tree wells. Parking is accommodated on-street, and may also be in structures with liner buildings, underground, and in block centers in surface lots not visible from streets.

2. Uptown Center (U-CT)
The U-CT zone is applied along segments of Philadelphia Street, and Comstock Avenue, as shown on the Regulating Plan, in part to provide transitions in building form and mass between areas within the U-CO zone and the U-G zone. This zone is intended for mixed-use buildings and courtyard housing, that accommodating a variety of non-residential and residential uses at lower intensities and densities than in the U-CO zone. Building types include mixed-use commercial blocks, live-work, and courtyard housing. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells. Parking is accommodated on-street, in structures with liner buildings, underground, and in block centers in surface lots not visible from streets.

3. Uptown General (U-G)
The U-G zone is applied in multiple locations within Uptown as shown on the Regulating Plan maintaining and enhancing the mixed use urban fabric that accommodates a variety of retail, office, and light service uses together with a wide variety of housing types. Non-residential land use types both support and relate to the activities in the more intensive U-CO and U-CT zones, and serve the daily convenience shopping needs of Uptown residents. Appropriate building types include single dwellings and each of the multi-unit types identified in Chapter 4, as well as commercial blocks and liner buildings at a smaller scale than found in the U-CO and U-CT zones. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells, and in parkway strips along streets that are more residential in character. Parking is accommodated on-street, in structures with liner buildings, and in block centers in surface lots not visible from streets.

4. Uptown Edge (U-E)
The U-E zone is applied is applied to preserve existing Uptown urban neighborhood areas as shown on the Regulating Plan. This zone is intended to accommodate a variety housing types and densities, with some opportunities for live-work, neighborhood-serving retail, and cafes. Appropriate building types include single dwellings, duplexes, triplexes, and quadplexes, bungalow courts, rosewalks, courtyard housing, and live-work buildings. The landscape style is appropriate to a neighborhood, with shading street trees in parkway strips and landscaped front yards separating buildings from sidewalks. Parking is on street, and in garages located away from street frontages.

4.3.2 Allowable Land Uses and Permit Requirements

A. Allowable land uses

A lot or building within the specific plan area shall be occupied by only the land uses allowed by Table 4-1 within the zone applied to the site by the Regulating Plan. The land uses listed in Table 4-1 are defined in Section 4.10 Glossary.

1. Establishment of an allowed use
Any one or more land uses identified by Table 4-1 as being allowed within a specific zone may be established on any lot within that zone, subject to the planning permit requirement listed in the table, and in compliance with all applicable requirements of this Development Code.

2. Use not listed
A land use not listed in Table 4-1 is not allowed within the specific plan area, except as otherwise provided in following Subsection A.3. A land use that is listed in the table, but not within a particular zone, is not allowed within that zone.

3. Similar and compatible use may be allowed
The Planning Commission may determine that a proposed use not listed in Table 4-1 is allowable through the process described in the Zoning Regulations.

4. Temporary uses
Temporary uses are allowed within the specific plan area in compliance with the Temporary Use Permit requirements in Zoning Regulations Chapter 18.54 Temporary Uses.

B. Permit requirements

Table 4-1 provides for land uses that are:
1. Permitted subject to compliance with all applicable provisions of this Development Code, and any applicable requirements of the Zoning Regulations. These are shown as "P" uses in the tables;
2. Allowed subject to the approval of a Minor Conditional Use Permit, and shown as "MCUP" uses in the tables;
3. Allowed subject to the approval of a Conditional Use Permit, and shown as "CUP" uses in the tables; and
4. Not allowed in particular zones, and shown as an "—" in the tables.

C. Standards for specific land uses

Where the last column in Table 4-1 ("Specific Use Regulations") includes a section number, the regulations in the referenced section of this Development Code or the Zoning Regulations apply to the use. Provisions in other sections of this Downtown Code may also apply.

Table 4-1
Allowed Land Uses and Permit Requirements for the Uptown Zones

P Permitted Use
MCUP Minor Conditional Use Permit required
CUP Conditional Use Permit required
— Use not allowed

LAND USE TYPE (1) (5)	PERMIT REQUIRED BY ZONE U-CO	U-CT	U-G	U-E	Additional Regulations
INDUSTRY					
Laboratory - Medical, analytical	—	P(2)	P(2)	—	
Media production - Office or storefront type	P(2)	P(2)	P	—	
Printing and publishing **(6)**	CUP(2)(7)	P(2)	—	P	
Research and development	P(2)	P(2)	—	—	
RECREATION, EDUCATION & PUBLIC ASSEMBLY					
Banquet facilities, rental halls (primary use)	CUP (2)	CUP	—	—	
Church	CUP (10)	CUP	CUP	CUP	
Commercial recreation facility - Indoor	CUP	CUP	—	—	
Community assembly	CUP(2)	CUP	CUP	CUP	
Health/fitness facility	P(2)	P	—	P	
Library, museum	P	P	P	P	
Live entertainment (3)	MCUP	—	—	—	
School, public or private	CUP(2)	CUP(2)	CUP	CUP	
Studio - Art, dance, martial arts, music, etc.	P(2)	P	CUP	—	
Theater, cinema or performing arts (3)	CUP(2)(9)	CUP	—	—	
RESIDENTIAL					
Dwelling - Multi-unit	P(2)(9)	P	P	P	
Dwelling - Single dwelling	—	—	P	P	
Home based business	P(2)	P(2)	P	P	
Live/work	P(2)	P(2)	P	P	
Mixed use project residential component	P(2)	P(2)	P	P	
Residential accessory use or structure	—	—	P	P	
Residential care facility - 7 or more clients	—	—	CUP	CUP	
Transitional housing, rooming or boarding house	—	—	P	P	
Second unit/accessory dwelling	—	—	P	P	
RETAIL (6)					
Bar, tavern, night club (3)	—	—	—	—	
General retail, except with any of the following features	P	P	P	MCUP	
Adult businesses (3)	—	—	—	—	
Alcoholic beverage sales: Ancillary to restaurant (3)	CUP	CUP	CUP	—	
Auto- or motor-vehicle related sales or services	—	—	CUP	CUP	
Drive-through facilities	—	—	—	—	
Floor area 2,500 sf or less	P	P	P	MCUP	
Floor area over 2,500 sf to 10,000 sf	P	P	MCUP	—	
Floor area over 10,000 sf to 20,000 sf	CUP	CUP	CUP	—	
Floor area over 20,000 sf	—	—	—	—	
Operating between 12:00 am and 6:00 am	CUP	CUP	CUP	CUP	
Vintage goods store	—	—	MCUP	—	
Food market - 10,000 sf or less	P	P	P	CUP	
Food market - More than 10,000 sf	—	MCUP	MCUP	—	
Restaurant, café, coffee shop, except drive-through (3)	P	P	P	MCUP	
Smoking lounges, Hookah bar establishments (3)	CUP	CUP	—	—	

Table 4-1 (continued)
Allowed Land Uses and Permit Requirements for the Uptown Zones

P Permitted Use
MCUP Minor Conditional Use Permit required
CUP Conditional Use Permit required
— Use not allowed

LAND USE TYPE (1) (5)	PERMIT REQUIRED BY ZONE U-CO	U-CT	U-G	U-E	Additional Regulations
SERVICES - BUSINESS, FINANCIAL, PROFESSIONAL					
ATM - Walkup	P	P	P	—	
ATM - Drive-up or drive through	—	—	—	—	
Bank, financial services	P	P	P	—	
Business support service	P	P	P	—	
Medical services - Clinic, urgent care	—	CUP	CUP	—	
Medical services - Doctor office	P(2)	P(2)	P	—	
Medical services - Extended care	—	—	—	CUP	
Office - Business, service	P	P	P	—	
Office - Government **(6)**	P	P	P	P	
Office - Professional, administrative, processing **(6)**	P(2)	P(2)	P	P	
Office - Professional, administrative, processing **(8)**	CUP	CUP	CUP	-	
SERVICES - GENERAL					
Child day care - Large or small family day care home	—	—	P	P	
Day care center - Child or adult	—	—	MCUP	MCUP	
Drive-through service	—	—	—	—	
Lodging - Bed & breakfast inn (B&B)	—	CUP	CUP	CUP	
Lodging - Hotel	P	P	CUP	—	
Mortuary, funeral home	—	MCUP	MCUP	—	No cremations on site
Personal services **(6)**	P	P	P	MCUP	
Laundromats (self-service laundries) **(6)**	—	—	MCUP	MCUP	
Personal services - Restricted	—	—	—	—	
Wine cellar / Alcohol storage	CUP	CUP	CUP	—	
TRANSPORTATION, COMMUNICATIONS, INFRASTRUCTURE					
Parking facility, public or commercial	P	P	P	—	
Wireless telecommunications facility	CUP	CUP	—	—	
Wireless telecommunications facility - stealth (4)	P	P	—	—	
Transit station or terminal	P	P	—	—	
Valet parking **(6)**	CUP	CUP	CUP	CUP	

Key to Zone Symbols

U-CO	Uptown Core
U-CT	Uptown Center
U-G	Uptown General
U-E	Uptown Edge

Notes:
(1) Each listed use type is defined in Section 4.10 Glossary of this Development Code
(2) Use allowed only on second or upper floor, or 40 feet behind ground floor use.
(3) Specific regulation of alcohol sale, live entertainment, and dance establishments shall be per the Whittier Municipal Code
(4) Stealth - entirely within a building or structure, or completely screened by a building parapet
(5) For historic buildings, see section E on page 4:6
(6) In the Uptown Edge Zone, this use only allowed on properties fronting east/west streets
(7) Commercial printing services are only allowed between Wardman and Penn
(8) Use allowed on the ground floor if greater than 50% of the ground floor square footage or a minimum of 4,000 square feet and the total building area is 20,000 square feet or more
(9) Use may be located on the ground floor if located within a local, state or federally designated historic landmark building. Otherwise, the use is allowed only on the second floor or upper floor, or 40 feet behind the ground floor use.
(10) Use allowed only on a second or upper floor, or 40 feet behind ground floor use. This requirement shall not apply to an existing church use located in a one-story building that was legally established prior to the adoption of Specific Plan Amendment No. 14-001 on June 24, 2014 under City Council Resolution No. 8631.

D. Urban Standards and Requirements

1. Purpose
This Chapter identifies the standards and requirements for new buildings or buildings to be modified, for each zone within the Uptown Whittier Specific Plan area to ensure that proposed development is consistent with the City's goals for building form, character, and quality within the Plan area.

2. Applicability
Each proposed building shall be designed in compliance with the standards of this Chapter for the applicable zone, except for public and institutional buildings, which because of their unique disposition and application are not required to comply with these requirements and are reviewed by a special permit and procedures.

3. Requirements by zone
Each proposed building shall be designed according to the urban standards identified per the zone in which the property is located.

E. Land uses and historic resources

Any building/structure that is located within the Uptown Whittier Specific Plan that is deemed eligible by the City or by the State of California or is officially listed on the Local, State or National Register of Historic Places or is an official contributing resource within a designated historic district may, for historic preservation and adoptive re-use purposes, be permitted any land-use to be contained within the historic building/structure subject to the prior review and approval of a Conditional Use Permit by the Planning Commission if it is determined that the land use will:

1. Be compatible and not adversely impact the surrounding land uses;
2. Be a good adoptive re-use of the building for economic development purposes;
3. Not adversely impact the historical features of the interior and exterior of the building nor adversely affect the historic setting of the building on the property based on the recommendations of the Historic Resources Commission;
4. Comply with all applicable Secretary of the Interior's Standards for historic preservation; and
5. Will not result in the building/structure being potentially at risk for removal from any Local, State or National Register of Historic Places or eliminating its eligibility to be listed in such in the opinion of the Historic Resources Commission.

Any land use approval given under this section shall not be construed in any way as setting a precedent for other land-uses to be located within a particular district of the Specific Plan that is otherwise not permitted.

F. Hours of operation for businesses

1. Businesses within the Uptown Core area are permitted to operate until 12:00 a.m.
2. Businesses within the Uptown Center area may apply for a CUP to operate after 12:00 a.m.
4. Businesses, once closed, shall not open to the public until 6:00 a.m.
5. If businesses wish to open before 6:00 a.m. or stay open after 12:00 a.m., they may apply for a CUP.

Table 4-2: Uptown Whittier Specific Plan Urban Standards: Summary of Requirements By Zone (refer to 4.3.3 through 4.3.6)

Development Features	U-CO Uptown Core	U-CT Uptown Center	U-G Uptown General	U-E Uptown Edge
				
Building placement	Minimum setbacks required and, where noted, maximum setbacks allowed; except where a frontage type standard allows exceptions or establishes different requirements.			
Front setback	0 ft min., 0 ft max.	0 ft min., 0 ft max.	18 ft min., 25 ft max.	20 ft min., 30 ft max.
Side street setback	0 ft min., 0 ft max.	0 ft min., 0 ft max.	10 ft min., 15 ft max.	10 ft min., 15 ft max.
Side yard setback	0 ft min., 0 ft max.	0 ft min., 0 ft max.	6 ft min.	5 ft min.
Rear setback	10 ft min.	10 ft min.	10 ft min.	15 ft min.
Alley setback	0 ft min.	0 ft min.	0 ft min.	5 ft min.
Building height	Maximum allowable height of structures; except where modified by standards for a specific building type.			
Height	2 stories min. 6 stories max.	2 stories min. 4 stories max.	3 stories max.	2 stories max. + attic
Frontage types	Only the following frontage types are allowed within each zone.			
Allowed types	Forecourt Storefront Arcade	Stoop/dooryard Forecourt Storefront	Frontyard/Porch Stoop/Dooryard Forecourt Storefront	Frontyard/Porch Stoop/Dooryard
Building types	Only the following building types are allowed within each zone.			
	Allowed Type / Lot Width / Lot Depth / Density Range[1]	**Allowed Type** / Lot Width / Lot Depth / Density Range[1]	**Allowed Type** / Lot Width / Lot Depth / Density Range[1]	**Allowed Type** / Lot Width / Lot Depth / Density Range[1]
	Commercial Block 100'-200' 100' 50+	Live/Work 25'-150' 100' 10 - 20	Single House 35'-60' 100' 6 - 8	Single House 35'-60' 100' 6 - 8
	Liner 125' 100' 50+	Courtyard Housing 125'-200' 140' 25 - 40	Accessory Dwelling 35'-60' 100' N/A	Accessory Dwelling 35'-60' 100' N/A
		Commercial Block 100'-200' 100' 50+	Duplex/ Triplex/ Quadplex 50'-100' 100' 10 - 20	Duplex/ Triplex/ Quadplex 50'-100' 100' 10 - 20
		Liner 125' 100' 50+	Rosewalk 125' 100' 10 -15	Rosewalk 125' 100' 10 - 15
			Bungalow Court 125' 125' 10 - 15	Bungalow Court 125' 125' 10 - 15
			Rowhouse 25'-150' 100' 10 - 20	Rowhouse 25'150' 100' 10 - 20
			Live/Work 25'-150' 100' 10 - 20	Live/Work 25'-150' 100' 10 - 20
			Courtyard Housing 125'-200' 140' 25 - 40	Courtyard Housing 125'-200' 140' 25 - 40
1 Dwelling units per acre			Commercial Block 100'-200' 100' 50+	

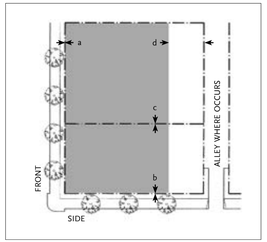


Illustrative Photo: Example of General Character of Uptown Core

4.3.3 Uptown Core (U-CO)

A. Intent

The U-CO zone is applied along segments of Greenleaf Avenue generally between Bailey and Penn Streets, as shown on the Regulating Plan. This zone is intended to establish an attractive and economically vital, pedestrian-oriented area that is defined by multi-story urban building types (commercial blocks, and liner buildings) accommodating a mixture of retail, office, light service, and upper floor residential uses. The standards of this zone are in tended to reinforce the form and character of Uptown represented by pre-World War II buildings through restoration, rehabilitation, and infill. The standards also facilitate the replacement or improvement of post-war development that eliminated the pedestrian orientation of various Uptown blocks. The landscape style is urban, emphasizing shading and accent street trees in sidewalk tree wells. Parking is accommodated on-street, and may also be in structures with liner buildings, underground, and in block centers in surface lots not visible from streets.



Building Placement Plan Diagram

B. Building Placement

1. Setbacks

Minimum setbacks required and, where noted, maximum setbacks allowed; except where a frontage type standard allows exceptions or establishes different requirements.

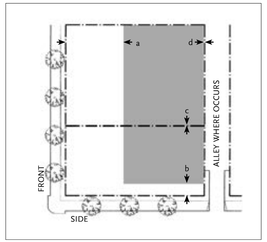
Buildings shall be placed within the shaded area as shown in the building placement diagram.

(a) Front Setback: 0 ft. min., 0 ft. max
(b) Side Street Setback: 0 ft. min., 0 ft. max
(c) Sideyard Setback: 0 ft. min., 0 ft. max
(d) Rear Setback: 10 ft. min.
(e) Alley Setback: 0 ft. min.

2. Encroachments

Encroachments are allowed subject to the following criteria:

(a) The following architectural elements are allowed to encroach into the required setbacks: awnings, galleries, balconies, bay windows, signs, cornices, eaves and similar projected elements.
(b) The encroachment should have a minimum height clearance of 8 feet, and leave a public passage on the sidewalk of a minimum of 5 feet.
(c) Outdoor dining may be allowed on sidewalks and paseos, etc. by approval of the Director of Public Works.
(d) The serving of alcohol is subject to the relevant regulations of the California Department of Alcohol Beverage Control and in compliance with applicable city ordinances.



Parking Placement Plan Diagram

C. Parking

1. Parking Placement

On-grade parking (enclosed or unenclosed) is allowed in the shaded area as shown in the parking placement diagram.

(a) Front setback: 40% lot depth
(b) Side street setback: 10' min
(c) Side yard setback: not required
(d) Rear setback: not required

All residential parking is required to be enclosed.

2. Parking Access

Vehicular access is permitted only from the alley or side streets. For areas outside Park Once district, see page 4:63.

3. Parking Requirements

Residential: 1.5 spaces/unit for studio/1 bedroom units
2.0 spaces/unit for 2 bedroom units
2.5 spaces/unit for 3+ bedroom units
0.25 spaces/unit for guest parking - may contribute toward parking within Park Once parking structures

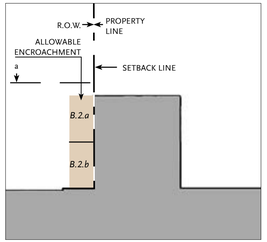
Live/Work: 2 spaces/unit minimum

Non-Residential: satisfied by Park-Once System

4. Park Once structures will be exempt from setback requirements, with the following regulations:

(a) Front setback: 0 ft. min., o ft. max.
(b) Side Street setback: 0 ft. min, 0 ft. max.
(c) Sideyard setback: 0 ft. min., 0 ft. max.
(d) Rear sideback: 10 ft. min., o ft. max.
(e) Alley setback: 0 ft. min., 0 ft. max.

Park once structures shall be lined with an occupiable use on the first floor of the street facade.



Building Profile Section Diagram

D. Building Profile and Type

1. Building Height

Maximum allowable height of structures except where modified by architectural standards.

(a) Maximum height: 6 stories
(b) Minimum height: 2 stories
(c) Towers / Penthouses: An area equal to 10% of the building's ground floor footprint may exceed the height limit by 1 story.
(d) Equipment, architectural features: HVAC equipment and architectural features (e.g. clock towers, elevator towers) may exceed the height limit by 10 feet provided the facility or feature is located no closer than 15 feet to any external building wall. Greater height for these features and non-stealth telecommunications equipment on a roof may be authorized through Minor Conditional Use Permit approval.

2. Building Types (see Section 4.4 for definitions and design standards)

(a) Only the following types are allowed:
- Commercial Block, Liner

3. Frontage Types (see Section 4.5 for definitions and design standards)

(a) Only the following types are allowed:
- Forecourt, Storefront, Arcade

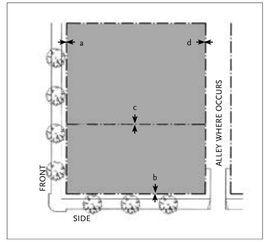


Illustrative Photo: Example of General Character of Uptown Center

4.3.4 Uptown Center (U-CT)

A. Intent

The U-CT zone is applied along segments of Philadelphia Street, and Comstock Avenues, as shown on the Regulating Plan, in part to provide transitions in building form and mass between areas within the U-CO zone and the U-G zone. This zone is intended for mixed-use buildings and courtyard housing, that accommodating a variety of non-residential and residential uses at lower intensities and densities than in the U-CO zone. Building types include mixed-use commercial blocks, live-work, and courtyard housing. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells. Parking is accommodated on-street, in structures with liner buildings, underground, and in block centers in surface lots not visible from streets.



Building Placement Plan Diagram

B. Building Placement

1. Setbacks

Minimum setbacks required and, where noted, maximum setbacks allowed; except where a frontage type standard allows exceptions or establishes different requirements.

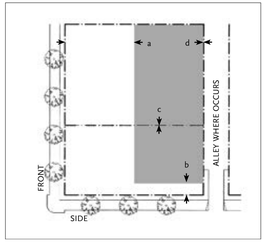
Buildings shall be placed within the shaded area as shown in the building placement diagram.

(a) Front Setback: 0 ft min, 0 ft max
(b) Side Street Setback: 0 ft min, 0 ft max
(c) Sideyard Setback: 0 ft min; 0 ft max
(d) Rear Setback: 10 ft min.
(e) Alley Setback: 0 ft

2. Encroachments

Encroachments are allowed subject to the following criteria:

(a) The following architectural elements are allowed to encroach into the required setbacks: awnings, galleries, balconies, bay windows, signs, cornices, eaves and similar projected elements.
(b) The encroachment shall have a minimum height clearance of 8 feet, and leave a public passage on the sidewalk of a minimum of 5 feet.
(c) Outdoor dining may be allowed on sidewalks and paseos, etc. by approval of the Director of Public Works.
(d) The serving of alcohol is subject to the relevant regulations of the California Department of Alcohol Beverage Control and in compliance with applicable City ordinances.



Parking Placement Plan Diagram

C. Parking

1. Parking Placement

On-grade parking (enclosed or unenclosed) is allowed in the shaded area as shown in the parking placement diagram.

(a) Front setback: 50% lot depth; subterranean: 10' min
(b) Side street setback: 10' min; subterranean: 10' min
(c) Side yard setback: not required
(d) Rear setback: not required; subterranean: 3' min

All residential parking is required to be enclosed.

2. Parking Access

Vehicular access is permitted only from the alley or side streets. For areas outside Park Once district, see page 4:63.

3. Parking Requirements

Residential: 1.5 spaces/unit for studio/1 bedroom units
2.0 spaces/unit for 2 bedroom units
2.5 spaces/unit for 3+ bedroom units
0.25 spaces/unit for guest parking - units within the Park Once district may contribute toward parking within Park Once parking structures

Live/Work: 2 spaces / unit minimum

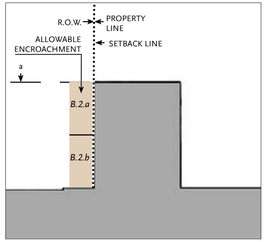
Non-Residential: Satisfied by Park-Once system

Areas outside Park Once district: see page 4:63

4. Park Once structures will be exempt from setback requirements, with the following regulations:

(a) Front setback: 0 ft. min., o ft. max.
(b) Side Street setback: 0 ft. min, 0 ft. max.
(c) Sideyard setback: 0 ft. min., 0 ft. max.
(d) Rear sideback: 10 ft. min., o ft. max.
(e) Alley setback: 0 ft. min., 0 ft. max.

Park once structures shall be lined with an occupiable use on the first floor of the street facade.



Building Profile Section Diagram

D. Building Profile and Type

1. Building Height

Maximum allowable height of structures except where modified by architectural standards.

(a) Maximum height: 4 stories
(b) Minimum height: 2 stories
(c) Towers / Penthouses: An area equal to 10% of the building's ground floor footprint may exceed the height limit by 1 story.
(d) Equipment, architectural features: HVAC equipment and architectural features (e.g. clock towers, elevator towers) may exceed the height limit by 10 feet provided the facility or feature is located no closer than 15 feet to any external building wall. Greater height for these features and non-stealth telecommunications equipment on a roof may be authorized through Minor Conditional Use Permit approval.

2. Architectural Types (see Section 4.4 for definitions and design standards)

(a) Only the following types are allowed:
- Live-Work, Courtyard Housing, Commercial Block, Liner

3. Frontage Types (see Section 4.5 for definitions and design standards)

(a) Only the following types are allowed:
- Stoop/Dooryard, Forecourt, Storefront

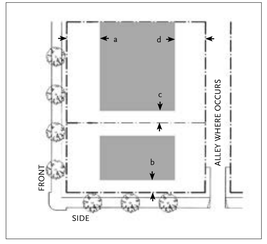


Illustrative Photo: Example of General Character of Uptown General Zone

4.3.5 Uptown General (U-G)

A. Intent

Uptown General (U-G). The U-G zone is applied in multiple locations within Uptown as shown on the Regulating Plan maintaining and enhancing the mixed use urban fabric that accommodates a variety of retail, office, and light service uses together with a wide variety of housing types. Non-residential land use types both support and relate to the activities in the more intensive U-CO and U-CT zones, and serve the daily convenience shopping needs of Uptown residents. Appropriate building types include single dwellings and each of the multi-unit types identified in Chapter 4, as well as commercial blocks and liner buildings at a smaller scale than found in the U-CO and U-CT zones. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells, and in parkway strips along streets that are more residential in character. Parking is accommodated on-street, in structures with liner buildings, and in block centers in surface lots not visible from streets.

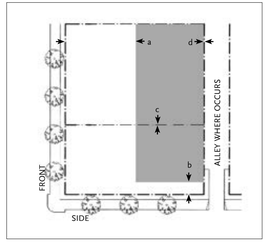


Building Placement Plan Diagram

B. Building Placement

1. Setbacks (as measured from the property line)
Buildings shall be placed within the shaded area as shown in the building placement diagram.
(a) Front Setback: 18 ft min; 25 ft max
(b) Side Street Setback: 10 ft min; 15ft max
(c) Sideyard Setback: 6 ft min
(d) Rear Setback: 10 ft min
(e) Alley Setback: 0 ft min

2. Encroachments
Encroachments are allowed subject to the following criteria:
(a) The following architectural elements are allowed to encroach into the required setbacks: awnings, galleries, balconies, bay windows, signs, cornices, eaves and similar projected elements.
(b) The encroachment shall have a minimum height clearance of 8 feet, and leave a public passage on the sidewalk of a minimum of 5 feet.
(c) Outdoor dining may be allowed on sidewalks and paseos, etc. by approval of the Director of Public Works.
(d) The serving of alcohol is subject to the relevant regulations of the California Department of Alcohol Beverage Control and in compliance with applicable City ordinances.



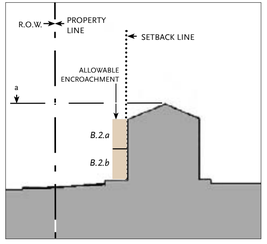
Parking Placement Plan Diagram

C. Parking

1. Parking Placement
On-grade parking (enclosed or unenclosed) is allowed in the shaded area as shown in the parking placement diagram.
(a) Front setback: 50% lot depth; subterranean: 15' min
(b) Side street setback: 5' min; subterranean: 10' min
(c) Sideyard setback: 5' min; subterranean: 5' min
(d) Rear setback: not required; subterranean: 10' min
All residential parking is required to be enclosed.

2. Parking Access
Vehicular access is permitted only from the alley or side streets. For areas outside Park Once district, see page 4:63.

3. Parking Requirements
Residential: 2.0 spaces/unit for Single House, Accessory Dwelling, Duplex/Triplex/Quadplex Building Types
1.5 spaces/unit for studio/1 bedroom units
2.0 spaces/unit for 2 bedroom units
2.5 spaces/unit for 3+ bedroom units
0.25 spaces/unit for guest parking - units within the Park Once district may contribute toward parking within Park Once parking structures
Live/Work: 2 spaces / unit minimum
Accessory Dwelling: 1 space / unit minimum
Non-Residential < 750 sq ft: not required
Areas outside Park Once district: see page 4:63
4. Park Once structures will be exempt from setback requirements, with the following regulations:
(a) Front setback: 0 ft. min., o ft. max.
(b) Side Street setback: 0 ft. min, 0 ft. max.
(c) Sideyard setback: 0 ft. min., 0 ft. max.
(d) Rear setback: 10 ft. min., o ft. max.
(e) Alley setback: 0 ft. min., 0 ft. max.
Park once structures shall be lined with an occupiable use on the first floor of the street facade.



Building Profile Section Diagram

D. Building Profile and Type

1. Building Height
(a) Maximum height: 3 stories
(b) Towers / Penthouses: An area equal to 10% of the building's ground floor footprint may exceed the height limit by 1 story.
(c) Equipment, architectural features: HVAC equipment and architectural features (e.g. clock towers, elevator towers) may exceed the height limit by 10 feet provided the facility or feature is located no closer than 15 feet to any external building wall. Greater height for these features and non-stealth telecommunications equipment on a roof may be authorized through Minor Conditional Use Permit approval.

2. Architectural Types (see Section 4.4 for definitions and design standards)
(a) Only the following types are allowed:
- Single House, Accessory Dwelling, Duplex/Triplex/ Quadplex, Rosewalk, Bungalow Court, Rowhouse, Live-Work, Courtyard Housing, Commercial Block

3. Frontage Types (see Section 4.5 for definitions and design standards)
(a) Only the following types allowed:
- Frontyard/Porch, Stoop/Dooryard, Forecourt, Storefront

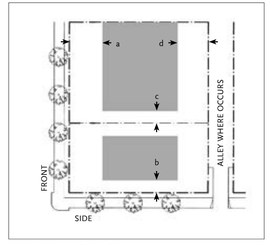


Illustrative Photo: Example of General Character of Uptown Edge

4.3.6 Uptown Edge (U-E)

A. Intent

Uptown Edge (U-E). The U-E zone is applied to preserve existing Uptown urban neighborhood areas as shown on the Regulating Plan. This zone is intended to accommodate a variety housing types and densities, with some opportunities for live-work, neighborhood-serving retail, and cafes. Appropriate building types include single dwellings, duplexes, triplexes, and quadplexes, bungalow courts, rosewalks, courtyard housing, and live-work buildings. The landscape style is appropriate to a neighborhood, with shading street trees in parkway strips and landscaped front yards separating buildings from sidewalks. Parking is on street, and in garages located away from street frontages.

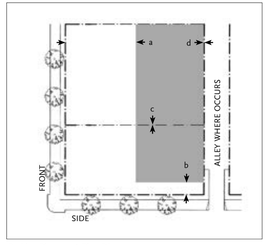


Building Placement Plan Diagram

B. Building Placement

1. Setbacks (as measured from the property line)
Buildings shall be placed within the shaded area as shown in the building placement diagram.
(a) Front Setback: 15' min; 20' max
(b) Side Street Setback: 10' min
(c) Sideyard Setback: 5' min; 15' max
(d) Rear Setback: 15' min
(e) Alley Setback: 5'

2. Encroachments
Encroachments are allowed subject to the following criteria:
(a) The following architectural elements are allowed to encroach into the required setbacks: awnings, galleries, balconies, bay windows, signs, cornices, eaves and similar projected elements.
(b) The encroachment shall have a minimum height clearance of 8 feet, and leave a public passage on the sidewalk of a minimum of 5 feet.
(c) Outdoor dining is allowed on paseos by approval of the Director of Public Works.
(d) The serving of alcohol is subject to the relevant regulations of the California Department of Alcohol Beverage Control and in compliance with applicable City ordinances.



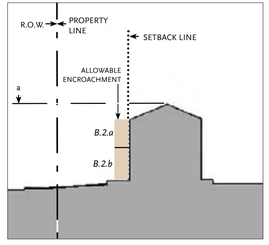
Parking Placement Plan Diagram

C. Parking

1. Parking Placement
On-grade parking (enclosed or unenclosed) is allowed in the shaded area as shown in the building placement diagram.
(a) Front setback: 50% lot depth; subterranean: 15' min
(b) Side street setback: 5' min; subterranean: 10' min
(c) Sideyard setback: 5' min; subterranean: 5' min
(d) Rear setback: not required; subterranean: 10' min
All residential parking is required to be enclosed.

2. Parking Access
Vehicular access is permitted only from the alley or side streets.

3. Parking Requirements
Residential: 2.0 spaces/unit for Single House, Accessory Dwelling, Duplex/Triplex/Quadplex Building Types
1.5 spaces/unit for studio/1 bedroom units
2.0 spaces/unit for 2 bedroom units
2.5 spaces/unit for 3+ bedroom units
0.25 spaces/unit for guest parking - units within the Park Once district may contribute toward parking within Park Once parking structures
Live/Work: 2 spaces / unit minimum
Accessory Dwelling: 1 space / unit minimum
Non-Residential < 750 sq ft: not required
Areas outside Park Once district: see page 4:63



Building Profile Section Diagram

D. Building Profile and Type

1. Building Height
(a) Maximum height: 2 stories + attic
(b) Towers / Penthouses: An area equal to 10% of the building's ground floor footprint may exceed the height limit by 1 story.
(c) Equipment, architectural features: HVAC equipment and architectural features (e.g. clock towers, elevator towers) may exceed the height limit by 10 feet provided the facility or feature is located no closer than 15 feet to any external building wall. Greater height for these features and non-stealth telecommunications equipment on a roof may be authorized through Minor Conditional Use Permit approval.

2. Architectural Types (see Section 4.4 for definitions and design standards)
(a) Only the following types are allowed:
- Single House, Accessory Dwelling, Duplex/Triplex/ Quadplex, Rosewalk, Bungalow Court, Rowhouse, Live-Work, Courtyard Housing, Live-Work

3. Frontage Types (see Section 4.5 for definitions and design standards)
(a) Only the following types allowed:
- Frontyard/Porch, Stoop/Dooryard

Introduction

A. Requirements

1. Purpose
This Chapter identifies the building types allowed within the Uptown Whittier Specific Plan area, and provides design standards for each type, to ensure that proposed development is consistent with the City's goals for building form, character, and quality within the Specific Plan area.

2. Applicability
Each proposed building shall be designed in compliance with the standards of this Chapter for the applicable building type, except for public and institutional buildings, which because of their unique disposition and application are not required to comply with building type requirements.

3. Allowable building types by zone
Each proposed building shall be designed as one of the types allowed by the following table for the zone applicable to the site. Each type is subject to the requirements of the applicable zone as well as the corresponding frontage type requirements.

4. Housing unit sizes

- Second units/accessory dwellings	420 sq.ft. minimum 700 sq.ft. maximum
- Senior housing units	450 sq.ft. minimum
- Multifamily rental units: average size of units	600 sq.ft. minimum 800 sq.ft.
- Ownership housing units: average size of units	800 sq.ft. minimum 1,000 sq. ft.

A minimum of two floor plan types shall be required of all projects:
- Different unit sizes
- Different unit types (studio, 1 bedroom, 2 bedroom, etc. and town houses, flats, lofts, etc.)

5. Residential densities
For the purposes of residential densities, the density ranges in Table 4-4 for each building type are calculated based on typological characteristics (e.g. frontage type, accessibility, minimal dimensions for habitability, placement on site, amount of open space). The figures are further calculated based on plan layouts and sectional character (e.g. number of stories, relationship of units to each other). A density bonus would be calculated based on this range (e.g. 10% - 20% above the maximum in the range).


Single House


Accessory Dwelling


Duplex / Triplex / Quadplex


Rosewalk


Rowhouses

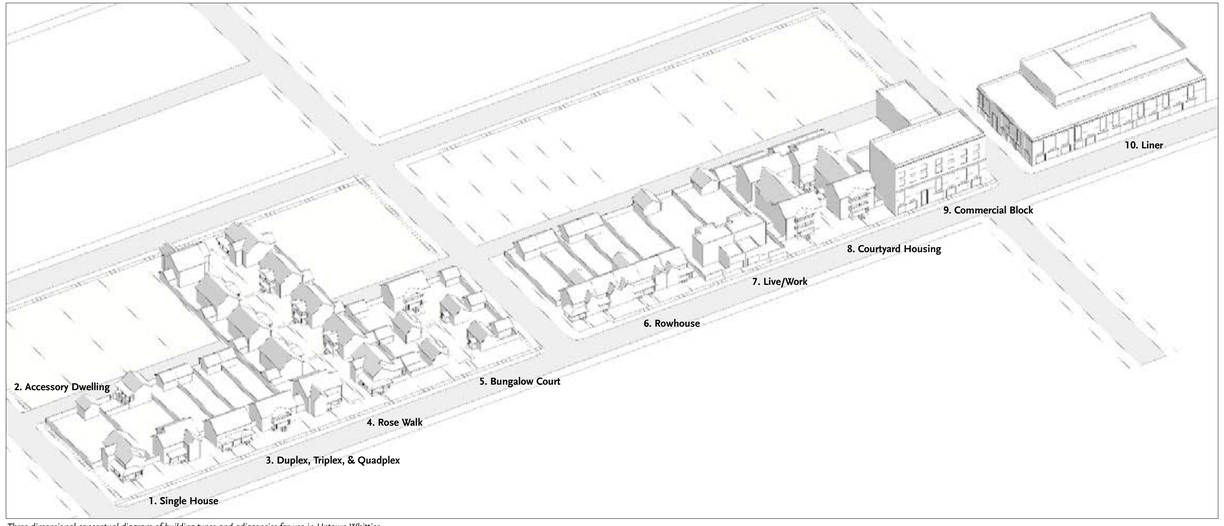

Bungalow Court


Live/Work


Courtyard Housing


Commercial Block


Liner



Three-dimensional conceptual diagram of building types and adjacencies for use in Uptown Whittier.

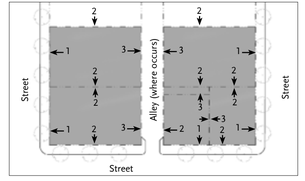
Table 4-3: Building Types Allowed by Zone

Building Type	Building Types per Zone			
Y = allowed; "-" = not allowed	u-co	u-ct	u-g	u-e
1. Single House	-	-	Y	Y
2. Accessory Dwelling	-	-	Y	Y
3. Duplex/Triplex/Quadplex	-	-	Y	Y
4. Rose Walk	-	-	Y	Y
5. Bungalow Court	-	-	Y	Y
6. Rowhouse	-	-	Y	Y
7. Live/Work	-	Y	Y	Y
8. Courtyard Housing	-	Y	Y	Y
9. Commercial Block	Y	Y	Y	-
10. Liner	Y	Y	-	-

Table 4-4: Lot dimensions and Density Ranges by Building Type

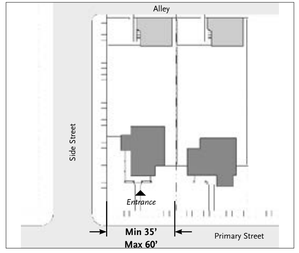
Building Type	Lot Width	Lot Depth	Density Range
	(MIN-MAX)	(MIN)	(dwelling units per acre)
1. Single House	35'-60'	100'	6 - 8
2. Accessory Dwelling	35'-60'	100'	not applicable
3. Duplex/Triplex/Quadplex	50'-100'	100'	10 - 20
4. Rosewalk	125'	100'	10 - 15
5. Bungalow Court	125'	125'	10 - 15
6. Rowhouse	25'-150'	100'	10 - 20
7. Live/Work	25'-150'	100'	10 - 20
8. Courtyard Housing	125'-200'	140'	25 - 40
9. Commercial Block	100'-200'	100'	50+
10. Liner	125'	100'	50+

Lot Width and Depth Determination

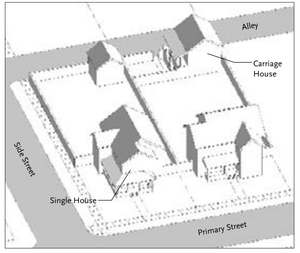


Lot width and depth shall be determined as described below.

1- Front (Lot Width): Principal Frontage
2- Side (Lot Depth)
3- Rear (Lot Width)



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Single house with front porch



Illustrative Photo: Single houses with front yards and driveways

4.4.1 Single House

A structure occupied by one primary residence that can also accommodate commercial uses.

A. Lot Size
1. Width: Minimum: 35 ft; maximum: 60 ft.
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) The main entrance to the house shall be accessed directly from and face the street.
(b) Where an alley is present, parking and services shall be accessed through the alley.
(c) Where an alley is not present, parking and services shall be accessed by of a driveway 8 to 12 feet wide, and with 2-foot planters on each side.
(d) On a corner lot without access to an alley, parking and services shall be accessed by a driveway of 16 feet maximum width, and with 2-foot planters on each side.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) Required parking shall be a minimum of two parking spaces located within a garage.
(b) A non-alley-accessed garage may accommodate no more than 2 cars. A side street facing garage shall have 1-car garage doors.
(c) Where an alley is present, services, including all utility access and above ground equipment and trash container areas shall be located on the alley.
(d) Where an alley is not present, utility access, above ground equipment and trash container areas shall located in a side or rear yard and be screened from view from the street with a hedge or fence.
2. Guidelines
(a) An alley accessed garage may accommodate up to three cars.

D. Open Space
1. Standards
(a) At least one side yard shall be designed to provide an open area no less than 10 by 10 feet.
(b) Rear yards shall be no less than 15% of the area of each lot and of a regular geometry (e.g., rectangular).
2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.

E. Landscape
1. Standards
(a) Landscape shall not be used to separate a front yard from front yards on adjacent parcels. Front yard trees shall be of porch scale (no more that 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
2. Guidelines
(a) Side yard trees may be placed to protect the privacy of neighbors.
(b) At least one large tree may be provided in each rear yard for shade and privacy.

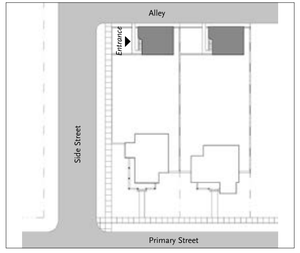
F. Frontage
1. Standards
(a) A house's ground level shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street.
(b) The applicable frontage requirements apply per Section 4.5.
2. Guidelines
(a) Frontage types that provide a transition from public to private, indoor to outdoor at the entrance to the house are required. Porches, towers, loggias, dooryards and stoops are preferred types.

G. Building Size and Massing
1. Standards
(a) Building elevations abutting side yards shall be designed to provide at least one horizontal plane break of at least three feet, and one vertical break.
(b) Houses on corner lots shall be designed with two front facades.
(c) Buildings shall be composed of one and/ or two story volumes, each designed to house scale.
2. Guidelines
(a) Attic space may be occupied and not count as a story when applying the height limits of the applicable zone.

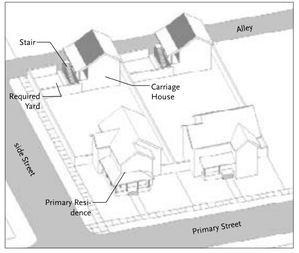
H. Accessory Dwellings
These are allowed as per the standards and guidelines in Section 4.4.2 Accessory Dwelling.



Illustrative Photo: Two-story single house on a corner lot with porch



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Separate accessory dwelling entries are clear



Illustrative Photo: Varied massing and facade compositions above garages

4.4.2 Accessory Dwelling

An attached or detached residence which provides complete independent living facilities for one or more persons and which is located or established on the same lot on which a single-family residence is located. Such dwellings may contain permanent provisions for living, sleeping, eating, cooking and sanitation. This definition includes carriage houses and granny flats.

A. Lot Size
1. Width: Minimum: 35 ft; maximum: 60 ft.
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) The main entrance to the unit shall be accessed from the side yard of the main house.
(b) Where an alley is present, parking and services shall be accessed through the alley.
(c) Where an alley is not present, parking and services shall be accessed by of a driveway 8 to 12 feet wide, and with 2-foot planters on each side.
(d) On a corner lot without access to an alley, parking and services shall be accessed by a driveway of 16 feet maximum width, and with 2-foot planters on each side.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) Required parking shall be within a garage.
(b) Where an alley is present, services, including all utility access and above ground equipment and trash container areas shall be located on the alley.
(c) Where an alley is not present, utility access, above ground equipment and trash container areas shall be located at least 10 feet behind the front of the house and be screened from view from the street with a hedge or fence.
(d) A non-alley-accessed garage may accommodate no more than 2 cars. A side street facing garage shall have 1-car garage doors.
2. Guidelines
(a) An alley accessed garage may accommodate up to three cars.

D. Open Space
1. Standards
(a) Side-yards shall be a minimum of five feet on the ground level and 20 feet on the upper level.
(b) One of the side-yards shall be no less than 20 feet and shall include the stairs to the unit and same as its private space.
2. Guidelines
N.A.

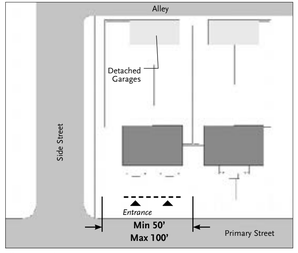
E. Landscape
1. Standards
(a) The garden entrance to the accessory dwelling shall contain one canopy tree.
2. Guidelines
N.A.

F. Frontage
1. Standards
(a) As accessory dwelling units are located on top of the garage, their stairs shall be located a the side yard.
2. Guidelines
(a) Balconies, loggias, bay windows are allowable at the alley.

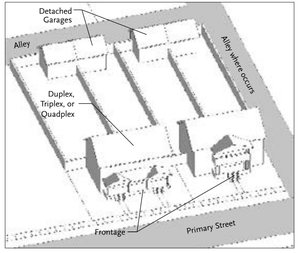
G. Building Size and Massing
1. Standards
(a) Thirty feet (30') maximum along the alley.
(b) Accessory dwellings shall be designed as flats located above garages.
(c) Accessory dwellings can be no taller than 2 stories.
2. Guidelines
N.A.



Illustrative Photo: Accessory dwelling as separate structure with garage



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: House form which can be a duplex, triplex, or quadplex



Illustrative Photo: A duplex with a shared porch and entry vestibule

4.4.3 Duplex, Triplex, and Quadplex

Duplexes, triplexes, and quadplexes are multiple dwelling forms that are architecturally presented as large single-family houses in their typical neighborhood setting.

A. Lot Size
1. Width: Minimum: 50 ft; maximum 100 ft
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) The main entrance to each dwelling shall be accessed directly from and face the street. Access to second floor dwellings shall be by a stair, which may be open or enclosed.
(b) Where an alley is present, parking and services shall be accessed through the alley.
(c) Where an alley is not present, parking and services shall be accessed by a driveway 8 to 12 feet wide, and with 2-foot planters on each side.
(d) On a corner lot without access to an alley, parking and services shall be accessed by driveways of 7 to 8 feet maximum width, and with 2-foot planters on each side.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) Required parking shall be within garages, which may contain up to four cars.
(b) Garages on corner lots without alleys may front onto the side street only if provided with 1-car garage doors, and with driveways no more than 8 feet wide that are separated by planters at least 2 feet wide.
(c) Where an alley is present, services, including all utility access and above ground equipment and trash container areas shall be located on the alley.
(d) Where an alley is not present, utility access, above ground equipment and trash container areas shall be screened from view from the street with a hedge or fence.
2. Guidelines
N.A.

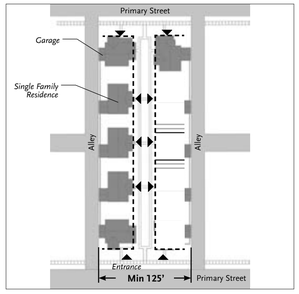
D. Open Space
1. Standards
(a) Each ground floor dwelling shall have a private or semi-private required yard of at least 150 square feet. This shall be separate from the front yard setback space.
(b) Required yards shall be at least 8 feet wide, and enclosed by a fence, wall or hedge.
2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.
(b) Porches, stoops and dooryards may encroach into a required yard. See Frontages further, below.

E. Landscape
1. Standards
(a) Landscape shall not be used to separate a front yard from front yards on adjacent parcels. Front yard trees shall be of porch scale (no more than 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
2. Guidelines
(a) Side yard trees may be placed to protect the privacy of neighbors.
(b) At least one large tree shall be provided in each rear yard for shade and privacy.

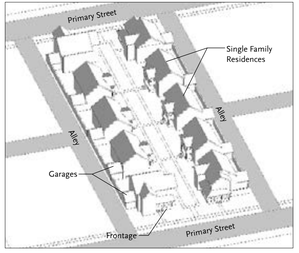
F. Frontage
1. Standards
(a) Dwellings abutting front yards shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street.
(b) The applicable frontage requirements apply per Section 4.5.
2. Guidelines
(a) Frontage types that provide a transition from public to private, indoor to outdoor at the entrance to the house are required. These may be determined through the Design Review process to serve also as the required yard for some or all of the dwellings. Porches, towers, loggias, dooryards and stoops are preferred types.
(b) On corner lots, entrances to dwellings on both frontages are encouraged, particularly in triplexes and quadplexes.
(c) See the requirements of the applicable zone for allowed encroachments into required setbacks.

G. Building Size and Massing
1. Standards
(a) Building elevations abutting side yards shall be designed to provide at least one horizontal plane break of at least three feet, and one vertical break.
(b) Buildings on corner lots shall be designed with two front facades.
(c) Buildings shall be massed as large houses, composed principally of two story volumes, each designed to house scale.
2. Guidelines
(a) Dwellings within buildings may be flats and/or townhouses.
(b) Attic space may be occupied and not count as a story when applying the height limits of the applicable zone.

H. Accessory Dwellings
Not allowed.



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Individual houses look on to a pedestrian path



Illustrative Photo: Houses can be two stories around a landscaped area

4.4.4 Rosewalk

Rosewalks are an architectural type consisting of freestanding single-family residences arranged on either side of a common green. Having the same right-of-way width as a narrow neighborhood street, the rosewalk usually connects two parallel streets.

A. Lot Size
1. Width: Minimum: 125 ft
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) Entrances to dwellings shall be directly from the front yard or from the common green.
(b) Parking and services shall be accessed through an alley.

C. Parking
1. Standards
(a) Required parking shall be screened from the street.
(b) Services, including all utility access, above ground equipment, and trash container areas shall be located on the alley.

D. Open Space
1. Standards
(a) Common shall have a right-of-way width of at least 26 feet.
(b) Each ground floor dwelling shall have a private or semi-private required yard of at least 150 square feet, which may be located in the side yard or rear yard.
(c) Required yards shall be at least 10 feet wide, and enclosed by a fence, wall or hedge.
2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.
(b) Porches, stoops and dooryards may encroach into required yards. See Frontages further, below.

E. Landscape
1. Standards
(a) Landscape shall not be used to separate a front yard from front yards on adjacent parcels. Front yard trees shall be of porch scale (no more than 1.5 times the height of the porch at maturity).
(b) At least one large tree shall be provided in each rear yard for shade and privacy.
2. Guidelines
(a) Side yard trees may be placed to protect the privacy of neighbors.

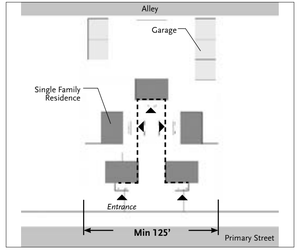
F. Frontage
1. Standards
(a) Buildings shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street and/or to the courtyard.
(b) Frontage types that provide a transition from public to private, indoor to outdoor at the main entrance to each dwelling are required. Porches, dooryards and stoops are preferred types, and may encroach into the courtyard.
(c) The applicable frontage requirements apply per Section 4.5.
2. Guidelines
(a) See the requirements of the applicable zone for allowed encroachments into required setbacks.

G. Building Size and Massing
1. Standards
(a) Buildings shall be composed of one and/or two story volumes and massed as houses.
(b) Building elevations abutting side yards shall be designed to provide at least one horizontal plane break of at least three feet, and one vertical break.
2. Guidelines
(a) Dwellings within the buildings may be flats and/or townhouses.
(b) Attic space may be occupied and not count as a story.

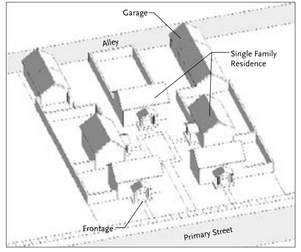
H. Accessory Dwellings
Not allowed.



Illustrative Photo: Landscape, such as hedges, is used as a screen for privacy



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Entrances to the bungalow are from a common space



Illustrative Photo: Bungalows are typically of a modest size

4.4.5 Bungalow Court

Bungalow Courts are an architectural type consisting of freestanding single-family residences arranged around a common, shared courtyard. The individual buildings are arrayed next to each other to form a shared type that is wholly open to the street.

A. Lot Size
1. Width: Minimum: 125 ft
2. Depth: Minimum: 125 ft

B. Access
1. Standards
(a) Entrances to dwellings shall be directly from the front yard or from the courtyard. Access to second floor dwellings shall be by a stair, which may be open or enclosed.
ii. Where an alley is present, parking and services shall be accessed through the alley.
(b) Where an alley is not present, parking and services shall be accessed by of a driveway 8 to 12 feet wide, and with 2-foot planters on each side.
2. Guidelines
(a) On a corner lot without access to an alley, parking and services may be accessed from the side street.

C. Parking
1. Standards
(a) Required parking shall be in garages, which may contain up to four cars.
(b) Where an alley is present, services, including all utility access and above-ground equipment and trash container areas shall be located on the alley.
(c) Where an alley is not present, utility access, above-ground equipment and trash container areas shall be located in a side or rear yard, and be screened from view from the street with a hedge or fence.
2. Guidelines
(a) Garages on corner lots without alleys may front onto the side street only if provided with 1-car garage doors, and with driveways no more than 8 feet wide that are separated by planters at least 2 feet wide.

D. Open Space
1. Standards
(a) A central courtyard shall comprise at least 15% of the lot area. See Courtyard Types.
(b) Each ground floor dwelling shall have a private or semi-private required yard of at least 150 square feet, which may be located in a side yard, the rear yard, or the courtyard.
(c) Required yards shall be at least 8 feet wide, and enclosed by a fence, wall or hedge.

2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.
(b) Porches, stoops and dooryards may encroach into required yards. See Frontages, below.

E. Landscape
1. Standards
(a) Landscape shall not be used to separate a front yard from front yards on adjacent parcels. Front yard trees shall be of porch scale (no more than 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
(b) At least one large tree shall be provided in each rear yard for shade and privacy.
2. Guidelines
(a) Side yard trees may be placed to protect the privacy of neighbors.

F. Frontage
1. Standards
(a) Buildings shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street and/or to the courtyard.
(b) Frontage types that provide a transition from public to private, indoor to outdoor at the main entrance to each dwelling are required. Porches, dooryards and stoops are preferred types, and may encroach into the courtyard.
2. Guidelines
(a) See the requirements of the applicable zone for allowed encroachments into required setbacks.

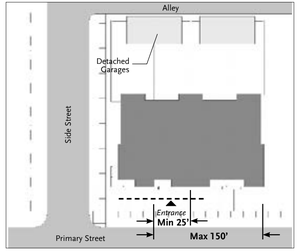
G. Building Size and Massing

1. Standards
(a) Buildings shall be composed of one and/or two story volumes and massed as houses.
(b) Building elevations abutting side yards shall be designed to provide at least one horizontal plane break of at least three feet, and one vertical break.
2. Guidelines
(a) Dwellings within the buildings may be flats and/or townhouses.
(b) Attic space may be occupied and not count as a story.

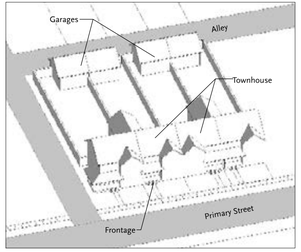
H. Accessory Dwellings
Not allowed.



Illustrative Photo: Each bungalow as a house around a common court



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Wall offsets and bay windows help distinguish each unit



Illustrative Photo: Entrances to each rowhouse are clearly marked

4.4.6 Rowhouse

An individual structure occupied by one primary residence or a structure of multiple townhouse unit types arrayed side by side.

A. Lot Size
1. Width: Minimum: 25 ft (1); maximum 150 ft (6)
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) The main entrance to each unit shall be accessed directly from and face the street.
(b) Garages and services shall be accessed from an alley. This type is not allowed on a lot without an alley.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) Required parking shall be in a garage, which may be attached to or detached from the dwelling.
(b) Services, including all utility access, above ground equipment, and trash containers, shall be located on an alley.
2. Guidelines
N.A.

D. Open Space
1. Standards
(a) Rear yards shall be no less than 15% of the area of each lot and of a regular geometry (e.g. rectangular).
2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.

E. Landscape
1. Standards
(a) Landscape shall not be used to separate a front yard from front yards on adjacent parcels. Front yard trees, if provided, shall be of porch scale (no more than 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
(b) At least one large tree shall be provided in each rear yard for shade and privacy.
2. Guidelines
N.A.

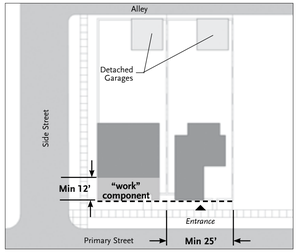
F. Frontage
1. Standards
(a) Each rowhouse ground level shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street and/or to the courtyard.
(b) Frontage types that provide a transition from public to private, indoor to outdoor at the main entrance to each dwelling are required. Porches, dooryards and stoops are preferred types.
(c) The applicable frontage requirements apply per Section 4.5 Frontage Types.
2. Guidelines
(a) See the requirements of the applicable zone for allowed encroachments into required setbacks.

G. Building Size and Massing
1. Standards
(a) Buildings shall be composed of 2- and/or 3-story volumes in compliance with the regulations for the applicable zone.
(b) Buildings on corner lots shall be designed with two front facades.
(c) Each rowhouse building shall maintain setbacks from property lines on at least 2 sides, with as much direct access to yards as possible.
2. Guidelines
(a) In a 3-story building, a townhouse dwelling may be stacked over a ground floor flat. In this case, the flat shall be accessed by its own front door at the frontage, and the townhouse dwelling shall be accessed by a separate front door and a stair.

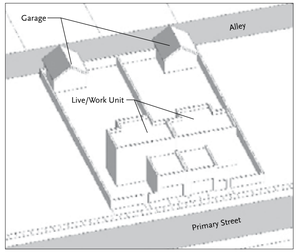
H. Accessory Dwellings
Not allowed.



Illustrative Photo: Rowhouses are effective in creating urban edges



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Separate entrances for the live and work components



Illustrative Photo: The work component can be an office or services



Illustrative Photo: The commercial and services can be in a storefront space

4.4.7 Live/Work

An integrated residence and working space, occupied and utilized by a single household in a structure, either single-family or multi-family, that has been designed or structurally modified to accommodate joint residential occupancy and work activity.

A. Lot Size
1. Width: Minimum: 25 ft (1); maximum 150 ft (6)
2. Depth: Minimum: 100 ft

B. Access
1. Standards
(a) The main entrance to the ground floor flex space shall be accessed directly from and face the street.
(b) The upstairs dwelling shall be accessed by a separate entrance, and by a stair.
(c) Garages and services shall be accessed from an alley. This type is not allowed on a lot without an alley.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) At least one required parking space shall be in a garage, which may be attached to or detached from the dwelling.
(b) Services, including all utility access, above ground equipment, and trash containers, shall be located on an alley.
2. Guidelines
(a) Additional required parking spaces may be enclosed, covered or open.

D. Open Space
1. Standards
(a) Rear yards shall be no less than 15% of the area of each lot and of a regular geometry (e.g., rectangular).
(b) No outdoor storage of materials associated with a business will be allowed.
2. Guidelines
(a) Front yards are defined by the setback and frontage type requirements of the applicable zone.

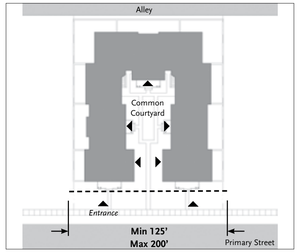
E. Landscape
1. Standards
(a) Landscape shall not obscure front yards on adjacent lots or the shopfront of the ground floor flex space. Front yard trees, if provided, shall be of porch scale (no more than 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
(b) At least one large tree shall be provided in each rear yard for shade and privacy.
2. Guidelines
N.A.

F. Frontage
1. Standards
(a) Each live/work unit shall be designed so that living areas (e.g., living room, family room, dining room, etc.), rather than sleeping and service rooms, are oriented toward the fronting street and/or to the courtyard.
(b) The applicable frontage requirements apply per Section 4.5 Frontage Types.
(c) Each live/work unit shall maintain a commercial and services "work" component adjacent to the street a minimum of 12 feet in depth on the ground floor. The "work" component is not to be used as part of the residential living unit, and is subject to the applicable building and fire code requirements. See illustrative plan diagram above.

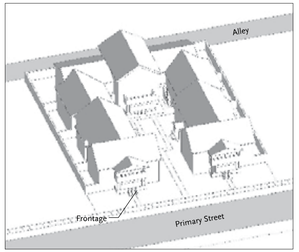
2. Guidelines
(a) Frontage types that provide a transition from public to private, indoor to outdoor at the main entrance to each dwelling are required. Shopfronts, dooryards and stoops are preferred types.
(b) See the requirements of the applicable zone for allowed encroachments into required setbacks.

G. Building Size and Massing
1. Standards
(a) Buildings shall be composed of 2- and/or 3-story volumes in compliance with the regulations for the applicable zone.
(b) Buildings on corner lots shall be designed with two front facades.
2. Guidelines
N.A.

H. Accessory Dwellings
Not allowed



Illustrative Plan Diagram



Illustrative Axonometric Diagram

4.4.8 Courtyard Housing [1]

Courtyard housing an architectural type consisting of residences that can be arranged in four possible configurations: townhouses, townhouses over flats, flats, and flats over flats. These are arrayed next to each other, on one or more courts, to form a shared type that is partly or wholly open to the street.

A. Lot Size
1. Width: Minimum: 125 ft; maximum 200 ft
2. Depth: Minimum: 140 ft

B. Access
1. Standards
(a) The main entrance to each ground floor dwelling shall be directly off a common courtyard or directly from the street.
(b) Access to second story dwellings shall be through an open or roofed stair, serving no more than 2 dwellings.
(c) Elevator access may be provided between the garage and podium only.
(d) Where an alley is present, parking shall be accessed through the alley and services through the alley and side yards.
(e) Where an alley is not present, parking and services shall be accessed from the street by side yard driveways flanked by planters, at least 1-foot wide.
(f) On a corner lot without access to an alley, parking and services shall be accessed from the side street and services shall be underground and/ or in the side and rear yards.
2. Guidelines
N.A.

C. Parking
1. Standards
(a) Required parking shall be in an underground garage, or may be surface parking, tuck under parking, an above ground garage, or a combination of any of the above.
(b) Where an alley is present, services, including all utility access and above ground equipment and trash container areas shall be located on the alley.
(c) Where an alley is not present, services shall be located in compliance with the setback requirements of the applicable zone.
2. Guidelines
(a) Dwellings may have direct on indirect access to their parking stall(s), or direct access to stalls enclosed within the garage. A combination of these conditions is encouraged.
(b) Parking entrances to subterranean garages and/or driveways shall be located as close as possible to the side or rear of each lot.

D. Open Space
1. Standards
(a) Courtyard housing shall be designed to provide a central courtyard and/or partial, multiple, separated or interconnected courtyards of a size of at least 15% of the lot.
(b) In a project with multiple courtyards, at least two of the courtyards shall conform to the patterns below.
(c) Minimum courtyard dimensions shall be 40 feet when the long axis of the courtyard is oriented East/West and 30 feet when the courtyard is oriented North/South.
(d) In 40-foot wide courtyards, the frontages and architectural projections allowed within each urban zone are permitted on two sides of the courtyard. They are permitted on one side of 30-foot wide courtyards.
(e) Private patios may be provided at side yards, rear yards and courtyards.
(f) Courtyards shall be connected to each other and to the public way by zaguans or paseos.
(g) Surface parking for five cars or less is allowed in a front garden, screened from the street by a decorative wall.
2. Guidelines
N.A.

E. Landscape
1. Standards
(a) Landscape shall not obscure front yards on adjacent lots or the shopfront of the ground floor flex space. Front yard trees, if provided, shall be of porch scale (no more than 1.5 times the height of the porch at maturity) except at the margins of the lot, where they may be of house scale (no more than 1.5 times the height of the house at maturity).
(b) At least one large tree shall be provided in each rear yard for shade and privacy.
(c) At least one large tree planted directly in the ground shall be provided in at least one courtyard for shade, privacy and scale.
2. Guidelines
(a) Sideyard trees may be placed to protect the privacy of neighbors.
(b) Courtyards located over garages should be designed to avoid the sensation of forced podium hardscape.

F. Frontage
1. Standards
(a) Entrance doors, living space (e.g., living rooms and dining rooms) shall be oriented toward the courtyard(s) and the fronting street to the degree possible. Service rooms shall be oriented backing to sideyards, service yards and rear yards to the degree possible.
(b) Frontage types are required that provide a transition from public to private, indoor to outdoor at the entrance to each dwelling. Porches, towers, loggias, dooryards entry stairs and stoops are allowed. No arcade may encroach into the required minimum width of a courtyard.
(c) Stoops up to 3 feet in height and dooryards up to 2 feet in height may placed above subterranean parking, provided that they are landscaped and scaled to the street and building.
(d) The applicable frontage requirements apply per Section 4.5 Frontage Types.
2. Guidelines
(a) See the requirements of the applicable zone for allowed encroachments into required setbacks.



Illustrative Photo: example of housing organized around a courtyard

G. Building Size and Massing
1. Standards
(a) Buildings shall be composed of one, two and three story masses, each designed to house scale, and not necessarily representing a single dwelling.
(b) The intent of these regulations is to provide for courtyard housing projects with varying building heights. Suggested height ratios for various courts are as follows:

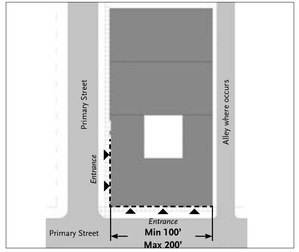
Table: Allowed massing by story

***Max Ratio of Each Story** in % of ground floor*			
1	***2***	***3***	***4***
100	***100***	***80***	***30***
Max in "U-E" Zone	Max in "U-G" Zone	Max in "U-CT" Zone	

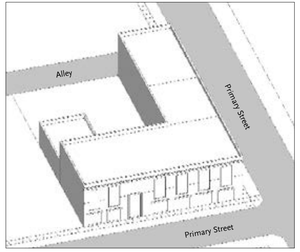
(c) Three story buildings shall be composed of single loaded and stacked dwellings. In this case, the visibility of elevators and of interior corridors at the third story shall be minimized by incorporation into the mass of the building.
(d) Buildings on the south side of the each site shall be at least 1 storey lower in height than those on the north side to allow for maximum exposure to sunlight within each courtyard.
2. Guidelines
(a) Buildings may contain any of four combinations of units: flats, flats over flats, townhouses, and townhouses over flats.
(b) Dwellings may be as repetitive or unique as deemed by individual designs.
(c) Four story masses should be minimized inside courtyards and apparent on street frontages.

H. Accessory Dwellings
Not allowed.

[1] Note: For additional illustrative examples of courtyard housing, see pages 2:10, 4:11, and Section 4.6 Architectural Style Guidelines



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Example of 2-story commercial building on a corner site



Illustrative Photo: Commercial blocks with retail uses on ground floor

4.4.9 Commercial Block

A building designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.

A. Lot Size
1. Width: Minimum: 100 ft; maximum 200 ft
2. Depth: Minimum: 100 ft

B. Access

1. Standards
(a) The main entrance to each ground floor commercial or residential storefront is directly from the street.
(b) Entrance to the residential portions of the building is through a street level lobby, or through a podium lobby accessible from the street or through a side yard.
(c) Interior circulation to each dwelling is through a corridor.
(d) Where an alley is present, parking may be accessed through the alley.
(e) For corner lots without access to an alley, parking is accessed from the side street through the building.
(f) Where an alley is not present, parking is accessed from the street through the building.

2. Guidelines
(a) Elevator access should be provided between the garage, and every one of the levels of the building.

C. Parking

1. Standards
(a) Required parking is accommodated in an underground garage, surface parking, tuck under parking, or a combination of any of the above.
(b) Dwellings have indirect access to their parking stall(s).
(c) Services, including all utility access and above ground equipment and trash are located on alleys.
(d) Where alleys don't exist, utility access, above ground equipment and trash are located as provided under the urban regulations for each zone.

2. Guidelines
(a) Parking entrances to subterranean garages and/ or driveways are located as close as possible to the side or rear of each lot.

D. Open Space

1. Standards
(a) The primary shared open space is the rear yard designed as a courtyard. Courtyards can be located on the ground or on a podium. Side yards may also be formed to provide outdoor patios connected to ground floor commercial uses.
(b) Minimum courtyard dimension shall be 40 feet when the long axis of the courtyard is oriented EW and 30 feet for a NS orientation. Under no circumstances will a courtyard be of a proportion of less than 1:1 between its width and height.
(c) In 40 foot wide courtyards, frontages and architectural projections allowed within each urban zone are permitted on two sides of the courtyard . They are permitted on one side of 30 foot wide courtyards.

2. Guidelines
(a) Private patios may be provided at side yards and rear yards.

E. Landscape

1. Standards
(a) In the front yard, there is no landscape, but the streetscape.
(b) At least one large tree planted directly in the ground shall be provided in the rear yard.
(c) Courtyards located over garages should be designed to avoid the sensation of forced podium hardscape.

2. Guidelines
(a) Sideyard trees may be placed to create a particular sense of place.

F. Frontage

1. Standards
(a) Entrance doors, public rooms, such as living rooms and dining rooms are oriented to the degree possible fronting toward the courtyard(s) and street. Service rooms are oriented to the degree possible backing to corridors.
(b) The applicable frontage requirements apply per Section 4.5 Frontage Types.

2. Guidelines
(a) Frontage types that provide a transition from public to private, indoor to outdoor at the entrance to commercial ground floor spaces are allowed. Store fronts, arcades and galleries are preferred.

G. Building Size and Massing

1. Standards
(a) Target height ratios for various commercial blocks are as follows:

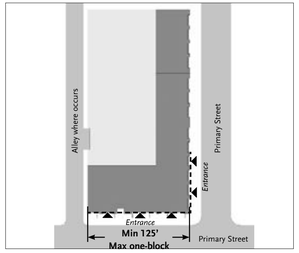
	Table: Allowed massing by story					
	***Max Ratio of Each Story** in % of ground floor*					
	1	***2***	***3***	***4***	***5***	***6***
Typical	***100***	***100***	***100***	***100***	***80***	***50***
Corner lot	***100***	***100***	***100***	***70***	***20***	***20***

Max in "U-G" Zone → | Max in "U-CT" Zone → | Max in "U-CO" Zone →

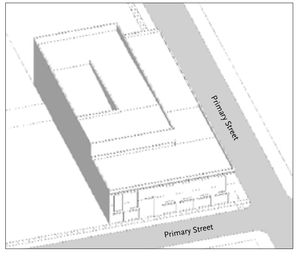
(b) Each dwelling must have at least one side exposed to the outdoors with direct access to at least a dooryard, patio, terrace or balcony.
(c) Facades along frontage lines that exceed 150 feet shall incorporate a massing break in the form of a forecourt from grade through the roof for the purpose of expressing at least two primary volumes. The massing break shall be 35 feet in depth from R.O.W. and 25 feet in width as measured parallel to R.O.W.

2. Guidelines
(a) Buildings may contain any of three types of dwellings: flats, town houses and lofts.
(b) Dwellings may be as repetitive or unique as deemed by individual designs.
(c) Buildings may be composed of one dominant volume.

H. Accessory Dwellings
Not Allowed



Illustrative Plan Diagram



Illustrative Axonometric Diagram



Illustrative Photo: Liner with retail spaces on the first floor



Illustrative Photo: Top floor is stepped back to decrease its height impact

4.4.10 Liner

A building that conceals a larger building such as a public garage that is designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.

A. Lot Size
1. Width: Minimum: 125 ft; maximum one-block
2. Depth: Minimum: 100 ft

B. Access

1. Standards
(a) The main entrance to each ground floor commercial or residential storefront is directly from the street.
(b) Entrance to the residential portions of the building is through a street level lobby, or through a podium lobby accessible from the street or through a side yard.
(c) Interior circulation to each dwelling is through a corridor.
(d) For corner lots without access to an alley, parking is accessed from the side street through the building.
(e) Where an alley is not present, parking is accessed from the street through the building.

2. Guidelines
(a) Elevator access should be provided between the garage, and every one of the levels of the building.
(b) Where an alley is present, parking may be accessed through the alley.

C. Parking

1. Standards
(a) Required parking is accommodated in an underground or above-grade garage, tuck under parking, or a combination of any of the above.
(b) Dwellings have indirect access to their parking stall(s).
(c) Services, including all utility access and above ground equipment and trash are located on alleys.
(d) Where alleys don't exist, utility access, above ground equipment and trash are located as provided under the urban regulations for each zone.

2. Guidelines
(a) Parking entrances to subterranean garages and/ or driveways are located as close as possible to the side or rear of each lot.

D. Open Space

1. Standards
(a) The primary shared open space is the rear or side yard designed as a courtyard. Courtyards can be located on the ground or on a podium. Side yards may also be formed to provide out door patios connected to ground floor commercial uses.
(b) Minimum courtyard dimension shall be 20 feet when the long axis of the courtyard is oriented EW and 15 feet for a NS orientation. Under no circumstances will a courtyard be of a proportion of less than 1:1 between its width and height.
(c) In 20 foot wide courtyards, frontages and architectural projections allowed within each urban zone are permitted on two sides of the courtyard . They are permitted on one side of 15 foot wide courtyards.

2. Guidelines
(a) Private patios may be provided at side yards and rear yards.

E. Landscape

1. Standards
(a) In the front yard, there is no landscape, but the streetscape.

2. Guidelines
(a) Courtyards located over garages should be designed to avoid the sensation of forced podium hardscape.

F. Frontage

1. Standards
(a) Entrance doors an public rooms, such as living rooms and dining rooms are oriented, to the degree possible, fronting toward the courtyard(s) and street. Service rooms are oriented to the degree possible backing to corridors.
(b) The applicable frontage requirements apply per Section 4.5 Frontage Types.

2. Guidelines
(a) Frontage types that provide a transition from public to private, indoor to outdoor at the entrance to commercial ground floor spaces are allowed. Storefronts and arcades are preferred.

G. Building Size and Massing

1. Standards
(a) Target height ratios for various liners are as follows:

Table: Allowed massing by story			
***Max Ratio of Each Story** in % of ground floor*			
1	***2***	***3***	***4***
100	***100***	***100***	***80***

(b) Each dwelling must have at least one side exposed to the outdoors with direct access to at least a dooryard, patio, terrace, or balcony.

2. Guidelines
(a) Buildings may contain any of three types of dwellings: flats, town houses and lofts.
(b) Dwellings may be as repetitive or unique as deemed by individual designs.
(c) Buildings may be composed of one dominant volume.

H. Accessory Dwellings
Not Allowed

4.5 FRONTAGE TYPES

A. Purpose. This section identifies the frontage types allowed within the Specific Plan area, and for each type, provides a description, a statement as to the type's intent and, design standards, to ensure that proposed development is consistent with the City's goals for building form, character, and quality. The types are organized by intensity from least (Frontyard / Porch) to most (Arcade) intense.

B. Applicability. Each building shall be designed in compliance with the standards of this section for the applicable building type, with the exception of civic and institutional buildings. Because of their unique disposition and application, civic and institutional buildings are not required to comply with building type requirements, but are rather subject to a separate design review process.

C. Allowable Frontage types by zone. All proposed buildings shall be designed to incorporate the allowed types identified in Table 4-5, as applicable.

4.5.010 General requirements for frontage types.

A. A physical transition shall be provided between the glazing of the storefront and the Adjacent Sidewalk except if the glazing itself terminates directly at the grade. Where a bulkhead is applied to transition between the opening(s) and the adjacent grade, the bulkhead shall be between 10 inches and 36 inches tall (aluminum storefront or spandrel panel may not substitute for a bulkhead).

B. All storefronts shall provide clear views of merchandise displays within the shop space and/or maintained and lighted merchandise display(s) within a display zone of approximately four feet in depth from the glass.

C. Awnings, signs, etc, shall be located at least 8 feet above the adjacent sidewalk and may project for the width of the sidewalk to a maximum encroachment of within 2 feet of the back of curb.

D. Awnings shall only cover storefronts and openings so as to not cover the entire facade.

E. The term "clear" means that the identified area is free of encroachments other than signs, light fixtures, etc.

4.5.020 Specific standards for frontage types.

The following standards in Tables 4-5 and 4-6 apply to all proposed building / modifications in the plan area.

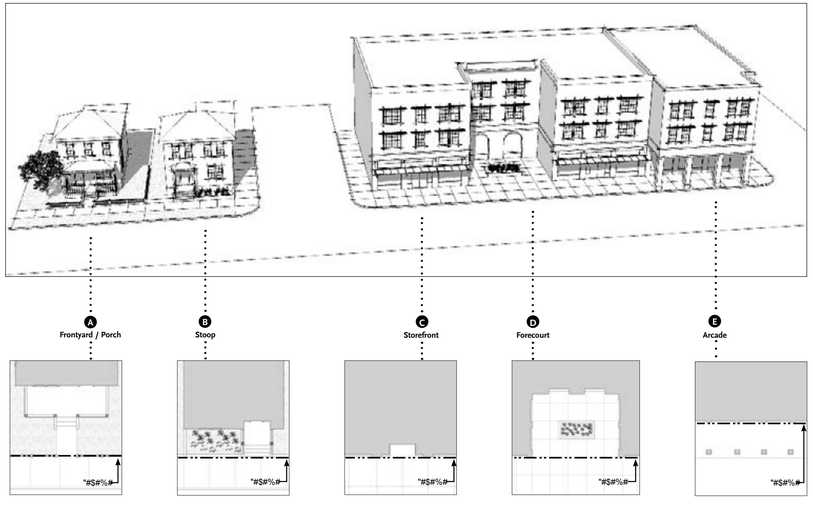


Table 4-5: Frontage Types Allowed by Zone and minimum % of Frontage [1]

Frontage Type	U-CO	U-CT	U-G	U-E
A. Frontyard / Porch	---	---	min 100	min 100
B. Stoop	---	min 25	min 25	min 25
C. Forecourt	max 25	max 25	max 25	---
D. Storefront	min 75	min 75	min 75	---
E. Arcade	min 50	---	---	---

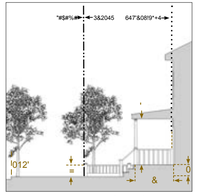
min 50 = allowed
--- = not allowed

[1] The specified percentages in table 4-5 apply when only one frontage type is used on a Building's frontage. Combinations of types allowed in the same particular zone are not subject to these specific percentages and are to be evaluated in design review by the Community Development Director.

Table 4-6 : Specific Standards for frontage types

A. Frontyard / Porch

Frontyards provide a physical transition from the sidewalk to the building. A fence or wall at the property line may be used to define the private space of the yard. The front yard may also be raised from the sidewalk, creating a small retaining wall at the property line with entry steps to the yard. A raised porch may be combined with the front yard as show below.



Section Diagram: Frontyard / Porch

Configuration
A great variety of front yard / porch designs are possible, per the following:

a. Depth min 7 ft clear

   Width min 12 ft clear for centered entry; min 8 ft clear for asymmetrical entry

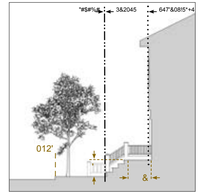
b. min 8 ft clear

c. Porches may be at grade or raised to transition into the building. In no case shall porches be raised more than 3 feet from the adjacent grade.

d. Fences or walls defining and/or retaining the front yard shall not exceed 4 feet in height from the adjacent sidewalk.

B. Stoop

Stoops are elevated entry porches/stairs placed close to the frontage line with the ground story elevated from the sidewalk, securing privacy for the windows and front rooms. This type is suitable for ground-floor residential uses with short setbacks. This type may be interspersed with the storefront frontage type. A porch or shed roof may also cover the stoop.



Section Diagram: Stoop

Configuration
A great variety of stoop designs are possible, per the following:

a. Depth min 4 feet wide clear
   Width min 4 feet clear

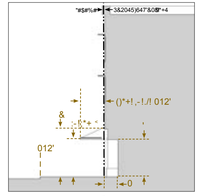
b. The ground floor shall not be elevated more than 3 feet above the adjacent sidewalk.

c. Stoops must correspond directly to the building entry(s).

d. Fences or walls defining the stoop or front setback shall not exceed 4 feet from the highest adjacent finished grade.

C. Storefront

Storefronts are large glazed openings in a façade, filled with doors and transparent glass in a storefront assembly. This traditional retail frontage type is often provided with canopies or awnings, which may be fixed or retractable, to shelter pedestrians and shade the storefront glass from glare. The storefront assembly may be recessed up to 100 feet to provide a widened sidewalk or a covered area for outdoor dining.



Section Diagram: Storefront

Configuration
A great variety of storefront designs are possible, per the following:

a. min 10 feet tall and max 16 feet tall, as measured from the adjacent sidewalk.

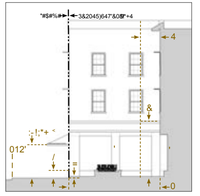
b. The corresponding storefront(s) opening(s) along the primary frontage shall comprise at least 75% of the 1st floor wall area facing the street and not have opaque or reflective glazing.

c. Storefronts within the overall facade may be recessed from the frontage line by up to 10 feet.

d. The storefront shall provide clear views of merchandise displays within the shop space and/or maintained and lighted merchandise display(s) within a display zone of approximately four feet in depth from the glass.

D. Forecourt

A Forecourt is a public space formed by a recess in the façade of a building. Forecourts are generally appropriate for commercial or civic use, or in some cases for vehicular drop-off at a civic building or hotel, as distinct from courtyards which are semi-public spaces providing frontages of a generally residential character.



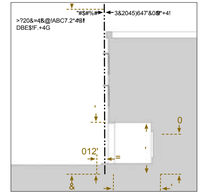
Section Diagram: Forecourt

Configuration
A great variety of forecourt designs are possible, per the following:

a. The frontage created by the forecourt shall be improved with shopfronts and be min 12' tall as measured from the adjacent sidewalk.
b. The corresponding storefront(s) opening(s) along the primary frontage shall be at least 65% of the 1st floor wall area and not have opaque or reflective glazing.
c. Width min 10 feet clear, max 60 feet clear
   Depth min 20'; max 40'
d. The forecourt may be raised from the sidewalk, creating a small retaining wall at the property line with entry steps to the court, but shall not exceed 3 feet from the adjacent sidewalk grade. ADA access shall be accommodated within the parcel.
e. Encroachments within the forecourt, such as balconies, galleries, awnings, signage and light fixtures are allowed up to 1/3 the width and depth of the forecourt.
f. The storefront shall provide clear views of merchandise displays within the shop space and/or maintained and lighted merchandise display(s) within a display zone of approximately four feet in depth from the glass.

E. Arcade

Arcades are colonnades supporting a building façade that is set just behind the curb of the street, such that the sidewalk is enclosed within the building volume, between the colonnade and storefronts. This type is ideal for retail use, as it shelters the pedestrian and shades the storefront glass, preventing glare that might obscure views of merchandise. The arcade also provides habitable residential or commercial space over the sidewalk, narrowing the space of the street and creating a very urban character.



Section Diagram: Arcade

Configuration
A great variety of arcade designs are possible, per the following:

a. The height and the proportions of the arcade shall correspond to the facade consistent with the architectural style of the building.
b. Min 10 ft clear in all directions. Soffits, columns/arches shall be treated consistent with the architecture of the building
c. The arcade shall correspond to storefront openings and;
   i. spacing between openings along the right-of-way shall be square or vertically oriented;
   ii. frontages shall be improved with storefronts;
   iii. storefronts shall be 10 ft tall min.
d. Min 2' and max 4' sidewalk between curb and face of arcade (except at curb extensions for intersections in which case the arcade shall continue in parallel to the right-of-way).
e. The storefront shall provide clear views of merchandise displays within the shop space and/or maintained and lighted merchandise display(s) within a display zone of approximately four feet in depth from the glass.

A. Introduction: Architecture Style Guidelines

These Architecture Style Guidelines establish a clear set of guidelines that provide the City of Whittier and future applicants with a basis for proposing and reviewing development projects. The Guidelines serve two primary purposes:

1. To establish high quality design in the historically sensitive core of the City, and
2. To facilitate the design review and planning approval process of projects in terms of an architecture that is appropriate to particular building types and compatible to adjacent buildings.

The Guidelines are most effective as a proactive guide for architects, developers, and institutions that are considering a project in Uptown Whittier. The Guidelines are not intended as a literal style manual; instead, they serve as a framework that represents the salient characteristics of traditional and contemporary styles for use in the design and development of new buildings. The City shall use them as part of a formal design review process, potentially assisted by a town architect qualified in these matters.

B. Architecture Styles

Based on extensive documentation of local precedents in and around Uptown Whittier, a survey of historic buildings, and a study of existing and proposed historic district designations, six architecture styles have been identified as relevant to the Specific Plan area's history and in future developments and as being deserving of continued application and interpretation:

1. Mediterranean
2. Craftsman
3. Victorian
4. Main Street
5. Art Deco
6. California Contemporary

Each style is described and differentiated through formal characteristic aspects of the buildings and their relationship to their context:

- Introduction (historic description)
- Key Characteristics
- Massing and Proportion
- Elements and Details
  - Massing
  - Base
  - Primary Walls
  - Roof-Wall Connections
  - Roof
  - Drainage
  - Openings
  - Attached Elements
  - Site Definition and Landscape

Architecture Style:	Mediterranean	Craftsman	Victorian	Main Street	Art Deco	California Contemporary
Building Type:						
1. Single House	Y	Y	Y	-	-	-
2. Accessory Dwelling	Y	Y	Y	-	-	-
3. Duplex, Triplex, and Quadplex	Y	Y	Y	-	-	-
4. Rose Walk	Y	Y	Y	-	-	-
5. Bungalow Court	Y	Y	Y	-	-	-
6. Rowhouse	Y	Y	Y	-	-	Y
7. Live / Work	Y	Y	Y	Y	Y	Y
8. Courtyard Housing	Y	Y	-	-	Y	Y
9. Commercial Block	Y	-	-	Y	Y	Y
10. Liner	Y	-	-	Y	Y	Y

Key
Y Style permitted for this building type
- Style not permitted

C. General Guidelines

Buildings are the principal determinants of street and neighborhood form. As they are incrementally constructed, they contribute, along with their neighbors, to both the formation of the public realm and to the collective form of the city.

Essential, therefore, to the design of new projects is the careful consideration of how they relate to their physical context (towards the street, towards buildings across the street, and towards neighboring buildings), as well as to their historical, cultural, and climatic context. In order for this to be successfully achieved, new buildings must be designed both from the inside out and the outside in. They should be pleasing to both those who inhabit them and to those who pass by on foot, bicycle, or automobile.

In addition, all components of a building must be thoughtfully and holistically designed: the careful articulation of building volumes in a manner that is respectful of existing buildings; the inclusion of frontages that enhance the building's relationship to the public realm; the selection of materials, window and door assemblies and the consideration of how they relate to one another both proportionally and in terms of color and texture; the choice of plants, trees, and hardscape materials that are compatible with the proposed building, the Uptown District as a whole, and are appropriate to the climate of Whittier; the placement of mechanical systems and utilities in the least obtrusive manner; and the kinds of constructional details that generate permanent buildings and, by extension, long term value.

In the following pages, guidelines are offered for accomplishing the architectural design dimension of this Plan, particularly of each of the six chosen styles. The following are general guidelines that apply to all of them:

A. Materials and Finishes.

Architectural materials and constructional assemblies should be combined in a manner that guarantees permanence and longevity. Further, they should be designed consistently within the architectural language chosen for each project, in terms of structural expression, scale, and proportion.

1. **Durability of Materials.** Materials, especially at the ground floor level, should be durable and detailed in a manner that energizes the public realm.

2. **Exposed Wood.** Exposed wood (or wood-like materials) should be finished in a manner that minimizes maintenance and promotes its longevity.

3. **Reflective Materials.** The use of reflective materials is discouraged. They should only be used if:

   - They are applied to small areas (such as to highlight signage) and

   - It can be shown that they will not cause a nuisance to automobile traffic, pedestrians, and neighboring buildings.

4. **Masonry and Stone.**

   - Masonry veneer walls should be detailed with structural integrity, appearing thicker and heavier, especially at corners and window and door openings.

   - Brick and cut stone should be laid in true bonding patterns. Mortar joints should be struck.

   - River and rubble stone should be laid from large to small, with smooth or beaded mortar joints.

   - Masonry detailing should involve the transition from stone to other materials through moldings, caps, and other trim elements.

5. **Synthetic Materials.** The use of synthetic materials is discouraged unless they can be shown to:

   - Adequately simulate the appearance of the natural material they imitate.

   - Demonstrate an ability to age similar to or better than the natural material they imitate.

   - Have a permanent texture, color, and character that is acceptable for their proposed application.

   - Be pressure washed and, in general, withstand anti-graffiti measures.

6. **Multiple Materials.** Two or more wall materials may be combined on one facade. If located one above the other, lighter materials should be placed above more substantial materials (e.g. wood above stucco or masonry, or stucco and glass above masonry). In general, vertical joints between different materials should occur only at inside corners.!!

7. **Color.** Materials and finishes should be composed to provide balanced compositions and should be understood to be of the essence in describing the character of a new or rehabilitated building. Large areas of bright colors should be avoided.

8. **Finishes and Fixtures.** Finishes, fixtures, and other architectural details should be designed to be consistent with each other throughout the building.

9. **Attached Elements.** Attached architectural elements and details such as lighting fixtures, custom signage, awnings, hand rails, balconies, and trellises are strongly encouraged. They should be designed to be consistent with each other throughout the building. Such elements should draw inspiration from and relate to surrounding buildings.

B. Openings.

The placement, orientation, proportion, materiality, detailing, and color of windows and doors are indispensable to defining a building's character and quality. Conversely, windows and doors that are inappropriately proportioned or material- or color-coordinated with a building's style can seriously damage its aesthetic quality.

1. **Materials.**

   - Windows, doors, frames, colors, and styles shall be appropriate to a building's architectural style.

   - Recommended window and door materials include wood, fiberglass, steel, or aluminum. Vinyl and vinyl-clad windows are discouraged, although when used should utilize mullion patterns and colors appropriate to a building's style.
   - Flush nail-on aluminum windows are prohibited.
   - Glazing should be clear glass, particularly in storefront and primary window applications. Transom and other specialty windows may be decorative.

2. **Details.**

   - Window sills should be detailed to properly shed water.
   - Head casing should be equal in width to or wider than jamb casing.
   - Mullions, if used, should be true and should be of a substantial dimension (e.g. not flat).

3. **Configurations.**

   - In general, window openings and panes should be vertically oriented, square, and/or composed of groupings of vertically oriented windows.
   - The orientation and proportion of openings should be consistent with the architectural language of the rest of the building. Openings should relate to one another proportionally and according to a rational system of design.
   - Building elevations are encouraged to exhibit a hierarchy between window sizes to differentiate between public rooms and private rooms.
   - Windows in new buildings should be designed in scale with surrounding buildings.

4. **Placement.**

   - In general, windows should be recessed from the wall plane of the facade to provide depth. The depth should be specific to the architectural style being utilized.
   - Bay windows, if provided, should be habitable spaces.

5. **Accessories.** Accessories may include operable shutters sized to match their openings, opaque canvas awnings and other shading devices, and planter boxes supported by visible brackets appropriate to each design.

6. **Garage Openings.**

   - Pedestrian entrances to buildings should be more prominent than automobile entrances. This can be accomplished by way of size, massing, or detail variation.
   - Parking garage entrance openings should be composed as an integral part of the building facade. They should be designed as doorways and be secured by gates or doors and scaled in proportion to the overall form of each building.

7. **Solar Design.** Active solar devices should be fully integrated into the overall form of the building and properly detailed into its fabric. Passive solar devices such as overhangs, shutters, louvers, canopies, and shade trees should be used to minimize solar heat gain. Buildings should be designed to allow for the passage of cooling breezes.

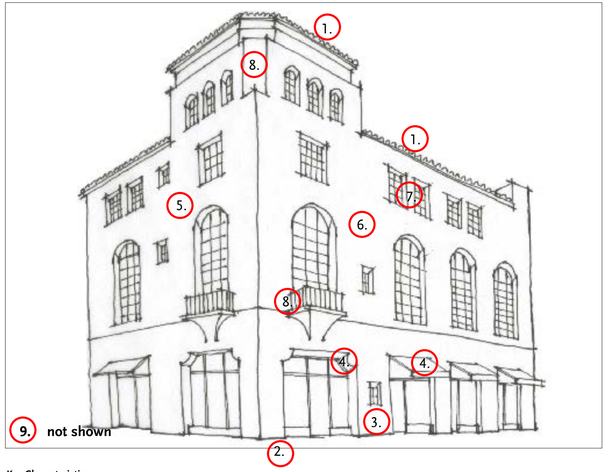
4.6.1 Mediterranean



Introduction. The Mediterranean style was generated by the Eclectic movement of 1890 - 1940, which was inspired by architectural precedents from the Classical, Medieval, and Renaissance periods, derived from original Spanish, Italian, Greek and North African Moorish cultures, and their colonial progeny (with indigenous influences) in North and South America. The style came into prominence in the 1920's and 1930's, and is predominantly found in California and Florida due to both the historic Latin colonization patterns of these regions, and to similarities with the precedents' Mediterranean climate and culture. Eastern architects such as Bertram Goodhue and Addison Mizner, and California architects such as Wallace Neff and George Washington Smith used a deep understandings of the precedent's origins and applied them in a carefully disciplined, yet more convenient, functional way to match the changing lifestyles and material culture of 20th century America.

The Mediterranean style is a mature and complex architectural language. Its heritage is so extensive, that when applied, it evokes a heightened sense of urbanity, while maintaining an intimate relationship with nature typical to a temperate Mediterranean-like climate such as Whittier's. The style can be distinguished by its simple massing, smooth white walls, deeply set openings, and red tile roofs. The basic mass is punctuated by rhythmic placement of windows and doors, and detail that is sparingly applied to these openings with carved surrounds and window grilles. Both color and decoration are somewhat restrained as compared to other styles, and are reserved for such details as wrought iron railings, grilles, and gates, fabric awnings, and stone or colorful tile surrounds at doors, windows, and fountains. Shading devices such as arcades, recessed entries, balconies, overhangs, and awnings are arranged as counterpoints to the simple, geometric forms of the buildings.

The style has been used historically in Uptown Whittier, and is particularly suited to the Philadelphia and Greenleaf Avenue areas, public buildings, and multi-family buildings.



Key Characteristics

1. **Roof -** low pitch gable ends, occasional hipped ends, red clay tile. Flat roofs in combination with pitched. Roof eaves are plaster molding transitions from wall or wooden bracketed overhangs.
2. **Floor Plan/Elevation -** simple plans in rectangular, L-shaped, or U-shaped configurations.
3. **Base -** typically no base, wall meets ground simply. Articulated bases (projected, material changes, etc.) are reserved for public buildings.
4. **Shading -** recessed arcades & entries, balconies, or fabric awnings.
5. **Form/Massing -** 1 to multiple stories, simply proportioned, asymmetrical compositions. Corner towers common.
6. **Walls -** flat planes of smooth or textured plaster, punctuated by deep openings.
7. **Openings -** vertically proportioned, combination of small and large openings in asymmetrical or symmetrical pattern.
8. **Articulation -** plane of wall broken by modest planar changes, balconies, awnings, plaster brackets or pilasters, & occasional roof eaves. Detailing is limited to metal or wood railings, grilles, and wood or tile ornamentation at major door or window openings.
9. **Colors -** limited to off-white and white, terra-cotta roof tiles, & contrasting color of doors, windows, & wood brackets, columns, and railings.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **Mediterranean** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

1. **Basic Massing -** One-, two-, and three-story volumes roofed in a combination of gabled, hipped, shed, and flat roof forms. Roof pitches are low and range between 3:12 and 5:12.

   Residential buildings tend to be roofed in sloped roof forms, while commercial buildings tend to be roofed in either sloped or flat roofs or a combination of the two.

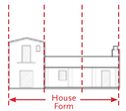
   Small and medium massing is composed and scaled as a series of house forms. Large massing is organized around elevators, lobbies, and corridors and its form is designed to the scale of the block.

2. **Detailed Massing Elements -** Overall building massing is broken down with the addition of attached architectural elements (such as balconies and exterior stairways) as well as the whole range of urban frontage types.

3. **Composition and Openings** - Within the framework of various masses, openings may be arranged asymmetrically or symmetrically, often within the same building. Residential buildings tend to be more asymmetrical than commercial buildings, with the openings of commercial buildings often being arranged serially.

4. **Floor Plan -** Simple rectangular plans are most common, with public rooms predominantly facing onto the street. L-shaped and U-shaped plans are also common.



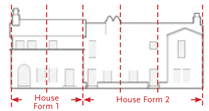


1. Small Massing
(Single House, Duplex, Triplex, and Quadplex)

A simple single-family house organized as a three-bay composition. Its comprised of one- and two-story rectangular volumes arranged in an L-shaped configuration. The two-story volume dominates through its vertical proportion and the one-story volume is horizontally composed. Attached elements include a second floor balcony, a ground floor porch, and a chimney.

This massing strategy also applies to the individual houses of Bungalow Courts and Rose Walks.

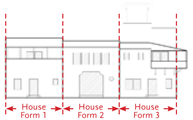




2. Medium Massing
(Rowhouse and Live / Work)

A two-story rowhouse building comprised of two house forms. The first house (left) is composed of two bays and the second house (right) is composed of three. The asymmetrical design of openings transforms the repetitive nature of the individual unit plans. The pedimented end of the large volume increases its scale on the street front. This kind of design expresses the continuous fabric of rowhousing, while distinguishing the individual character of each unit. This is accomplished through volumetric variation, setbacks, varied roof configurations, and frontage choices.

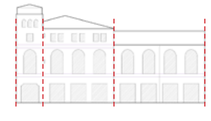




3. Medium Massing
(Courtyard Housing)

In this courtyard housing building, two-story, equal bay house forms are composed around a central courtyard. The individual houses are differentiated from one another by small variations in height, setback, and roof forms. Window and door openings relate compositionally to each house and are arranged both symmetrically and asymmetrically. The massing is further broken down in scale with the addition of stoops and a balcony and loggia on the second floor. This kind of design expresses the character of each unit, while combining them into a collective courtyard form.





4. Large Massing
(Commercial block and Commercial liner)

A commercial block building that breaks down its massing into three bays that are differentiated from one another by variations in height. Higher massing and a tower accentuate the corner. Ground floor openings are large storefronts. The massing and arrangement of openings are more formal than that of the more residential types at left. Openings are arranged in a serial pattern.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.1 Mediterranean Revival



Local precedent: Modest and elegant multifamily building in Whittier, CA.



Local precedent: Office building with balconies and elaborate entrance in Whittier, CA.



Regional precedent: Multifamily building w/forecourt on corner site in Pasadena, CA.



Tower at corner



Painted base with deep recess



Single plane composition



Single-volume composition



Base articulated in same material and color



Intermediate molding at base



A multiple volume composition



Continuous material base.



Applique at cornice and corner

A. Massing

a. Volumetric compositions can be of a single primary volume offset by a variety of lesser ones. Also possible are compositions that are expressed in a single volume.
b. Multiple volume compositions can be overlapped or offset vertically or horizontally.
c. It is common and desirable to articulate building corners on corner lots.

B. Base

a. Exterior walls reach the ground with an expression of weight, with or without a base.
b. An explicit element of base is described either as a painted band of traditional colors or an applied band of tile, stone, or cast concrete.
c. Elements setback within the wall, may have their own material connection to the ground, such as tile, plaster or concrete.

C. Primary Walls

a. Expressed as single-plane expanses of plaster wall.
b. May be articulated by traditional moldings or applied ornament of stone or cast concrete, to describe the vertical divisions into base, body and top.
c. Plaster finish shall be Santa Barbara Mission-Stucco, Humpy-Bumpy brown coat 16/20 finish with 0 - 3/8" variation, or 20-30 fine sand finish
d. Control joints are not allowed.



Expressed rafters, broad eave



Sloped tile roof



Projecting scuppers



Deep, recessed openings



Useable balconies



Fountain as focal point of a courtyard



Clay tile roof without eaves



Parapet with flat roof



Gutter and downspout



Major openings with trim



Integrated stairs



Integrated 1-story wall with doorway



Terra cotta tiles on profiled parapet



Roof as balcony behind articulated parapet



Water retention and control



Paired, recessed openings



Integrated chimneys



Forecourt with entry gate

D. Roof-Wall Connections

a. The roof visually dominates the wall by extending beyond it.
b. Exterior walls transition into the roof by one of three means: i) a projected wooden eave with exposed wooden rafters, ii) a plaster molding or, iii) a tile cap
c. Foam moldings are expressly prohibited.

E. Roof

a. May be pitched at a 3:12 ratio and finished in Roman or Mission tile laid irregularly (tile may be multi-color).
b. Flat roofs are allowed and shall be articulated as an explicit exterior wall in visual transition to the sky. May be accessible and used as balconies or terraces.
c. No bird stops allowed at end condition: must be mortar filled.

F. Rainwater Drainage

a. May be conducted off pitched roofs by a traditional combination of gutters and downspouts.
b. Flat roofs may be drained by use of trumpet scuppers. A roof that drains internally will need tile or ceramic scuppers on exterior walls.
c. Rainwater reaching the ground may be harvested in cisterns or temporarily collected in dry wells.

G. Openings

a. Deep-set (min 3" plaster return) and vertical. May be combined with deeper balcony, loggia, and arcade elements to generate complex building-wide vertical or horizontal compositions.
b. Such compositions can be symmetrical overall, locally symmetrical or, asymmetrical.
c. Shutters are the real, aggregate dimension of their associated opening.
d. French doors and casement windows are typical. Multi-pane windows and multi-paneled doors are typical

H. Attached Elements

a. All allowable frontage types can be expressed in this architecture style.
b. Architectural elements such as balconies, stairs, and chimneys can project beyond the building's primary volume into the areas of its setbacks.
c. Attached elements contribute to the massing variety of buildings by being sized to a building-wide scale.

I. Site Definition and Landscape

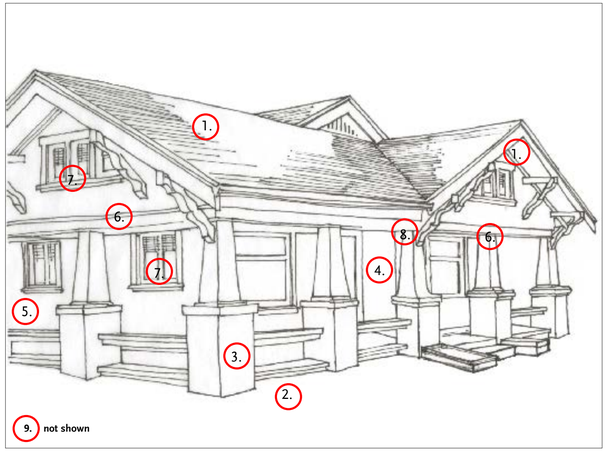
a. Buildings typically create surrounding public and private space within walled precincts. Forecourts, garden walls, and zaguans are common.
b. The landscape of gardens and courtyards heightens the spatial character of each walled precinct or exterior room and generates a special outdoor place directly linked to the building.
c. Courtyards are places of repose and social gathering.

4.6.2 Craftsman



Introduction. The Arts and Crafts movement of the late 19th Century inspired the Craftsman architecture in California and the nation. It was a style of the hand-made and earthy, a reaction to the repetitiveness and homogenization of the industrial buildings occurring at the time. Architect William Morris lead the movement, which had its origins in England. Morris, and the English Arts & Crafts Exhibition Society inspired the local evolution of the style by U.S. architects such as Bernard Maybeck, Gustave Stickley, and most notably Charles and Henry Greene of Pasadena, California. The style focused on careful and honest detailing of natural materials such as redwood, tile, copper, brick and stone in use of both the house's structure and exterior envelope, its landscape, its fittings and hardware, its furnishings, etc. All parts of the home received artful attention. Architects Greene and Greene designed exemplars of the style in Pasadena, as well as modest, inexpensive, and low-profile bungalow homes throughout the region. Popular magazines of the early 20th Century such as *Good Housekeeping* made the style familiar to the public and pattern book makers, which in turn, made the Craftsman house the most reproduced house style in the country at that time.

Buildings are composed of horizontal, single- and two-story volumes. An additional floor may be concealed within the volume of the roof. In its most simple form, it is a wood box surrounded by various attached elements. Walls are typically horizontally placed wood siding, shingles or board-and-batten, with a foundation base and piers in river stone, brick or stucco. Rafter tails and porch columns are exposed, smooth, and shaped. Windows and doors are vertical in proportion - often combined into horizontal patterns - and trimmed in wood. Roofs are composed of shallow sloped gabled forms, and made of wood, asphalt shingles or sheets with broad overhangs and eaves.



Key Characteristics

1. **Roof -** low to medium pitched low-slung roofs, with gables facing street, or crossing with rear gable, & occasional side-facing gable. Hipped roof used on occasion. Large overhangs with rafter tails, exposed eaves, braces, and brackets.
2. **Floor Plan/Elevation -** simple, rectangular or L-shaped plan, with added porches and frequently a porte cochere over drive leading to rear of lot.
3. **Base -** articulated in brick, stone, stucco, or shingle typically with change in plane.
4. **Shading -** very deep front and side porches or open shade structures added to mass of building, sometimes contained underneath main roof form. Upper level balconies and sleeping porches common.
5. **Form/Massing -** 1 to 3 stories with 3rd story incorporated into roof line, very horizontally proportions, rectangular mass is very simple with few projections.
6. **Walls -** wall planes are articulated in combinations - with heavier materials at ground [stucco] and lighter above [clapboard, shingles].
7. **Openings -** vertical or square proportions, and ganged for horizontal compositions at public rooms. Of note, the front door is lower and wider than standard front doors.
8. **Articulation -** besides roof details, building base and porch columns and railings are detailed in wood, stone, or brick. Windows have trim. Balconies, window planter boxes, brick or stone chimneys and unique lantern light fixtures are common.
9. **Colors -** earth tones in the darker ranges. Field and accent colors are closely related and contrast is limited in the best examples.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **Craftsman** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

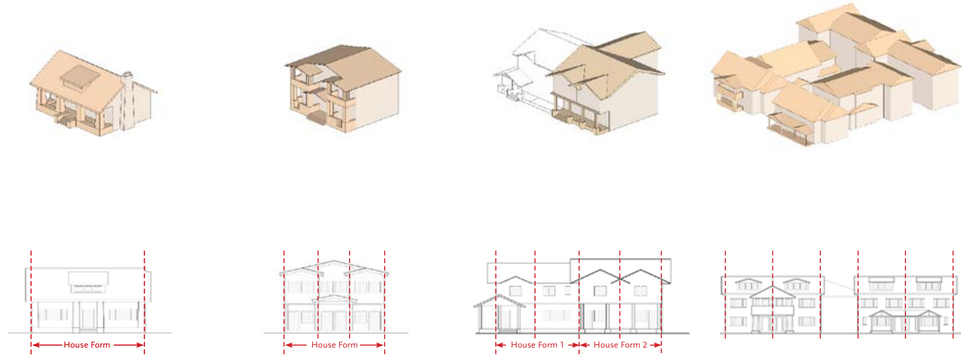
Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

1. **Basic Massing -** One-, two-, and three-story house-like volumes most typically roofed in low slung gabled forms, although hipped forms are sometime used. Bungalows are oriented, arrayed, or facing with their gabled end of their roofs parallel to the street. The top floor is usually fully enclosed by the roof form (i.e., within the attic space) and is lit by dormer windows. For three-story buildings, the third floor must be enclosed within the roof form. Roof pitches vary between 3:12 and 6:12.

2. **Detailed Massing Elements -** Building massing is often articulated through a variety of frontages thoroughly integrated with the form of the building. These typically include porches, arcades, raised forecourts, etc. Detailed massing arranged symmetrically on the body of the buildings. The best examples of this style are asymmetrical and picturesque in their composite massing. Dormers are generally large and are roofed in gabled or shed roof forms.

3. **Composition and Openings** - Openings are generally arranged symmetrically, although some local asymmetries are common.

4. **Floor Plan -** Simple rectangular plans are most common, with public rooms predominantly facing onto the street.



1. **Small Massing (Single House)**

A two-story single house comprised of a simple rectangular plan that orients its long side towards the street. The second floor is enclosed within a singular, gabled roof form and is lit by a dormer window covered by a shed roof and gable windows on both sides. Since the gable presents its side towards the street, the perception from the street is that the house is a one-story building. A deep front porch, also enclosed within the gable roof form, presents a hospitable face towards the street.

This massing strategy also applies to the individual houses of Bungalow Courts and Rose Walks.

2. **Small Massing (Duplex, Triplex, or Quadplex)**

A two-story quadplex that is conceived as a large single house that happens to contain four, simply stacked residential units. The building is organized as a simple plan covered with a shallow-sloped gabled roof. The attic space is not occupied. Two-story porches symmetrically flank each side of the street-facing elevation denoting the four apartments contained under the single roof. Under the ground floor porch, two central doors provide access to the upper floor units and the edge doors provide access to the ground floor units.

3. **Medium Massing (Rowhouse, Live / Work)**

A rowhouse building that is composed of two house forms that are joined together as one building. Each house is composed of two units and is covered by a gabled roof. The individual house forms are differentiated from one another by the arrangement of porches and window and door openings. An attached porch (on unit at far left) and an embedded porch (subtracted from the house form on the right) add interest to the street facing elevation and help break down the building's massing to a human scale.

4. **Large Massing Courtyard Housing**

A three-story courtyard housing building that arranges house forms around a central courtyard. Individual house forms are differentiated from one by their porch, door, window, and dormer design. These attached elements also break down the overall massing to a human scale. The third story is completely enclosed within the attic space so that from the street and the courtyard, the building appears to be two-story.

Despite its density, this building presents a two house front to the street and is highly compatible with adjacent single family houses.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.2 Craftsman



Local precedent: Asymmetrical gabled front roofs, front and side porches in Whittier, CA.



Local precedent: Asymmetrical gabled front roof and deep porches in Whittier, CA.



Local precedent: Symmetrical composition, side gable roof, shed dormer, and earth-tone materials in Whittier, CA.



Rectangular volumes with deep, low-slung roofs



Rectangular main volume with attached porches



Rectangular volumes, horizontally proportioned

A. Massing

a. Form is a simple rectangular mass, horizontally proportioned, typically 1 to 2 stories.
b. The rectangular mass is articulated by components such as attached porches, balconies, bay windows, or projecting room volumes so integrally composed into the building that they are indistinguishable from the principle volumes.
c. Cantilever upper walls and bay windows are not uncommon.



Wood shingle wall, stained



Stucco base with stained wood shingle wall



Clapboard siding at base, shingles above

B. Primary Walls

a. Walls are articulated with changes in planes, and/or change in materials.
b. Material changes are limited to 2, with no more than 80% of the total wall surface in one material.
c. Heavy materials, if used, are located at ground floor (stone or stucco), and lighter materials or textures above (shingle or clapboard siding).



Brace and exposed rafters



Large overhanging eaves with exposed rafters



Structural elements expressed @ gable end vents

C. Roof-Wall Connections

a. Wide eaves with exposed rafters and rafter tails
b. Wood braces & brackets may be used.
c. Minimum 24" overhang.
d. Attic vents are placed at the gable ends of the roof and finished with decorative wood grilles.



Gable front roof facing street



Side gable, roof parallel to street



Seldom-utilized hipped roof

D. Roof

a. Roof forms include gables that face the street, or gables with the long side of the roof facing the street.
b Principal gables are pitched between 3:12 and 5:12. Shed slopes are less than the principal slope, between 2:12 and 6:12.
b. Dormers may be used to provide light and air to rooms on the upper levels.
c. Heavy timber throughout in braces, brackets, lookouts, and brackets (3" x 5" minimum).



Gutter and downspout



Downspout



Copper downspouts, leader box

E. Rainwater Drainage

a. May be conducted off pitched roofs by a traditional combination of gutters and downspouts.
b. Rainwater reaching the ground may be harvested in cisterns or temporarily collected in dry wells.
c. Gutters and downspouts are metal - galvanized, painted, or copper and typically half round, round, or square.



Vertical openings in horizontal composition



Paired vertical windows, 3 over 1 double hung



Typical wider, shorter front door w/ lite

F. Openings

a. Window openings are proportioned vertically, although several windows may abut to form a horizontal grouping, particularly at public rooms.
b. Windows are typically not deeply recessed.
c. Window lites may be divided into equal increments or be divided on a portion of a window (such as the upper portion of a double-hung or casement window: 4 over 1, 3 over 1).
d. Front doors are typically shorter and wider than the average entry door, and typically has a special lite [window] incorporated into it.



Front Porch



Chimney



Porte-cochere

G. Attached Elements

a. Porches, balconies, porte cocheres, chimneys, and trellises are added to the simple main mass of the building.
b. The term Craftsman applies to the hand-wrought nature of all the detailing on the exterior, which exhibits the honest detailing and joinery of the construction.
c. Columns are lightly elaborated - they are tapered and square, and rendered in stone, brick, plaster, or wood. Piers are a minimum of 6"x6" if wood posts, and 18"x18" if stone or stucco.



Masonry and stone base



Tapered stone foundation base, shingle wall



Stucco base

H. Base

a. Bases are articulated as separate from the main wall through a change of plane, or a change in material, in concrete, stone, or brick.
b. The base may be expressed as a foundation, or the entire first floor.
c. The lower floor may be stucco (smooth sand finish) with the upper floors clad in clapboard or shingle siding.
d. When stone is used for bases, stones are stacked naturally, with larger stones lower on the wall, smaller above those.



Walls composed of natural materials blend into landscape



Trellis as entry



Natural materials with accented gate

I. Site Definition and Landscape

a. Buildings face a front yard.
b. Entry porches are defined by columns, trellises, low walls, and/or hedge plantings. Gates at side yards are wood.
c. Garages are tucked in the rear of the lot and accessed by a long drive and sometimes a porte cochere.
d. Terrace or patio walls are of river stone and/or clinker brick, or brick.
e. Plantings are heavy with dark evergreen plant materials.

4.6.3 Victorian



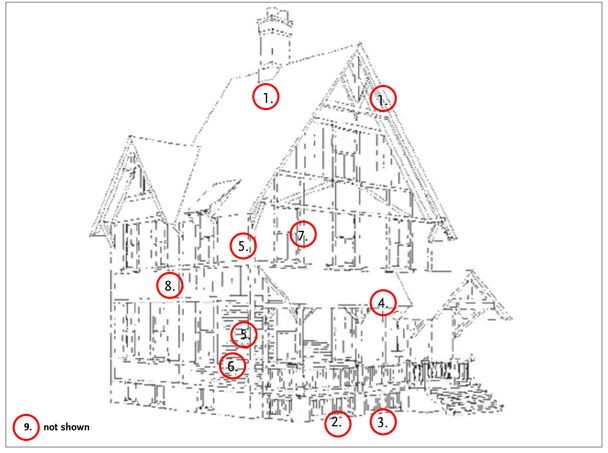
Introduction

Victorian refers to an era of style, from approximately 1850 to 1900 (approximately during the reign of Britain's Queen Victoria). Regional variations such as Gothic Revival, Italianate, Stick, Queen Anne, Shingle, and styles flourished during this time.

Several factors fueled the popularity and spread of the style. The Industrial Revolution created steam power for railroads and mass-production of building materials, as well as a burgeoning new middle class. Stick framing replaced heavy timber construction, and along with stock doors, windows, and nails, it allowed greater variation in house plans and facades. Workmen could replicate the style without specialized artisan guilds, and Pattern Books spread it easily though the country.

The mid-century shift away from classical design and formal gardens for small houses was key to the emergence of "picturesque" design. Andrew Jackson Downing's *Victorian Cottage Residences* greatly influenced popular taste. The emerging middle class in this country embraced the innovative idea of the relaxed country house as an antidote to urban life.

Victorian style's great exuberance and variety make it uniquely American. The style was highly utilized in the West, and California in particular. The Stick and Queen Anne versions of Victorian predominate in the region with great examples located in the City of Whittier.



Key Characteristics

1. Roof - Simple gable, or hipped with cross gables and main gable facing front. All roofs steeply pitched.
2. Floor Plan/Elevation - asymmetrical layout most typical, symmetry occurs infrequently.
3. Base - raised above grade on plinth.
4. Porch - sits on base, 2 or 1 sides of home, 1 story, with elaborate detailed wood columns, brackets, railings.
5. Form/Massing - 1, 2, & 3 stories, vertically proportioned, with high ceilings. Floor plan shape is reflected clearly in the massing.
6. Walls - masonry bases and/or wood walls, multiple textures & multiple colors on surfaces.
7. Openings - vertically proportioned, large openings.
8. Articulation - plane of wall broken by window bays, planar changes, and material changes. Detailing is intense at window & door openings, porches, & gable ends.
9. Towers - [not shown here] on occasion, they are included in large two-story versions, located at center or corners of front facade.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **Victorian** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

1. **Basic Massing -** One-, two-, and three-story house-like volumes most typically covered with gabled or hipped roofs. The overall proportions of buildings, including projections such as bay windows, towers, turrets, are generally vertical. Residential forms are almost always raised on a plinth. Roof pitches are steep - usually 8:12 or greater.

2. **Detailed Massing Elements -** The overall massing is broken down by the addition of complex and picturesquely composed frontages, bay windows, porches, wrap-around porches, stoops, etc. These detailed massing elements are elaborated in complex shapes and colors that heighten the source of volumetric complexity of such buildings.

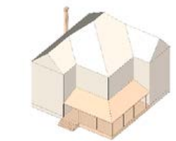
3. **Composition and Openings** - Window openings are vertically proportioned and almost always align from floor to floor (i.e., second floor windows are located directly above ground floor window or door openings).

4. **Floor Plan -** Simple rectangular plans are most common, with public rooms predominantly facing onto the street.



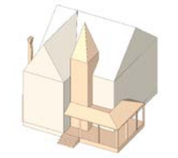
1. Small Massing
(Single House - one-story)

A one-story single house comprised of a primary volume covered by a steeply-pitched hipped roof, a secondary frontal volume covered by a gabled roof, and a porch covered by a hipped shed roof. Openings and attached elements are vertical in proportion. Entrance is through the porch and front door.



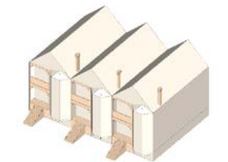
2. Small Massing
(Single House - two-story)

A two-story single house comprised of a primary volume covered by a steeply-pitched hipped roof, and two secondary volumes each covered by a gabled roof, and a porch covered by a shed roof that wraps the corner. Openings and attached elements are vertical in proportion. Entrance is through the porch and front door.



3. Small Massing
(Duplex, Triplex, or Quadplex - three-story)

A three-story quadplex comprised of a primary and secondary volume covered by a cross gable roof, a tower covered by a pyramidal roof, and a porch covered by a shed roof that wraps the corner. Light to the third-floor rooms is provided through windows located at the gable ends of the roof. The building is conceived as a large single house that happens to contain four residential units (conceptually, the building could just as easily function as a single house or a duplex). Openings and attached elements, are vertical in proportion. Entrances to the units are through a common porch, front door, and hall/stairway.



4. Medium Massing
(Rowhouse or Live/Work - two-story)

A three-story rowhouse comprised of a series of gable-roof covered house forms that are joined together to form one building. A two-story bay window and a porch further articulate the presence of each unit, while providing a serial pattern that identifies the building as a block of units.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.3 Victorian

Elements & Details



Local precedent: hipped roof, symmetrical porch, asymmetrically placed on housefront



Regional/local precedent: hipped roof, front gable, two bay asymmetrical porch integrated into the house - Whittier, CA.



Regional/local precedent: gable front roof, townhouses - San Francisco, CA.



Hip & cross gable front roof, wrapped porch



Base - wood trim & lattice, wood siding over stucco



Wood siding, shingles in polychrome color scheme



Hip & cross gable front, wrapped porch



Base - brick, brick pier & lattice infill



Multiple materials & colors articulate volumes



Gable side & cross gable front, asymmetrical porch



Base - field stone, cut stone



Board & batten wood siding

A. Massing

a. Buildings are characterized by the prominence of their walls and very highly articulated roofs. There is typically one principal volume elaborated by the addition of many and complex frontages.
b. Complex geometries of floor plans reflected in complex massing of buildings.
c. Vertical proportions are typical of all massing.

B. Base

a. Buildings sit on plinth, raised up to 3 feet or more above grade.
b. Base is articulated from walls with drip line trim and change in material.
c. Materials are wood trim, stucco, brick, and stone.

C. Primary Walls

a. Walls are multi-planar and articulate separate elements of the massing.
b. Materials are a combination of horizontal siding, vertical board and batten, and shingles of many shapes and sizes. Walls also may include brick, stone, and stucco associated with various architectural elements typical of the style.



Closed gable ends with shingle patterns



Metal Roof - standing seam, cross gable roof



Downspout painted to match wall and trim color



Multiple door & window shapes, sizes, & details



Porches, tower, & brick chimneys



Informal garden layout



Open gable end, dormer, bay window



Wood shingle - gabled and hipped roofs



Gutter and downspout



True-divided lite sash windows w/ correct trim



*Porch w/ turned wood columns, milled details **



Native plantings, climbing vines, picket fence



Gable with brackets



Composition shingle - gable end to street



Gutter - half-round w/ brackets, downspout



Door w/ lites, trimmed windows in bay



Projecting bay windows, porch w/ brackets



Wrought iron fence, urns, and flower beds

D. Roof-Wall Connections

a. Roofs are prominent and visually dominant over walls.
b. Roofs extend beyond walls with elaborate moldings, bracketed moldings, or brackets and define open, enclosed, or framed gables.
c. At corners, towers extend beyond roofs and assume a specific form integral to the building.

E. Roof

a. Roofs are prominent and are a primary determinant of the form of buildings.
b. Roof shapes are hipped, gable end, and their various combinations.
c. Roof pitch is steep, 8:12 and greater.
d. Materials include standing seam metal, wood shingle, and composition shingle.

F. Drainage

a. Traditional combination of gutters and downspouts, placed on outside or inside corners.
b. Shapes are typically half-round for gutters, and round for downspouts. Support brackets add additional detail.
c. Rainwater reaching the ground may be harvested in cisterns or temporarily collected in dry wells.

G. Openings

a. Windows and doors are vertically proportioned, vertically oriented.
b. Windows are multi-paned, front doors have lites. Double hung is the primary window type.
c. Ground floor openings are larger in height and width. Upper floor openings are larger then common and of a variety of sizes.
d. Trim includes head, jamb, & sill which project out from wall surface. Sill is further pronounced.
e. Shutters are functional and when closed cover entire window or door opening.
f. Windows are typically not deeply recessed.

H. Attached Elements

a. Porches, bay windows, brows, awnings, towers, finials, crenelations, and chimneys are the architectural elements attached to the main mass of their buildings which define and enrich their overall form.
b. Attached elements receive the majority of the detail on facades. They are mostly reduced in polychrome painted wood. Minor elements are of decorative iron and brick.
c. Porch columns and balustrades are narrowly spaced and highly detailed.

I. Site Definition and Landscape

a. Front yards are generally small and well defined by low fence at property line, or stoop in townhouse condition.
b. Front fences are brick or stone base w/ wrought iron, iron without base, or wood picket.
c. Large shade trees are mixed with typically heavy foundation plantings. The plant palette allows staggered blooming times to provide year-round color. The layout is more natural, paying credence to the style's origins.

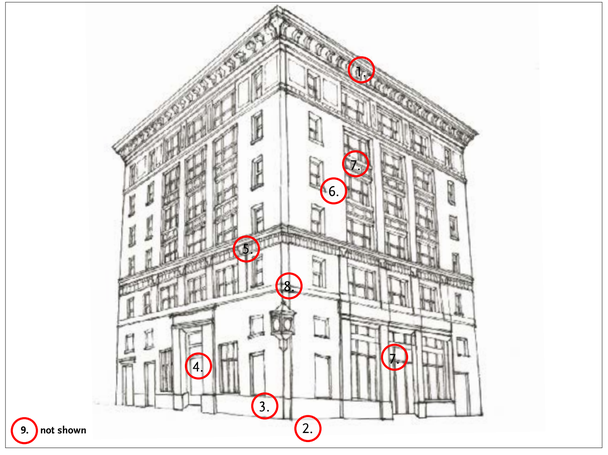
* Photo source: The Abrams Guide to American House Styles, by William Morgan.

4.6.4 Main Street



Introduction. Main Street style buildings are found on most pre-World War II U.S. main streets and frame town squares and plazas. This building type began in the late nineteenth century when, in the process of densifying towns and cities, housing was built over shop fronts. As a style in the U.S., it is derived from a number of historic precedents, including Spanish Colonial, Greek Revival, Victorian, Victorian Italianate, and Richardsonian Romanesque adapted to urban contexts and mixed uses. The type's simple, rectangular form is derived from a logical, repetitive structural framework which is expressed externally by the rhythmic placement of columns, storefronts, and openings on upper levels. Original frameworks were of load-bearing masonry, but the style easily adapted to iron and steel construction. Buildings sit on street fronts or corners, oriented directly to streets or town squares. This means that only one or two facades need detailed design attention.

The Main Street style is expressed through substantial materials - such as brick, stone, and heavy plaster. Upper story window openings are located in a rhythmic serial pattern in singles or groups. The plane of the wall is articulated by structural expressions - engaged columns and lintels over openings. The ground floor has expansive glass storefronts interrupted by structural columns with transoms to allow light to penetrate deep into the interior. Multi-story facades are typically divided into base, body, and top with the ground floor taller than the shorter upper floors. Buildings are topped by a flat roof line emphatically crowned at the eaves by a projecting cornice or a receding, stepped parapet.



Key Characteristics

1. Roof - flat roof with projecting cornice or parapet.
2. Floor Plan/Elevation - simple, rectangular plans with L-shaped or U-shaped variations.
3. Base - articulated base by change in material, change in plane, or both.
4. Shading - recessed arcades & entries, balconies, or fabric awnings.
5. Form/Massing - 1 to multiple stories, with base, middle, and top. Vertically proportioned with corner towers common.
6. Walls - flat planes of stone, brick, or plaster, punctuated by deep openings.
7. Openings - large storefront openings at ground, vertically proportioned, with transoms arranged in rhythmic pattern. Upper floors include combinations of small and large openings relating to ground level openings. Serial or symmetrical composition are typical.
8. Articulation - base, middle and top of facade are clearly defined by changes in material and horizontal banding. Ground floor and/or building-scaled base receive most detailed attention. Other details include cornices, balconies, awnings.
9. Colors - public buildings are more reserved, with muted colors. Otherwise, the palette is open to interpretation.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **Main Street** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

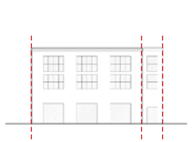
1. **Basic Massing -** A simple rectilinear box with a single, street-facing orientation due to its zero-setback front and side yard setbacks (except for when located on a corner, where building is oriented towards both streets). Buildings greater than 125- feet in length should be divided into separately-articulated volumes in order to give the appearance that the building is comprised of multiple buildings. Volumetric variation can be expressed by horizontal and/or vertical offsets. Roofs are generally flat.

2. **Detailed Massing Elements -** Overall massing is broken down to a more human scale through the employment of repetitive bays and a clearly defined top, middle, and base. Various commercial frontages can be integrated into buildings including storefronts, arcades, and galleries.

3. **Composition and Openings** - Window openings are vertically proportioned and typically align from floor to floor (i.e., upper-floor windows are located directly above ground floor window or door openings). Openings are symmetrically configured or serial in their composition.

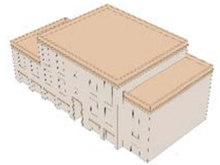
4. **Floor Plan -** Simple rectangular plans are most common, with ground floor retail spaces and upper floor loft spaces facing directly onto the street.





1. Medium Massing
(Live / Work)

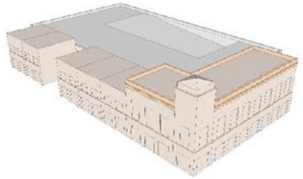
A two-story live/work building comprised of three bays. Ground floor storefront and upper floor windows correspond to and delineate the individual bays. A set back fourth bay provides stair and elevator access to the upper floors.





2. Large Massing
(Commercial Block)

A three-story commercial block building that utilizes differences in height and setback to break down the overall scale of the building. The front facade is divided up into repeating bays that are delineated with ground floor storefronts and upper floor windows that align with the storefronts. The central block is symmetrical in its composition and gives access to upper floors through a front door, lobby, elevator, and interior corridors.





3. Large Massing
(Commercial Liner)

This building lines the edge of a city block and hides pedestrian-unfriendly uses such as parking garages, movie theaters, or big box stores. From the street, the two-part massing of the building appears to be a commercial block. Its elevations are serially composed with access to the upper stories from a corner entrance. The building also steps up the massing at the corner to add more emphasis to its urban location.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.4 Main Street



Regional/local precedent: Whittier, CA. - Bank of America building at the corner of Greenleaf and Philadelphia in Uptown in multi-story configuration.



Regional/local precedent: Whittier, CA. - at Greenleaf in Uptown creating a distinct street edge, with large store windows and awnings at the ground floor.



Regional/local precedent: South Pasadena, CA.-retail ground floor, lofts above.



3-story mass with differentiated volumes



1-story commercial building



2-story mass with articulated corner

A. Massing

a. Simple box or rectangular floor plans are reflected in regular volumetric massing configurations.
b. Buildings are often divided into different masses by offsetting in plan or elevation.
c. Such variations in massing can emphasize important architectural features such as a building entrance, or a corner condition.



Frame with articulated base and storefront infill



Base defined by storefront windows with clerestory



Frame without base and glass storefront infill.



B. Base

a. Base of facade is articulated by change in materials, or change in plane of wall.
b. Ground floor is columnar. Upper floors are wall dominant.
c. Multi-story buildings: ground floor is exposed as a base and is articulated by large storefront windows that, in some cases, are rendered in different materials than upper floors.



Flat plane walls w/ lintels expressed at openings



Wall with base, middle, top articulated in brick



Wall plane articulated through pilasters

C. Primary Walls

a. Walls are simple planes of brick, stone, or heavy plaster.
b. Wall has tripartite detailing to separate base, middle, and top.
c. Wall planes are articulated with vertical pilasters, or horizontal decorative moldings, and cornices.
d. Openings are cut out of the primary wall material.



Cornice of cast concrete with brackets



Cornice of wooden brackets



Cornice line of brick

D. Roof-Wall Connections

a. Walls visually dominate over roofs.
b. Walls are articulated at the top with a cornice - formed with the same material as the rest of the building or fashioned of complimentary materials such as stone, concrete, or metal. The cornice is of substantial enough depth to lend a shadow line to the facade and define the cap of the wall.
c. The articulation of the roof to the wall connection is formally consistent with the overall character of the building.



Flat roof with simple parapet



Flat roof with parapet and integrated signage



Flat roofs with gardens, usable terrace

E. Roof

a. Flat roofs predominate.
b. Parapets are articulated as an explicit exterior wall making a visual transition to the sky through plain or elaborate profiles.
b. Roofs may be accessible and be used as balconies or terraces.



Downspouts on back side of building



Internal drains embedded in structure



Awnings at commercial frontage

F. Drainage

a. Flat roofs are drained away from public sidewalks in several ways:
i. Downspouts on the the back-side or alley-side of the building;
ii. Internal drain pipes imbedded within the buildings walls;
iii. Awnings or canopies may drain onto the public sidewalk.



Ground floor storefront windows & doors



Vertical, rhythmically paired, double-hung windows



Giant-scaled windows span two floors

G. Openings

a. Ground floor windows and doors are part of storefront frontages - large and expansive, typically with a transom.
b. Upper floor windows are placed and grouped with a rhythm relating directly to the major storefront openings below.
c. Upper floor windows are vertically proportioned and are divided into multiple lites (typically double-hung).
d. Windows can be composed serially, symmetrically, horizontally, or vertically.
e. Window apertures can vary by size from large to small, as they are used to express a building's division into base, middle, and top.
f. Because buildings, at least historically, are typically built of masonry, windows are recessed at least 3 inches.



Awning and storefront frontage



Canopy frontage



Balcony frontage

H. Attached Elements

a. Awnings, canopies, and second floor balconies may extend into the public right-of-way.
b. Such attachments provide shelter to passing pedestrians and emphasize the ground floor uses.
c. Attached elements provide a thin, layered accent to buildings that are bulky by nature.
d. Recessed storefronts can provide useful, off-the-sidewalk outdoor commercial space for the use of ground floor business.



Lanscape- sidewalk, shade trees, outdoor seating



Landscape - forecourt, shadetrees



Courtyard within a Main steet block

I. Site Definition and Landscape

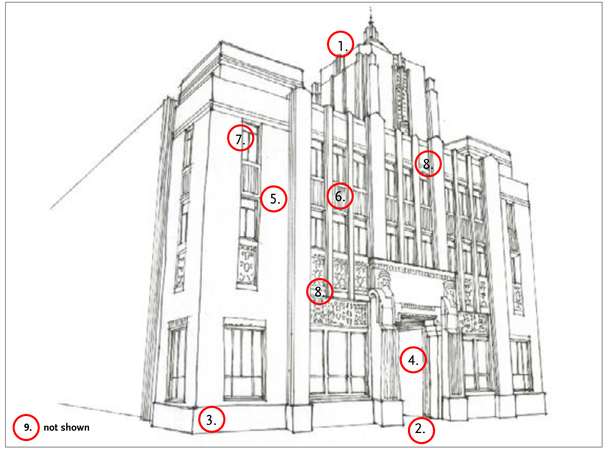
a. Main street buildings, given their urban nature, front a public landscape of wide sidewalks dominated by regularly spaced shade trees.
b. Plantings occur at street-facing forecourts, internal courtyards, or in pots placed on sidewalks.
c. Buildings fronting wide sidewalks can appropriate public space for private uses.

4.6.5 Art Deco



Introduction. The Art Deco is a highly stylized example of a classical style related to the design of buildings and the decorative arts from approximately 1920 - 1940. This vertical, streamlined style grew from the Arts & Crafts, Art Nouveau, Cubist, and Constructivist art movements, which emphasized the simplified juxtaposition of sinuous and geometric forms. The style was brought to the fore with the 1925 Exposition Internationale des Arts Decoratifs et Industrielles Modernes in Paris. Art Deco was extremely popular from that time on in the U.S. because of its connotations of modernity, technological progress, and uniqueness through ornamentation. It also reflected the linear designs of ships, planes, and autos of the time. The style was used in almost all towns in the U.S., mostly for important civic and commercial buildings. Regionalism influenced adoption and refinement of the style in various States, where architects recognized local flora, fauna, and indigenous cultures' designs for inspiration. Navaho rugs, Hopi pottery, and Lakota beadwork, for example, all figured into the style which shared their bold, geometric ornament.

The Art Deco style celebrated the Machine Age through explicit use of man-made materials, particularly glass, metals, and terra cotta panel detailing - all contrasted with stone or plaster. It is characterized by vertical volumes that step back at upper floors and long, ribbed pilasters that run the entire height of buildings, Art Deco's sleek and cubic forms are decorated with patterns and motifs—such as intricate crystalline facets, zigzags, chevron patterns, and curvilinear ornaments—inspired by American indigenous cultures and various other world cultures eclectically introduced into buildings. Windows are typically located between the pilasters and, between floors, are often separated by decorated transom panels. Symmetry and serial composition are recurring patterns on this style.



Key Characteristics

1. **Roof -** flat, with stepped or crenellated parapets.
2. **Floor Plan/Elevation -** simple, rectangular block buildings. Elevation expresses underlying structure with columnar forms.
3. **Base -** articulated in brick, stone, and/or material change in the plane of application.
4. **Shading -** recessed entry vestibules and at ground level. Awnings sometimes are used above storefronts.
5. **Form/Massing -** 1 to multiple stories, large rectangular masses with vertical proportions. Massed symmetrically around strong middle of building entry or corner entry.
6. **Walls -** plane of facade broken rhythmically with bays and vertical pilasters which are usually ribbed, and often extend above the parapet.
7. **Openings -** extremely vertical proportions. Windows are typically located between the pilasters. Windows are subdivided into panes, and are arranged symmetrically or serially.
8. **Articulation -** engage pilasters at walls are ribbed, or stepped, and decorated with applied or incised motifs. Spaces between pilasters are filled with windows and decorative panels. The predominant material is generally stone, concrete, terra cotta or plaster and is contrasted with decorative touches of metal, glass, terra cotta panels, and/or tiles.
9. **Colors -** Colors are generally muted, with the accent materials providing a contrast.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **Art Deco** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

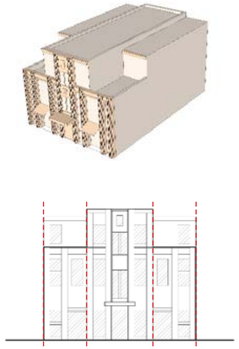
Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

1. **Basic Massing -** Art Deco buildings are characterized by rectangular volumes typically offset in plan and elevation. Long pilasters typically run the entire height of buildings. Central and/or corner tower elements are often employed. Windows are typically located between the pilasters and are often separated by decorated transom panels.

2. **Detailed Massing Elements -** Building volumes are articulated by pilasters, horizontal canopies, and ground floor arcades and galleries that help to break down the scale of buildings.

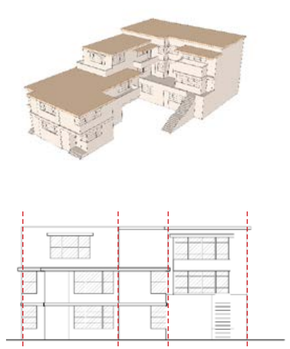
3. **Composition and Openings** - Window openings are vertically proportioned and always align from floor to floor (i.e., upper-floor windows are located directly above ground floor window or door openings). Wall areas between openings tend to be embellished with intricate patterns and vivid colors.

4. **Floor Plan -** Simple rectangular plans are most common, with ground floor retail spaces and public rooms facing directly onto the street.



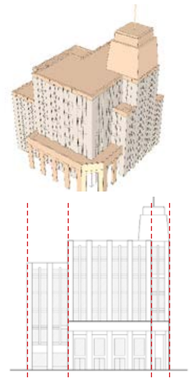
1. Medium
(Commercial Block)

A three-story, medium-scaled commercial block building comprised of a single rectangular volume with portions of the third floor stepped back from the street. The ground floor frontage consists of shopfronts on either side of an entrance that leads to upper floor uses. The ground floor is at sidewalk level to provide direct access to ground floor commercial uses.



2. Medium
Courtyard Housing

A three-story courtyard housing building that arranges its volumes around a sideyard courtyard. The overall massing, covered by flat roofs, steps back from the street.



3. Large
(Commercial Block)

A seven-story corner commercial block building comprised of a conglomeration of cubic volumes of varying heights. A gallery frontage provides a transition between the street level and the significant height of the building. The ground floor is dedicated to commercial/retail uses and is of a storefront frontage. Entrance into the building is through the corner and is accommodated in the tower element.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.5 Art Deco



Local precedent: movie theater on Greenleaf in Uptown Whittier, CA..



Local precedent: An illustrative example of a civic building, the United States Post Office, near Central Park, Whittier, CA.





Local precedent: storefronts on Philadelphia & Greenleaf in Whittier, CA.



Massing - symmetrically composed bays



Stone base contrasting with pilasters



Stone pilasters modulate stepped massing.



Massing - stepped back volumes at roof



Whole-story base



Plaster walls and pilasters with metal windows



Massing - tower volume at corner



Marble base incorporated into storefront



Glazed Terra Cotta panels & tiles

A. Massing
a. Large, rectangular, simple volumes with defined bays, vertical proportions.
b. Engaged pilasters define the bays of the building, and run its entire height.
c. Upper parts of building step back with parapet treatment or additional volumes at corners and at center.

B. Base
a. Base of walls are articulated with change in plane or material.
b. Materials include stone, cast concrete, glazed terra cotta tile, or glazed ceramic tile.
c. The entire ground floor height may be articulated as the base of the building.

C. Primary Walls
a. Wall planes are divided rhythmically with bays defined by pilasters to enforce verticality.
b. Pilasters run the entire height of the building, and sometimes break the height of the parapet.
c. Walls are of the materials such as heavy plaster, stone, cast concrete, glazed terra cotta tile, glazed ceramic tile, or plaster.



Pilasters extend past parapet



Flat roof (lower volume) and pyramid roof (upper volume)



Decorative roof overflow scupper



Elaborate main entry



Decorative metal awnings



Wide sidewalks, street trees, and planter boxes



Stepped parapet w/ crenellated pilasters



Roof expressed as pavillion



Roof overflow scuppers recessed into facade



Recessed metal windows with metal transoms



Metal window grille and metal balcony



Sidewalk, street trees, forecourt and porches



Undulating parapets and pilasters



Corner with stacked & stepped tower



Scuppers (left) Downspouts within walls (right)



Recessed double-hung windows with metal decorative transoms



Entrance canopy



Storefront

D. Roof-Wall Connections
a. Parapets cap flat roofs, and are configured in one of three ways:
i) pilasters that continue beyond height of interstitial walls;
ii) walls that continue beyond height of the pilasters;
iii) walls and pilasters that reach to same height and undulate in depth.
b. Decorated metal, ceramic tile, or glazed terra cotta transoms may be incorporated as part of parapet.

E. Roof
a. Roofs are flat, with parapets. Additional stepped volumes can be stacked above main roof.
b. Towers may be expressed as stacked volumes, and in roof shapes such as pyramidal, conical, or other special forms.

F. Drainage
a. To preserve the stylized lines of the Art Deco facades, roof drainage should located within walls of the building itself and therefore not visible on the facade
b. Where external scuppers and downspouts are utilized, they should be located on the side or rear facades.

G. Openings
a. Windows are situated between pilasters, arranged symmetrically or serially on the facade, and are recessed.
b. Windows are multi-paned and vertical in orientation.
c. Finely crafted, metal window grates are often utilized.
d. Metal or tile transom panels between windows on consecutive floors are typically utilized.
e. Windows on flat walls are typically recessed.

H. Attached Elements
a. Architectural elements such as balconies and awnings are assembled of finely-crafted metal, or metal with canvas covering. These elements often encroach into the building's setbacks.
b. Metal window grilles are typical.
c. Signage is dimensional in nature, with stand away blade signs and free-standing lettering done in period style.

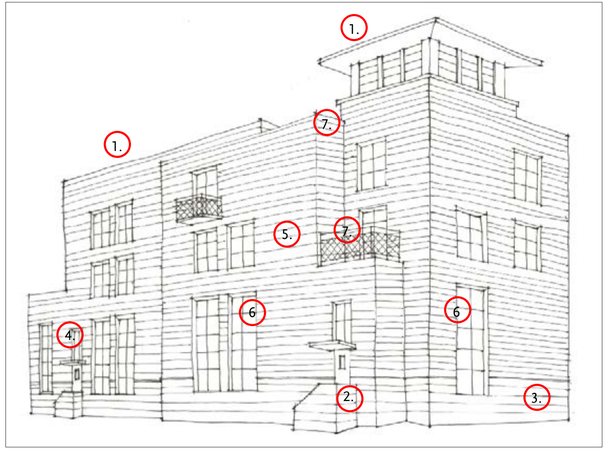
I. Site Defintion and Landscape
a. Art Deco buildings, given their urban nature, front a public landscape of wide sidewalks dominated by regularly spaced shade trees.
b. Plantings occur at street-facing forecourts, internal courtyards, or in pots placed on sidewalks.
c. Buildings fronting wide sidewalks can appropriate public space for private uses.

4.6.6 California Contemporary



Introduction. The California Contemporary style is based on the Modernist tradition and is adjusted eclectically to the local climate and culture of each place where it is being applied. The style was initially inspired by the simple forms of traditional Spanish architecture of the Southwest. Its evolution in the 1920s and 1930s was also driven by the work of innovative California architects laboring under the varied influences of the International Style. With widely available machine-age materials, most notably steel and glass, they created a new style for the mild, temperate climate of California. In this style, structural steel skeletons liberated the walls of their load-bearing duties, allowing thin curtain walls as exterior building skins and open floor plans in the interior. Solid building masses juxtaposed with walls of light materials, and big expanses of glass openings were made possible. Windows and other wall openings were sometimes designed to run continuously, or even wrapping around building corners.

The California Contemporary is, therefore, a fusion of internationalist and regionalist architectural influences. It focuses on a distinct expression, particularly through the relationship of indoor and outdoor spaces that is possible in this moderate climate and light construction. It is characterized by simple cubic forms, horizontal roof planes, cantilevered projections, and door and window openings composed asymmetrically across unadorned exterior curtain walls. The style further emphasizes building massing over structural articulation. Interlocking volumes are often emphasized by the use of various construction materials and colors. Roofs are typically flat, but occasionally they are also sloped, or a combination thereof. Exterior walls are very smooth with crisp edges and corners. Architectural elements such as awnings, balconies, and trellises are appended to these volumes, often occurring in the interstitial spaces between volumes, further articulating an open connection to the landscape.



Key Characteristics:

1. **Roof -** typically flat. Can vary with pitched elements, or a combination of the two. Occasional cantilevered eaves.
2. **Floor Plan/Elevations -** asymmetrical layouts with open floor plans (larger, uninterrupted spaces).
3. **Base -** either not expressed, or articulated by material changes, plane changes, or planters.
4. **Form/Massing -** solid masses juxtaposed with large openings of doors, windows, or entry voids.
5. **Walls -** smooth, unadorned stucco, tiles, stone, or brick masses combined with contrasting materials articulated as tight skins stretched over underlying framework. Structural members and materials occasionally exposed when weather resistant and integrated into composition. Color may be monochromatic or multi-chromatic as appropriate to the sun and light of California.
6. **Openings -** vertically proportioned, large openings composed asymmetrically or symmetrically and juxtaposed with the mass of the wall as glass curtains or punched openings.
7. **Permeability -** a strong relationship between interior and exterior spaces due to California's mild climate and enhanced by porches, balconies, recesses, trellises, galleries, awnings, openings, courts, and patios.

Massing & Proportion

The following drawings are illustrative of massing strategies for small, medium, and large buildings in the **California Contemporary** style. These are merely indicative of possible building configurations, and not intended as a limited, preferred, or exclusive set of designs in this style.

Every style is not merely a surface applique. It is really a volumetric expression, dependent on spatial, material, contextual, environmental, and other forces affecting the form and performance of buildings. It is expected that proposed projects will seek their own massing configuration based on their program and context, inspired and directed in part by this limited catalog of possibilities.

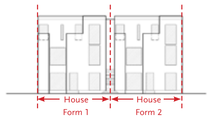
1. **Basic Massing -** A simple rectilinear box or conglomeration of boxes with the structural system often (but not always) apparent. Typical variations of California Contemporary building massing include both symmetrical and asymmetrical, single and repetitive volume compositions. Proportions of openings can be either vertical or horizontal. Within volumes, window and window arrays can be disposed symmetrically or asymmetrically. Roofs are typically flat.

2. **Detailed Massing Elements -** Balconies, terraces, exterior stairs, horizontal canopies, and so on are often employed to break down a building's massing and generate a play between solid and void as well as light and shadow.

3. **Composition and Openings** - Window openings are vertically proportioned and may be arrayed symmetrically or asymmetrically.

4. **Floor Plan -** Simple rectangular plans are most common with public rooms facing directly onto the street.

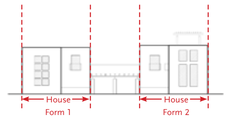




1. Medium
(Rowhouse, Live / Work)

A three-story rowhouse building comprised of a series of asymmetrically disposed individual house forms that are differentiated from one another by undulating setbacks and varying heights. Further articulation is provided by horizontal canopies, clipped on secondary volumes, and stairs that protrude beyond the face of the front facade. Access to both ground floor and upper floor units is directly from the sidewalk. The ground floor is raised a few feet above adjacent grade to improve privacy.





2. Medium
(Courtyard housing)

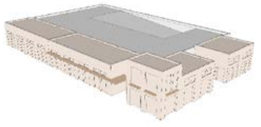
A two-story court comprised of two house form buildings that flank each side of a shared courtyard. A trellis connects the two buildings and marks the entrance to the courtyard from the street. Though the massing of the project is symmetrically disposed, different window articulation of the front facades of each building adds interest and asymmetry to the overall composition.





3. Large
(Commercial block)

A commercial block building comprised of a single, rectangular mass with serially-disposed windows. The upper floor is stepped back to form a continuous terrace that is, in turn, covered by a horizontal canopy. Access is by lobby, elevator, and corridor.





4. Large
(Commercial liner)

This building lines the edge of a city block and hides pedestrian-unfriendly uses such as parking garages, movie theaters, or big box stores. From the street, the building appears to be a commercial block. The building also steps up its massing at the corner to add more emphasis to the corner. The composition of its openings is serial. Access is by lobby, elevator, and corridor.

Note: The diagrams are representative examples of massing and proportional relationships in each style. Diagrams are not to scale.

4.6.6 California Contemporary



Regional precedent: South Pasadena, CA - courtyard housing



Regional precedent: National Resources Defense Council office building, Santa Monica, CA.



Massing of simple volumes and voids



No base with glass infill panels



Plaster ground floor



Simple volume with large front opening.



Brick base



Cementitious siding



Articulated volumes step back from the street



Concrete base with brick columns and walls



Brick

A. Massing

a. Volumes of differing heights and widths are juxtaposed with large openings or voids.
b. Repetition of building volumes is permitted, but slight variations should be included to avoid monotony.
c. Massing is generally asymmetrical, but partial, localized symmetries are not uncommon.

B. Base

a. Exterior walls reach the ground with or without a base.
b. Where present, the base is articulated as a change in plane, or material such as stone, cast concrete, or brick.
c. The entire ground floor height may be articulated as the base.

C Primary Walls

a. Expressed as single-plane, expanses of wood, cementitious, or metal siding (no T-111), plaster, glass, brick, cast concrete, or cast concrete
b. Several materials may be composed with one another on a building.
c. Change of materials should be accommodated through articulated joints.
d. Expansive white walls are strongly discouraged as they do not fit the color context of Uptown Whittier (see image 6 on page 4:53).



Simple brick pattern beneath parapet cap



Flat roof with decorative cornice/parapet



Internal roof drains



Openings that span multiple floors.



Balconies, trellis structures, porches



Urban landscape- street trees, pocket plantings



Parapet with receding cornice



Curved metal roof covering outdoor roof deck



Scupper and downspout



Openings punched into mass wall



Wood trellis, metal awning



Details - raised planter boxes



Metal Awning with exposed rafters



Flat roof with precast concrete parapet



Scupper and downspout



Corner windows, bay window



Wood trellis, metal awnings



Landscape over concrete podium, vines

D. Roof-Wall Connections

a. Walls are designed as dominant over roofs.
b. The parapet of flat-roofed volumes may be articulated in a variety of ways: with a cornice, without a cornice, with a receding cornice.
c. Sloped roofs may have overhangs, or none. For roofs with sloped overhangs, exposed structure is encouraged.
d. Wood or metal braces may be used.

E. Roof

a. Roofs are typically flat.
b. Various other roof shapes are acceptable with the exception of barrel shaped or sharply angled roofs.
c. Roof materials may be utilized which are appropriate to the overall form of a building.

F. Drainage

a. Downspouts may be utilized as decorative vertical elements and facade accents but should be integrated into the design of the elevation.
b. Scuppers may be used to provide contrast on flat facade surfaces.
c. Drainage components should be metal.
d. Flat roofs on larger structures should be drained via internal roof drains.
e. Rainwater reaching the ground may be harvested in cisterns or temporarily collected in dry wells

G. Openings

a. Openings may be composed asymmetrically or symmetrically as either curtain walls or punched openings.
b. Windows should be manufactured of quality materials such as metal or wood and be of commercial grade.
c. Window openings may be either framed or unframed, recessed or not recessed.
d. Windows should be multi-paned and be vertical in orientation. They may be arranged as horizontal arrays.

H. Attached Elements

a. Architectural elements (porches, balconies, trellises, awnings, and bay windows) must be designed and assembled of finely-crafted metal or wood.
b. All frontages should be designed consistently with the overall form of the building.
c. Attached elements may be fully integrated into the form of a building or just attached to it.

I. Site Definition and Landscape

a. Landscape should consist of trees that shade yards and lower plant materials that define and embellish the character of shared open space.
b. Evergreen and deciduous plants should be located to provide appropriate solar access depending on the season.
c. To the degree possible, a single large tree should be provided for each courtyard.

4.6.6 California Contemporary

Preferred Characteristics of Buildings. Of all possible ways of designing contemporary buildings in Southern California, the following eight are preferred compositional strategies for new designs to be inserted into the fabric of Uptown Whittier. While these strategies are preferred, the images may incorporate some details that may not be desirable.

1. Multi Bay Frame
2. Single Bay Frame
3. Wall with Punched Openings - Symmetrical
4. Wall with Punched openings - Asymmetrical
5. Additive Volumes
6. Subtracted Volumes
7. Regular Repetition
8. Irregular Repetition

In the following pages, a definition of each compositional strategy is presented along with an image illustrating it. It is *not* the intention of this plan to design buildings that are directly associated with these images. Rather, the clear understanding of each strategy should result in designs that are true to their program, location, lot size, and compatibility with adjacent buildings.

Applicants utilizing these strategies must provide a clear description of how their design is composed through them, as outlined in Section 4.6.8 (Process).



1. Multi-Bay Frame. This architectural expression emphasizes the repetitive nature of structural bays in frame construction. Glazed surfaces fill the gaps between structural members producing both retail frontages on the ground floor and large scale openings on the upper floors, often with recessed or projecting balconies.



2. Single-Bay Frame. This architectural expression focuses on the pattern of a structural frame defining a single opening to the street. This opening is part of a commercial storefront frontage. Its glazing and bulkhead design can be slightly inset from the street, slightly inset to define an entrance pocket, or deeply inset to define and outdoor sitting area.



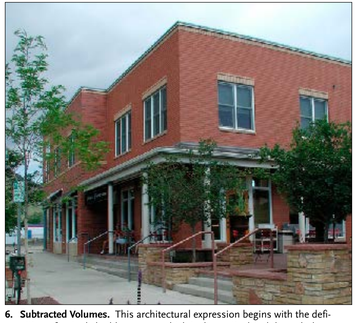
3. Wall with Punched Openings - Symmetrical. This architectural expression has its source in the design of a single regular volume whose front wall plane is patterned by a series of symmetrically arrayed openings. Typically these openings are vertically stacked with the ground floor doors dominating in proportion over the windows above. Such buildings can be designed with a variety of frontages, both residential and commercial.



4. Wall with Punched Openings - Asymmetrical. This architectural expression is based on an asymmetrical composition of volumes, often defined by towers and/or terraces. The front plane of such a composition is a wall patterned by asymmetrically placed openings that describe a variety of room types fronting the street. Such buildings can be enhanced by a variety of frontages, both residential and commercial.



5. Additive Volumes. This architectural expression is rendered through the definition and free composition of various constituent three-dimensional elements and volumes of a building. The visual effect is one of addition or assembly.



6. Subtracted Volumes. This architectural expression begins with the definition of a single building mass, which is then articulated through the removal of various sub volumes. The visual effect is one of subtraction or carving.



7. Regular Repetition. This architectural expression capitalizes on the definition of a standard building volume, which is serially repeated. The scale of this repetition should be limited to room volumes and incorporate an appropriate frontage type. Its rhythm should not exceed three repetitions.



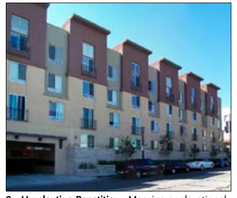
8. Irregular Repetition. This architectural expression is the result of the definition of a single building into a composition of small volumes. These are typically related to each other by material and detail, but are distinctive and separate in their form.

4.6.6 California Contemporary

Formal Characteristics that are Discouraged. Of all possible contemporary mixed-use building designs, those shown on the following pages display formal characteristics that should be avoided because they are categorically inconsistent with Uptown's architectural character. If a potential applicant desires to submit a design for a new or renovated building that employs any of these characteristics, the applicant must provide an explicit explanation for doing so as outlined in Section 4.6.8 (Process).



1. **Arbitrary Facade Composition.** Facades that are designed exclusively according to an internal and self-referential composition.



2. **Unrelenting Repetition.** Massing or elevational elements that are excessively repeated.



3. **Structural Integrity.** A structural expression that places walls over glass and does not visually convey structural forces to the ground.



4. **Facade Articulation.** Unmodulated facades of no compositional or material interest.



5. **Dead Ground Floors.** Dead ground floors that do not provide access or views into a building.



6. **Blank Walls.** Expansive areas of blank walls without window or door openings



7. **Slanted and Curved Walls.** Slanted and curved walls that put too much emphasis on a building at the expense of its neighbors.



8. **Acute Angles.** Acute walls, roofs and balconies that put too much emphasis on a building at the expense of its neighbors.



9. **Bright Colors.** Large areas of bright wall colors that fragment the architectural form of a building.



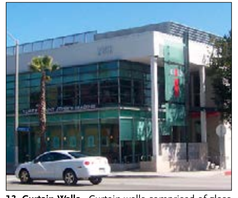
10. **Shiny Cladding Materials.** Shiny and reflective wall cladding materials that provide an aggressive formal presence.



11. **Industrial Materials.** Materials that are industrial in character, such as concrete block and corrugated metal siding.



12. **Building Volume Definition.** A building's primary volume defined by regular, tinted, or mirrored glass.



13. **Curtain Walls.** Curtain walls comprised of glass areas that cover the majority of the building's facade.



14. **Low Ground Floors.** Ground floor ceiling heights that are too short for commercial use.



15. **Arbitrary Elements.** Building elements that are both gratuitous and useless.



16. **Shallow Detailing.** Assemblies of materials that are abstract, shadowless, and lacking in craftsmanship.

4.6.7. Guidelines for Environmentally Sensitive Building Design



4.6.8 Process

The review of design proposals should be enabled through measures that focus the attention of both applicants and reviewers on the essential qualities of each architectural project and its compatibility within the site context to which it is being introduced.

In order to accomplish this end, the energy and time of City staff should be focused away from reviewing projects already designed and therefore adverse to change. Instead, City staff should receive information on proposed projects early in the design process, where its criticism and advice can be used to efficiently and effectively accomplish the architectural purposes outlined in these Guidelines.

The following is a proposed process for preliminary review of all projects:

1. A preliminary sketch shall be submitted to the City for review of a proposed project's design principles, its basic form, and its intended response to its context. Submittal package shall include:

   a. Site Plan with context (150 feet in all directions)
   b. Photos of buildings on project side of street and opposite side of street (150 feet in each direction)
   c. Simple digital massing model with context (150 feet in all directions).
   d. One street-facing elevation or perspective (150 feet in all directions)
   e. A written narrative, including diagrams, answering the following questions:

      i. How does the proposed building relate to its site and to its neighbors in terms of setbacks, height, massing, scale, frontage, open space and landscape?
      ii. If the proposed building is immediately adjacent to a lower density zone, what measures have been employed to insure that the proposed building is appropriate to and not a visual nuisance to existing, smaller scale buildings in the lower density zone?
      iii. What style has been chosen for the proposed building and why?
      iv. What materials and finishes are proposed and are they employed in a manner that safeguards and expresses the permanence of the building?
      v. What makes the proposed building particular to Whittier? How does it respond and contribute to Whittier's architectural heritage and climate?
      vi. If the proposed building is adjacent to a historic resource, what measures have been employed to insure that the proposed building responds to it?

4.6.9 Enforcement

The authority of the City of Whittier in directing projects to fully conform to these Guidelines depends on the follow-up measures available to the City to ensure that approved designs are fully constructed.

This end is to be accomplished through the following enforcement framework:

1. The project developer shall retain a licensed architect for each project for the entire duration of the project (from preliminary design to final occupancy).

2. Any or all of the following enforcement methods may be employed by the City to insure a building under construction is in compliance with the approved design documents:

   a. A project walk-through at the following construction milestones:

      i. Framing during window installation (prior to waterproofing installation)
      ii. Early application of roof finishes
      iii. Early application of wall finishes
      iv. Installation of architectural details (exterior railings, light fixtures, etc.).

   b. Sign off from architect to confirm the building under construction is consistent with the approved design and construction documents.
   c. Conformance with conditions of approval that describe how certain details/ finishes should be executed.
   d. Construction of a mock-up of selected finishes and details.

Standards

4.7.1. Purpose and Intent

This section establishes the vision for maintaining the existing, pedestrian-scaled, walkable blocks in the Uptown Whittier through standards for creating new blocks and their corresponding lots. The figure below illustrates the stark difference between the intent of this section and that of conventional suburban development, particularly in terms of scale, pattern and diversity of block, lot and building types. The following standards and provisions apply to all property, buildings and activity in the Uptown Specific Plan area.



Left: Conventional Suburban Retail Center Development: Discontinuous network of vehicular-oriented blocks and streets



Left: Traditional Town Center Development: Walkable, small and interconnected Blocks

The procedure for subdividing land is intended to continue the prevalent pattern in the historic core of Whittier; that is, Uptown, which is an urban infrastructure of small, walkable blocks, an interconnected and human-scaled network of thoroughfares punctuated by open space of varying types. The following regulations apply to all property within the project boundaries that seeks development.

4.7.2 Applicability

Each new block type shall be designed in compliance with the standards of this Chapter for the applicable type, subject to the review and approval of the City of Whittier.

4.7.3 Allowable Types and Requirements

The range of block types, their dimensional requirements and allowed lot widths are summarized below:

Block and Lot Requirements

Min Block Depth	Max Block Length	Allowable Lot Widths
110 ft per 1/2 block	600 ft	25 to 200

4.7.4 Design objectives

Each site shall be designed to be divided into smaller blocks with:

A. Internal streets, where appropriate to connect with off-site streets and/or to create a series of smaller, walkable blocks;

B. Service alleys within the new blocks; and

C. Multiple buildings on the site, with their entrances on bordering streets.

4.7.5 Subdivision requirements

Each site shall be designed as a subdivision in compliance with the following standards, and to achieve the objectives in this chapter.

A. Each proposed parcel shall not exceed 1 acre.

B. Each proposed parcel shall front on a street and its frontage shall not exceed 200 feet, unless specified otherwise in Section 4.5 Frontage Types.

4.7.6 Building design

Buildings proposed on a site of one-half block or larger shall be designed in compliance with the following requirements, in addition to all other applicable provisions of this Code.

A. Buildings shall be designed to have fronts and backs, with front facades containing primary building entrances and facing streets.

4.7.7 Procedure for Subdividing Land

A. Site

Sites larger than 4 acres shall be subdivided further to create additional blocks.

B. Introduce Streets

Sites being subdivided into additional blocks shall introduce streets from the list of existing and allowable street types and comply with the block-size requirements in Section 4.6.3.

C. Introduce Alleys

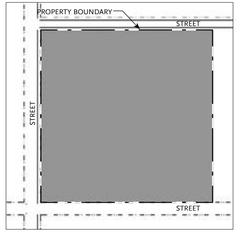
Access to blocks and their individual parcels is allowed only by alley/lane, side street or, in the case of residential development, via small side drives accessing multiple dwellings. The intent is to maintain the integrity and continuity of the streetscape without interruptions such as driveway access. Therefore, although residential development allows minor interruptions along the primary frontage, the introduction of rear service thoroughfares such as alleys and lanes is required.

D. Introduce Lots

Based on the type(s) of blocks created and the thoroughfare(s) that they front, lots (parcels) are introduced on each block to correspond with the allowable building types in Section 4.4.

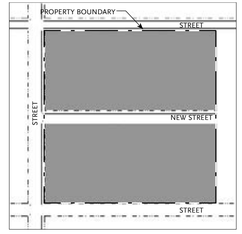
E. Introduce Projects

Each lot is designed to receive a building per the allowable building types identified in Section 4.4 and can be arranged to suit the particular organization of buildings desired for each particular block. The allowable building types then are combined with the allowable Frontage Types in Section 4.5 per the Zone in Section 4.3 in which the lot is located, in order to generate a particular urban form and character.



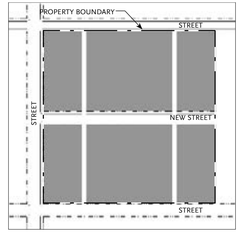


Site to be sudivided: Illustrative Diagram



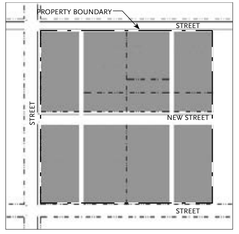


Introduce Streets: Illustrative Diagram



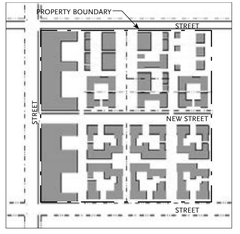


Introduce Alleys: Illustrative Diagram





Introduce Lots: Illustrative Diagram





Introduce Projects: Illustrative Photo

4.8.1 Sign Regulations

A. Purpose and Intent

These sign regulations are intended to appropriately limit the placement, type, size, and number of signs allowed within the Uptown Whittier Specific Plan area, and to require the proper maintenance of signs. The purposes of these limitations and requirements are to:

1. Avoid traffic safety hazards to pedestrians, bicyclists, and motorists, caused by visual distractions and obstructions;

2. Promote the aesthetic and environmental values of the community by providing for signs that do not impair the attractiveness of the City as a place to live, work, shop, and play;

3. Provide for signs as an effective channel of communication, while ensuring that signs are aesthetically proportioned in relation to adjacent structures and the structures to which they are attached; and

4. Safeguard and protect the public health, safety, and general welfare.

4.8.2 Applicability

A. Signs regulated

These sign regulations apply to all signs in all zones established by Section 4.3 (Regulating Plan and Zones), except that directional/instructional signs and real estate signs shall instead comply with the requirements of the City of Whittier Municipal Code Title 16 Signs, and Chapter 18.73 Sign Ordinance.

B. Applicability to sign content

The provisions of this Chapter do not regulate the message content of a sign (sign copy), regardless of whether the message content is commercial or noncommercial.

C. Sign permit requirements

Sign installation within the areas subject to this Code shall require sign permit approval in compliance with the City of Whittier Municipal Code Title 16 Signs, and Chapter 18.76 Sign Ordinance., unless exempted from sign permit requirements.

D. Exempt Signs and Permit Exceptions

See the City of Whittier Municipal Code Section 16.10 Special Provision, and Section 18.72.040 Exempt Signs

E. Definitions

Definitions of the specialized terms and phrases used in this are in the City of Whittier Municipal Code, Chapter 18.72 On-premises signs, and Section 18.72.020 Definitions.

4.8.3 Prohibited Signs

All sign types and sizes not expressly allowed by this Chapter shall be prohibited. Examples of prohibited signs include, but are not limited to the following:

A. Abandoned signs;

B. Animated and moving signs, including electronic message display signs, and variable intensity, blinking, or flashing signs, or signs that emit a varying intensity of light or color, except time and temperature displays (which are not considered signs), and barber poles;

C. Exposed cabinet/raceways behind channel letters;

D. Internally illuminated cabinet (can) signs;

E. Off-site signs (e.g., billboards, and signs mounted on vehicles);

F. Obscene signs;

G. Pole signs and other freestanding signs over six feet in height;

H. Roof signs;

I. Because of the City's compelling interest in ensuring traffic safety, signs that simulate in color, size, or design, any traffic control sign or signal, or that make use of words, symbols, or characters in a manner that interferes with, misleads, or confuses pedestrian or vehicular traffic;

J. A sign in the form or shape of a directional arrow, or otherwise displaying a directional arrow, except as approved by the City, or as required for safety and convenience and for control of vehicular and pedestrian traffic within the premises of the subject use;

K. A sign attached to or suspended from a boat, vehicle, or other movable object that is parked within a public right-of-way, or located on private property so that it is visible from a public right-of-way; except a sign painted directly upon, magnetically affixed to, or permanently affixed to the body or other integral part of a vehicle;

L. A sign burned, cut, or otherwise marked on or affixed to a rock, tree, or other natural feature;



Projecting Sign



Projecting Sign



Marquee Sign



Window Sign



Window Sign



Projecting Sign



Projecting Sign

4.8.3 Prohibited Signs (continued)

M. A sign placed within a public right-of-way, except as provided by Section 4.8.5 (Signs Standards);

N. Temporary and portable signs, including the following;

1. A-frame and other portable sidewalk signs in the public right of way; also see Chapter 18.76.080 of the Whittier Municipal code, interim sign ordinance

2. Balloons and other inflatable devices;

3. Flags, except official national, state, or local government, institutional or corporate flags, properly displayed; and

4. Pennants and streamers, except in conjunction with a athletic event, carnival, circus, or fair.

4.8.4 General Requirements for All Signs

A. Sign area and height measurement
The measurement of sign area and height to determine compliance with the maximum sign area requirements and height limits of this Chapter shall occur in compliance with the City of Whittier Municipal Code Title 16 Signs, and Chapter 18.76 Sign Ordinance.

B. Sign location requirements

Each sign shall be located in compliance with the following requirements, and all other applicable provisions of this Chapter.

1. On-premise signs required
Each sign shall be located on the same site as the subject of the sign, except as otherwise allowed by this Chapter.

2. Setback requirements
Each sign shall comply with the setback requirements of the applicable zoning district, except for an approved projecting sign, and except for an approved freestanding sign, which shall be set back a minimum of 10 feet from the front and side street property lines.

3. Placement on a building
No sign shall be placed so as to interfere with the operation of a door or window. Signs should not be located so that they cover prominent architectural features of the building.

4. Signs within a public right-of-way
No sign shall be allowed in the public right-of-way except for the following:
(a) A projecting sign in compliance with Section 4.8.5 (Sign Standards);
(b) Public signs erected by or on behalf of a governmental agency to convey public information, identify public property, post legal notices, or direct or regulate pedestrian or vehicular traffic;
(c) Bus stop signs installed by a public transit company;
(d) Informational signs of a public utility regarding its lines, pipes, poles, or other facilities; or
(e) Emergency warning signs erected by a governmental agency, a public utility company, or a contractor doing authorized within the public right-of-way.

All signs within the public right-of-way that are intended to regulate, warn, or guide traffic, shall comply with the Manual on Uniform Traffic Control Devices.

Any sign installed or placed within the public right-of-way other than in compliance with this section shall be forfeited to the public and be subject to confiscation.

C. Sign design

The following design criteria shall be used in reviewing the design of individual signs. Substantial conformance with each of the following design criteria shall be required before a sign permit or Building Permit can be approved.

1. Color
Colors on signs and structural members should be harmonious with one another and relate to the dominant colors of the buildings on the site. Contrasting colors may be utilized if the overall effect of the sign is still compatible with building colors.

2. Design and construction
(a) Except for banners, flags, temporary signs, and temporary window signs conforming with the requirements of this Chapter, each sign shall be constructed of permanent materials and shall be permanently attached to the ground, a building, or another structure by direct attachment to a rigid wall, frame, or structure.
(b) Each permanent sign shall be designed by a professional (e.g., architect, building designer, landscape architect, interior designer, or others whose principal business is the design, manufacture, or sale of signs), or who is capable of producing professional results.
(c) Each permanent sign shall be constructed by persons whose principal business is building construction or a related trade including sign manufacturing and installation, or others capable of producing professional results. The intent is to ensure public safety, achieve signs of careful construction, neat and readable copy, and durability, to reduce maintenance costs and prevent dilapidation.

3. Materials and structure
(a) Sign materials (including framing and supports) shall be representative of the type and scale of materials used on the site where the sign is located. Sign materials shall match those used on the buildings on the site and any other signs on the site.
(b) Permitted materials include wood, metal, and others conforming to the conditions of section (a) above.
(c) No sign shall include reflective material.
(d) Materials for permanent signs shall be durable and capable of withstanding weathering over the life of the sign with reasonable maintenance.
(e) The size of the structural members (e.g. columns, cross-beams, and braces) shall be proportional to the sign panel they are supporting.
(f) The use of individual letters incorporated into the building design is encouraged, rather than a sign with background and framing other than the structure wall.

4. Street address
The review authority may require that a sign include the street address of the site, where it determines that public safety and emergency vehicle response would be more effectively served than if the street address were displayed solely on one or more buildings on the site.

5. Copy design guidelines
The City does not regulate the message content (copy) of signs; however, the following are principles of copy design and lay out that can enhance the readability and attractiveness of signs. Copy design and layout consistent with these principles is encouraged, but not required.
(a) Sign copy should relate only to the name and/or nature of the business or commercial center.
(b) Permanent signs that advertise continuous sales, special prices, or include phone numbers, etc. should be avoided.
(c) Information should be conveyed briefly or by logo, symbol, or other graphic manner. The intent should be to increase the readability of the sign and thereby enhance the identity of the business.
(d) The area of letters or symbols should not exceed 40 percent of the background area in commercial districts or 60 percent in residential districts.
(e) Freestanding signs should contain the street address of the parcel or the range of addresses for a multi-tenant center.

6. Sign lighting
Sign lighting shall be designed to minimize light and glare on surrounding rights-of-way and properties.
(a) External light sources shall be directed and shielded so that they do not produce glare off the site, on any object other than the sign.
(b) Sign lighting shall not blink, flash, flutter, or change light intensity, brightness, or color.
(c) Colored lights shall not be used at a location or in a manner so as to be confused or construed as traffic control devices.
(d) Neither the direct nor reflected light from primary light sources shall create hazards for pedestrians or operators of motor vehicles.
(e) For energy conservation, light sources shall be hard-wired fluorescent or compact fluorescent lamps, or other lighting technology that is of equal or greater energy efficiency. Incandescent lamps are prohibited.

D. Sign maintenance

1. Each sign and supporting hardware, including temporary signs and awning signs, shall be maintained in good repair and functioning properly at all times. Any damage to a sign or its illumination, including the failure of illumination shall be repaired within a maximum of 14 days from the date of damage or failure.

2. A repair to a sign shall be of materials and design of equal or better quality as the original sign.

3. A sign that is not properly maintained and is dilapidated shall be deemed a public nuisance, and may be abated in compliance with the City's Land Use Code.

4. When an existing sign is removed or replaced, all brackets, poles, and other supports that are no longer required shall be removed, and the facade where the sign was located is to be restored and painted to match the existing building.

4.8.5 Sign Standards

Each sign shall comply with the restrictions provided by this section.

A. Each sign shall comply with the requirements in the accompanying table, Sign Standards by Building Type and Land Use.

4.8.6. Standards for Specific Sign Types

A. Banners and Portable Signs

Banners shall be governed by Chapter 18.76.080 Temporary on-premises signs of the Sign Ordinance of the Whittier Municipal Code.

B. Public Wayfinding Signs

Public wayfinding signs are exempt from sign permit requirements.

C. Neon Signs

Non-animated (i.e. Non-flashing, non-blinking or without any movement) neon signs of maximum 30 amps shall be permitted. Neon signs are only permitted outside below 8' in height if encased in protective transparent material for safety purposes.

D. Painted Wall Signs

Painted wall signs shall be governed by Chapter 18.76.020 Wall signs of the Sign Ordinance of the Whittier Municipal Code.

E. Murals

Murals shall only be permitted with approval of the Director of Community Development.

SIGN STANDARDS BY BUILDING TYPE AND LAND USE

Allowed Sign Types	Maximum Sign Height	Maximum Number of Signs Allowed per Parcel	Maximum Sign Area Allowed per Parcel
Duplexes, Triplexes, Quadplexes:			
None allowed			
Multi-Family Projects and Structures:			
Wall or freestanding	Wall signs: Below edge of roof; Freestanding: 48 inches	1 of either allowed type per entrance or street frontage	12 square feet of each; 24 square feet total of all signs

Non-Residential Uses:

Allowed Sign Types	Maximum Sign Height and Location Requirements	Maximum Sign Area and Other Requirements
Awning	Shall be entirely on awning valence; lettering maximum 66% of valence height; valence height max 18 inches.	50% of the area of the valence front. 1 sign maximum per each separate awning valence.
Marquee	To be established by City during project review Allowed only for the entrance of a theater or playhouse.	To be established by City during project review 1 sign maximum
Monument	5 feet including base structure. Allowed only on a site within the U-CO and U-CT zones with more than 100 ft of continuous street frontage.	36 square feet
Projecting or suspended	16 inches and bottom of sign shall be no closer than 8 ft above sidewalk surface below.	6 square feet No dimension greater than 3 square feet Sign shall be redwood sandblasted, hand carved, or architecturally designed equivalent, or cut metal.
Wall Mounted	2 feet below parapet or eave. Individual letters 18 inches; except that up to 36 inches may be allowed through the enhanced signage procedure Mounting 1-story: Above 1st floor windows Mounting multi-story: Between windows	1 square foot per 1 linear foot of primary business frontage 1 sign allowed per business frontage with pedestrian entrance. Side street or rear entrance wall sign maximum 50% of the primary sign area.
Window - Permanent	Within window area	15% of total window area.
Window - Temporary	Within window area	25% of total window area. Allowed for display a maximum of 15 days at 1 time, up to 3 times in 12-month period.

4.8.7 Nonconforming Signs

A nonconforming sign is any permanent or temporary sign that was legally established and maintained in compliance with the provisions of all applicable laws in effect at the time of original installation but that does not now comply with the provisions of this specific plan.

A. General requirements

A nonconforming sign shall not be:

1. Changed to another nonconforming sign;
2. Structurally altered to extend its useful life;
3. Enlarged;
4. Re-established after a business is discontinued for 60 days or more; or
5. Re-established after damage or destruction to 50 percent or more of the value of the sign, or its components, as determined by the Building Official.

B. Maintenance and change

Sign copy and face changes, nonstructural modifications, and nonstructural maintenance (e.g., painting, rust removal) are allowed without a sign permit up to a maximum of 25 percent of the existing total area of the sign. Face changes not including copy, and any nonstructural modifications exceeding 25 percent of the existing total area of the sign, and any structural changes shall comply with all applicable standards of this Chapter.



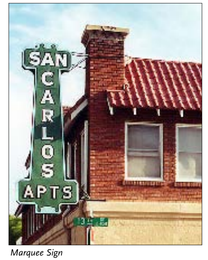
Large Wall and Awning-Mounted Signs



Contemporary Wall-Mounted Sign



Wall-Mounted Sign



Marquee Sign



Projecting and Window Neon Signs





Above: Large, wall-mounted neon sign on a corner building

Left: Contemporary, three-dimensional door-mounted sign above store entrance



Sign painted directly on storefront frame, and smaller projecting signs on the right

4.9.1 - Parking Location and Design

A. Location of off site parking facilities.

Off street parking facilities for lots located outside of the Park Once District shall be located on the same lot as the principal use served, except:

1. For any non-residential uses only, if the same is located upon a lot that is located within five hundred feet of the outer boundaries of the lot upon which the principal use so served is located.

B. Joint uses authorization.

The Director of Community Development, upon application by the owner or lessee of any property, shall authorize the joint use of parking facilities by the following uses or activities under the conditions specified in this chapter:

1. The parking facilities required by this chapter for a use which is non-residential and is primarily a daytime use may be provided by the parking facilities of a use which is primarily a nighttime and/or Sunday use and vice versa, provided such reciprocal parking shall be subject to conditions set forth in subsection 2 of this section.

2. Conditions Required for Joint Use.

   a. The outer boundaries of the properties upon which the uses are proposed, to which the application relates, shall be located within five hundred feet of each other.

   b. The applicants shall show that there is no substantial conflict in the principal operating hours of the uses for which the joint use of off street parking facilities is proposed.

   c. Parties concerned with the joint use of off street parking facilities shall evidence agreement for such joint use by a legal instrument approved by the City attorney as to form and content. Such instrument, when approved, shall be recorded in the office of the county recorder and copies thereof filed with the Department of Building and Safety and the Planning Department.

C. Number of spaces required

Off-street parking spaces shall be provided for each land use as required by Sections 4.3.3 through 4.3.6 for the applicable zone. Required parking for uses not listed within these Sections shall comply with the parking requirements within the Whittier Municipal Code.

D. Parking design

Parking facilities, including internal and external access, and individual spaces shall be designed in compliance with the City's standards in the Land Use Code (Parking Standards). Parking facilities visible from a street shall be landscaped as provided in Section 4.9.2, below.

E. Parking provisions

1. The following parking provisions contained within the Whittier Municipal Code shall apply to the Uptown Whittier Specific Plan except as specifically stated otherwise within this document:

Section 18.48.010 (Facilities required), Sections 18.48.020.1 (Schedule of parking requirements), 18.48.020.2(1)C (Senior Citizen Housing), 18.48.020.2(1)D (Clubs, fraternity, sorority, and boarding houses), 18.48.020.2(1)E (Congregate and assisted living facilities), 18.48.020.2(2)0 (Catering and Delivery Vehicles), 18.48.020.2(P) (No parking use reference), 18.48.020.2(3) (Unique circumstances), 18.48.020.2(4) (Parking justification study), 18.48.020.2(6) (Disabled parking), 18.48.050 (Plan required), 18.48.080 (Exemption – Certain residential zone uses), 18.80.060 (Development standards - condominium conversions)

2. All single-family homes shall contain a minimum of two enclosed garage parking spaces. An automatic garage door opening system shall be provided and maintained for the garage door when the driveway apron in front of the garage door is less than 18 feet in depth.

3. Minimum and fractional parking. The off-street parking spaces required for each permitted use shall not less than the minimum required, provided that any fractional parking space shall be computed as a whole space.

4. Tandem Parking Prohibited. All required residential and non-residential parking spaces shall be non-tandem. Non-required parking may be designed in a tandem configuration.

5. Surfacing. All off-street parking areas, including driveways and aisles, shall be paved with concrete, asphaltic concrete pavement, pavers or other material approved by the Public Works Director in accordance with adopted city standards therefor. Such surfacing shall be designed, constructed and maintained so as to dispose of all surface water in accordance with city standards therefor.

6. Lights. Suitable lighting shall be provided so as to adequately illuminate any parking area having spaces for five or more vehicles or new or used-car sales areas permitted by this title. Such lighting shall be arranged so as to reflect the light away from adjacent properties.

7. Entrances and Exits. The location and design of all entrances and exits to streets or alleys from off-street parking facilities shall be subject to the approval of the city traffic engineer, to insure that such will result in a minimum of interference with the traffic flow on such adjacent streets and alleys.

8. Multi-Family Guest Parking. One space for each three units when the development consists of up to 9 units. One space for each four units when the development consists of 10 or more units

All guest parking spaces shall be clearly marked and maintained for guests only. In addition, no guest parking spaces shall be located within a private garage, but may be located within an above and/or below ground parking structure that serves the on-site parking needs of the development. The location of guest parking spaces, which are not visible from the public right-of-way, must be directed by signs and dispersed throughout the site. Guest parking within a gated community shall be located behind a secured gate and be accessible via a phone access system or manned guard gate unless specifically approved by the approval authority when it can be found that such guest parking located outside the gated area is:

a. Conveniently located to all units in the project;
b. Oriented in a manner that will be properly maintained; and
c. Visible to arriving guests and adequately screened from adjoining public streets.

4.9.2 - Landscape Standards

A. Street trees

Proposed development shall include street trees as provided by Chapter 2.4 (Open Space and Streetscape Design).

B. Parking facility landscaping

Surface parking areas shall be planted with shade trees at a minimum ratio of one tree for every four spaces in an orchard planting arrangement. In the limited circumstances where this development code allows parking areas adjacent to a street or sidewalk, the parking area shall be screened with landscaping, and a decorative wall between 36 and 48 inches in height, as approved by the review authority.

4.9.3 - Fences, Walls, and Screening

A. Applicability

The requirements of this section apply to all fences and walls unless otherwise stated.

1. Fences or wall in flood hazard area
A fence or wall in an area subject to flooding identified on a Federal Flood Insurance Rate Map (FIRM) on file in the City's Public Works Department shall require a Building Permit, and shall comply with all requirements of the City Engineer in addition to the requirements of this section.

2. Exemptions
These regulations do not apply to fences or walls required by regulations of a State or Federal agency, or by the City for reasons of public safety.

B. Height limits

Each fence, wall, and hedge shall comply with the height limits shown in the following table.

MAXIMUM HEIGHT OF FENCES AND WALLS

Location of Fence or Wall	Maximum Height
Within front or street side setback	36 in - lots of 60 ft or less 42 in - lots between 60 to 100 ft 5 1/2 ft - lots of over 100 ft
Within interior side or rear setback	6 ft (1)
Within a zone where no set-back is required - Located 20 ft or more to the rear of a front or street side property line - Located within 20 ft of a front or street side property line	6 ft (1) 42 in for solid wall or fencing 6 ft for open fencing
At intersection of alley, street or driveway	36 in
Outside of a required set-back	8 ft

(1) A fence or wall up to eight feet in height may be allowed when the portions above six feet are of an open design (e.g., lattice, wrought iron or grille work). A Building Permit also may be required.

C. Specific fence and wall requirements

Fences and walls are required as follows, in addition to any other City requirement, or California Building Standards Code requirements.

1. Fencing between different land uses
Fencing between different land uses shall be provided in compliance with Subsection E. (Screening).
2. Outdoor equipment, storage, and work areas
Nonresidential outdoor uses and equipment adjacent to a residential use shall be fenced and/or screened in compliance with Subsection E. (Screening).

3. Retaining walls
Any embankment to be retained that is over 48 inches in height shall be benched so that no individual retaining wall exceeds a height of 36 inches, and each bench or terrace is a minimum width of 24 inches.
4. Temporary fencing
Temporary fencing may be necessary to protect archaeological or historic resources, trees, or other similar sensitive features during site preparation and construction. This fencing shall be approved by the Director of Community Development.

D. Prohibited materials

The following fencing materials are prohibited except where they are required by a State or Federal law or regulation: barbed, razor or concertina wire in conjunction with a fence or wall, or by itself, and chain link fencing.

E. Screening

This Subsection establishes standards for the screening and separation of adjoining residential and nonresidential land uses, equipment and outdoor storage areas, and surface parking areas.

1. Screening between non-residential and residential
Non-residential development abutting a site developed exclusively as residential shall provide screening at the parcel boundary as follows.

(a) The screen shall consist of plant materials and a solid, decorative wall of masonry or similar durable material, six feet in height (up to eight feet may be allowed in compliance with Subsection B, Height limits. Openings or pedestrian connections may be required at the discretion of the review authority.
(b) The decorative wall shall be architecturally treated on both sides, subject to the approval of the review authority.

2. Mechanical equipment, loading docks, and refuse areas.
(a) Roof or ground mounted mechanical equipment shall be screened from public view from adjoining public streets and rights-of-way and adjoining properties with residential development. This equipment includes air conditioning, heating, ventilation ducts, and exhaust vents, loading docks, refuse storage areas, and utility services, electrical transformers, gas meters, etc.
(b) The colors, materials, and architectural style of screening shall be architecturally compatible with other on-site development.
(c) All single family dwellings shall be designed with storage space provided for three, 90-gallon trash bins, not visible from the street during non-collection days.
(d) Trash enclosures shall be built for space to house sufficient three-yard bins to be determined by the City at the time of application for a development or applicable modification of an existing building/property. such enclosures shall be consistent with the surrounding architecture and shall be constructed with a solid roof, and provide convenient pedestrian and collection-vehicle access.

4.10 GLOSSARY

4.10.1 Purpose

This section provides definitions of terms and phrases used in this Code that are technical or specialized, or that may not reflect common usage. If any of the definitions in this section conflict with definitions in the Zoning Code or other provisions of the City of Whittier Municipal Code, these definitions shall control for the purposes of this Code.

4.10.2 Definitions of Specialized Terms and Phrases

Land use type classifications. The land use types listed in Table 4-1 on page 4:5 shall be defined as provided in the City's Planning and Zoning Code except for use types that are defined in Subsection B., and identified as "(land use)."

Terms and phrases. As used in this Code, each of the following terms and phrases shall have the meaning ascribed to them in this section, unless the context in which they are used clearly requires otherwise.

Accessory Structure: a detached building or structure, part of a building or structure, which is incidental or subordinate to the main building, structure or use on the same parcel, without cooking facilities (e.g., storage shed, garage, gazebo).

Adult Business: a business establishment or concern which as a regular and substantial course of conduct performs as an adult bookstore, adult motion picture theater, adult motion picture arcade, adult drive-in theater, adult cabaret, adult motel or hotel, adult theater, adult model studio, sexual encounter establishment, body painting studio, massage parlor, headshop/drug paraphernalia shop, or sells or distributes adult merchandise or sexually oriented merchandise, or any other business or concern which offers to its patrons products, merchandise, services or entertainment characterized by an emphasis on matters depicting, describing, or relating to specified sexual activities or specified anatomical parts, but not including those uses or activities which are preempted by state law (see City of Whittier Municipal Code Section 18.44.020. V).

Allee: a row of trees planted along a Thoroughfare or Pedestrian Walkway.

Alley: a low capacity thoroughfare with one, shared lane and no parking lanes, designed and intended for service and/or secondary access purposes (rural version of an alley is a 'lane').

Antique or Collectible Store (land use). A retail store that sells antiques, curios, gifts and souvenirs, and collectible items including sports cards and comic books. A store that primarily sells books is included under "General Retail." Does not include stores selling other types of second hand items (e.g., clothing), which are instead included in the definition of "Second Hand Store."

Apartment: a dwelling sharing a building and a lot with other dwellings and/or uses. Apartments may be for rent or for sale as condominiums.

Arcade: see 'Frontage Types'

Architectural Type (also referred to as 'Building Type'**:** a structure defined by the combination of configuration, placement and function.

Bicycle Path: a dedicated area, paved in a variety of materials (e.g., asphalt to decomposed granite) that is non-traversable by vehicles and is often shared with pedestrians.

Bicycle Route: an identified area, usually by white lines, that is part of the vehicular roadway that allows bicycle use.

Block: the aggregate of private lots, passages, common drives and, lanes, circumscribed by thoroughfares.

Block Face: the aggregate of all the building facades on one side of a block. The block face provides the context for establishing architectural harmony.

Building Function: the uses accommodated by a building and its lot.

Building Height: the vertical extent of a building measured in stories, not including a raised basement or a habitable attic. Height limits do not apply to masts, belfries, clock towers, chimney flues, and similar structures. Building height shall be measured from the average grade of the enfronting Thoroughfare. See entry in Glossary on 'Story' for dimensions.

Building Placement: the maximum envelope available for placing a building on a lot.

Building Type: (also referred to as 'Architectural Type')**:** a structure defined by the combination of configuration, placement and function. The Types used in this Specific Plan are listed below in the order they appear in the document:

Single Family: A structure occupied by one primary residence that also accommodates commercial uses.

Accessory Dwelling (e.g. Carriage House): An attached or detached residence which provides complete independent living facilities for one or more persons and which is located or established on the same lot on which a single-family residence is located. Such dwellings may contain permanent provisions for living, sleeping, eating, cooking and sanitation. This definition includes 'granny flats'.

Duplex, Triplex, and Quadplex: These structures are multiple dwelling forms that are architecturally presented as large single-family houses in their typical neighborhood setting.

Rosewalk: An architectural type consisting of freestanding single-family residences arranged on either side of a common green. Having the same right-of-way width as a narrow neighborhood street, the rosewalk usually connects two parallel streets.

Bungalow Court: An architectural type consisting of freestanding single-family residences arranged around a common, shared courtyard. The individual buildings are arrayed next to each other to form a shared type that is wholly open to the street.

Rowhouse: An individual structure occupied by one primary residence or a structure of multiple townhouse unit types arrayed side by side along the primary frontage.

Live/Work: An integrated residence and working space, occupied and utilized by a single household in a structure, either single-family or multi-family, that has been designed or structurally modified to accommodate joint residential occupancy and work activity.

Courtyard Housing: A type consisting of residences that can be arranged in four possible configurations: townhouses, townhouses over flats, flats, and flats over flats. These are arrayed next to each other , on one or more courts, to form a shared type that is partly or wholly open to the street.

Stacked Dwellings: A structure of single-floor residences of similar configuration either above or below.

Commercial Block: A building designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.

Liner: A structure that conceals a larger building such as a public garage that is designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.

Civic: the term defining not-for-profit organizations dedicated to the arts, culture, education, government, transit and municipal parking facilities.

Civic Space: an open area dedicated for public use, typically for community gatherings. Civic Space Types are defined by the combination of certain physical constants defined by the relationship between their intended use, their size, their landscape and their enfronting buildings.

Colonnade: a series of columns similar to an arcade but spanned by straight lintels rather than arches, linked together, usually as an element of a building.

Commercial Recreation Facility - Indoor (land use). Establishments providing indoor amusement and entertainment services for a fee or admission charge, including:

- bowling alleys
- coin-operated amusement arcades
- dance halls, clubs and ballrooms
- electronic game arcades (video games, pinball, etc.)
- ice skating and roller skating
- internet/cyber café
- pool and billiard rooms as primary uses

This use does not include adult businesses. Four or more electronic games or coin-operated amusements in any establishment, or a premises where 50 percent or more of the floor area is occupied by amusement devices, are considered an electronic game arcade as described above; three or fewer machines are not considered a land use separate from the primary use of the site.

Commercial Frontage: the non-residential frontage of a building. Non-residential activities subject to city approval are allowed within this space, which must be at least 25 feet in depth. These spaces are limited to the first floor and as such, have different building requirements than upper floors (e.g., large storefront windows, signage, etc.).

Common Yard: the type of yard most associated with residential development, characterized by one yard visually connecting with the adjacent yard(s).

Community Assembly: the activities typically performed by, or at, the following institutions or installations: places of worship and religious facilities; public, parochial, and private nonprofit clubs, lodges, meeting halls, and recreation centers; and temporary non-profit festivals;

Context: the particular combination of elements that create a specific environment. A Context Zone is administratively similar to the land-use zones in conventional zoning ordinances, except that in addition to specifying the building use, density, height and setback, all the relevant elements and characteristics of the intended environment are integrated. The integration includes the characteristics of the private lot and building as well as those of the enfronting public streetscape. Their combination and the ratio of natural-urban intensity is determined by their location on the Transect.

Curb: the edge of the vehicular pavement detailed as a raised curb or a swale. The curb usually incorporates the drainage system.

Density: the number of dwelling units within a standard measure of land area, usually as units per acre.

Design Speed: the velocity at which a Thoroughfare can be comfortably driven without the constraints of signage or enforcement. there are 4 ranges of speed: Very Low: below 20mph, Low: 20-25mph, Moderate: 25-35mph and High: above 35mph. This factor determines the character and context for a particular segment of the Thoroughfare system.

Developable Areas: those areas of a site that are not designated Open Space.

Dooryard: see 'Frontage Types'

Driveway: a vehicular lane within a lot, usually leading to a garage. A Driveway may be used for parking, providing that it is no more than 18 feet wide.

Dwelling, Multi-Family (land use). See the descriptions of building types in Section 3.3.010 (Architectural Types).

Edgeyard Building: a building that occupies the center of its lot with setbacks on all sides. This is the least urban of types as the front yard sets it back from the frontage, while each of the side yards weakens the spatial definition of the public thoroughfare space. The front yard is intended to be visually continuous with the yards of adjacent buildings. The rear yard can be secured for privacy by fences/walls and a well-placed outbuilding/garage.

Elevation (Building): the exterior walls of a building not along a frontage. Also referred to as 'Facade' when the elevation is along a frontage line.

Enfront: the placement of an element along a frontage line, as in "arches enfront the street."

Entrance (Principal): the principal point of access of pedestrians to a building. In the support of pedestrian activity, the Principal Entrance should give to the frontage rather than to the parking.
Fabric Building: A building which is not civic or otherwise especially important in the overall neighborhood of blocks and buildings. A building which contributes to the forming of public space by being contextual so that civic and institutional buildings are emphasized.

Facade: the exterior wall of a building that is set along a frontage line. Facades support the public realm and are subject to frontage requirements additional to those required of elevations.

Forced Podium Hardscape: A built condition which can occur when the "podium" created by the protruding roof of a sub-grade garage is minimally landscaped and not provided other design elements such as seating areas, fountains and gardens, to soften an otherwise featureless concrete appearance and provide areas within the courtyard that are attractive to, and usable by residents and their visitors for active and passive pursuits.

Forecourt: see 'Frontage Types'

Frontage Line: those lot lines that coincide with a public frontage line. One shall be designated as the Principal Frontage Line. Facades along Frontage Lines define the public realm and are therefore more highly regulated than the elevations that coincide with other lot lines.

Frontage Type: the architectural element of a building between the public right-of-way and the private property associated with the building. Frontage Types combined with the public realm create the perceptible streetscape. The following types are listed as they appear in this code:

Frontyard / Porch: a common frontage associated with single family houses, where the facade is set back from the right of way with a front yard. An encroaching porch may also be appended to the facade. A fence or wall at the property line may be used to define the private space of the yard. The front yard may also be raised from the sidewalk, creating a small retaining wall at the property line with entry steps to the yard.

Stoop / Dooryard: an elevated entry porch/stair placed close to the frontage line with the ground story elevated from the sidewalk, securing privacy for the windows and front rooms. This type is suitable for ground-floor residential uses with short setbacks. This type may be interspersed with the shopfront frontage type. A porch or shed roof may also cover the stoop.

Forecourt: a semi-public exterior space partially surrounded by a building and also opening to a thoroughfare. These spaces usually lead to a Court, which is a private exterior space. It is often used as a vehicular entrance or drop-off, and its landscape may be improved with paving.

Storefront: a facade placed at or close to the right-of-way line, with the entrance at sidewalk grade. This type is conventional for retail frontage and is commonly equipped with cantilevered shed roof(s) or awning(s). Recessed storefronts are also acceptable. The absence of a raised ground floor precludes residential use on the ground floor facing the street, although such use is appropriate above.

Arcade: a facade with an attached colonnade, that is covered by upper stories. This type is ideal for retail use, but only when the sidewalk is fully absorbed within the arcade so that a pedestrian cannot bypass it.

General Retail (land use): Stores and shops selling many lines of merchandise. Examples of these stores and lines of merchandise include:

- antique store
- appliance store
- art galleries, retail
- art supplies, including framing services
- bath and kitchen store
- bicycles
- books, magazines, and newspapers
- cameras and photographic supplies
- clothing, shoes, and accessories
- department stores
- drug stores and pharmacies
- dry goods
- electronics store
- fabrics and sewing supplies
- florists and houseplant stores (indoor sales only outdoor sales are "Building and Landscape Materials Sales")
- furniture store
- hobby materials
- jewelry
- luggage and leather goods
- musical instruments (small), parts and accessories (large instruments are under "Furniture, Furnishings, and Appliance Store")
- orthopedic supplies
- small wares
- specialty shops
- sporting goods and equipment
- stationery
- toys and games
- variety stores
- vintage goods store
- videos, DVDs, records, CDs, including rental stores

Does not include adult businesses which are separately defined.

Infill Development: a site seamlessly developed within an existing urban fabric, balancing, completing and/or repairing the surrounding areas.

Inside Turning Radius: the curved edge of a Thoroughfare at an intersection, measured at the inside edge of vehicular tracking. The smaller the Turning Radius, the smaller the pedestrian crossing distance and the more slowly the vehicle is forced to make the turn. Control of the Curb Radius is an important variable in the fostering of a pedestrian-friendly environment.

Layer: a range of depth of a lot within which certain elements are permitted.

Liquor Store (land use). A retail store that primarily sells wine, beer, and/or spirits, that may specialize in one or more of the above, and may also sell convenience merchandise including food products.

Lot: a separately platted subdivision of land held privately, usually intended for the purposes of building.

Lot Line: the boundary that legally and geometrically demarcates a lot. Such lines appear graphically on a Tract Map or Development Permit Site Plan

Lot Width: the length of the Principal Frontage Line.

Medical Services - Clinic, Urgent Care (land use). A facility other than a hospital where medical, mental health, surgical and other personal health services are provided on an outpatient basis. Examples of these uses include:

- medical offices with five or more licensed practitioners and/or medical specialties
- out-patient care facilities
- out-patient surgical centers
- urgent care facilities
- other allied health services

These facilities may also include incidental medical laboratories. Counseling services by other than medical doctors or psychiatrists are included under "Offices - Professional/Administrative."

Medical Services - Doctor Office (land use). A facility other than a hospital where medical, dental, mental health, surgical, and/or other personal health care services are provided on an outpatient basis, and that accommodates no more than four licensed primary practitioners (for example, chiropractors, medical doctors, psychiatrists, etc., other than nursing staff) within an individual office suite. A facility with five or more licensed practitioners is instead classified under "Medical Services - Clinic, Urgent Care." Counseling services by other than medical doctors or psychiatrists are included under "Offices - Professional / Administrative."

Medical Services - Extended Care (land use). Residential facilities providing nursing and health-related care as a primary use with in-patient beds. Examples of these uses include: board and care homes; convalescent and rest homes; extended care facilities; and skilled nursing facilities. Long-term personal care facilities that do not emphasize medical treatment are included under "Residential Care."

Meeting Hall: a building accommodating at least one room with an area equivalent to a minimum of 10 square feet per projected dwelling unit within the pedestrian shed in which the meeting hall is located.

Neighborhood Market/Convenience Store (land use). A neighborhood serving retail store of 2,500 square feet or less in gross floor area, which carries a range of merchandise oriented to daily convenience shopping needs.

Net Developable Area: the private area defined by blocks which is not to remain for public uses such as Plazas, Greens, Squares, Thoroughfares or Streetscapes.

Office (land use). This Code distinguishes between the following types of offices. These do not include medical offices (see "Medical Service - Clinic, Laboratory, Urgent Care," and "Medical Service - Doctor Office.")

Business, Service. Establishments providing direct services to consumers. Examples of these uses include employment agencies, insurance agent offices, real estate offices, travel agencies, utility company offices, elected official satellite offices, etc. This use does not include "Bank, Financial Services," which are separately defined.

Processing. Office-type facilities characterized by high employee densities, and occupied by businesses engaged in information processing, and other computer-dependent and/or telecommunications-based activities. Examples of these uses include:

- airline, lodging chain, and rental car company reservation centers
- computer software and hardware design and development
- consumer credit reporting
- data processing services
- health management organization (HMO) offices where no medical services are provided
- insurance claim processing
- mail order and electronic commerce transaction processing
- telecommunications facility design and management
- telemarketing

Professional/Administrative. Office-type facilities occupied by businesses that provide professional services, or are engaged in the production of intellectual property. Examples of these uses include:

- accounting, auditing and bookkeeping services
- advertising agencies
- attorneys
- business associations, chambers of commerce
- commercial art and design services
- construction contractors (office facilities only)
- counseling services
- court reporting services
- detective agencies and similar services
- design services including architecture, engineering, landscape architecture, urban planning
- educational, scientific and research organizations
- financial management and investment counseling
- literary and talent agencies
- management and public relations services
- media postproduction services
- news services
- photographers and photography studios
- political campaign headquarters
- psychologists
- secretarial, stenographic, word processing, and temporary clerical employee services
- security and commodity brokers
- writers and artists offices

Open Space Types: the various types of open space ranging from the regionally-oriented to those types oriented at the level of the block. The following types are listed as they appear in this code:

Nature: An interacting ecological process, responsive to laws constituting a value system, and offering both intrinsic opportunities and limitations to human uses.

Plaza: An open space that is available for civic purposes and commercial activities. A plaza is spatially defined by building frontages and normally has a floor of pavement. Plazas should be located at the intersection of important streets and they frequently enfront civic buildings. Size is flexible depending on block size and location but seldom exceeds 2 acres.

Green: An open space available for informal active and passive recreation. A green my be spatially defined by ground plane landscape and informal trees rather than buildings. Minimum size of a green may be 1/2 acre and a maximum size of 10-15 acres. A green is the least formal of urban open spaces

Square: An open space available for unstructured recreation and civic purposes. A square is spatially defined by building frontages and its landscape shall consist of pathways, lawns and trees. Trees are normally formally aligned in bosque's or allee's. Squares have a wider array of passive and recreational opportunities than greens.

Tot Lot: An open space designed and equipped specifically for the recreation of children. A tot lot may be fenced and may include an open shelter. Tot lots should be interspersed within residential areas and may be placed within a block.

Outbuilding: an ancillary building (e.g., garage, storage area, crafts space, etc.), usually located towards the rear of the same lot as the principal building. It is sometimes connected to the principal building and sometimes occurs as a separate building (also known as an '*Accessory Structure*').

Park-Once (Shared Parking Policy): an accounting for parking spaces that are available to more than one function. The requirement is based on a range of parking-demand found in mature, mixed-use centers (1.4 to 2.5 spaces per 1000 square feet of non-residential floor area). The Shared Parking ratio varies according to multiple functions in close proximity unlikely to require the spaces at the same time.

Paseo: Passage or breezeway.

Pedestrian First: the practice of addressing the needs of people, once out of their automobiles, through a series of interdependent urban design and streetscape principles (e.g., wide sidewalks, street trees and shade, on-street parking, outdoor dining, inviting storefronts, the feeling of being in an 'outdoor room', short cross-walk distances, interconnected and short blocks).

Pedestrian Shed: an area defined by the average distance that may be traversed at an easy pace from its Edge to its Center in approximately 5 minutes. This distance is used to determine the size of a Neighborhood. This dimension averages one quarter of a mile or approximately 1400 feet for generally flat terrain.

Personal Services (land use). Establishments providing non-medical services to individuals as a primary use. Examples of these uses include:

- barber and beauty shops
- clothing rental
- day spa
- dry cleaning pick-up stores with limited equipment
- home electronics and small appliance repair
- locksmiths
- massage (licensed, therapeutic, non-sexual - permitted only as an ancillary use to a day spa or similar use and subject to Municipal Code requirements)
- pet grooming with no boarding
- shoe repair shops
- tailors
- tanning salons

These uses may also include accessory retail sales of products related to the services provided.

Personal Services - Restricted (land use). Personal services that may tend to have a blighting and/or deteriorating effect upon surrounding areas and which may need to be dispersed to minimize their adverse impacts, and explicitly excluded. Examples of these uses include:

- check cashing stores
- fortune tellers
- palm and card readers
- pawnshops
- psychics
- spas and hot tubs for hourly rental
- tattoo and body piercing services

Planter: the layer of the streetscape which accommodates street trees. Planters may be continuous or individual according to the Thoroughfare and location within the neighborhood.

Porch: see 'Frontage Types'

Principal Building: the main building on a lot, always located toward the frontage.

Principal Frontage: the frontage of a parcel which is used to identify the parcel for street address purposes.

Private Frontage: the privately held layer between the frontage line and the principal building facade. The structures and landscaping within are held to specific standards. The variables of Private Frontage are the depth of the setback and the combination of architectural elements such as fences, stoops, porches and galleries. These elements influenced social behavior in the public realm. The Frontage layer may overlap the public streetscape in the case of awnings, galleries and arcades.

Public Frontage: the area between the frontage line and the curb of the vehicular lanes, and the type and dimension of curbs, walks, planters, street trees and streetlights.

Rearyard Building: a building that occupies the full frontage, leaving the rear of the lot as the sole yard. This type, with it continuous facade, steadily defines the public thoroughfare. The rear elevations may be articulated for functional purposes. In its residential form, this type is the Row House. For its commercial form, the Rear Yard can accommodate substantial parking.

Recess Line: a horizontal line, the full width of a facade, above which the facade sets back a minimum distance from the facade below.

Residential: premises available for long-term dwelling.

Residential Care Facility: Any of the facilities specified herein which generally provide personal care in a residential setting for children, adults, or children and adults. "Residential Care Facility" shall include "residential care facilities," as defined by the California Community Care Facilities Act; California Health and Safety Code Section 1502 (a)(1). The term "residential care facility" shall include the following health facilities, as set forth in California Health and Safety Code Section 1267.8: an intermediate care facility/developmentally disabled habilitative, an intermediate care facility/developmentally disabled-nursing, or a congregate living health facility. The term shall also include the following facilities: residential care facilities for persons with chronic life-threatening illnesses, as set forth in California Health and Safety Code Section 1568.0831; residential care facilities for the elderly, as set forth in California Health and Safety Code Section 1569.85; pediatric day health and respite care facilities, as set forth in California Health and Safety Code Section 1761.4; alcoholism or drug abuse recovery or treatment facilities, as set forth in California Health and Safety Code Section 11834.23; and any state-authorized, certified, or licensed family care homes, foster homes, or group homes serving mentally disordered or otherwise handicapped persons or dependent and neglected children, as set forth in the Lanterman-Petris-Short Act, California Welfare and Institutions Code Section 5116. The term "residential care facility" shall include any other facilities which are deemed by any other applicable law to be a residential use of property and required by law to be treated the same as other single-family residences for local zoning purposes. The term "residential care facility" shall not include family day care homes, as defined in Section 18.06.170; family day care homes shall be regulated pursuant to the provisions of Section 18.10.020 (K) of this code. Notwithstanding anything to the contrary in this Section, the term "residential care facility" is limited to those facilities, places or buildings that are both subject to regulation by the State of California and actually licensed by the State of California. No facility, place or building that may otherwise be regulated by the State of California, but which is not actually licensed by the State of California, shall be deemed a "residential care facility" for purposes of this chapter."

Retail: premises available for the sale of merchandise and food service.

Retail Frontage Line: Frontage Line designating the requirement for a shopfront, making the ground level available for retail use.

Setback: the area of a lot measured from a lot line to a building facade or elevation that must be maintained clear of permanent structures excepting galleries, fences, garden walls, arcades, porches, stoops, balconies, bay windows, terraces and decks (that align with the first floor level) which are permitted to encroach into the Setback.

Storefront: see 'Frontage Types'

Sideyard Building: a building that occupies one side of the lot with the setback to the other side. The visual opening of the side yard on the street frontage causes this building type to appear free-standing. A shallow frontage setback defines a more urban condition. If the adjacent building is similar with a blank party wall, the yard can be quite private. This type permits systematic climactic orientation in response to the sun or the breeze.

Sidewalk: the paved layer of the public frontage dedicated exclusively to pedestrian activity.

Stoop: see 'Frontage Types'

Story: a habitable level within a building of no less than 8 feet and no more than 14 feet in height from finished floor to finished ceiling. Raised basements are not considered a story for the purposes of determining building height if more than half the entire basement is below ground level. Attics are not considered a story for the purposes of measuring building height.

Streetscape: the urban element that provides the major part of the public realm as well as paved lanes for vehicles. A streetscape is endowed with two attributes: capacity and context. Capacity is the number of vehicles that can move safely through a segment within a given time period. It is physically manifested by the number of lanes and their width, and by the curb radius. Context is physically manifested by the appropriate Frontage types as determined by the Zone in which it is located and in the corresponding portion of the Public Realm Plan.

Streetwall: an opaque, freestanding wall built along the Frontage Line, or coplanar with the facade, often for the purpose of masking a parking lot from the adjacent Thoroughfare. Streetwalls shall be between 3.5 and 8 feet in height, and constructed of a material matching the adjacent building facade. The wall may be replaced by a hedge, subject to City Approval. Streetwalls may have openings no larger than necessary to allow automobile and pedestrian access.

Terrace: a level, paved area accessible directly from a building as its extension. A terrace is typically private and is most common as a Rear Yard in single-family development.

Thoroughfare: a vehicular way incorporating moving lanes and parking lanes (except alleys/lanes which have no parking lanes) within a right-of-way.

Thoroughfare Types: the three principal movement-types of thoroughfares that comprise an interconnected, varied and hierarchical network:

Free Flow: a thoroughfare which has dedicated, striped lanes of travel and tends to be a more highly traveled thoroughfare. Typical speeds are up to 55 mph.

Slow Flow: a thoroughfare, of moderate capacity (shorter in length than a free flow street) which does not have striped, dedicated (not striped) lanes of travel but has enough width for cars to pass each other comfortably but at a slow speed. Typical speeds are up to 20 mph.

Yield Flow: a thoroughfare of low capacity, shortest in length, and of a type where a single travel lane is shared by cars in both directions. Typical speeds are up to 15 mph.

Traffic Calming: a set of techniques which serves to reduce the speed of traffic. Such strategies include lane-narrowing, on-street parking, chicanes, yield points, sidewalk bulge-outs, speed bumps, surface variations, midblock deflections, and visual clues. Traffic calming is a retrofit technique unnecessary when thoroughfares are correctly designed for the appropriate speed at initial construction.

Transect: a system of classification deploying the conceptual range of 'rural-to-urban' to arrange in useful order, the typical context groupings of natural and urban areas. This gradient, when rationalized and subdivided into zones becomes the basis of the Regulating Plan and the zones supporting this Plan.

Transition Line: a horizontal line, the full width of a facade expressed by a material change or by a continuous horizontal articulation such as a cornice or a balcony.

Type: a form determined by function and confirmed by culture. A Type is physically defined by its function, its disposition on the lot and its configuration, including frontage and height.

Vernacular: the common language of a region, particularly in reference to the architectural tectonics. Through time and use, the vernacular has intrinsically resolved the architectural response to climate, construction technique, and to some extent, social mores.

Vintage goods store: A single unified retail store that sells items commonly classified as antique or vintage and commonly valued as "good-as-new" quality and, not including "secondhand" clothing or goods, which is defined as having limited collectors' value; thrift stores; multi-tenant establishments with less than 500 square feet per merchant; or establishments selling primarily used auto parts, appliances, or furniture.

Yard: a private area that adjoins or surrounds a building, its landscape subject to the landscape requirements.

Zaguan: a pedestrian passage between courts of one to two rooms in depth and one story in height.

APPENDIX

A.1.1 Tree Selection Criteria

By using the list of trees provided and planting the streets according to the Specific Plan, Whittier will achieve consistent visual unity, block by block, without sacrificing variety. Selection was influenced by a number of pertinent factors and objectives:

- **Environmental Suitability:** Trees that thrive in Whittier and the region;
- **Sustainability Concerns:** California natives or trees closely resembling them, including their drought-resistance, in appearance and function shall be used;
- **Street Tolerance:** A variety of street trees that perform well in urban environments are proposed. Automobile exhaust, dust, and small planters narrows the range of species appropriate for curbs;
- **Variety:** Within all of these factors is embedded the goal of species variety: Leaf color in autumn and spring, the scent of evergreens and cedars, and a kaleidoscope of branching patterns and shadow play; Vertical nature of palms and skyline view.
- **Scale and Transparency-Street:** Trees at maturity should begin branching above commercial signage and allow buildings to be seen through the canopy. Medium sized trees are reserved for narrow streets and alleys that can not accommodate big trees.

A. Street Tree Guidelines

- Eliminate unnecessary curb cuts for a continuous line of trees at the street edge;
- Tree wells are approximately 7' x 7' with structural soil beneath for root aeration and growth for canopy trees and located within parking area; palm trees are 4' x 4' wells' in retail areas. Tree wells in residential neighborhoods to be located in street parking areas and shall be 6'x 6' curbed wells.
- Automatic irrigation to be maintained for tree establishment and drought;
- Spacing (typical 30') should depend on tree type, visual unity and adequate canopy coverage;
- Substitutes only if disease or pests render the selected species unsuitable;
- Commit to long-term maintenance to optimize health and aesthetic qualities.



Above: The ficus trees are aesthetically striking and an integral part of Uptown's character, yet they pose serious challenges such as their age and deteriorating condition. One such challenge is the effect their roots have on nearby sidewalks and curbs, including the cracks and upheaval seen in the image above. This Specific Plan proposes a two-fold approach to address these challenges: a tree-succession plan over time, and a structural soil system for the future planting of trees. Both solutions may be costly in terms of time and resources, but are necessary and beneficial to the future of Uptown.



Below: Street trees are a dominant component of the urban landscape, for they contribute to the urban form (e.g. in the shape of a canopy), and also provide both aesthetic (e.g. the welcome sight of greenery) and utilitarian (e.g. providing shade) pleasure to residents and visitors. Trees also complement other public realm features, such as shrubs, planters and benches--all of which transform streets in pleasing public open spaces.

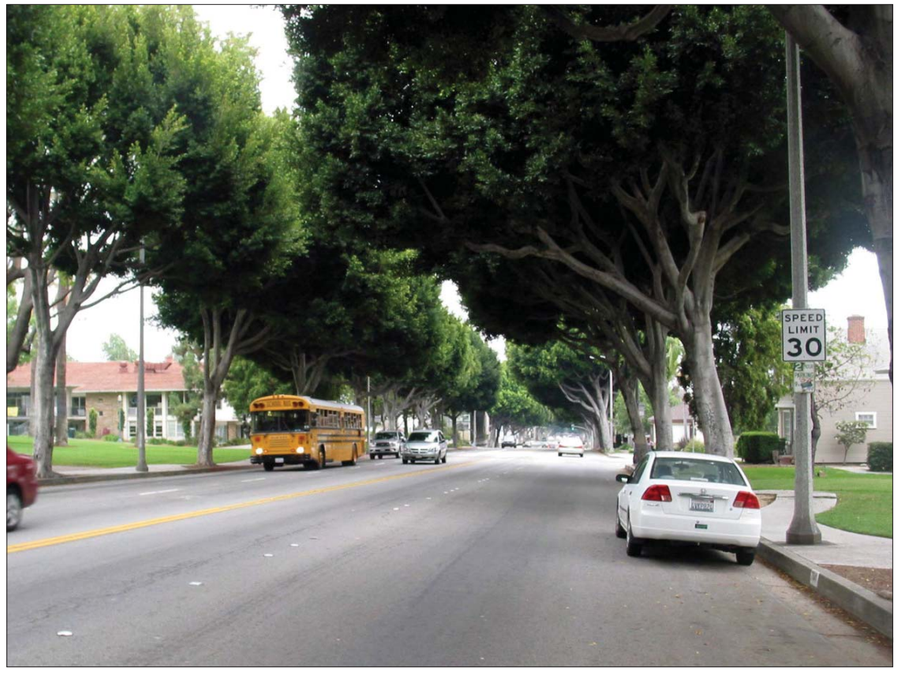


Right: Painter Avenue, on the eastern end of Uptown, is an excellent example of the manner in which intensive planting of street trees can help define the edge and transform an area into a distinctive destination. In order to accomplish this task, trees must be of the same or similar species, be planted in relatively close proximity to each other, and establish a clear geometric shape (e.g. a virtual wall, an overhead canopy, a colonnade) that is legible to passers-by.

Left: Apart from aesthetic considerations, trees must also be selected for their maintenance implications, especially in an urban setting with road pavement, curbs, sidewalks, and buildings in close proximity. Uptown faces a number of challenges in this regard, such as the small planting space and subsequent damage to the curb seen this the adjoining photograph.



Above: Appropriately selected and planted street trees help frame views and soften the sometimes hard edges of urban form, as seen above on Greenleaf Avenue in Uptown. The selection of tree species, including their urban form and long-term maintenance implications, is a crucial decision-making process in the attractiveness and viability of a district such as a town center.



A.1.2 Reforestation Guidelines and Sustainability

A. Tree Evaluation, Inventory and Assessment

- Evaluation for Hazard
  - Injured Trees
  - Unhealthy Trees
- Inventory Healthy Trees and Economic Value
  - Recommendation for sustaining trees during reforestation
- Qualified Arborist
  - Certified Arborist/Plant Pathologist conducts tree evaluation

B. Plan with a Vision

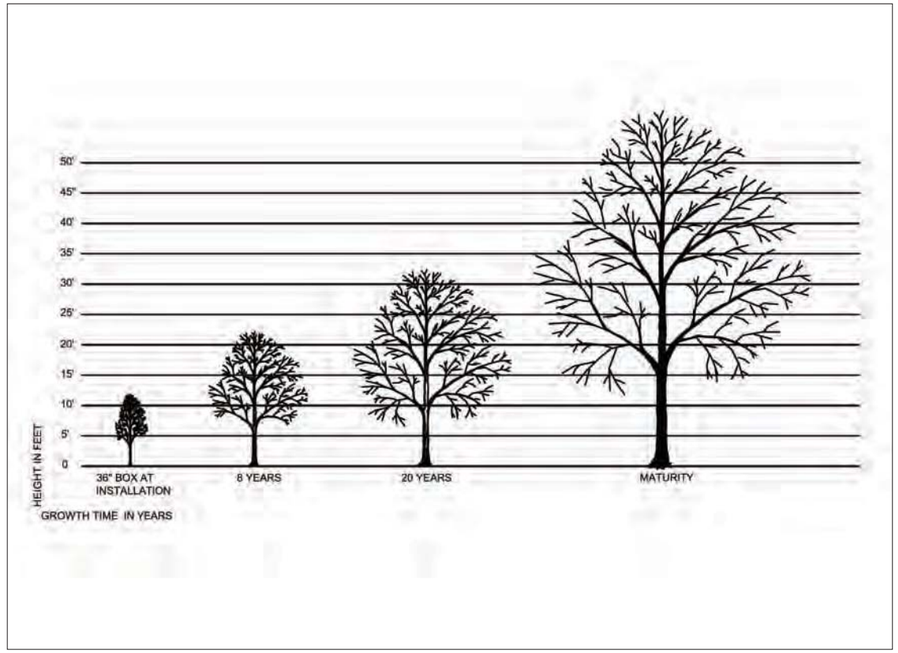
- Adjust Reforestation Program based on Tree Evaluation
- Implement Reforestation Plan

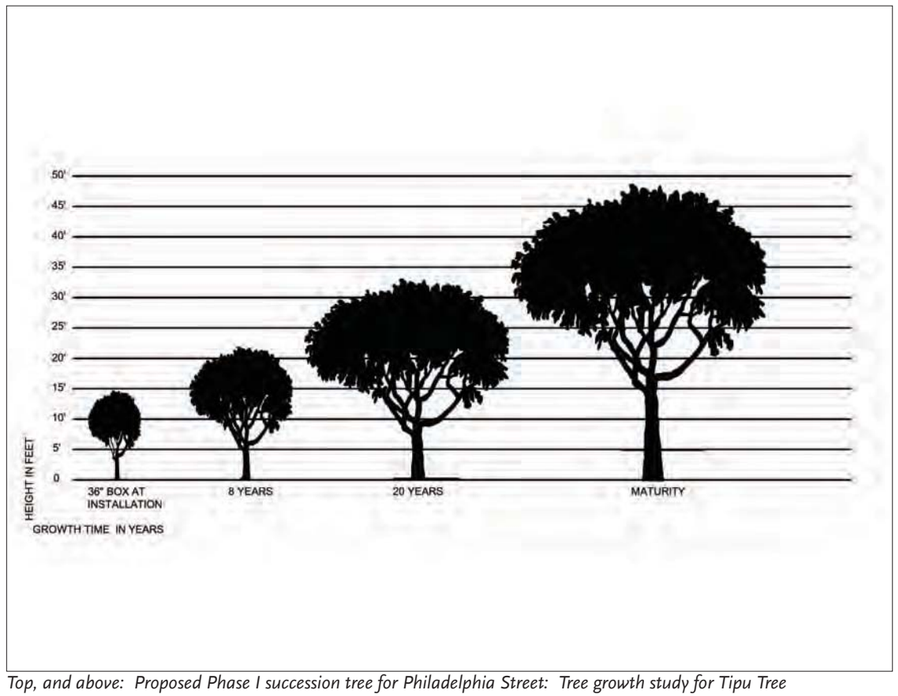
C. Tree Protection During Reforestation / General Construction

- Activities During Construction for Protection of Urban Forest
  - Tree Fencing Plan
  - Soil Compaction over Rootball and Dripline Plan
  - Erosion Control Plan
  - Tree Pruning Plan
  - Grade Fills
  - Grade Cuts
  - Root Severance
  - Excavation Plan
- Contractors / Owners subject to penalties for damage to trees
- Employees subject to discipline for damage to trees

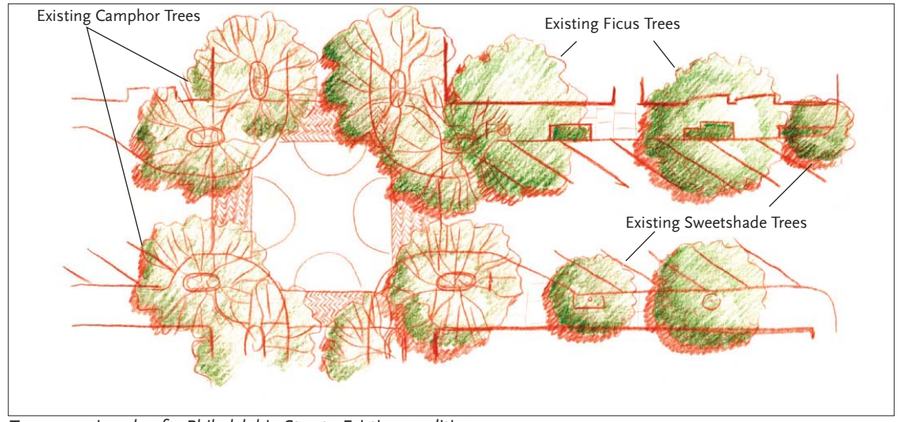
D. Tree Installation/Sustainability of Existing/Proposed Urban Forest

- Planting Medium and Strategies for Urban Landscape Planting within paved areas
  - Root Trenches for trees in paved areas of uncompacted soil. Sustainable soil volumes of 900-1,000 square feet.
  - Bridging pavement sections over uncompacted soil trenches.
  - Alternate: Structural soil system or gap graded soil to maintain compaction while allowing root penetration.
- Drainage and Aeration
  - Provide sub-drainage system and aeration through perforated pipes
- Irrigation Practices
  - Provide ongoing irrigation and supplementation of water during establishment period and as ongoing maintenance
- Pruning Practices
  - Timing of pruning based on tree type
  - Pruning of Young Trees
  - Excessive Pruning
  - Topping of trees prohibited
- Fertilization, Insect and Disease Control
  - Fertilizing standards and Mycorrhizae Treatments of young and existing trees
  - Mulching to reduce thermal buildup in soil and maintain even moisture
  - Provide program review for disease and insect control
- Training Material / Education Program for Maintenance Staff
  - Provide ongoing education and training materials to staff and public on sustaining the Urban Forest.
- Public and Private Urban Forest Commission
  - A joint venture between the City and Uptown Area stakeholders to review and develop policy for Uptown Urban Forest

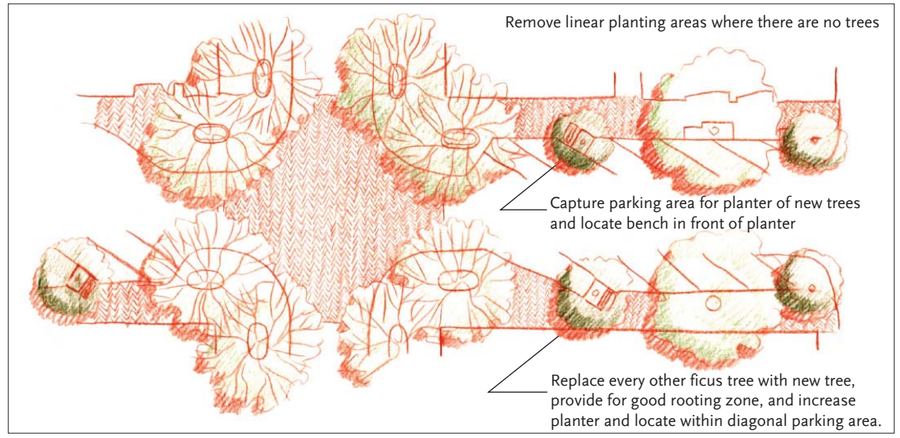




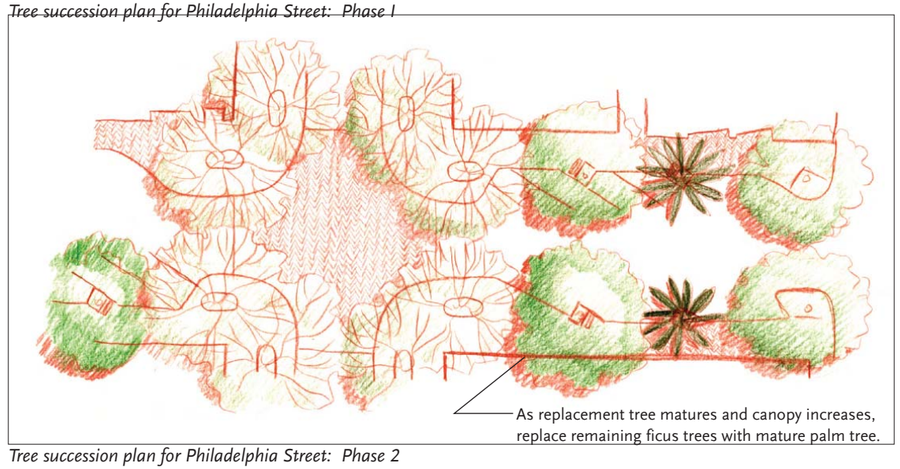
Top, and above: Proposed Phase I succession tree for Philadelphia Street: Tree growth study for Tipu Tree



Tree succession plan for Philadelphia Street: Existing conditions



Tree succession plan for Philadelphia Street: Phase I



Tree succession plan for Philadelphia Street: Phase 2

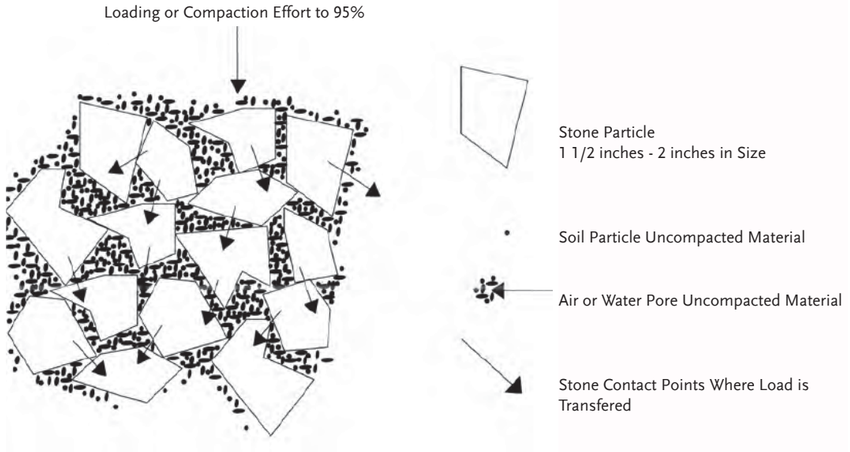
A.1.3 Planting, Irrigation, and Structural Soil System

The most common cause of young tree failure is planting too deep. In most instances , the point where the top most root in the roo ball originates from the trunk referred to as the root flare zone or root collar) should be located 1-2" above the soil surface. If there is a nursery soil over this area, scrape it off. Never place any soil over the root ball. The planting hole should be at least twice the width of the root ball, preferably wider because roots grow best in loose soil. Depth of tree pit should be to the depth of root ball of proposed tree size. In all but exceptional circumstances where the soil is very poor, extensive research clearly shows that there is no need to incorporate any amendments into the backfill soil. Simply use the loosened soil that came out of the planting hole.

Apply a 3 inch thick layer of mulch to at least six foot diameter circle around the tree. This area should be at least two feet in diameter for each inch of tree trunk diameter and maintained during the establishment period. Apply a thinner layer of mulch directly over the root ball but keep it at least 10 inches from the trunk. This allows rainwater, irrigation and air to easily enter to root ball and keeps the trunk dry.

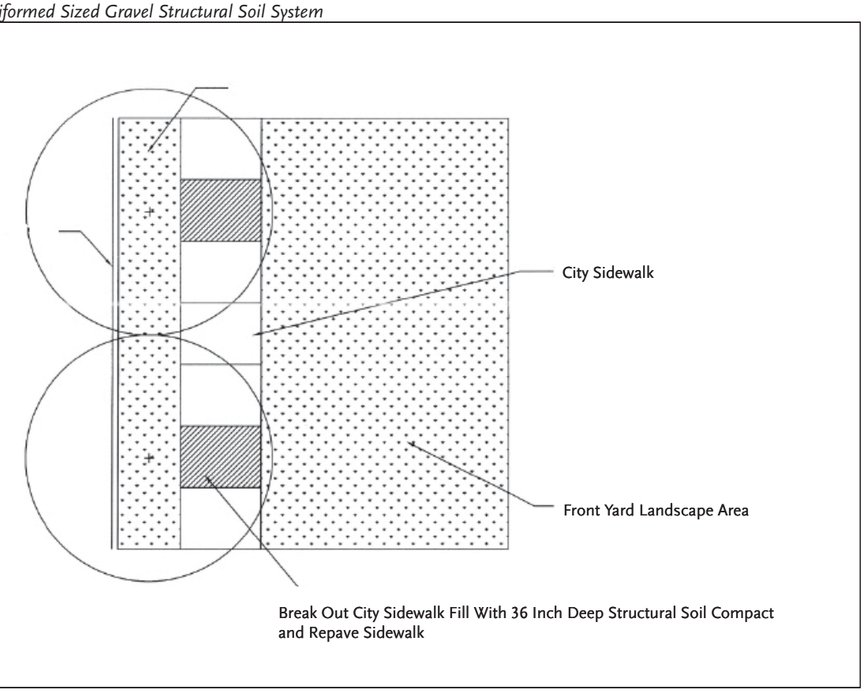
Regular irrigation after planting encourages rapid root growth that is essential for tree establishment. Trees with regular irrigation through the first growing season after planting require about 3 months or more per inch of trunk diameter to fully establish roots in the landscape soil. Trees in drier climates may take longer to establish. Trees that are under irrigated during this establishment period (and most trees are) often require additional time to establish because roots grow more slowly.

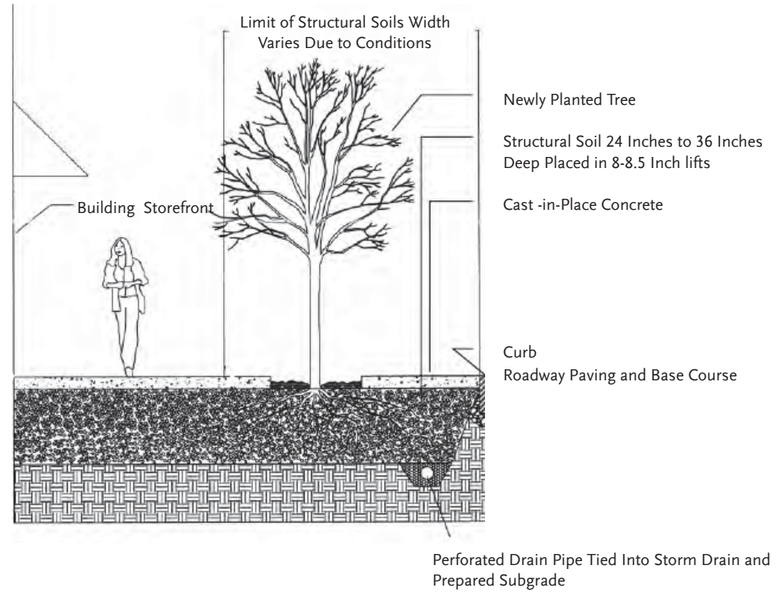
Unlike established plants, which do best with deep, infrequent irrigation, research clearly shows that recently planted trees and shrubs establish quickest with light, frequent irrigation. For planted trees daily irrigation provides the quickest establishment. Following the initial few months of frequent irrigation, provide weekly irrigation until plants are fully established. With every irrigation cycle, apply tow gallons of water per inch trunk diameter (e.g. 2 to 4 gallons for a 2 inch tree) over the root ball only. Never add water if the root ball is saturated.



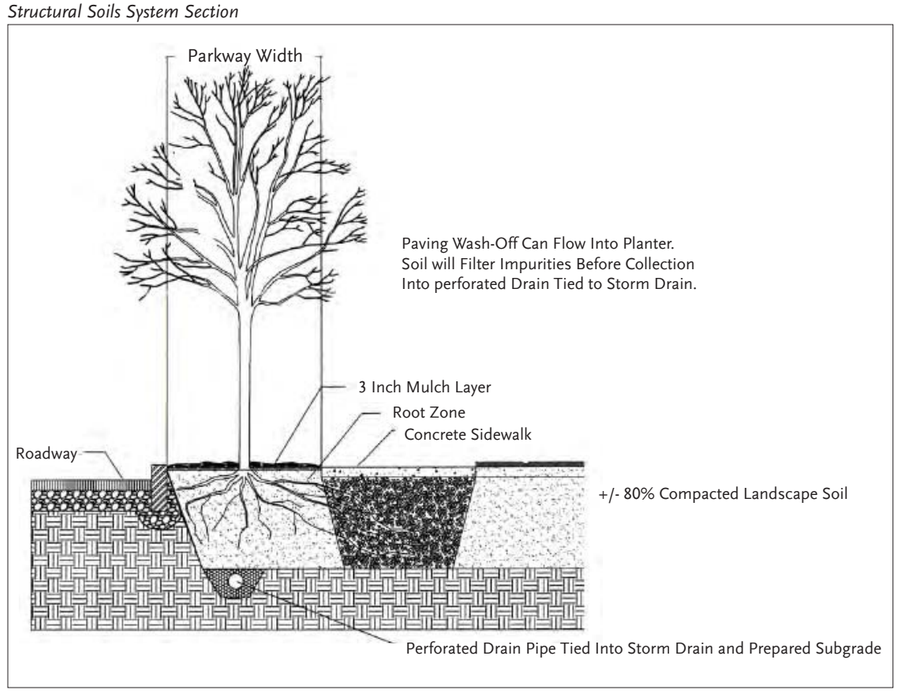
Uniformed sized gravel allows for compaction requirements of paving systems while allowing in-fill soil to be placed uncompacted for root penetration, thus reducing root uplifting of paved surfaces.

Uniformed Sized Gravel Structural Soil System





Structural Soils System Section

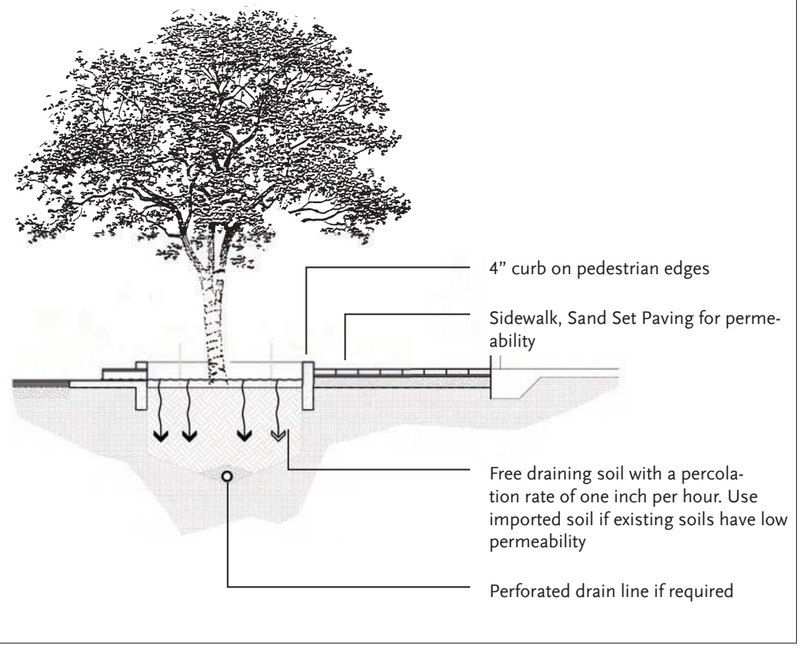


A.1.4 Storm Water Guidelines and Sustainability

Soils and plant materials can successfully filter pollutants from water. Bio-retention is a soil and plant-based storm water best management practice employed to filter runoff from developed communities.

Various grasses, shrubs, and trees are established to promote evapotranspiration, maintain soil porosity, encourage biological activity, and promote uptake of some pollutants. Runoff from an impervious area is directed into the bio-retention facility. The water infiltrates through the plant/mulch/soil environment, providing the treatment.

Green space is made functional to keep storm water on-site, to minimize runoff by maximizing infiltration, and to employ natural processes for water quality improvement. This is accomplished by running the storm water collected from the sidewalks and streets in the gutter through the street tree planters. The soil level in the planters is six inches lower than the street gutter. Runoff is directed into the planter through a slot into the tree well. The pollutants are caught by the landscape filter and some water is percolated into the soil. Runoff is thus filtered prior to discharge into storm drain line.



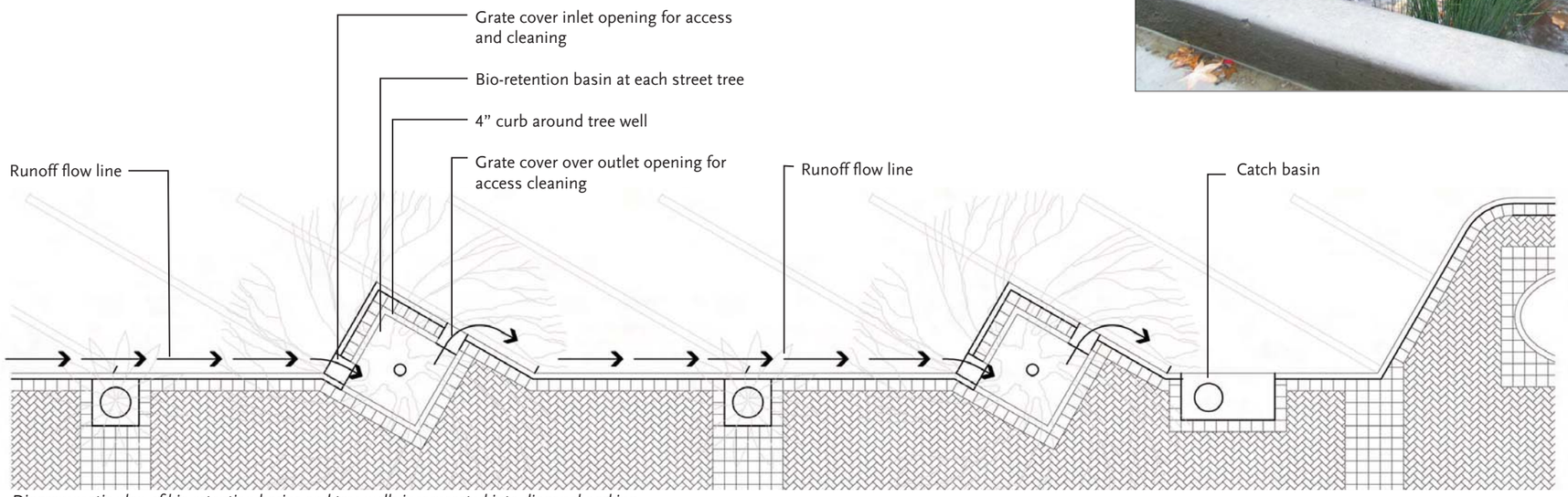
Section of bio-retention basin incorporated into tree well

Right: Bio-retention has multiple utilitarian benefits, including filtering pollutants from stormwater runoff and serving as a landscape buffer to the road pavement. The stormwater collection area is also used for aesthetic purposes, to plant grasses, flowers, and trees.



Right: Water flows from the street into the bio-retention planter to be filtered before draining into the soil and a perforated drain line, if necessary.





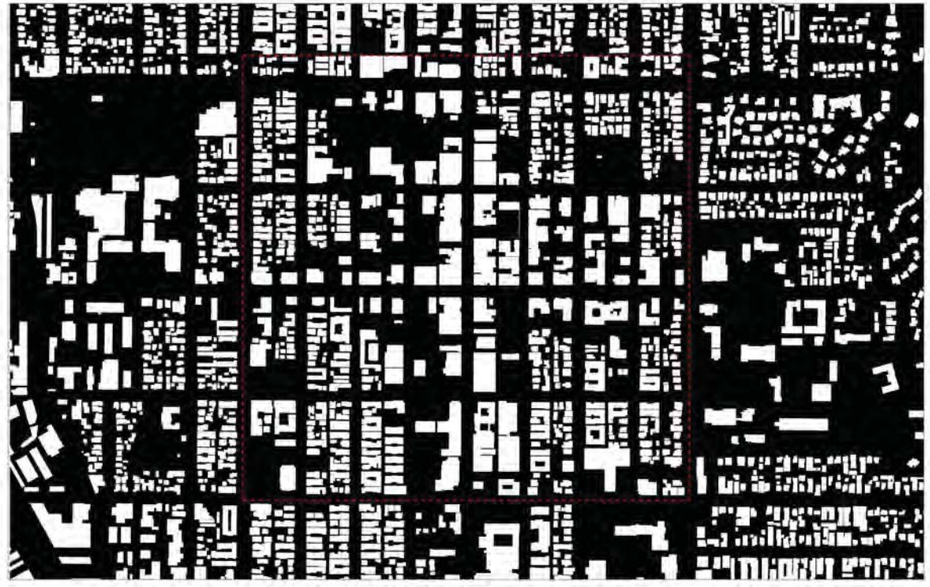
Diagrammatic plan of bio-retention basins and tree wells incorporated into diagonal parking



UPTOWN: LOCAL CONTEXT

UPTOWN WHITTIER SPECIFIC PLAN
CITY OF WHITTIER, CALIFORNIA

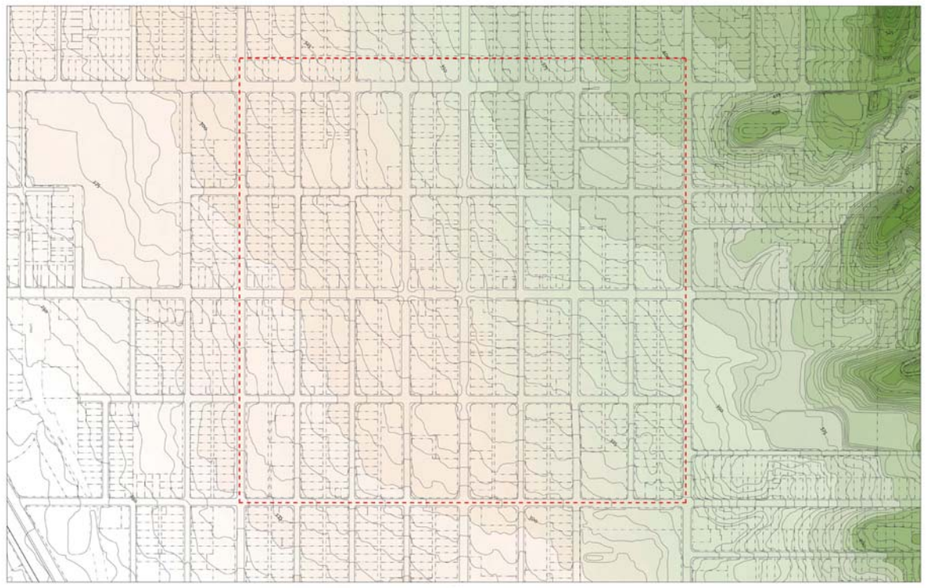
MOULE & POLYZOIDES
ARCHITECTS AND URBANISTS
JUNE 2006



UPTOWN: REVERSE FIGURE FIELD

UPTOWN WHITTIER SPECIFIC PLAN
CITY OF WHITTIER, CALIFORNIA

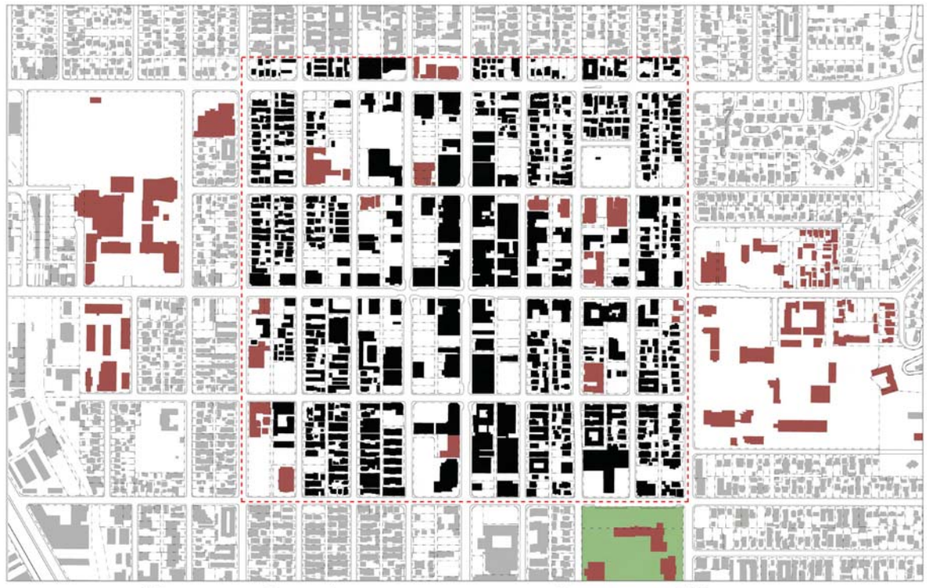
MOULE & POLYZOIDES
ARCHITECTS AND URBANISTS
JUNE 2006



UPTOWN: TOPOGRAPHY

UPTOWN WHITTIER SPECIFIC PLAN
CITY OF WHITTIER, CALIFORNIA

MOULE & POLYZOIDES
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JUNE 2006



UPTOWN: CIVIC, INSTITUTIONAL AND PLACES OF WORSHIP

UPTOWN WHITTIER SPECIFIC PLAN
CITY OF WHITTIER, CALIFORNIA

MOULE & POLYZOIDES
ARCHITECTS AND URBANISTS
JUNE 2006



Uptown: Districts and Boundaries

Uptown Whittier Specific Plan
City Of Whittier, California

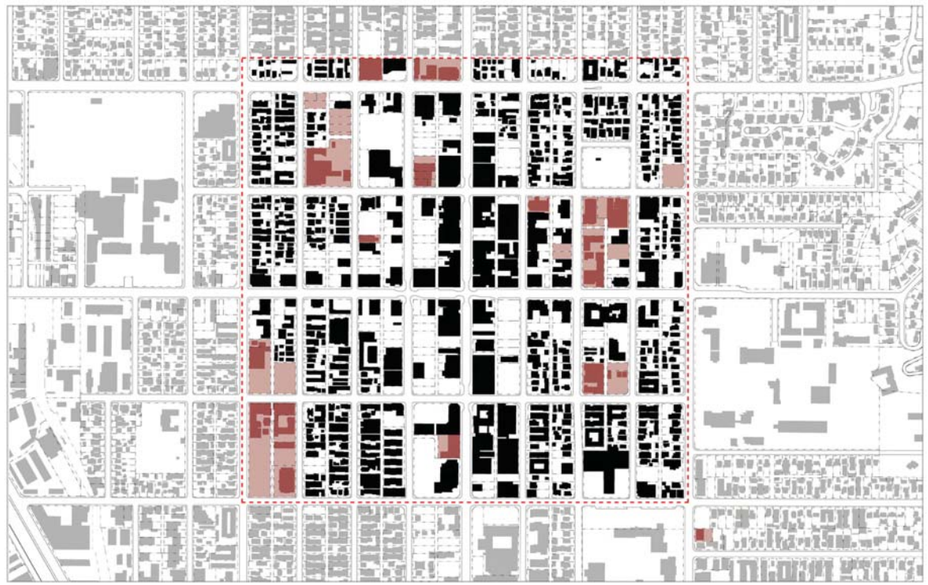
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June 2006



Uptown: Parking Network

Uptown Whittier Specific Plan
City Of Whittier, California

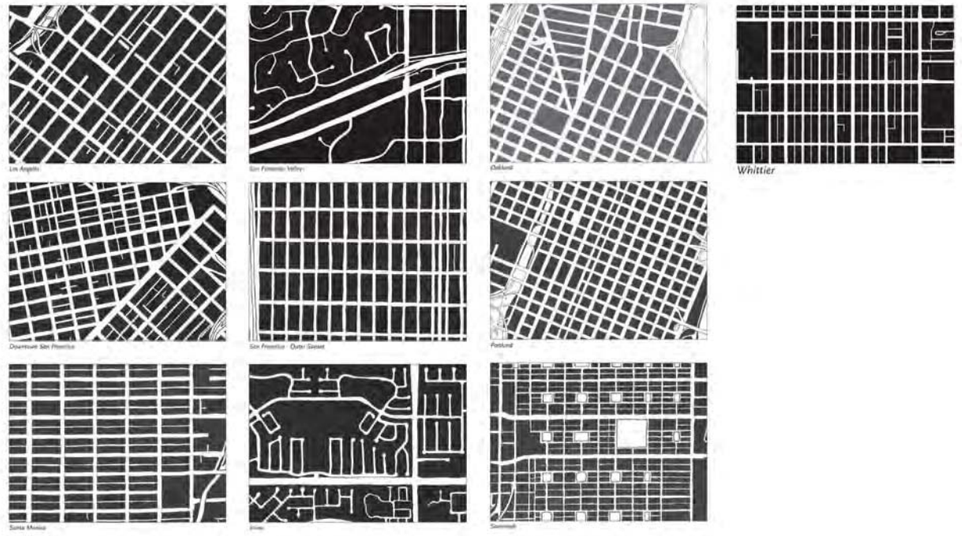
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Uptown Whittier: Churches

Uptown Whittier Specific Plan
City Of Whittier, California

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June 2006

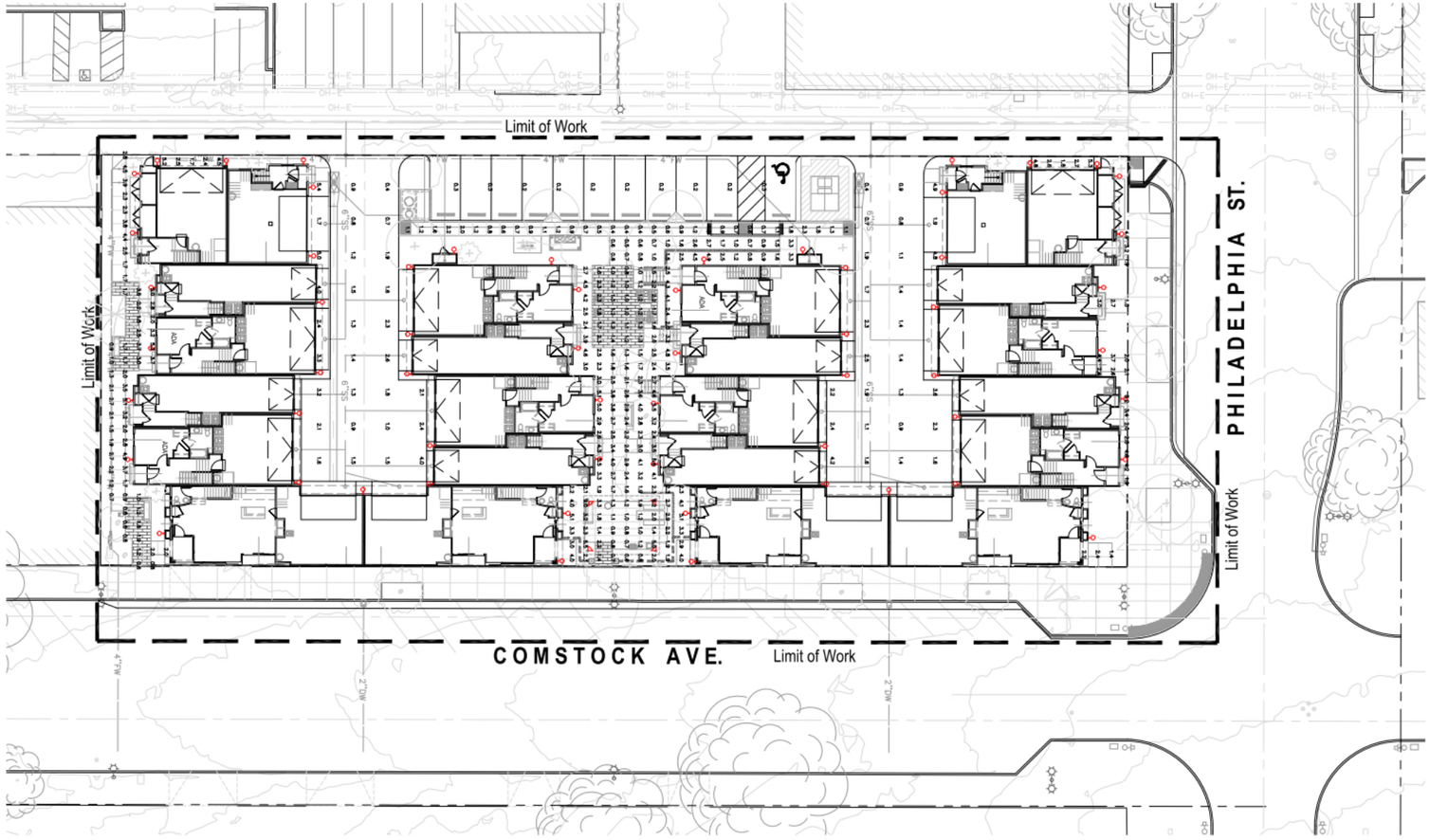


Town Comparisons

Uptown Whittier Specific Plan
City Of Whittier, California

Moule & Polyzoides
Architects and Urbanists
May 2006

APPENDIX 3

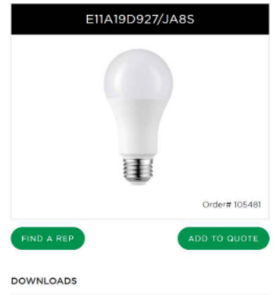


Internal Driveways & Parking Area	
AVERAGE FOOT-CANDLES	1.95
MAXIMUM FOOT-CANDLES	5.4
MINIMUM FOOT-CANDLES	0.2
MINIMUM TO MAXIMUM FC RATIO	0.04
MAXIMUM TO MINIMUM FC RATIO	28.07
AVERAGE TO MINIMUM FC RATIO	10.18

Open Space Areas & Walks	
AVERAGE FOOT-CANDLES	2.30
MAXIMUM FOOT-CANDLES	9.2
MINIMUM FOOT-CANDLES	0.4
MINIMUM TO MAXIMUM FC RATIO	0.04
MAXIMUM TO MINIMUM FC RATIO	22.53
AVERAGE TO MINIMUM FC RATIO	5.64







NOTES:
1. Site lighting & landscape up-lights, down-lights, path lights/bollards, etc.) to be shielded to not allow more than .01 foot-candle beyond property line when adjacent residential dwellings.
2. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	NOTE 3	QUANTITY
Down-SS (1)		(1) COOL WHITE LED	2-3/8"DIA. X 9"H. UPLIGHT LUMINAIRE3 COOL WHITE LED, CUSTOM CHROME PLATED PARABOLIC REFLECTOR AND TEXTURED LENSFLAT TEMPERED GLASS LENS	ELECTRONIC	WALL/CEILING	FX LUMINAIRE, JB-3LED-BZ	120V 1P 2W	12V, Low Voltage		IGHT LABORATORY INC 2/16/2011 0,0 INDICATING THE CANDELA VALUES ARE ABSOLUTE ANDSHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS. 12VAC, 4.058W IESNA:LM-79-08	4
Wall-Sconce (2)		(1) 1W A19 AC 120V/60Hz 15W 2700K	Trans Globe Lighting, Wall Lattern. Item# 514-01-BK (Black). MaxLite Bulb.	ELECTRONIC	WALL	Maxlite Inc., E11A19D927/JA8S	120V 1P 2W	LUMENS 1150. 3000K. 1-18 LAMP/WATTS. Aluminum, 9.00 x 8.00 x 14.00". Glass : Frosted Seeded Glass Panels.	Keep 6'-6" min. clearance when fixture is above hardscape.	EST TEST SERVICE SHENZHEN CO.,LTD 2020-08-18 2020-09-10 11:42:11 0,0 EVERFINE G0-R5000_V2 SYSTEM	60

0 10' 20' 40'
Scale: 1" = 20'

Schematic Photometrics Lighting Plan

MJW Investments, LLC

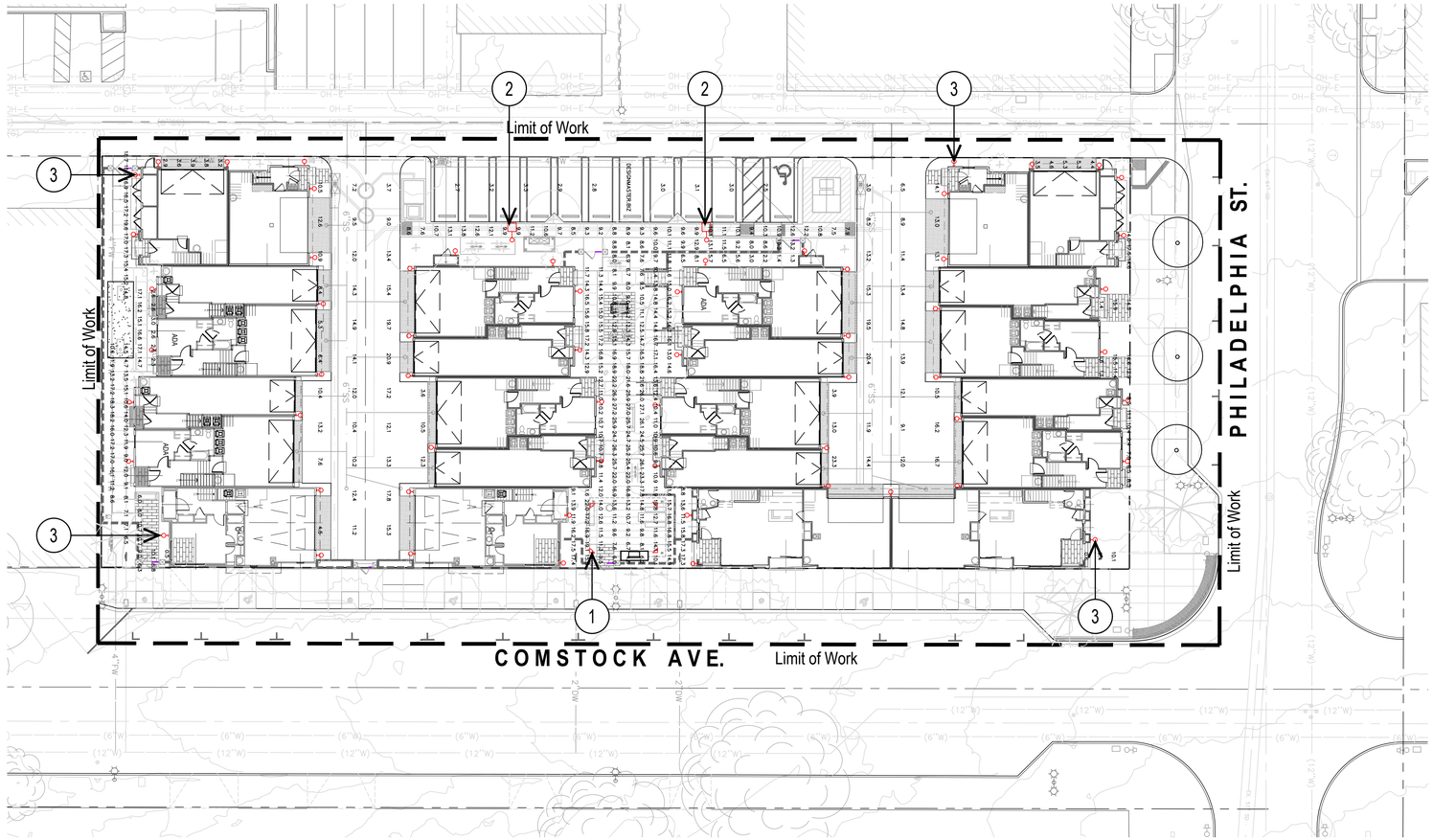
2nd City Submittal | Project No.: MJW10-D
Date: Apr. 30, 2024

L-7

MW INVESTMENT GROUP

The Comstock - Whittier, CA

studio PAD Landscape Architecture



Internal Driveways & Parking Area	
AVERAGE FOOT–CANDLES	9.97
MAXIMUM FOOT–CANDLES	23.3
MINIMUM FOOT–CANDLES	2.5
FOR EVALUATION USE ONLY	0.11
MAXIMUM TO MINIMUM FC RATIO	9.44
AVERAGE TO MINIMUM FC RATIO	4.04

Open Space Areas & Walks	
AVERAGE FOOT–CANDLES	12.82
MAXIMUM FOOT–CANDLES	27.2
MINIMUM FOOT–CANDLES	0.5
MINIMUM TO MAXIMUM FC RATIO	0.02
MAXIMUM TO MINIMUM FC RATIO	50.51
AVERAGE TO MINIMUM FC RATIO	23.78

NOTES:
1. Site lighting & landscape up-lights, down-lights, path lights/bollards, etc.) to be shielded to not allow more than .01 foot-candle beyond property line when adjacent residential dwellings.
2. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
3. See sheet L-7B for Lighting spec sheets.
4. Final electrical plans to be prepared by Electrical Engineer in future Construction Documents phase.

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	QUANTITY
Down–SS (1)		(1) COOL WHITE LED	2–3/8"DIA. X 9"H. UPLIGHT LUMINAIRE3 COOL WHITE LED, CUSTOM CHROME PLATED PARABOLIC REFLECTOR AND TEXTURED LENSFLAT TEMPERED GLASS LENS	ELECTRONIC	WALL/CEILING	FX LUMINAIRE, JB–3LED–BZ	120V 1P 2W	12V, Low Voltage		4
Pole (2)		(36) 36 WHITE LIGHT EMITTING DIODES (LEDS), BASE UP.	FABRICATED METAL HOUSING, 1 LED MODULE CONSISTING OF:	ELECTRONIC	POLE	U.S. ARCHITECTURAL LIGHTING, DSAP20–PLED–III–W–36LED –350mA–WW–HS.	120V 1P 2W	Arm: 'XPK' Mounting Style. Pole Ht.: 12ft, RNTS 124 – 11.	Provide House–shields to minimize light from trespassing off property.	2
Wall–Sconce (3)		(1) 1W A19 AC 120V/60Hz 15W 2700K	Trans Globe Lighting, Wall Lattern. Item# 514–01–BK (Black). MaxLite Bulb.	ELECTRONIC	WALL	Maxlite Inc., E11A19D927/JA8S	120V 1P 2W	LUMENS 1150. 3000K. 1–18 LAMP/WATTS. Aluminum, 9.00 x 8.00 x 14.00". Glass : Frosted Seeded Glass Panels.	Keep 6'–6" min. clearance when fixture is above hardscape.	61

Schematic Photometrics Lighting Plan

0 10' 20' 40'
Scale: 1" = 20'

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

MW INVESTMENT GROUP

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

L-7A

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	QUANTITY
Down-SS (1)		(1) COOL WHITE LED	2-3/8"DIA. X 9"H. UPLIGHT LUMINAIRE3 COOL WHITE LED, CUSTOM CHROME PLATED PARABOLIC REFLECTOR AND TEXTURED LENSFLAT TEMPERED GLASS LENS	ELECTRONIC	WALL/CEILING	FX LUMINAIRE, JB-3LED-BZ	120V 1P 2W	12V, Low Voltage		4
Pole (2)		(36) 36 WHITE LIGHT EMITTING DIODES (LEDS), BASE UP.	FABRICATED METAL HOUSING, 1 LED MODULE CONSISTING OF:	ELECTRONIC	POLE	U.S. ARCHITECTURAL LIGHTING, DSAP20-PLED-III-W-36LED -350mA-WW-HS.	120V 1P 2W	Arm: 'XPK' Mounting Style. Pole Ht.: 12ft, RNTS 124 - 11.	Provide House-shields to minimize light from trespassing off property.	2
Wall-Sconce (3)		(1) 1W A19 AC 120V/60Hz 15W 2700K	Trans Globe Lighting, Wall Lattern. Item# 514-01-BK (Black). MaxLite Bulb.	ELECTRONIC	WALL	Maxlite Inc., E11A19D927/JA8S	120V 1P 2W	LUMENS 1150. 3000K. 1-18 LAMP/WATTS. Aluminum, 9.00 x 8.00 x 14.00". Glass : Frosted Seeded Glass Panels.	Keep 6'-6" min. clearance when fixture is above hardscape.	61

NOTES:

1. See sheet L-7A for Photometric Lighting Plan

FXLuminaire

JB LED Down Light DESIGNER PLUS



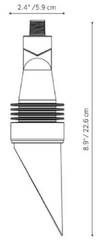
PROJECT

CATALOG #

TYPE

NOTES

The JB is FX Luminaire's original LED Down Light. The JB solves the problem of changing lamps in complicated areas by providing long-life LEDs. The pure color of the LED allows you to add the supplied blue lens to create a natural moonlight effect.



Quick Facts

- Die-cast aluminum
- Two-layer marine-grade anodization and powder coat finish
- Lumileds® Integrated LEDs
- ProAim™ adjustability
- Beam angle lenses
- Compatible with Luxor® technology
- Phase and PWM dimmable
- Input voltage: 10-15V

LANDSCAPE AND ARCHITECTURAL LIGHTING

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1 of 8

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1

SOLID STATE AREA LIGHTING

DSAP SERIES-PLED

PROJECT NAME:

FIXTURE TYPE:

FEATURES

Luminaire
Upper housing is heavy gauge cast aluminum (min. .125" wall; alloy >0.2% Cu for DSAP25) or spun aluminum with reveal (.125" min. wall for DSAP20). Lower housing is 0.080" thick spun aluminum with integrated LED module seat. Lower housing is vented at top and bottom for convective cooling of LED module. Top Driver chamber is barriered from LED Module chamber. Trulevel ball coupling mount is welded to housing and facilitates quick leveling and installation.

PLED™ Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED Emitters
High output LED's are utilized with drive currents ranging from 350mA to 875mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED Driver
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50.60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field installation.)

Amber LED's
PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

Finish
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.



DSAP25

Patent pending



DSAP20

(Formerly DSAP1)

Patent pending

U.S. Pole Co Inc. | 600 West Avenue O, Palmdale, CA 93551 Phone (661) 233-3000 Fax (661) 233-3001 www.USPOLE.com

2021090

U.S. ARCHITECTURAL LIGHTING

2

Trans Globe Lighting

51401 BK



Wall Lantern

Width (in): 8

Height (in): 14.875

Depth (in): 9.125

Glass Type: Frosted

Bulb Type: Medium Base (E26)

Number of Bulbs: 1

Wattage: 60

Finish Shown: Black (BK)

Available Finishes: Black (BK)

UL Listed: Wet

Country of Origin: China

Material: Metal, Glass, Electrical

E11A19D927/JA8S



Order# 105481

FIND A REP

ADD TO QUOTE

DOWNLOADS

PERFORMANCE

Watts (W)	11
Voltage (V)	120
Delivered Lumens (lm)	1100
Efficacy (lm/W)	100
Color Rendering Index (CRI)	≥90
Color Temperature (K)	2700
Beam Angle	220
Power Factor	0.90
Min. Ambient Temp (°F)	-4
Max. Ambient Temp (°F)	104

LISTINGS

Energy Star®	Y
Title 20	Y

Job Name:	Job Type:	Contact:
Fixture Location:	Quantity:	Additional Notes:

Shipping Box	Width	Height	Depth	Ship Wt	Method	Oversize	Case QTY
Ship QTY: 1 ea					Ground	No	
UPC: by finish		**Finish:**		**Warranty:** 1 year limited parts, repair, and replacement			

28104 Witherspoon Pkwy | Valencia, CA 91355
TEL (818) 768-5511 | FAX (818) 768-2326
www.tglighting.com

3

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

MW INVESTMENT GROUP

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

studio PAD

Project No.: MJW10-D
Date: Sept. 20, 2024

0 10' 20' 40'
Scale: 1" = 20'

Schematic Lighting Specification & Cut Sheets

L-7B

APPENDIX 4

Jim Borer, Certified Arborist #496
Specimen tree preservation, and analysis

January 3, 2022

Mr. Matt Waken
MJW Investments, LLC.

Telefax: This page plus 18

Re: Existing Tree Inspection Report
18282 Philadelphia Street
Whittier, Ca.

Dear Matt,

I am writing as a follow-up to my November 16 and December 23, 2021, field inspections of the existing mature specimen trees within and on the street frontages of the above referenced redevelopment project location in Whittier, California.

Assignment

Travel to the subject site, review the existing conditions of the 5 Ficus trees and the 12 carrotwood trees that are growing within the site and on the street frontages of Philadelphia Street and Comstock Avenue. Consider the trees existing conditions and their dispositions for long-term conservation in the context of the site's re-development. Prepare and submit this follow-up report, including the accompanying 'Excel' Spreadsheet inventory of the subject trees.

Observations

***Ficus n. 'macrocarpa'* Indian laurel fig**

The five mature Ficus trees are growing as street trees behind the curb frontages. Two of the Ficus are growing within the Philadelphia Street frontage and three are growing within the Comstock Avenue frontage. I have attached photographs of the trees' conditions at the time of the field inspection on December 23, 2021.

The five Ficus trees are mature specimens. The two Philadelphia Street trees have recently been pruned and therein possess upright form and character. The three Comstock Avenue frontage Ficus trees have not been pruned recently and possess broader form and character as a result.

PO Box 1803, Rancho Cucamonga, Ca. 91729-1803

Phone 909/ 997-7020 Fax 909/ 948-8882

E-mail jimborerarborist@charter.net

The five individual Ficus trees supported extensive surface roots. Therein they have uplifted and damaged their adjacent curbs, sidewalks, and street surfaces. The extent of the surface root uplifting damage can be seen in the obvious cracking, shaving, and asphalt patching that connects uplifted sections to others that have not been uplifted or uplifted as much. The uplifting damage has been ongoing for decades. These conditions expose the Ficus' surface root systems to be very shallow and in contact with many of these uplifted/ damaged features referenced above.

Opinions and Recommendations

The Ficus trees are mature specimens that exhibit good vigor and possess reasonably good viability given the existing site conditions, usage, their surface rooting conditions, and the related uplifting damage that they have inflicted upon the adjacent improvements including fractured, cracked, and damaged curbs and paved surfaces.

It is my opinion that these trees would be subject to significant disaffection as the result of substantial efforts to repair the uplifting damage that they have subjected the adjacent paved surfaces and curbs in any attempt to repair and replace the same. It is my opinion that they would be subject to severe impacts to their surface root structures in any such effort. There would be additional encroachment from demolition, removal of the adjacent structures, sidewalks, curbs, and paved surfaces that would be required to comprehensively redevelop the site into a multi-unit residential housing project.

It is further my opinion that these trees would experience significant decline to both their systemic vigor (growth systems) and structural integrity (ability to support themselves) in any such demolition and reconstruction efforts. Therein they would be subject to severe decline and catastrophic failure and collapse if they were subject to conservation in place during such operations.

It is my opinion furthermore that these Ficus are not good candidates for relocation given the required size of the root balls, 16' or larger, that would be required to support ongoing vigorous performance as transplanted specimens. The root ball sizes would require the commitment of substantial areas, equal to the root ball dimensions plus a few extra feet on each side, that would be required to replant them with reasonable exposed root ball soil surface areas. The areas that would be required to guy wire the canopy structures would extend distances that would be equivalent to half of the canopy heights or further outward from the trunks. It is my experience that such lateral clearances that would be required to support guy-wire tie downs are not possible is street tree / urban settings.

It is my opinion that these street trees should be removed and replaced, in the context of the site's redevelopment, with a species that is less invasively surface rooted, smaller in mature stature, and upright in growth form, and therefore more

well-suited to the setting of multi-family building(s), more vertical spaces, and realistic street frontages planter sizes. Therein I recommend a species such as either Indian tribe crape myrtles, (*Lagerstroemia x. faurei* varieties) or Brisbane box, *Tristania conferta*.

If required to plant Ficus trees in support of the removal of the subject Ficus trees it would be my recommendation that they be planted off-site in another civic setting to the satisfaction of the city of Whittier.

***Cupaniopsis anacardioides.* Carrotwood trees**
The twelve Cupania trees in and around the parking lot setting of the site are maturing specimens that, while exhibiting various canopy conditions, are mature specimens that have been exposed to poor care for an extended period in the past. Their systemic conditions expose varying levels of vigor based upon their canopy densities at this time.

The Cupania trees' structural conditions are poor. This is based upon the fact that they have been non-selectively pruned (topped), possess structural defects including locations where many major branches arise from singular locations, and where parallel branches are growing into each other, referred to as inclusion, without their being cojoined at their growing tissues.

Opinions and Recommendations
It is my opinion that the Cupania trees are mature specimens that exhibit varying degrees of poor vigor and poor structural integrity. Therein they are poor candidates for conservation within the re-development process in any manner. They could be reasonable candidates for replacement within the new landscape provided that the planting locations can support canopies that could be expected to grow to be 20 feet tall and a minimum of 20 feet wide. Otherwise it is my opinion that they should be replaced with smaller stature trees that would be considered a better fit into smaller planting areas.

I have attached photographs to document the conditions at the time of the field inspections. Please contact me if you have any questions, require additional inspection, or if you wish to discuss any of the issues related in this report with me further.

Respectfully submitted,

Jim Borer Certified
Arborist #496

Enclosure: Photographs of conditions at time of inspection

Jim Borer, Certified Arborist #496

Specimen tree preservation, and analysis





Tree number 1, Ficus n. macrophylla

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E-mail jimborerarborist@charter.net



The canopies of tree numbers 1 and 2 have been pruned substantially but are still massive and broad in form and character.

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Jim Borer, Certified Arborist #496

Specimen tree preservation, and analysis



Surface roots extend outward for long distances in both open planters and beneath paved surfaces.

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Jim Borer, Certified Arborist #496

Specimen tree preservation, and analysis



Tree number 2

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Specimen tree preservation, and analysis



Tree number 2's canopy has been pruned yet hangs over the sidewalk and the building.



The black color ribbons are asphalt where the pavement has been uplifted by roots.

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E-mail jimborerarborist@charter.net

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Specimen tree preservation, and analysis



This picture depicts a root that is a good distance away from the tree's trunk on the soil surface.



Tree number 3

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E-mail jimborerarborist@charter.net



Tree number 3 with asphalt patches where it has grossly uplifted the adjacent sidewalk.



Tree number 3 at the eastern end of the planter frontage where it has been uplifted and patched.

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Tree number three where the curb along street frontage has been damaged by surface roots.



Tree number four along the Comstock frontage.

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Specimen tree preservation, and analysis



Fractrured street surface adjacent to tree number four.



Tree number four where its surface rots have damaged adjacent sidewalk.

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Specimen tree preservation, and analysis



Tree number four where it has grossly uplifted sidewalk frontage.



Tree number 5

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E-mail jimborerarborist@charter.net

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Specimen tree preservation, and analysis



Tree number five where it has grossly uplifted the curb, sidewalk, and fractured adjacent street surface.



Tree number five uplifted adjacent street surface.

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Specimen tree preservation, and analysis



Tree number five overview of uplifting damage.



Tree number 16 is typically well foliage but inside of the dense canopy are profusions of twiggy branches where the woody branches were severely pruned irrespective of the presence of significant secondary branches that could have been reasonable places to perform the reductions..

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Decline of the systemic vigor is apparent in the uppermost canopy. The topping can be seen where the large woody branches end and develop into profusions of small diameter twiggy branches abruptly.

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Specimen tree preservation, and analysis



This tree's canopy if full but the trunk structure is in decline due to having been topped.



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Specimen tree preservation, and analysis

Tree number 17 exhibits severe systemic distress.



Many woody branches developing from a single point on the trunk are prone to failures.



This photograph a typical condition of branch inclusion which is a defect that develops do to poor branch development patterns in early stages of life as an urban tree.

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The affects of inclusion are that the secondary growth of woody branches eventually frces branch shear failures.

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Project location: Southeast corner of Phi;adelphia and Comstock
Whittier, Ca.

Tree #	Latin name	Common name	DBH	Est. Ht. @Wdth	Comments	Dispotitions
1	***Ficus nitida***	Indian Laurel fig	29"	50' x 40'	Recently thinned Upright character	***Removal*** **(subject to decline)**
2	***Ficus nitida***	Indian laurel fig	28"	50' x 30'	Heavily thinned Rubber matting over exposed roots crown	***Removal*** **(subject to decline)**
3	***Ficus nitida***	Indian laurel fig	29"	55' x 45'	Generous canopy some defects in root crown area	***Removal*** **(subject to decline)**
4	***Ficus nitida***	Indian laurel fig	29"	50' x 45'	Generous canopy some root structure defects	***Removal*** **(subject to decline)**
5	***Ficus nitida***	Indian laurel fig	33"	50' x 50'	Largest canopy Most surface rooted w/ the most damaged concrete	***Removal*** **(subject to decline)**
6	Cupaniopsis anac.	carrotwood	11"	18' x 20'	Has been topped very thin canopy Secerely distressed	***Removal*** **(systemic decline)**
7	Cupaniopsis anac.	carrotwood	11"	12' x 12'	Has been topped Very thin canopy Die back present	***Removal*** **(systemic decline)**
8	***Cupaniaopsis anac.***	carrotwood	7"	12'x 13'	Has been topped very thin canopy	***Removal*** **(systemic decline)**
9	***Cupaniopsis anac.***	carrotwood	15"	20' x 20'	Has been topped inclusion within branch structure	***Removal*** **(systemic decline)**
10	***Cupaniopsis anac.***	carrotwood	16"	20' x 22'	Has been topped systemic decline	**Removal** **(systemic decline)**
11	***Cupaniopsis anac.***	**carrotwood**	14"	18' x 22'	has been topped defects in branch structure	**Removal** **(severe decline)**
12	***Cupaniopsis anac.***	**carrotwood**	13"	18' x 22'	Has been topped very thin live canopy obvious distress	**Removal** **(severe decline)**
13	***Cupaniopsis anac.***	carrotwood	11"	22' x 16'	Has been topped very thin canopy obvious distress	***Removal*** **(severe decline)**
14	***Cupaniopsis anac.***	**carrotwood**	18"	24' x 20'	Has been topped poor structure with defects	***Removal*** **(severe decline)**
15	***Cupianiopsis anac.***	**carrotwood**	15"	18' x 18'	Has been topped defects in branch structure	***Removal*** **(severe decline)**
16	***Cupaniopsis anac.***	**carrotwood**	14"	20' x 22'	Has been topped defects in branch structure	***Removal*** **(severe decline)**
17	***Cupaniopsis anac.***	**carrotwood**	8"	14' x 14'	Has been topped dieback of upper canopy	***Removal*** ***(severe defects)***

end

APPENDIX 5

Philadelphia & Comstock Townhouse

AIR QUALITY IMPACT ANALYSIS

CITY OF WHITTIER

PREPARED BY:

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SEPTEMBER 27, 2024

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LIST OF ABBREVIATED TERMS

%	Percent
°F	degrees Fahrenheit
µg/m^3	Microgram per Cubic Meter
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
AB 2595	California Clean Air Act
AQIA	air quality impact analysis
AQP	Air Quality Plans
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measure
C_2H_3Cl	vinyl chloride
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California EPA
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO	carbon monoxide
COHb	carboxyhemoglobin
EIR	Environmental Impact Report
EMFAC	EMissions FACtor model
EPA	Environmental Protection Agency
g/L	gram/liter
GHG	greenhouse gas
H_2S	hydrogen sulfide
LST	Localized Significance Thresholds
LST Methodology	Final Localized Significance Threshold Methodology
MM	Mitigation Measures
Mph	miles per hour
MWELO	Model Water Efficient Landscape Ordinance
NAAQS	National Ambient Air Quality Standards
NO	nitric oxide
NO_2	nitrogen dioxide

NO_X	nitrogen oxides
O_2	oxygen
O_2 deficiency	chronic hypoxemia
O_3	ozone
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate matter 10 microns or less
$PM_{2.5}$	Particulate matter 2.5 microns or less
ppm	parts per million
Project	Whittier Residential
RECLAIM	Regional Clean Air Incentives Market
ROG	reactive organic gases
RTP	Regional Transportation Plan
Rule 1113	SCAQMD Rule 1113 - Architectural Coatings
Rule 403	SCAQMD Rule 403 - Fugitive Dust
Rule 445	SCAQMD Rule 445 – Wood-Burning Devices
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_4	sulfates
SO_X	sulfur oxides
SRA	Source Receptor Area
TAC	toxic air contaminant
Title I	Non-Attainment Provisions
Title II	Mobile Source Provisions
VOC	Volatile Organic Compounds
vph	vehicles per hour

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Philadelphia & Comstock Townhouse Air Quality Impact Analysis* are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	*Less Than Significant*	*n/a*
Localized Construction Emissions	3.7	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Less Than Significant*	*n/a*
Localized Operational Emissions	3.8	*Less Than Significant*	*n/a*
CO "Hot Spot" Analysis	3.9	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.10	*Less Than Significant*	*n/a*
Sensitive Receptors	3.12	*Less Than Significant*	*n/a*
Odors	3.13	*Less Than Significant*	*n/a*
Cumulative Impacts	3.14	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality.

Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or

other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the SCAQMD.

SCAQMD RULES

SCAQMD Rules that are currently applicable during construction activity for this Project are described below.

SCAQMD RULE 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

The contractor shall adhere to the following applicable measures of Rule 403 including, but not limited to:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- All access points to the Project site shall have track out devices installed.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 mph or less.

Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD.

SCAQMD RULE 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD RULE 1301

This rule is intended to provide pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD RULE 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.

The two most pertinent regulatory requirements that could be modeled are Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3). Credit for Rule 403 and Rule 1113 have been taken in the analysis.

1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the proposed Philadelphia & Comstock Townhouse (Project). The purpose of this AQIA is to evaluate the potential air quality impacts associated with construction and operation of the proposed Project and identify measures, as necessary, to reduce emissions in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The proposed Philadelphia & Comstock Townhouse ("Project") is at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier. The Project's location in relation to the surrounding area is shown on Exhibit 1-A.

The Project site is generally surrounded by commercial, medical, and residential land uses, with the nearest residential land use is approximately 33 feet south of the Project site and the Whittier Hospital Women's Health Center is located 80 feet north of the Project site.

1.2 PROJECT DESCRIPTION

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP). The preliminary site plan is shown on Exhibit 1-B.

The site is currently occupied by a vacant 7,172 square foot office building. No credit has been taken for the existing office building for the purposes of this assessment.

EXHIBIT 1-A: LOCATION MAP

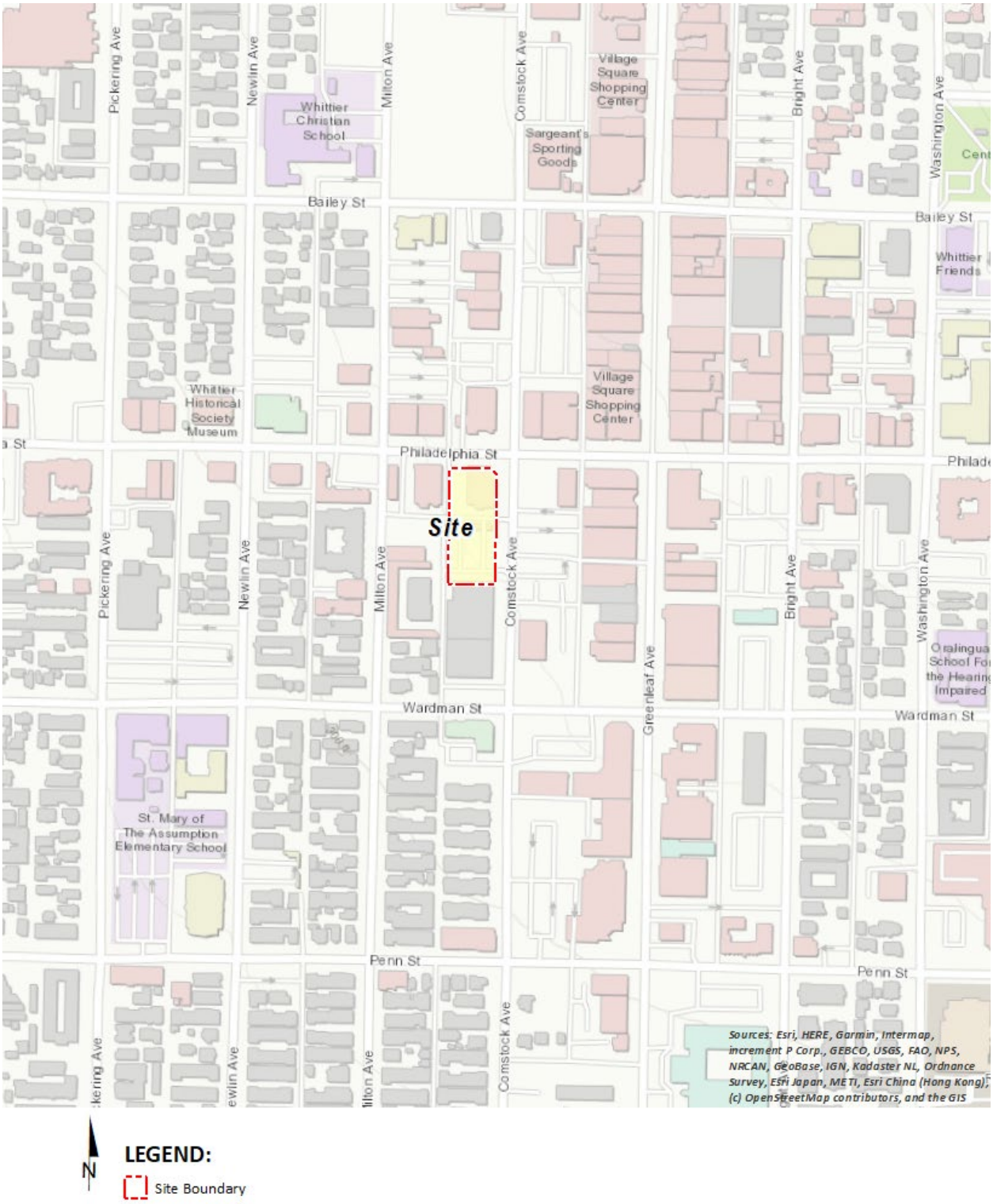
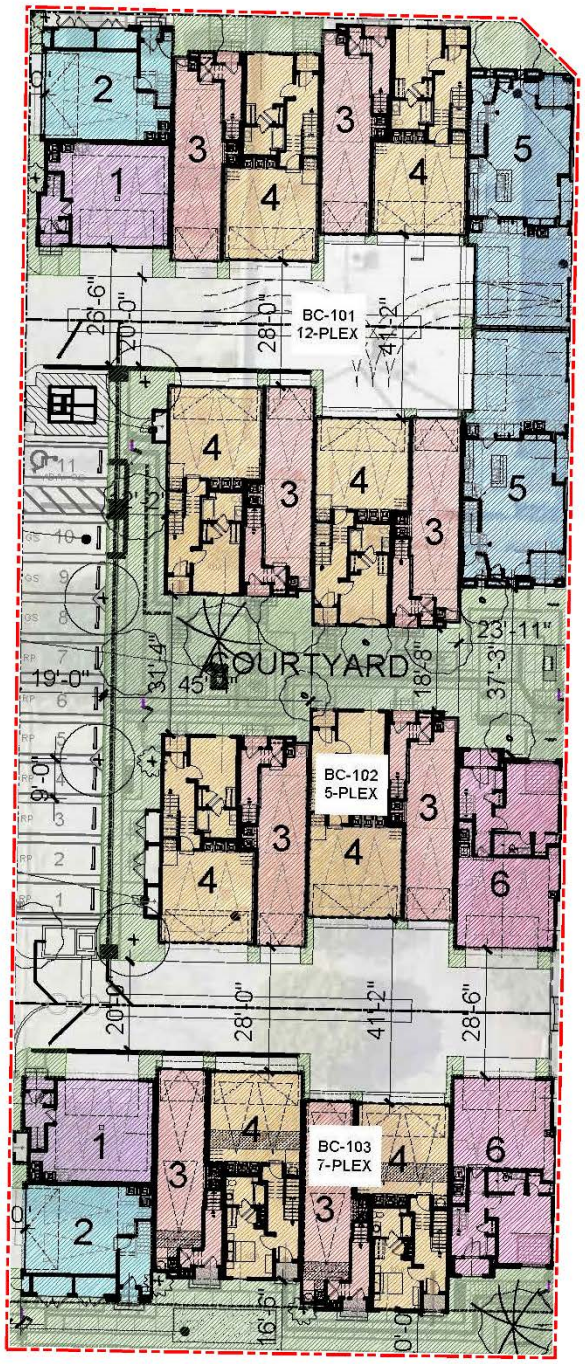


EXHIBIT 1-B: PRELIMINARY SITE PLAN



N

LEGEND:

Site Boundary

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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (4). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los

Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late fall to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of elevated levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and

low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (5):

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X).	Coal or oil burning power plants and industries, refineries, diesel engines	A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
NO_X	NO_X consist of nitric oxide (NO) and nitrogen dioxide (NO_2) and five other compounds, which are formed when nitrogen (N) combines with oxygen. Their lifespan in the atmosphere ranges from one to seven days for NO and NO_2. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitoring station.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the	Formed when reactive organic gases (ROG) and NO_X react in the presence of	Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
	presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live-in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
Particulate Matter (PM)	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. PM pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.	Sources of PM_{10} include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel. $PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	A consistent correlation between elevated ambient fine PM (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to PM. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms)	Organic chemicals are widely used as ingredients in household	Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
	that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (see below) interchangeably.	products. Paints, varnishes and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.	the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Lead (Pb)	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was	Metal smelters, resource recovery, leaded gasoline,	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
	emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of Pb emissions.	deterioration of Pb paint.	affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (6).	Odors can come from many sources including animals, human activities, industry, natures, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
			odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-2 (7).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on May 4, 2016, and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (8).

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

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TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (9). On January 25, 2024, CARB posted the adopted the 2023 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SCAB (10). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb[1]	Attainment	Unclassifiable/Attainment

"-" = The national 1-hour O_3 standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide information regarding air quality conditions to Southern California residents. The Project site is located within SRA 11. Within SRA 11, the SCAQMD South San Gabriel Valley monitoring station, located 2.74 miles northwest of the Project site, is the nearest long-term air quality monitoring station for CO, NO_2, O_3 and $PM_{2.5}$. The South San Gabriel Valley monitoring station does not include data for PM_{10}. As such, the next nearest monitoring station will be used. The Central Orange County monitoring station, located in SRA 17, is the next nearest monitoring station for PM_{10} and is located approximately 11.69 miles southeast of the Project site. It should be noted that the Central Orange County monitoring station was utilized in lieu of the South San Gabriel Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown on Table 2-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2020 through 2022 was obtained from the SCAQMD Air Quality Data Tables (11). Additionally,

[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2020-2022

Pollutant	Standard	Year		
		2020	2021	2022
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.169	0.104	0.123
Maximum Federal 8-Hour Concentration (ppm)		0.114	0.074	0.091
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	20	2	3
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	23	3	3
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	3.1	1.8	1.6
Maximum Federal 8-Hour Concentration	> 20 ppm	1.7	1.5	1.5
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.069	0.072	0.065
Annual Federal Standard Design Value		0.018	0.018	0.017
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	120	115	90
Annual Federal Arithmetic Mean (µg/m^3)		23.9	22.9	22.3
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	13	12	7
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	35.4	66.0	53.8
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	13.22	13.07	11.32
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	0	3	1

ppm = Parts Per Million
µg/m^3 = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (12). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The federal CAA was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The federal CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (13). The federal CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (14) (15). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-3 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

2.8.2 CALIFORNIA REGULATIONS

CALIFORNIA AIR RESOURCES BOARD

The CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (16) (12).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Plans (AQP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;

- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (17). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (18):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
    - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall

identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources 'Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency, which includes all of the following, shall be placed in the building:
    - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
    - Operations and maintenance instructions for the following:
        - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
        - Roof and yard drainage, including gutter and downspouts.
        - Space conditioning systems, including condensers and air filters.
        - Landscape irrigation systems.
        - Water reuse systems.
    - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
    - Public transportation and/or carpool options available in the area.
    - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
    - Information about water-conserving landscape and irrigation design and controllers which conserve water.
    - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
    - Information about state solar energy and incentive programs available.
    - A copy of all special inspection verifications required by the enforcing agency of this code.
    - Information from CALFIRE on maintenance of defensible space around residential structures.
- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

2.8.3 AIR QUALITY MANAGEMENT PLANNING

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (19). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.10.

3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP and Lead Agency planning regulations. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether the Project would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (20):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table 3-1 (21). The SCAQMD's *CEQA Air Quality Significance Thresholds* (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CALEEMOD

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

In May 2022, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released the latest version of CalEEMod version 2022.1.1.21. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (22). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1.

3.4 CONSTRUCTION EMISSIONS

3.4.1 CONSTRUCTION ACTIVITIES

Construction activities associated with the Project will result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Architectural Coating
- Paving

DEMOLITION ACTIVITIES

The site is currently developed with existing uses/structures which total approximately 7,172 square feet that will be demolished. Demolished material associated with demolition will be hauled off-site.

GRADING ACTIVITIES

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Per client-provided data, the Project would require 500 cubic yards of export for earthwork activities.

ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips are presented below in Table 3-2. Worker trips for all phases are based on client provided data. It should be noted that for vendor trips specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Hauling trips are based on CalEEMod defaults.

TABLE 3-2: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Demolition	80	0	8
Site Preparation	80	0	0
Grading	80	0	32
Building Construction	80	3	0
Paving	80	0	0
Architectural Coating	80	0	0

3.4.2 CONSTRUCTION DURATION

For purposes of analysis, construction of the Project is expected to commence in August 2024 and would last through January 2025. The construction schedule utilized in the analysis, shown in Table 3-3, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent[2]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (20). The duration of construction activities was based on Project specific data provided by the Project applicant, where available.

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Demolition	8/1/2024	8/14/2024	10
Site Preparation	8/15/2024	8/15/2024	1
Grading	8/16/2024	8/19/2024	2
Building Construction	8/20/2024	1/6/2025	100

[2] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Construction Activity	Start Date	End Date	Working Days
Paving	12/31/2024	1/6/2025	5
Architectural Coating	12/31/2024	1/6/2025	5

3.4.3 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-4 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

TABLE 3-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Demolition	Tractors/Loaders/Backhoes	2	8
	Rubber Tired Dozers	1	8
	Concrete/Industrial Saws	1	8
Site Preparation	Graders	1	8
	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Cranes	1	8
	Forklifts	2	8
	Tractors/Loaders/Backhoes	2	8
Paving	Tractors/Loaders/Backhoes	1	8
	Cement and Mortar Mixers	4	8
	Pavers	1	8
	Rollers	1	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

3.4.4 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-5: OVERALL CONSTRUCTION EMISSIONS SUMMARY – WITHOUT MITIGATION

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	2.18	19.78	21.68	0.04	4.51	2.14
Winter						
2024	52.10	16.07	32.22	0.03	3.81	1.34
2025	51.97	15.00	31.00	0.03	3.74	1.27
Maximum Daily Emissions	**52.10**	**19.78**	**32.22**	**0.04**	**4.51**	**2.14**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1.

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

3.5.1 AREA SOURCE EMISSIONS

ARCHITECTURAL COATINGS

Over a period of time, the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

CONSUMER PRODUCTS

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the

landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.5.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Electricity and natural gas usage associated with the Project were calculated by CalEEMod using default parameters.

3.5.3 MOBILE SOURCE EMISSIONS

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the *Philadelphia & Comstock Townhouse Trip Generation Assessment* were utilized in this analysis (23).

3.5.5 OPERATIONAL EMISSIONS SUMMARY

Operational activities for summer and winter scenarios are presented in Table 3-6. The estimated operational-source emissions are summarized on Table 3-6. Detailed operation model outputs for the Project are presented in Appendix 3.1. Project operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	0.71	0.53	6.02	0.01	1.24	0.32
Area Source	1.05	0.41	1.53	0.00	0.03	0.03
Energy Source	0.01	0.15	0.06	0.00	0.01	0.01
Project Maximum Daily Emissions	**1.77**	**1.09**	**7.61**	**0.02**	**1.29**	**0.37**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Winter						
Mobile Source	0.70	0.58	5.55	0.01	1.24	0.32
Area Source	0.93	0.40	0.17	0.00	0.03	0.03
Energy Source	0.01	0.15	0.06	0.00	0.01	0.01
Project Maximum Daily Emissions	**1.64**	**1.13**	**5.79**	**0.02**	**1.29**	**0.37**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod operational-source emissions are presented in Appendix 3.1.

3.6 LOCALIZED SIGNIFICANCE

BACKGROUND ON LST DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[3]. LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (24).

APPLICABILITY OF LSTS FOR THE PROJECT

For this Project, the appropriate SRA for the LST analysis is the SCAQMD South San Gabriel Valley (SRA 11). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

[3] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken:

- Identify the maximum daily on-site emissions that will occur during construction activity:
    - The maximum daily on-site emissions could be based on information provided by the Project Applicant; or
    - The SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* can be used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod (25) (26).
- If the total acreage disturbed is less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in lbs/day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than 5 acres per day, then LST impacts may still be conservatively evaluated using the LST look-up tables for a 5-acre disturbance area. Use of the 5-acre disturbance area thresholds can be used to show that even if the daily emissions from all construction activity were emitted within a 5-acre area, and therefore concentrated over a smaller area which would result in greater site adjacent concentrations, the impacts would still be less than significant if the applicable 5-acre thresholds are utilized.
- The *LST Methodology* presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

EMISSIONS CONSIDERED

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs" (27). As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

MAXIMUM DAILY DISTURBED-ACREAGE

For analytical purposes, the "acres disturbed" are based on specific equipment type for each subcategory of construction activity and the estimated maximum area a given piece of equipment can pass over in an 8-hour workday (as shown on Table 3-7). The equipment-specific grading rates are summarized in the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix C: Emission Calculation Details for CalEEMod* (25) (28). The disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acre in a given 8-hour day. Based on Table 3-7, the Project's construction activities could actively disturb approximately 0.5 acre per day during demolition, 1.0 acre per day during site preparation, and 1.5 acres per day during grading activities.

TABLE 3-7: MAXIMUM DAILY DISTURBED-ACREAGE

Construction Activity	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Demolition	Rubber Tired Dozers	1	0.5	8	0.5
Total acres disturbed per day during Demolition					0.5
Site Preparation	Crawler Tractors	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
Total acres disturbed per day during Site Preparation					1.0
Grading	Crawler Tractors	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
Total acres disturbed per day during Grading					1.5

Source: Maximum daily disturbed acreage based on equipment list presented in Appendix 3.1.

RECEPTORS

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically onsite for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours"* (27). Therefore, any adjacent land use where an individual could remain for 1 or 8-hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8-hours.

PROJECT-RELATED RECEPTORS

Receptors in the Project study area are described below and shown on Exhibit 3-A. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

R1: Location R1 represents the existing residence at 6737 Milton Avenue, approximately 352 feet northwest of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R1 is placed at the building façade.

R2: Location R2 represents the Grace Brethren Church Whittier at 6704 Milton Avenue, approximately 563 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R2 is placed at the building façade.

R3: Location R3 represents the Victory Outreach Church at 7021 Greenleaf Ave #1305, approximately 225 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R3 is placed at the building façade.

R4: Location R4 represents the existing residence at 7052 Milton Avenue, approximately 174 feet southwest of the Project site and is placed at the outdoor living areas (backyards).

R5: Location R5 represents the existing residence at 7014 Milton Avenue, approximately 33 feet west of the Project site and is placed at the outdoor living areas (backyards).

R6: Location R6 represents the Extra Space Storage at 7037 Comstock Avenue, adjacent south of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R6 is placed at the building façade.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptors used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is the existing residence at 7014 Milton Avenue, represented by R5, approximately 33 feet (10 meters) west of the Project site.

As previously stated, and consistent with *LST Methodology*, the nearest commercial/industrial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. The nearest receptor used for evaluation of localized impacts of NO_X and CO is the Extra Space Storage at 7037 Comstock Avenue, represented by location R6, adjacent south of the Project site.

It should be noted that the *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters"* (29). As such, a 25-meter distance will be used for evaluation of localized emissions of PM_{10}, $PM_{2.5}$, NO_X, and CO.

EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS



3.7 CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

3.7.1 LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

Since the total acreage disturbed is less than five acres per day for demolition, site preparation and grading activities, the SCAQMD's screening look-up tables were utilized to determine impacts for phases. It should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 3-8 were calculated by interpolating the threshold values for the Project's disturbed acreage.

TABLE 3-8: MAXIMUM DAILY LOCALIZED CONSTRUCTION EMISSIONS THRESHOLDS

Construction Activity	Construction Localized Thresholds			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	64 lbs/day	494 lbs/day	4 lbs/day	1 lbs/day
Site Preparation	83 lbs/day	673 lbs/day	5 lbs/day	1 lbs/day
Grading	102 lbs/day	852 lbs/day	6 lbs/day	2 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology, July 2008

3.7.2 CONSTRUCTION-SOURCE LOCALIZED EMISSIONS

IMPACTS WITHOUT MITIGATION

Table 3-9 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. For analytical purposes, emissions associated with peak demolition, site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of any criteria pollutant. Outputs from the model runs for unmitigated construction LSTs are provided in Appendix 3.1.

TABLE 3-9: LOCALIZED CONSTRUCTION-SOURCE EMISSIONS – WITHOUT MITIGATION

Construction Activity	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	**Maximum Daily Emissions**	**14.38**	**14.11**	**1.32**	**0.67**
	SCAQMD Localized Threshold	64	494	4	1
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Site Preparation	**Maximum Daily Emissions**	**6.24**	**6.16**	**0.68**	**0.40**
	SCAQMD Localized Threshold	83	673	5	1
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Construction Activity	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Grading	**Maximum Daily Emissions**	**16.62**	**14.58**	**2.85**	**1.70**
	SCAQMD Localized Threshold	102	852	6	2
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod unmitigated localized construction-source emissions are presented in Appendix 3.1.

3.8 OPERATIONAL-SOURCE EMISSIONS LST ANALYSIS

The proposed project is located on approximately 0.826 acres. As previously stated, the total development is proposed to consist of 24 residential (townhome) dwelling units. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

3.9 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of Project-specific CO "hot spots" is not needed to reach this conclusion. An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown on Table 3-10.

TABLE 3-10: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/Highland Avenue	4	4.5	3.5
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.2

Long Beach Boulevard/Imperial Highway	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations
Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (*1992 CO Plan*), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (30). In contrast, an adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 1.6 ppm and 1.5 ppm, respectively (data from the South San Gabriel Valley monitoring station for 2022). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph)—or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (31). Traffic volumes generating the CO concentrations for the "hot spot" analysis is shown on Table 3-11. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vph and AM/PM traffic volumes of 8,062 vph and 7,719 vph, respectively (30). The *2003 AQMP* estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm)[4].

TABLE 3-11: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374

[4] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm)

La Cienega Boulevard/Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: 2003 AQMP

3.10 AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (32). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements (33). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below. The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (34). These indicators are discussed below:

3.10.1 CONSISTENCY CRITERION NO. 1

The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized or regional significance thresholds were exceeded. As evaluated, the Project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.10.2 CONSISTENCY CRITERION NO. 2

The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The *2022 AQMP* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Whittier General Plan is considered to be consistent with the AQMP***.***

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The Project site is located within the Uptown Center of the Uptown Whittier Specific Plan and designates the Project site as "Uptown Center." The "Uptown Center" designation allows for mixed-use buildings and courtyard housing that allow for non-residential and residential uses at a lower intensity than other zones. Types of buildings include mixed-use commercial blocks, live-work, and courtyard housing with an urban landscape style (35).

Tentative Tract Map 84364 will consolidate six parcels into a single 0.826 gross acre lot to facilitate development of the Philadelphia & Comstock Townhouse Project. A Certificate of Appropriateness will be required for the Demolition Permit to authorize the removal of the 7,172 square foot medical office building and associated surface parking lot.

As previously stated, the total development is proposed to consist of 24 residential (townhome) dwelling units on 0.826 acres, which is consistent with the site's land use designation. Since the Project's proposed land use is consistent with the Specific Plan and as the Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the Project is determined to be consistent with the second criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP CONSISTENCY CONCLUSION

The Project would not result in or cause NAAQS or CAAQS violations, as the Project's construction and operational emissions would not exceed the applicable threshold of significance. The Project would also be consistent with the City's designated uses. As such, the Project is therefore considered to be consistent with the AQMP.

3.11 TOXIC AIR CONTAMINANTS

CONSTRUCTION ACTIVITY

During short-term construction activity, the Project will also result in some diesel particulate matter (DPM) which is a listed carcinogen and toxic air contaminant (TAC) in the State of California. The 2015 Office of Environmental Health Hazard Assessment (OEHHA) revised risk assessment guidelines suggest that construction projects as short as 2-6 months may warrant evaluation. Notwithstanding, based on Urban Crossroad's professional opinion and experience in preparing health risk assessments for development projects, given the distance of the Project from surrounding sensitive receptors, the dominant wind patterns blowing to the northwest away for receptors, and the annual $PM_{2.5}$ emissions from equipment during each year of construction, any DPM generated from construction activity would result in less than significant ground level concentrations of DPM and not result in a significant health risks and no further evaluation is required.

Furthermore, many air districts throughout the state, including the SCAQMD, are currently evaluating the applicability of age sensitivity factors and have not established CEQA guidance. More specifically in their response to comments received on SCAQMD New Source Review rule, the SCAQMD explicitly states that:

"The Proposed Amended Rules are separate from the CEQA significance thresholds. The SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board. In the interim, staff will continue to use the previous guidelines for CEQA determinations."

OPERATION ACTIVITIES

The project proposes residential land uses, which are not known emitters of substantial TAC concentrations. The project itself does not include any significant source of TACs that would

potentially affect sensitive receptors. Land uses in the vicinity of the project include commercial and residential land uses. These land uses are not typically associated with the emission of TACs. Additionally, as stated in the *Air Quality and Land Use Handbook: A Community Health Perspective* the concern for residential land uses is generally limited to siting new development within 500 feet of a freeway or urban road with 100,000 daily vehicles or constructing a new freeway or urban road with 100,000 daily vehicles within 500 feet of existing residences. The Project site is located over 1,500 feet from State Route 72 (Whittier Blvd) which has a volume of less than 50,000 daily vehicles thus exposure of persons on the Project site would be less than significant.

3.12 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.13 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project is a residential development and does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion

of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (36).

3.14 CUMULATIVE IMPACTS

As previously shown in Table 2-3, the CAAQS designate the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (37). In this report the AQMD clearly states (Page D-3):

> *…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

CONSTRUCTION IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

OPERATIONAL IMPACTS

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operational-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project operational-source emissions would be considered less than significant on a project-specific and cumulative basis.

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5 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Philadelphia & Comstock Townhouse. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
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PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – CARB • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

(Updated 5/4/16)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page …

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Designation	Abbreviation
Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Figure 1

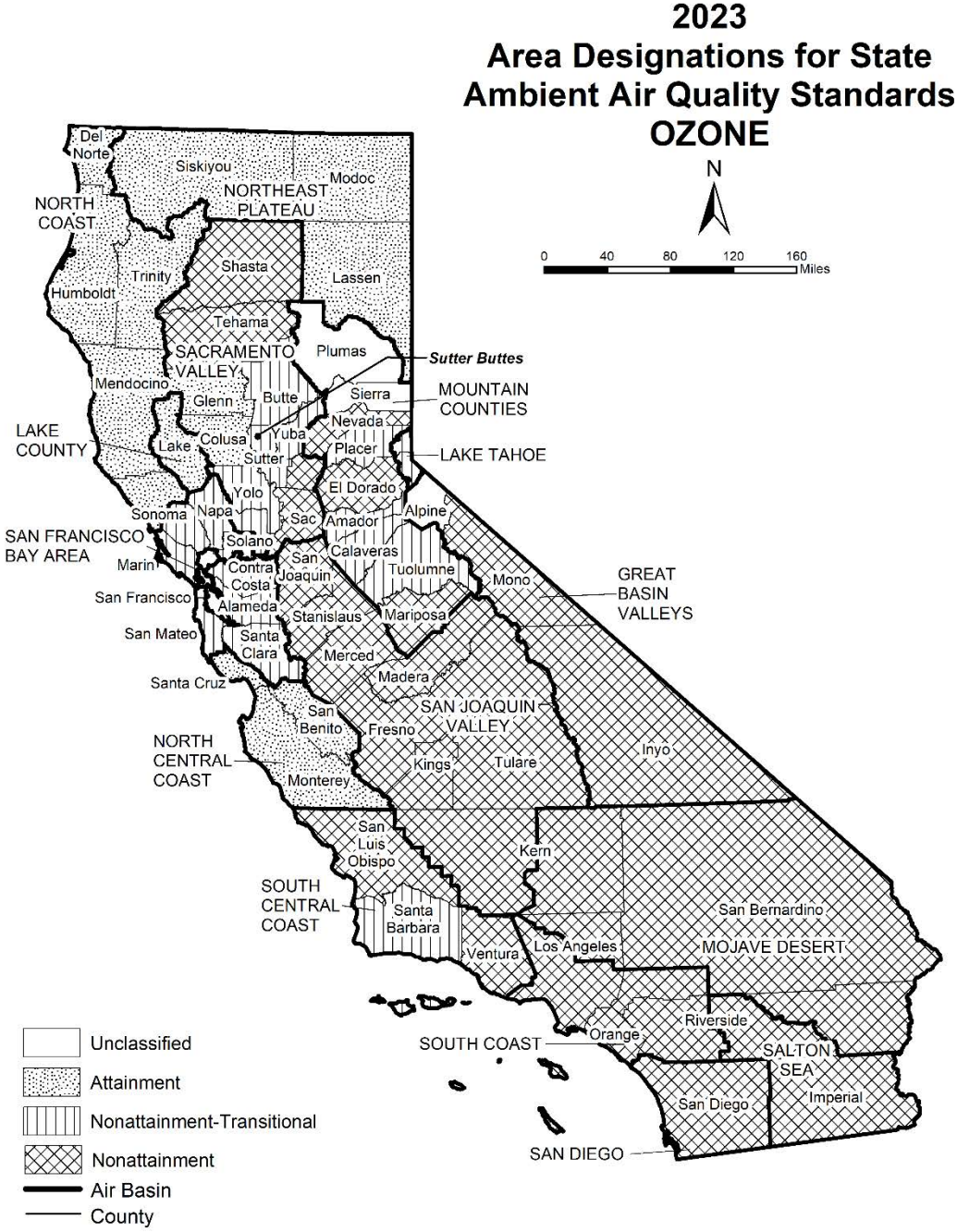

2023
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Sutter Buttes
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

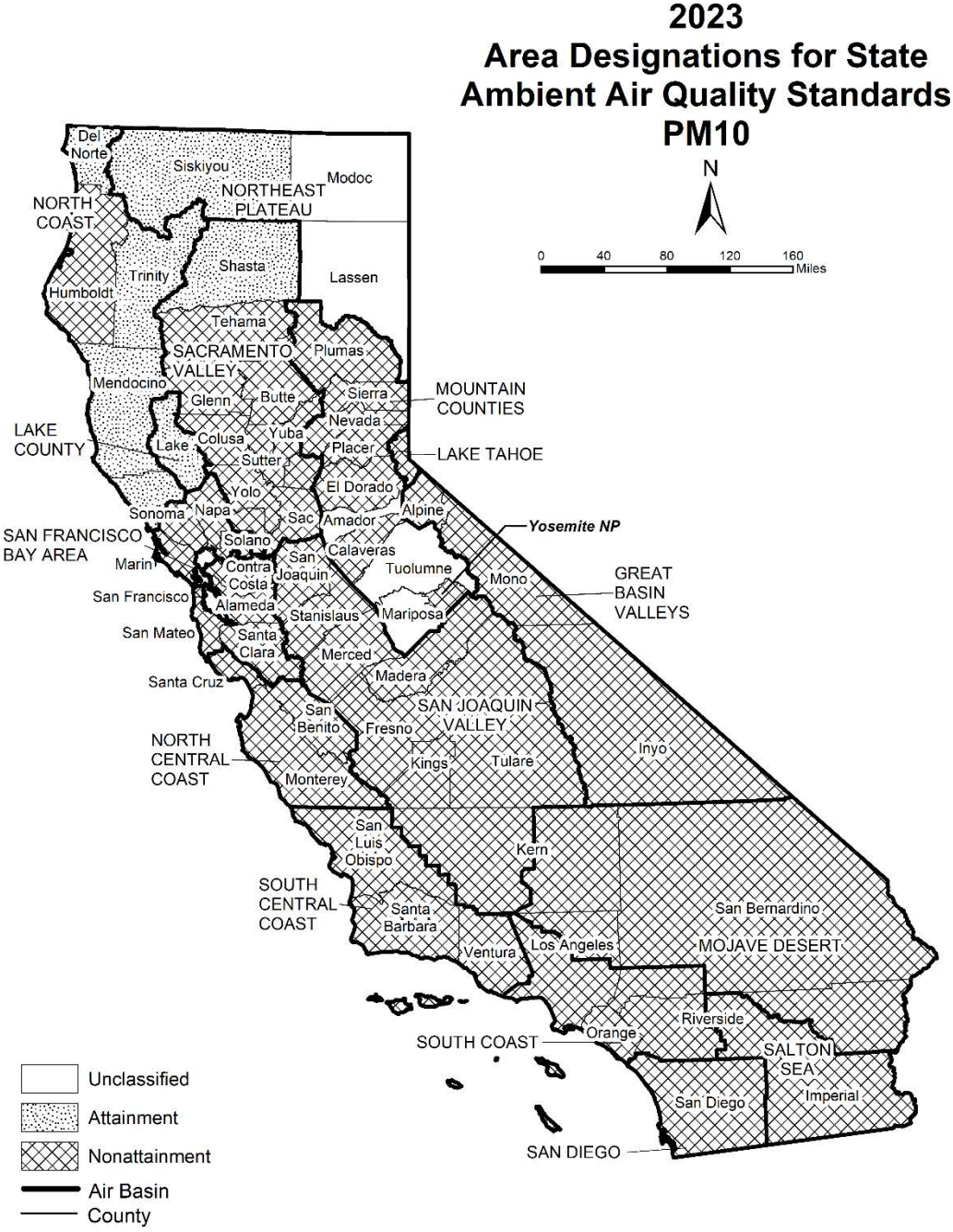
Table 1
California Ambient Air Quality Standards Area Designations for Ozone[1]

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County	N			
Mono County	N			
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN		NA-T		
MOJAVE DESERT AIR BASIN	N			
MOUNTAIN COUNTIES AIR BASIN				
Amador County		NA-T		
Calaveras County		NA-T		
El Dorado County (portion)	N			
Mariposa County	N			
Nevada County	N			
Placer County (portion)		NA-T		
Plumas County			U	
Sierra County			U	
Tuolumne County		NA-T		
NORTH CENTRAL COAST AIR BASIN				A
NORTH COAST AIR BASIN				A
NORTHEAST PLATEAU AIR BASIN				A

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County		NA-T		
Colusa and Glenn Counties				A
Shasta County	N			
Sutter/Yuba Counties				
Sutter Buttes		NA-T		
Remainder of Sutter County		NA-T		
Yuba County		NA-T		
Yolo/Solano Counties		NA-T		
Remainder of Air Basin	N			
SALTON SEA AIR BASIN	N			
SAN DIEGO AIR BASIN	N			
SAN FRANCISCO BAY AREA AIR BASIN		NA-T		
SAN JOAQUIN VALLEY AIR BASIN	N			
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County	N			
Santa Barbara County		NA-T		
Ventura County	N			
SOUTH COAST AIR BASIN	N			

[1] AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

Figure 2



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 2
California Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN	N		
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN	N		
MOJAVE DESERT AIR BASIN	N		
MOUNTAIN COUNTIES AIR BASIN			
Amador County		U	
Calaveras County	N		
El Dorado County (portion)	N		
Mariposa County			
- Yosemite National Park	N		
- Remainder of County		U	
Nevada County	N		
Placer County (portion)	N		
Plumas County	N		
Sierra County	N		
Tuolumne County		U	

Area	N	U	A
NORTH CENTRAL COAST AIR BASIN	N		
NORTH COAST AIR BASIN			
Del Norte, Mendocino, Sonoma (portion) and Trinity Counties			A
Remainder of Air Basin	N		
NORTHEAST PLATEAU AIR BASIN			
Siskiyou County			A
Remainder of Air Basin		U	
SACRAMENTO VALLEY AIR BASIN			
Shasta County			A
Remainder of Air Basin	N		
SALTON SEA AIR BASIN	N		
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN	N		
SOUTH COAST AIR BASIN	N		

Figure 3



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 3
California Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			
Plumas County			
- Portola Valley[1]	N		
- Remainder Plumas County		U	
Remainder of Air Basin		U	
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			
Butte County			A
Colusa County			A
Glenn County			A
Placer County (portion)			A
Sacramento County			A
Shasta County			A
Sutter and Yuba Counties	N		
Remainder of Air Basin		U	

Area	N	U	A
SALTON SEA AIR BASIN			
Imperial County			
- City of Calexico[2]	N		
Remainder of Air Basin			A
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN	N		

[1] California Code of Regulations, title 17, section 60200(c)

[2] California Code of Regulations, title 17, section 60200(a)

Figure 4



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 4
California Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN				A
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)				A
Riverside County (portion)			U	
San Bernardino County (portion)				A
MOUNTAIN COUNTIES AIR BASIN				
Amador County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County				A
Sierra County			U	
Tuolumne County				A
NORTH CENTRAL COAST AIR BASIN				
Monterey County				A
San Benito County			U	
Santa Cruz County			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County				A
Sonoma County (portion)			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County				A
Colusa County			U	
Glenn County			U	
Placer County (portion)				A
Sacramento County				A
Shasta County			U	
Solano County (portion)				A
Sutter County				A
Tehama County			U	
Yolo County				A
Yuba County			U	
SALTON SEA AIR BASIN				A
SAN DIEGO AIR BASIN				A
SAN FRANCISCO BAY AREA AIR BASIN				A
SAN JOAQUIN VALLEY AIR BASIN				
Fresno County				A
Kern County (portion)				A
Kings County			U	
Madera County			U	
Merced County			U	
San Joaquin County				A
Stanislaus County				A
Tulare County				A
SOUTH CENTRAL COAST AIR BASIN				A
SOUTH COAST AIR BASIN				A

* The area designated for carbon monoxide is a county or portion of a county

Figure 5



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 5
California Ambient Air Quality Standards Area Designations for Nitrogen Dioxide

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties			A
Remainder of Air Basin			A

Figure 6



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 6
California Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	A
GREAT BASIN VALLEYS AIR BASIN		A
LAKE COUNTY AIR BASIN		A
LAKE TAHOE AIR BASIN		A
MOJAVE DESERT AIR BASIN		A
MOUNTAIN COUNTIES AIR BASIN		A
NORTH CENTRAL COAST AIR BASIN		A
NORTH COAST AIR BASIN		A
NORTHEAST PLATEAU AIR BASIN		A

Area	N	A
SACRAMENTO VALLEY AIR BASIN		A
SALTON SEA AIR BASIN		A
SAN DIEGO AIR BASIN		A
SAN FRANCISCO BAY AREA AIR BASIN		A
SAN JOAQUIN VALLEY AIR BASIN		A
SOUTH CENTRAL COAST AIR BASIN		A
SOUTH COAST AIR BASIN		A

* The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 7

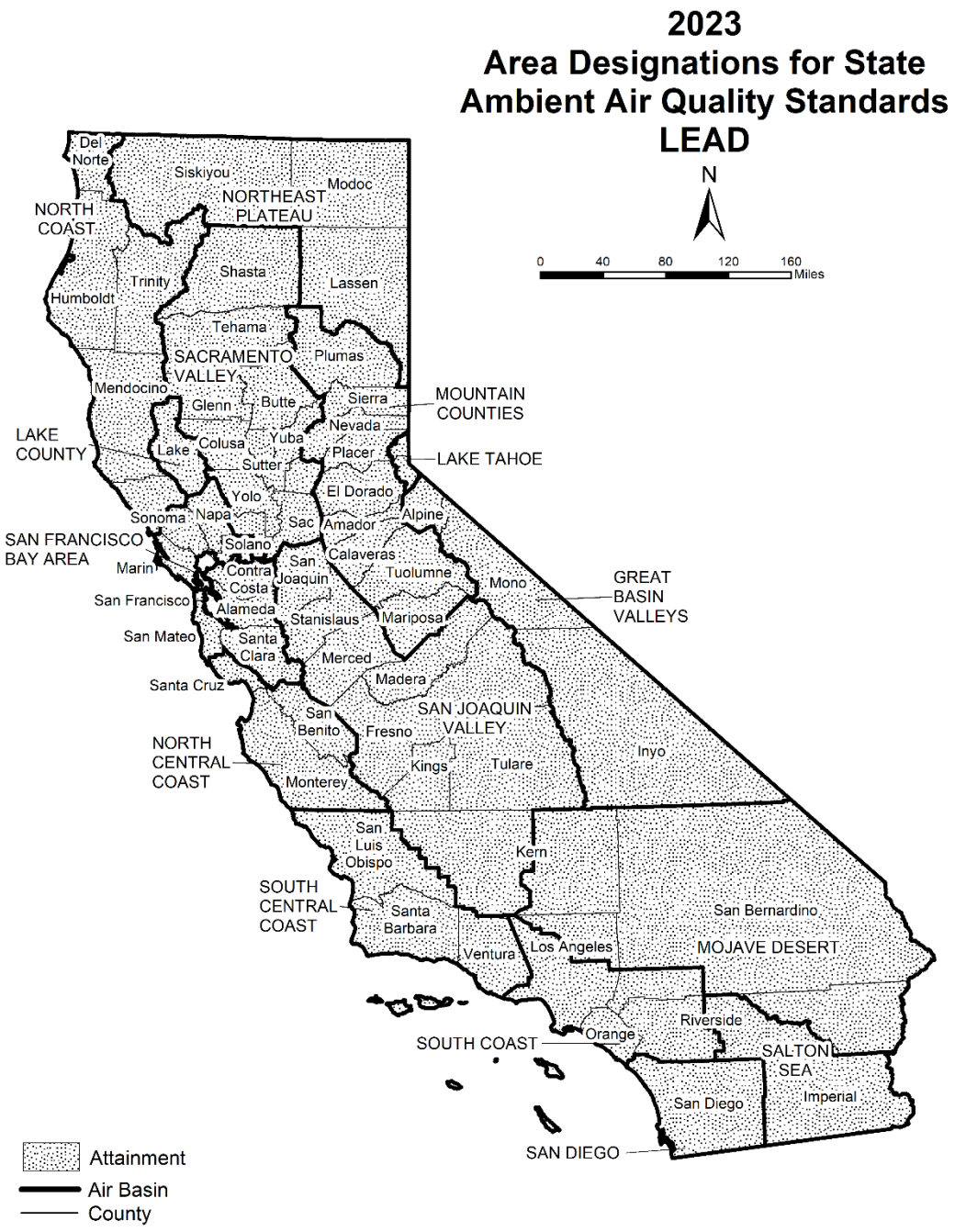

2023
Area Designations for State
Ambient Air Quality Standards
SULFATES
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 7
California Ambient Air Quality Standards Area Designations for Sulfates

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A

Area	N	U	A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

Figure 8



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

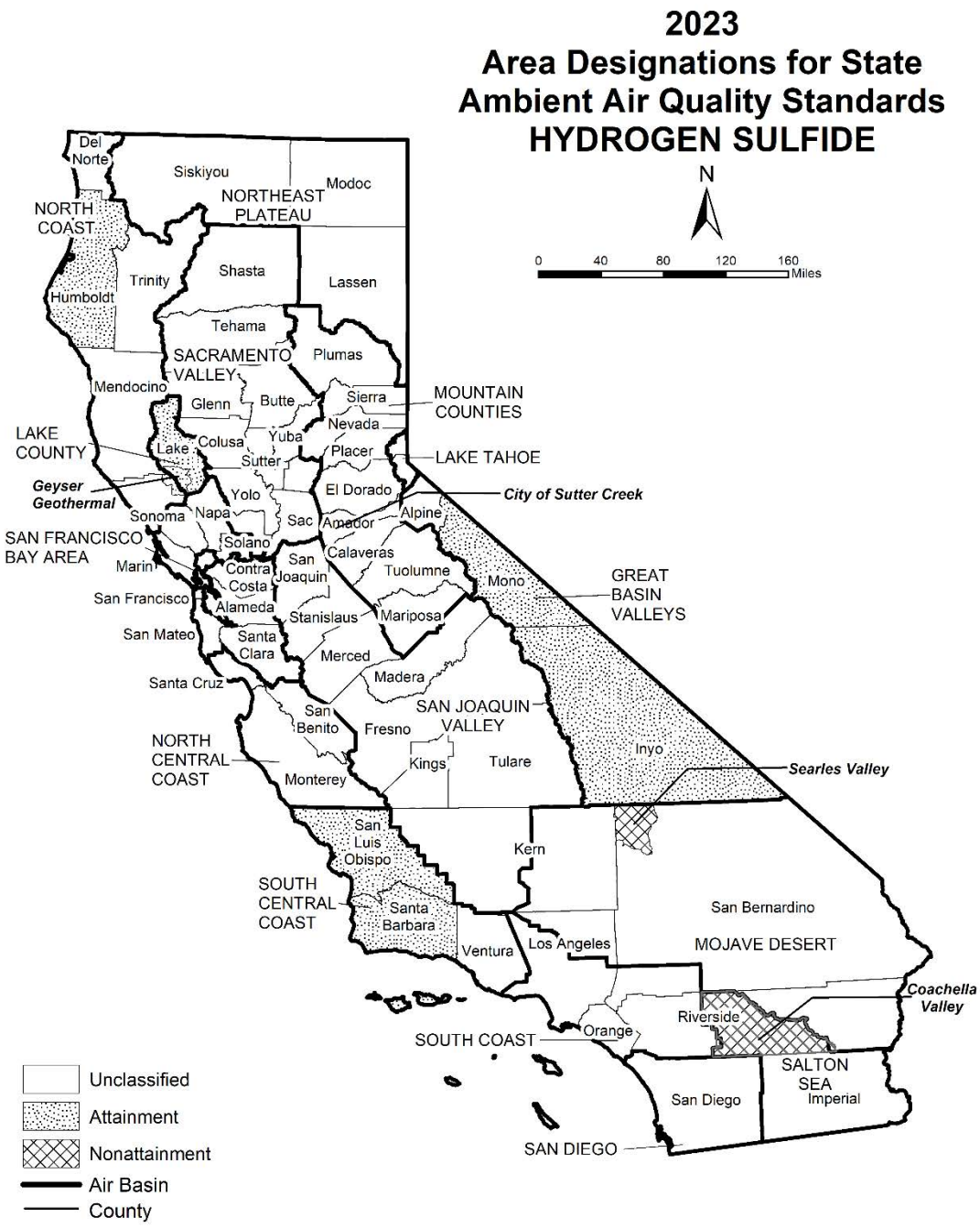
Table 8
California Ambient Air Quality Standards Area Designations for Lead (particulate)*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A

Area	N	U	A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 9



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 9
California Ambient Air Quality Standards Area Designations for Hydrogen Sulfide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)			U	
Riverside County (portion)			U	
San Bernardino County (portion)				
- Searles Valley Planning Area[1]	N			
- Remainder of County			U	
MOUNTAIN COUNTIES AIR BASIN				
Amador County				
- City of Sutter Creek	N			
- Remainder of County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County			U	
Sierra County			U	
Tuolumne County			U	

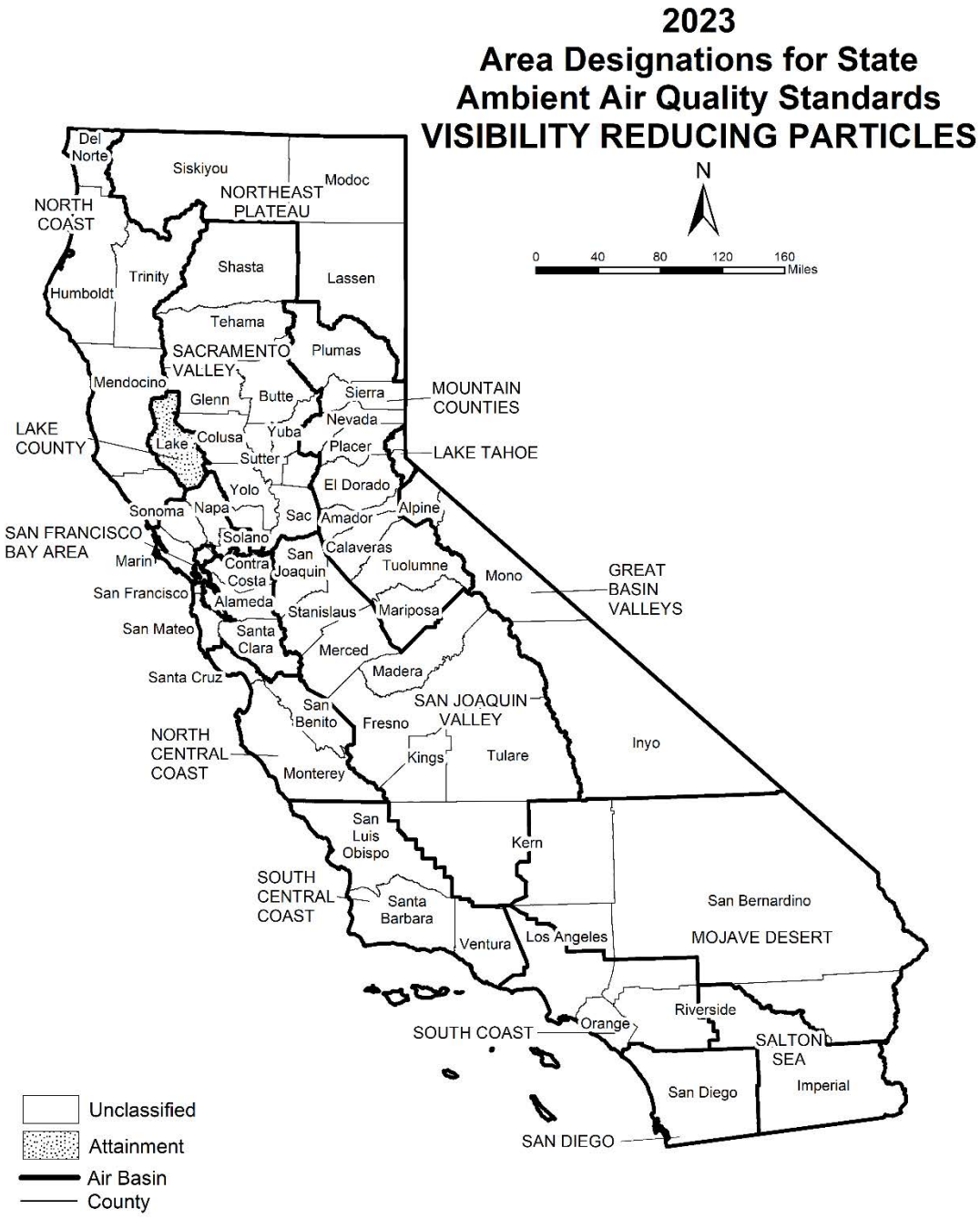
Area	N	NA-T	U	A
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County			U	
Sonoma County (portion)				
- Geyser Geothermal Area[2]				A
- Remainder of County			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN				
Riverside County (portion)	N			
Imperial County			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County				A
Santa Barbara County				A
Ventura County			U	
SOUTH COAST AIR BASIN			U	

* The area designated for hydrogen sulfide is a county or portion of a county

[1] 52 Federal Register 29384 (August 7, 1987)

[2] California Code of Regulations, title 17, section 60200(d)

Figure 10



Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 10
California Ambient Air Quality Standards Area Designations for Visibility Reducing Particles

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			U	
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN			U	
MOUNTAIN COUNTIES AIR BASIN			U	
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN			U	
SOUTH COAST AIR BASIN			U	

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

https://www.epa.gov/criteria-air-pollutants

Designation Categories

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Area designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 µg/m^3. Area designations were finalized in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m^3 as well as the 24-hour standard of 35 µg/m^3, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 µg/m^3. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at: *https://ecfr.io/Title-40/se40.20.81_1305*

Figure 11


Area Designations for National Ambient Air Quality Standards
8-HOUR OZONE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Sutter Buttes
SACRAMENTO VALLEY
Plumas
Tuscan Buttes
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Sutter
Yuba
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Antelope Valley and Western Mojave Desert
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
SOUTH COAST
Orange
SALTON SEA
Coachella Valley
Imperial
San Diego
SAN DIEGO
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Map reflects the 2015 8-hour ozone standard of 0.070 ppm
Air Quality Planning and Science Division, CARB

Table 11
National Ambient Air Quality Standards Area Designations for 8-Hour Ozone*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Amador County	N	
Calaveras County	N	
El Dorado County (portion)[1]	N	
Mariposa County	N	
Nevada County		
- Western Nevada County	N	
- Remainder of County		U/A
Placer County (portion)[1]	N	
Plumas County		U/A
Sierra County		U/A
Tuolumne County	N	
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Butte County	N	
Colusa County		U/A
Glenn County		U/A
Sacramento Metro Area[1]	N	
Shasta County		U/A
Sutter County		
- Sutter Buttes	N	
- Southern portion of Sutter County[1]	N	
- Remainder of Sutter County		U/A
Tehama County		
- Tuscan Buttes	N	
- Remainder of Tehama County		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN (cont.)		
Yolo County[1]	N	
Yuba County		U/A
SAN DIEGO COUNTY	N	
SAN FRANCISCO BAY AREA AIR BASIN	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN[2]		
San Luis Obispo County		
- Eastern San Luis Obispo County	N	
- Remainder of County		U/A
Santa Barbara County		U/A
Ventura County		
- Area excluding Anacapa and San Nicolas Islands	N	
- Channel Islands[2]		U/A
SOUTH COAST AIR BASIN[2]	N	
SOUTHEAST DESERT AIR BASIN		
Kern County (portion)	N	
- Indian Wells Valley		U/A
Imperial County	N	
Los Angeles County (portion)	N	
Riverside County (portion)		
- Coachella Valley	N	
- Non-AQMA portion		U/A
San Bernardino County		
- Western portion (AQMA)	N	
- Eastern portion (non-AQMA)		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and Table reflect the 2015 8-hour ozone standard of 0.070 ppm.

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[1] For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

[2] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

Figure 12

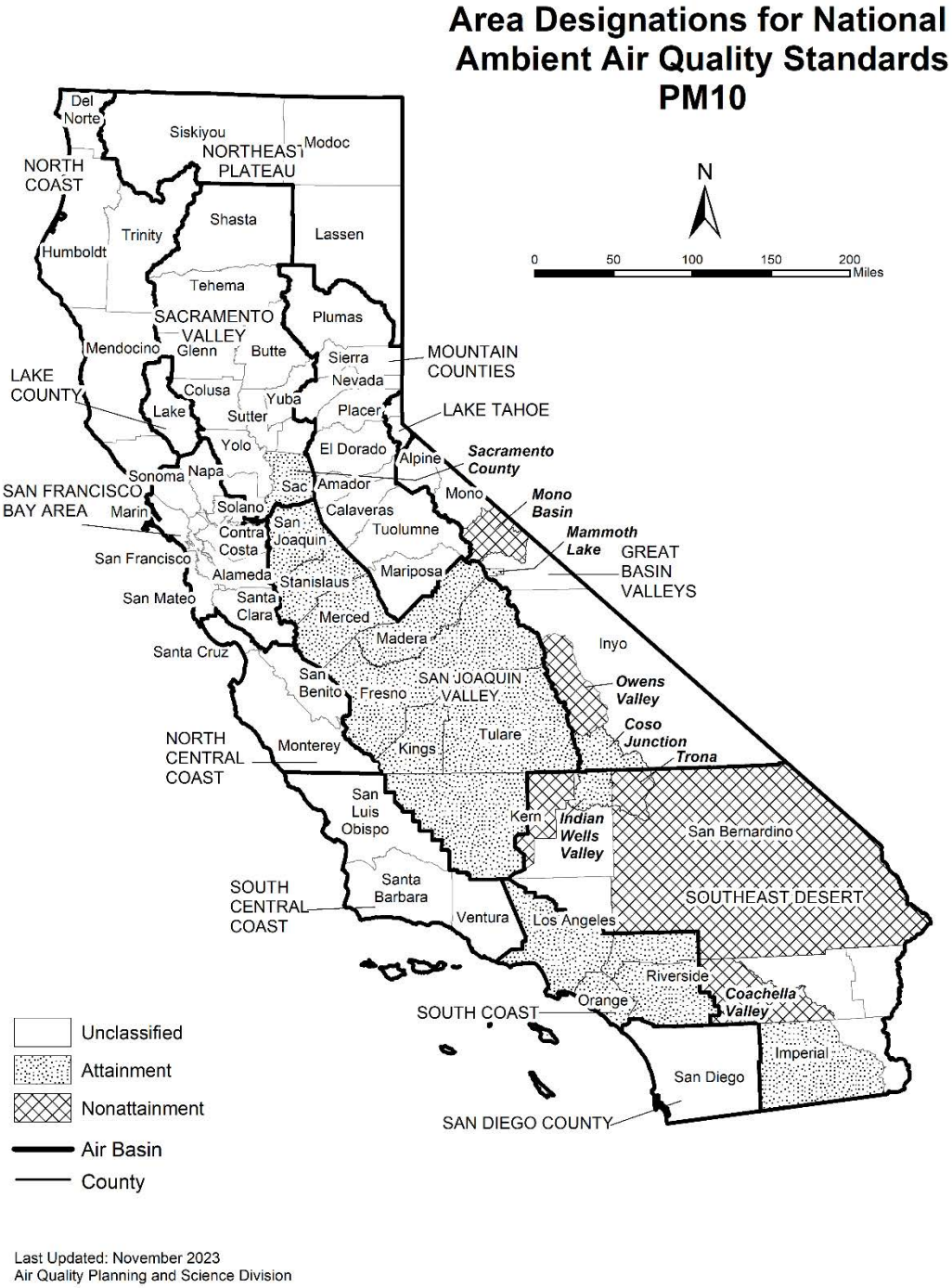

Area Designations for National Ambient Air Quality Standards
PM10
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Trinity
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Alpine
Sacramento County
Sonoma
Napa
Sac
Amador
Mono
Mono Basin
SAN FRANCISCO BAY AREA
Marin
Solano
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mammoth Lake
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Inyo
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Owens Valley
Coso Junction
Trona
NORTH CENTRAL COAST
Monterey
Kings
Tulare
San Luis Obispo
Kern
Indian Wells Valley
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
Ventura
Los Angeles
SOUTHEAST DESERT
Riverside
Coachella Valley
Orange
SOUTH COAST
Imperial
San Diego
SAN DIEGO COUNTY
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 12
National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			
Alpine County		U	
Inyo County			
- Owens Valley Planning Area	N		
- Coso Junction			A
- Remainder of County		U	
Mono County			
- Mammoth Lake Planning Area			A
- Mono Lake Basin	N		
- Remainder of County		U	
LAKE COUNTY AIR BASIN		U	
LAKE TAHOE AIR BASIN		U	
MOUNTAIN COUNTIES AIR BASIN		U	
NORTH CENTRAL COAST AIR BASIN		U	
NORTH COAST AIR BASIN		U	
NORTHEAST PLATEAU AIR BASIN		U	
SACRAMENTO VALLEY AIR BASIN			
Sacramento County[1]			A
Remainder of Air Basin		U	
SAN DIEGO COUNTY		U	

Area	N	U	A
SAN FRANCISCO BAY AREA AIR BASIN		U	
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN		U	
SOUTH COAST AIR BASIN			A
SOUTHEAST DESERT AIR BASIN			
Eastern Kern County			
- Indian Wells Valley			A
- Portion within San Joaquin Valley Planning Area	N		
- Remainder of County		U	
Imperial County			
- Imperial Valley Planning Area[2]			A
- Remainder of County		U	
Los Angeles County (portion)		U	
Riverside County (portion)			
- Coachella Valley	N		
- Non-AQMA portion		U	
San Bernardino County			
- Trona	N		
- Remainder of County	N		

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

[1] Air quality in Sacramento County meets the national PM_{10} standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

[2] The request for redesignation to attainment for the Imperial Valley Planning Area was approved by U.S. EPA in September 2020, effective October 2020.

Figure 13

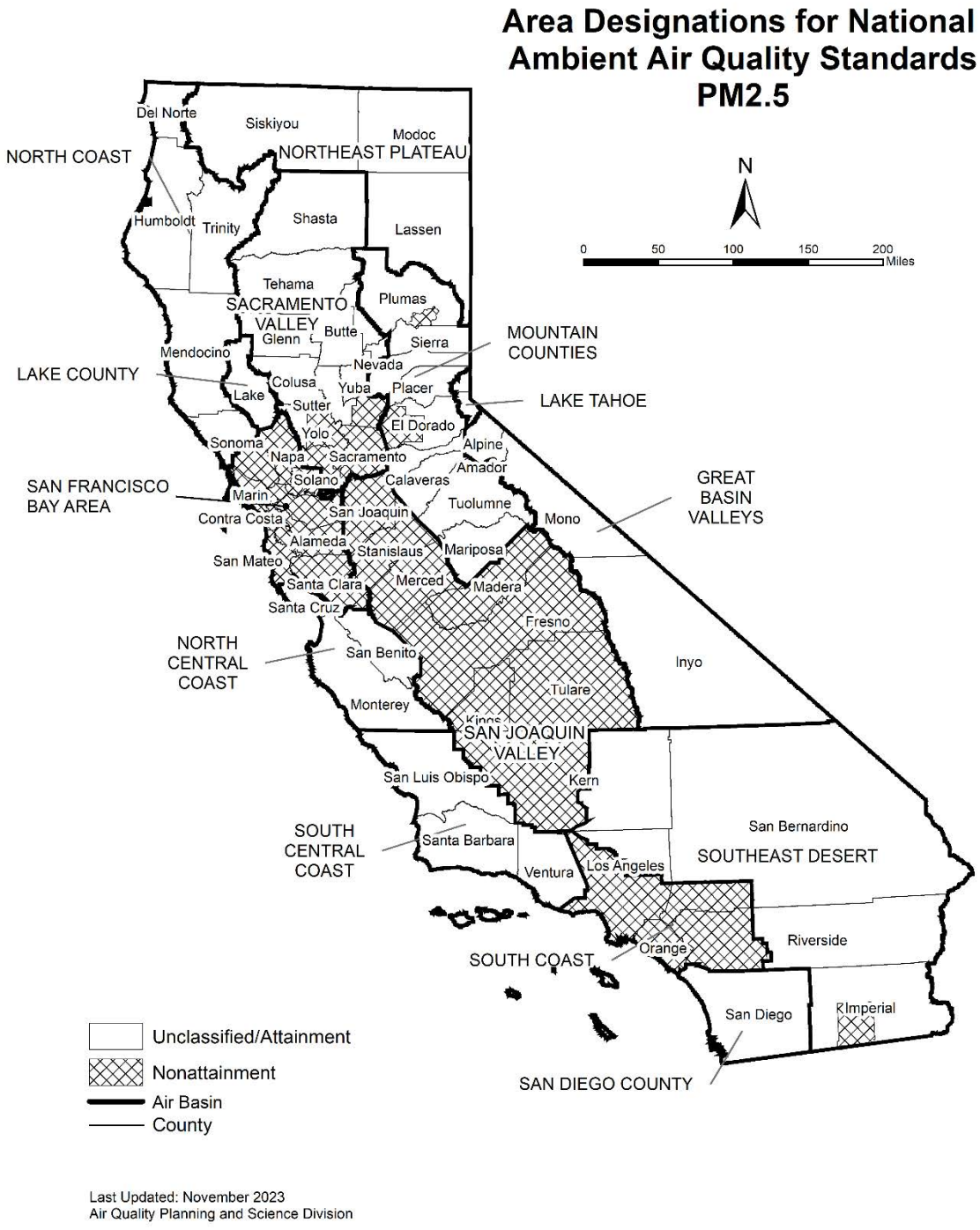

Area Designations for National Ambient Air Quality Standards PM2.5
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTH COAST
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
LAKE TAHOE
Sutter
El Dorado
Yolo
Alpine
Sonoma
Napa
Sacramento
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
GREAT BASIN VALLEYS
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
Alameda
Stanislaus
Mariposa
San Mateo
Merced
Madera
Santa Clara
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
Inyo
Tulare
Monterey
Kings
SAN JOAQUIN VALLEY
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
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Table 13
National Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Plumas County		
- Portola Valley Portion of Plumas County	N	
- Remainder of Plumas County		U/A
Remainder of Air Basin		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Sacramento Metro Area[1]	N	
Remainder of Air Basin		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN[2]	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN[3]	N	
SOUTHEAST DESERT AIR BASIN		
Imperial County (portion)[4]	N	
Remainder of Air Basin		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour $PM_{2.5}$ standard as well as the 1997 and 2012 $PM_{2.5}$ annual standards.

[1] For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[2] Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[3] Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

[4] That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

Figure 14


Area Designations for National Ambient Air Quality Standards
CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Lake
Sutter
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Tulare
Inyo
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Table 14
National Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 15


Area Designations for National Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Last Updated: November 2023
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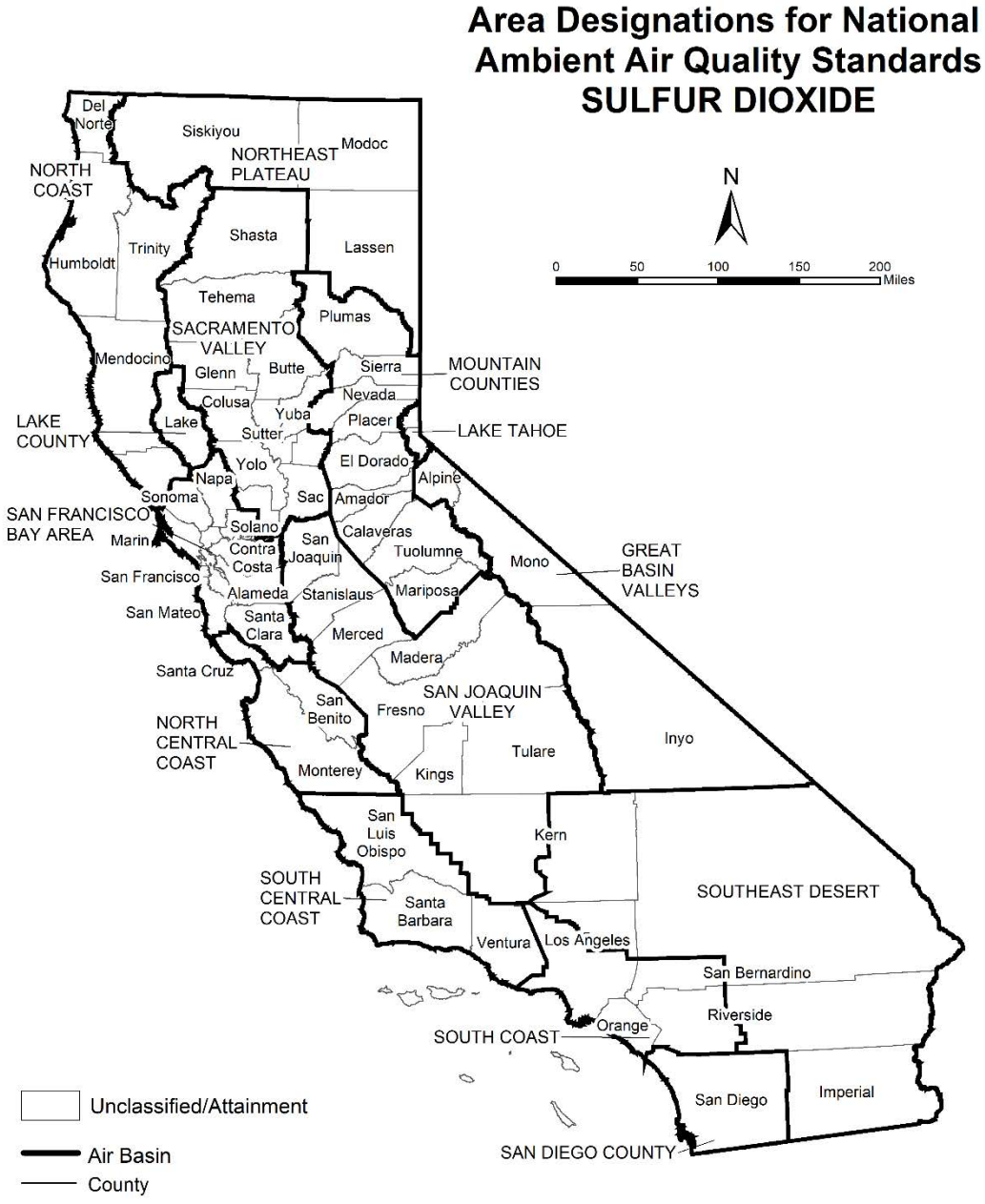
Table 15
National Ambient Air Quality Standards Area Designations for Nitrogen Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 16



Last Updated: November 2023
Air Quality Planning and Science Division

Table 16
National Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN[1]		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and table reflect the 2010 1-hour SO_2 standard of 75 ppb.

[1] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

Figure 17

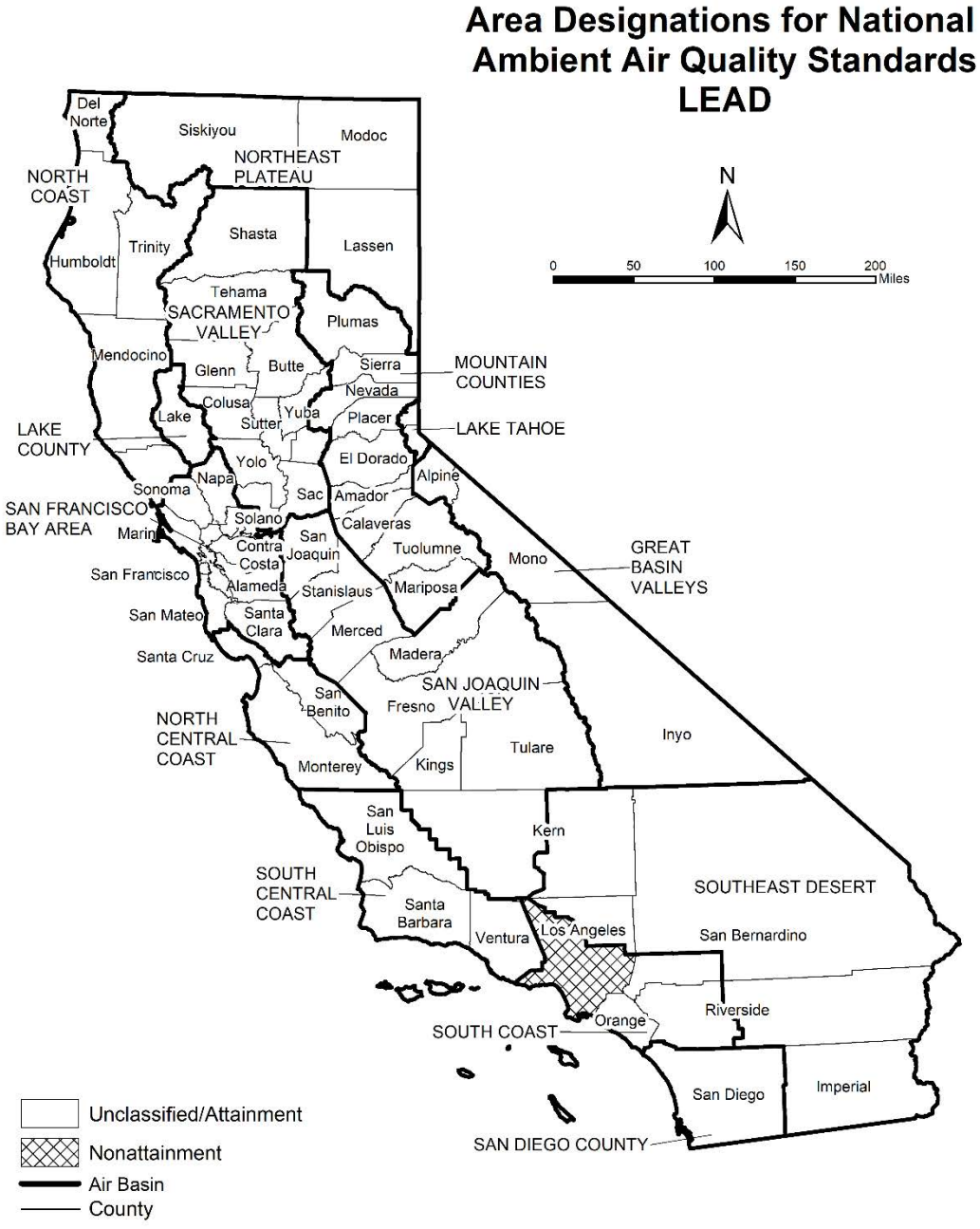

Area Designations for National Ambient Air Quality Standards
LEAD
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 17
National Ambient Air Quality Standards Area Designations for Lead (particulate)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		
Los Angeles County (portion)[1]	N	
Remainder of Air Basin		U/A
SOUTHEAST DESERT AIR BASIN		U/A

[1] Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

14480 - Whittier Residential Detailed Report

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3.13. Paving (2025) - Unmitigated

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4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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4.5.1. Unmitigated

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5.3.1. Unmitigated

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5.13.1. Unmitigated

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7.5. Evaluation Scorecard

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14480 - Whittier Residential
Construction Start Date	8/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	12826 Philadelphia St a, Whittier, CA 90601, USA
County	Los Angeles-South Coast
City	Whittier
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4809
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

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
Condo/Townhouse	24.0	Dwelling Unit	0.63	39,026	12,190	—	71.0	—

Parking Lot	72.0	Space	0.19	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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.61	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.11	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158

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

2024	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
2025	52.4	52.0	15.0	31.0	0.03	0.58	3.16	3.74	0.53	0.74	1.27	—	6,254	6,254	0.27	0.16	0.32	6,308
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.53	0.47	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
2025	0.62	0.61	0.18	0.37	< 0.005	0.01	0.04	0.04	0.01	0.01	0.01	—	74.0	74.0	< 0.005	< 0.005	0.06	74.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158
2025	0.11	0.11	0.03	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.4

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Area	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Area	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.66	0.59	0.50	4.85	0.01	0.01	1.04	1.04	0.01	0.26	0.27	—	1,153	1,153	0.06	0.05	1.89	1,172
Area	0.99	0.99	0.04	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	37.1	37.1	< 0.005	< 0.005	—	37.2
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
Area	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15
Energy	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.2	49.2	< 0.005	< 0.005	—	49.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Waste	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	14.4	14.1	0.02	0.62	—	0.62	0.57	—	0.57	—	2,203	2,203	0.09	0.02	—	2,211
Demolition	—	—	—	—	—	—	0.70	0.70	—	0.11	0.11	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.99	9.99	< 0.005	< 0.005	—	10.0
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.04	0.01	0.73	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	585	585	0.03	0.09	1.34	615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.8	29.8	< 0.005	< 0.005	0.05	30.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.93	4.93	< 0.005	< 0.005	0.01	5.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.79

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.72	6.24	6.16	0.01	0.40	—	0.40	0.37	—	0.37	—	916	916	0.04	0.01	—	919
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.51	2.51	< 0.005	< 0.005	—	2.52
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.42	0.42	< 0.005	< 0.005	—	0.42
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.98	2.98	< 0.005	< 0.005	0.01	3.02
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.50
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	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	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11	1.77	16.6	14.6	0.02	0.87	—	0.87	0.80	—	0.80	—	2,294	2,294	0.09	0.02	—	2,302
Dust From Material Movement	—	—	—	—	—	—	1.98	1.98	—	0.91	0.91	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.08	2.08	< 0.005	< 0.005	—	2.09
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.17	0.05	2.78	1.07	0.01	0.03	0.58	0.61	0.03	0.16	0.19	—	2,221	2,221	0.12	0.36	5.10	2,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.95	5.95	< 0.005	< 0.005	0.01	6.04
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.12

3.7. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	2.10	2.38	< 0.005	0.09	—	0.09	0.09	—	0.09	—	492	492	0.02	< 0.005	—	494
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.5	81.5	< 0.005	< 0.005	—	81.7
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.22	86.5
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.01	86.3
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.12	1.41	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	285	285	0.01	0.01	0.50	289
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.7	21.7	< 0.005	< 0.005	0.03	22.6
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.08	47.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	< 0.005	3.75
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	0.00	0.00

3.9. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.75	7.34	9.02	0.02	0.31	—	0.31	0.29	—	0.29	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.65	3.65	< 0.005	< 0.005	—	3.66
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.4	81.4	< 0.005	0.01	0.01	84.9
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
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	0.00	0.00

3.11. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.63	5.41	6.27	0.01	0.25	—	0.25	0.23	—	0.23	—	973	973	0.04	0.01	—	976
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.90	1.90	< 0.005	< 0.005	—	1.91
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.13. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.24	6.25	0.01	0.23	—	0.23	0.21	—	0.21	—	973	973	0.04	0.01	—	977
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.89	1.89	< 0.005	< 0.005	—	1.90
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	0.00	0.00

3.15. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.17. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179

Architectural Coating	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
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	0.00	0.00
Total	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
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	0.00	0.00
Total	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
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	0.00	0.00
Total	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.16	1.16	< 0.005	< 0.005	—	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6	< 0.005	< 0.005	—	18.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7
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
Total	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.12	0.01	1.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Total	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.73	5.73	< 0.005	< 0.005	—	5.74
Consumer Products	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41
Total	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Demolition	Demolition	8/1/2024	8/14/2024	5.00	10.0	10
Site Preparation	Site Preparation	8/15/2024	8/15/2024	5.00	1.00	1
Grading	Grading	8/16/2024	8/19/2024	5.00	2.00	2
Building Construction	Building Construction	8/20/2024	1/6/2025	5.00	100	100
Paving	Paving	12/31/2024	1/6/2025	5.00	5.00	5
Architectural Coating	Architectural Coating	12/31/2024	1/6/2025	5.00	5.00	5

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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	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
Demolition	—	—	—	—
Demolition	Worker	80.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.30	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	80.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	80.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	31.5	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	80.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.57	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	80.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	80.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	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

Non-applicable. No control strategies activated by user.

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	79,028	26,343	0.00	0.00	502

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,172	—
Site Preparation	—	—	1.00	0.00	—
Grading	—	500	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.19

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	0.19	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005
2025	0.00	349	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
Condo/Townhouse	174	210	172	65,300	1,439	1,739	1,423	540,093
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	24
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

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)
79027.65	26,343	0.00	0.00	502

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Condo/Townhouse	110,212	349	0.0330	0.0040	576,729
Parking Lot	7,326	349	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)
Condo/Townhouse	894,571	208,951
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	17.7	—
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

Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.9	annual days of extreme heat
Extreme Precipitation	5.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.43	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	64.7
AQ-PM	75.7
AQ-DPM	41.6
Drinking Water	57.7
Lead Risk Housing	65.1
Pesticides	0.00
Toxic Releases	82.6
Traffic	30.5
Effect Indicators	—
CleanUp Sites	72.0
Groundwater	27.8
Haz Waste Facilities/Generators	54.6
Impaired Water Bodies	0.00
Solid Waste	24.8
Sensitive Population	—
Asthma	64.5
Cardio-vascular	75.5
Low Birth Weights	12.8

Socioeconomic Factor Indicators	—
Education	57.9
Housing	92.7
Linguistic	78.2
Poverty	84.3
Unemployment	7.14

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.36442962
Employed	56.3839343
Median HI	16.98960606
Education	—
Bachelor's or higher	32.33671243
High school enrollment	100
Preschool enrollment	72.66777878
Transportation	—
Auto Access	6.775311177
Active commuting	48.89002951
Social	—
2-parent households	13.78159887
Voting	70.21686129
Neighborhood	—
Alcohol availability	15.38560246
Park access	81.35506224
Retail density	62.60746824

Supermarket access	18.52944951
Tree canopy	81.67586295
Housing	—
Homeownership	7.096111895
Housing habitability	23.04632362
Low-inc homeowner severe housing cost burden	25.38175286
Low-inc renter severe housing cost burden	46.6957526
Uncrowded housing	39.26600796
Health Outcomes	—
Insured adults	47.91479533
Arthritis	19.5
Asthma ER Admissions	24.7
High Blood Pressure	18.2
Cancer (excluding skin)	29.3
Asthma	58.2
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	15.4
Life Expectancy at Birth	52.9
Cognitively Disabled	4.6
Physically Disabled	12.2
Heart Attack ER Admissions	8.5
Mental Health Not Good	39.8
Chronic Kidney Disease	7.4
Obesity	34.3
Pedestrian Injuries	19.6
Physical Health Not Good	23.8
Stroke	13.0

Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	49.4
No Leisure Time for Physical Activity	26.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	18.5
English Speaking	38.9
Foreign-born	38.0
Outdoor Workers	90.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.9
Traffic Density	26.7
Traffic Access	23.0
Other Indices	—
Hardship	65.9
Other Decision Support	—
2016 Voting	22.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	28.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data. Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis.
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days.
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Trip characteristics taken from information based on Trip Generation.
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Architectural Coatings	SCAQMD Rule 1113
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Construction: Trips and VMT	Based on the Project Applicant, there will be between 30 and 40 construction workers on site at any give time during construction.

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APPENDIX 3.2:

SCAQMD AMICUS BRIEF

S219783

IN THE SUPREME COURT OF C ALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,

Plaintiffs and Appellants,

v.

COUNTY OF FRESNO,

Defendant and Respondent,

and,

FRIANT RANCH, L.P.,

Real Party in Interest and Respondent.

SUPREME COURT
FILED
APR 13 2015
Frank A. McGuire Clerk
Deputy

After a Published Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726
Honorable Rosendo A. Pena, Jr.

APPLICATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY AND *[PROPOSED]* BRIEF OF *AMICUS CURIAE*

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TO THE HONORABLE CHIEF JUSTICE AND JUSTICES OF THE SUPREME COURT:

APPLICATION FOR LEAVE TO FILE *AMICUS CURIAE* BRIEF

Pursuant to Rule 8.520(f) of the California Rules of Court, the South Coast Air Quality Management District (SCAQMD) respectfully requests leave to file the attached *amicus curiae* brief. Because SCAQMD's position differs from that of either party, we request leave to submit this amicus brief in support of neither party.

HOW THIS BRIEF WILL ASSIST THE COURT

SCAQMD's proposed amicus brief takes a position on two of the issues in this case. In both instances, its position differs from that of either party. The issues are:

1) Does the California Environmental Quality Act (CEQA) require an environmental impact report (EIR) to correlate a project's air pollution emissions with specific levels of health impacts?
2) What is the proper standard of review for determining whether an EIR provides sufficient information on the health impacts caused by a project's emission of air pollutants?

This brief will assist the Court by discussing the practical realities of correlating identified air quality impacts with specific health outcomes. In short, CEQA requires agencies to provide detailed information about a project's air quality impacts that is sufficient for the public and decisionmakers to adequately evaluate the project and meaningfully understand its impacts. However, the level of analysis is governed by a rule of reason; CEQA only requires agencies to conduct analysis if it is reasonably feasible to do so.

With regard to health-related air quality impacts, an analysis that correlates a project's air pollution emissions with specific levels of health impacts will be feasible in some cases but not others. Whether it is feasible depends on a variety of factors, including the nature of the project and the nature of the analysis under consideration. The feasibility of analysis may also change over time as air districts and others develop new tools for measuring projects' air quality related health impacts. Because SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, it is uniquely situated to express an opinion on the extent to which the Court should hold that CEQA requires lead agencies to correlate air quality impacts with specific health outcomes.

SCAQMD can also offer a unique perspective on the question of the appropriate standard of review. SCAQMD submits that the proper standard of review for determining whether an EIR is sufficient as an informational document is more nuanced than argued by either party. In our view, this is a mixed question of fact and law. It includes determining whether additional analysis is feasible, which is primarily a factual question that should be reviewed under the substantial evidence standard. However, it also involves determining whether the omission of a particular analysis renders an EIR insufficient to serve CEQA's purpose as a meaningful, informational document. If a lead agency has not determined that a requested analysis is infeasible, it is the court's role to determine whether the EIR nevertheless meets CEQA's purposes, and courts should not defer to the lead agency's conclusions regarding the legal sufficiency of an EIR's analysis. The ultimate question of whether an EIR's analysis is "sufficient" to serve CEQA's informational purposes is predominately a question of law that courts should review de novo.

This brief will explain the rationale for these arguments and may assist the Court in reaching a conclusion that accords proper respect to a lead agency's factual conclusions while maintaining judicial authority over the ultimate question of what level of analysis CEQA requires.

STATEMENT OF INTEREST OF *AMICUS CURIAE*

The SCAQMD is the regional agency primarily responsible for air pollution control in the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of the Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410; Cal. Code Regs., tit. 17, § 60104.) The SCAQMD participates in the CEQA process in several ways. Sometimes it acts as a lead agency that prepares CEQA documents for projects. Other times it acts as a responsible agency when it has permit authority over some part of a project that is undergoing CEQA review by a different lead agency. Finally, SCAQMD also acts as a commenting agency for CEQA documents that it receives because it is a public agency with jurisdiction by law over natural resources affected by the project.

In all of these capacities, SCAQMD will be affected by the decision in this case. SCAQMD sometimes submits comments requesting that a lead agency perform an additional type of air quality or health impacts analysis. On the other hand, SCAQMD sometimes determines that a particular type of health impact analysis is not feasible or would not produce reliable and informative results. Thus, SCAQMD will be affected by the Court's resolution of the extent to which CEQA requires EIRs to correlate emissions and health impacts, and its resolution of the proper standard of review.

CERTIFICATION REGARDING AUTHORSHIP AND FUNDING

No party or counsel in the pending case authored the proposed amicus curiae brief in whole or in part, or made any monetary contribution intended to fund the preparation or submission of the brief. No person or entity other than the proposed *Amicus Curiae* made any monetary contribution intended to fund the preparation or submission of the brief.

Respectfully submitted,

DATED: April 3, 2015

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
KURT R. WIESE, GENERAL COUNSEL
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By: Barbara Baird
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SOUTH COAST AIR QUALITY
MANAGEMENT DISTICT

BRIEF OF AMICUS CURIAE

SUMMARY OF ARGUMENT

The South Coast Air Quality Management District (SCAQMD) submits that this Court should not try to establish a hard-and-fast rule concerning whether lead agencies are required to correlate emissions of air pollutants with specific health consequences in their environmental impact reports (EIR). The level of detail required in EIRs is governed by a few, core CEQA (California Environmental Quality Act) principles. As this Court has stated, "[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Assn. v. Regents of the Univ of Cal.* (1988) 47 Cal.3d 376, 405 ["*Laurel Heights I*"]) Accordingly, "an agency must use its best efforts to find out and disclose all that it reasonably can." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428 (quoting CEQA Guidelines § 15144)[1].). However, "[a]nalysis of environmental effects need not be exhaustive, but will be judged in light of what is reasonably feasible." (*Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390; CEQA Guidelines §§ 15151, 15204(a).)

With regard to analysis of air quality related health impacts, EIRs must generally quantify a project's pollutant emissions, but in some cases it is not feasible to correlate these emissions to specific, quantifiable health impacts (e.g., premature mortality; hospital admissions). In such cases, a general description of the adverse health impacts resulting from the pollutants at issue may be sufficient. In other cases, due to the magnitude

[1] The CEQA Guidelines are found at Cal. Code Regs., tit. 14 §§ 15000, *et seq.*

or nature of the pollution emissions, as well as the specificity of the project involved, it may be feasible to quantify health impacts. Or there may be a less exacting, but still meaningful analysis of health impacts that can feasibly be performed. In these instances, agencies should disclose those impacts.

SCAQMD also submits that whether or not an EIR complies with CEQA's informational mandates by providing sufficient, feasible analysis is a mixed question of fact and law. Pertinent here, the question of whether an EIR's discussion of health impacts from air pollution is sufficient to allow the public to understand and consider meaningfully the issues involves two inquiries: (1) Is it feasible to provide the information or analysis that a commenter is requesting or a petitioner is arguing should be required?; and (2) Even if it is feasible, is the agency relying on other policy or legal considerations to justify not preparing the requested analysis? The first question of whether an analysis is feasible is primarily a question of fact that should be judged by the substantial evidence standard. The second inquiry involves evaluating CEQA's information disclosure purposes against the asserted reasons to not perform the requested analysis. For example, an agency might believe that its EIR meets CEQA's informational disclosure standards even without a particular analysis, and therefore choose not to conduct that analysis. SCAQMD submits that this is more of a legal question, which should be reviewed de novo as a question of law.

ARGUMENT

I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.

A. Air Quality Regulatory Background

The South Coast Air Quality Management District (SCAQMD) is one of the local and regional air pollution control districts and air quality

management districts in California. The SCAQMD is the regional air pollution agency for the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410, 17 Cal. Code Reg. § 60104.) The SCAQMD also includes the Coachella Valley in Riverside County (Palm Springs area to the Salton Sea). (SCAQMD, *Final 2012 AQMP (Feb. 2013)*, http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan; then follow "chapter 7" hyperlink; pp 7-1, 7-3 (last visited Apr. 1, 2015).) The SCAQMD's jurisdiction includes over 16 million residents and has the worst or nearly the worst air pollution levels in the country for ozone and fine particulate matter. (SCAQMD, *Final 2012 AQMP (Feb. 2013)*, http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan; then follow "Executive Summary" hyperlink p. ES-1 (last visited Apr. 1, 2015).)

Under California law, the local and regional districts are primarily responsible for controlling air pollution from all sources except motor vehicles. (Health & Saf. Code § 40000.) The California Air Resources Board (CARB), part of the California Environmental Protection Agency, is primarily responsible for controlling pollution from motor vehicles. (*Id.*) The air districts must adopt rules to achieve and maintain the state and federal ambient air quality standards within their jurisdictions. (Health & Saf. Code § 40001.)

The federal Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to identify pollutants that are widely distributed and pose a threat to human health, developing a so-called "criteria" document. (42 U.S.C. § 7408; CAA § 108.) These pollutants are frequently called "criteria pollutants." EPA must then establish "national ambient air quality standards" at levels "requisite to protect public health",

allowing "an adequate margin of safety." (42 U.S.C. § 7409; CAA § 109.) EPA has set standards for six identified pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter (PM), and lead. (U.S. EPA, National Ambient Air Quality Standards (NAAQS), http://www.epa.gov/air/criteria.html (last updated Oct. 21, 2014).)[2]

Under the Clean Air Act, EPA sets emission standards for motor vehicles and "nonroad engines" (mobile farm and construction equipment, marine vessels, locomotives, aircraft, etc.). (42 U.S.C. §§ 7521, 7547; CAA §§ 202, 213.) California is the only state allowed to establish emission standards for motor vehicles and most nonroad sources; however, it may only do so with EPA's approval. (42 U.S.C. §§ 7543(b), 7543(e); CAA §§ 209(b), 209(c).) Sources such as manufacturing facilities, power plants and refineries that are not mobile are often referred to as "stationary sources." The Clean Air Act charges state and local agencies with the primary responsibility to attain the national ambient air quality standards. (42 U.S.C. § 7401(a)(3); CAA § 101(a)(3).) Each state must adopt and implement a plan including enforceable measures to achieve and maintain the national ambient air quality standards. (42 U.S.C. § 7410; CAA § 110.) The SCAQMD and CARB jointly prepare portion of the plan for the South Coast Air Basin and submit it for approval by EPA. (Health & Saf. Code §§ 40460, et seq.)

The Clean Air Act also requires state and local agencies to adopt a permit program requiring, among other things, that new or modified "major" stationary sources use technology to achieve the "lowest achievable emission rate," and to control minor stationary sources as

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[2] Particulate matter (PM) is further divided into two categories: fine particulate or $PM_{2.5}$ (particles with a diameter of less than or equal to 2.5 microns) and coarse particulate (PM_{10}) (particles with a diameter of 10 microns or less). (U.S. EPA, Particulate Matter (PM), http://www.epa.gov/airquality/particlepollution/ (last visited Apr. 1, 2015).)

needed to help attain the standards. (42 U.S.C. §§ 7502(c)(5), 7503(a)(2), 7410(a)(2)(C); CAA §§ 172(c)(5), 173(a)(2), 110(a)(2)(C).) The air districts implement these permit programs in California. (Health & Saf. Code §§ 42300, et seq.)

The Clean Air Act also sets out a regulatory structure for over 100 so-called "hazardous air pollutants" calling for EPA to establish "maximum achievable control technology" (MACT) for sources of these pollutants. (42 U.S.C. § 7412(d)(2); CAA § 112(d)(2).) California refers to these pollutants as "toxic air contaminants" (TACs) which are subject to two state-required programs. The first program requires "air toxics control measures" for specific categories of sources. (Health & Saf. Code § 39666.) The other program requires larger stationary sources and sources identified by air districts to prepare "health risk assessments" for impacts of toxic air contaminants. (Health & Saf. Code §§ 44320(b), 44322, 44360.) If the health risk exceeds levels identified by the district as "significant," the facility must implement a "risk reduction plan" to bring its risk levels below "significant" levels. Air districts may adopt additional more stringent requirements than those required by state law, including requirements for toxic air contaminants. (Health & Saf. Code § 41508; *Western Oil & Gas Assn. v. Monterey Bay Unified APCD* (1989) 49 Cal.3d 408, 414.) For example, SCAQMD has adopted a rule requiring new or modified sources to keep their risks below specified levels and use best available control technology (BACT) for toxics. (SCAQMD, *Rule 1401-New Source Review of Toxic Air Contaminants*, http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiv; then follow "Rule 1401" hyperlink (last visited Apr. 1, 2015).)

B. The SCAQMD's Role Under CEQA

The California Environmental Quality Act (CEQA) requires public agencies to perform an environmental review and appropriate analysis for projects that they implement or approve. (Pub. Resources Code § 21080(a).) The agency with primary approval authority for a particular project is generally the "lead agency" that prepares the appropriate CEQA document. (CEQA Guidelines §§ 15050, 15051.) Other agencies having a subsequent approval authority over all or part of a project are called "responsible" agencies that must determine whether the CEQA document is adequate for their use. (CEQA Guidelines §§ 15096(c), 15381.) Lead agencies must also consult with and circulate their environmental impact reports to "trustee agencies" and agencies "with jurisdiction by law" including "authority over resources which may be affected by the project." (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines §§ 15086(a)(3), 15073(c).) The SCAQMD has a role in all these aspects of CEQA.

Fulfilling its responsibilities to implement its air quality plan and adopt rules to attain the national ambient air quality standards, SCAQMD adopts a dozen or more rules each year to require pollution reductions from a wide variety of sources. The SCAQMD staff evaluates each rule for any adverse environmental impact and prepares the appropriate CEQA document. Although most rules reduce air emissions, they may have secondary environmental impacts such as use of water or energy or disposal of waste—e.g., spent catalyst from control equipment.[3]

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[3] The SCAQMD's CEQA program for its rules is a "Certified Regulatory Program" under which it prepares a "functionally equivalent" document in lieu of a negative declaration or EIR. (Pub. Resources Code § 21080.5, CEQA Guidelines § 15251(l).)

The SCAQMD also approves a large number of permits every year to construct new, modified, or replacement facilities that emit regulated air pollutants. The majority of these air pollutant sources have already been included in an earlier CEQA evaluation for a larger project, are currently being evaluated by a local government as lead agency, or qualify for an exemption. However, the SCAQMD sometimes acts as lead agency for major projects where the local government does not have a discretionary approval. In such cases, SCAQMD prepares and certifies a negative declaration or environmental impact report (EIR) as appropriate.[4] SCAQMD evaluates perhaps a dozen such permit projects under CEQA each year. SCAQMD is often also a "responsible agency" for many projects since it must issue a permit for part of the projects (e.g., a boiler used to provide heat in a commercial building). For permit projects evaluated by another lead agency under CEQA, SCAQMD has the right to determine that the CEQA document is inadequate for its purposes as a responsible agency, but it may not do so because its permit program already requires all permitted sources to use the best available air pollution control technology. (SCAQMD, *Rule 1303(a)(1) – Requirements*, http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiii; then follow "Rule 1303" hyperlink (last visited Apr. 1, 2015).)

Finally, SCAQMD receives as many as 60 or more CEQA documents each month (around 500 per year) in its role as commenting agency or an agency with "jurisdiction by law" over air quality—a natural resource affected by the project. (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines § 15366(a)(3).) The SCAQMD staff provides comments on as many as 25 or 30 such documents each month.

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[4] The SCAQMD's permit projects are not included in its Certified Regulatory Program, and are evaluated under the traditional local government CEQA analysis. (Pub. Resources Code §§ 21150-21154.)

(SCAQMD Governing Board Agenda, Apr. 3, 2015, Agenda Item 16, Attachment A, http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-april-3-2015; then follow "16. Lead Agency Projects and Environmental Documents Received by SCAQMD" hyperlink (last visited Apr. 1, 2015).) Of course, SCAQMD focuses its commenting efforts on the more significant projects.

Typically, SCAQMD comments on the adequacy of air quality analysis, appropriateness of assumptions and methodology, and completeness of the recommended air quality mitigation measures. Staff may comment on the need to prepare a health risk assessment detailing the projected cancer and noncancer risks from toxic air contaminants resulting from the project, particularly the impacts of diesel particulate matter, which CARB has identified as a toxic air contaminant based on its carcinogenic effects. (California Air Resources Board, Resolution 98-35, Aug. 27, 1998, http://www.arb.ca.gov/regact/diesltac/diesltac.htm; then follow Resolution 98-35 hyperlink (last visited Apr. 1, 2015).) Because SCAQMD already requires new or modified stationary sources of toxic air contaminants to use the best available control technology for toxics and to keep their risks below specified levels, (SCAQMD Rule 1401, supra, note 15), the greatest opportunity to further mitigate toxic impacts through the CEQA process is by reducing emissions—particularly diesel emissions—from vehicles.

II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT'S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.

Numerous cases hold that courts do not review the correctness of an EIR's conclusions but rather its sufficiency as an informative document. (*Laurel Heights 1, supra*, 47 Cal.3d at p. 392; *Citizens of Goleta Valley v.*

Bd. of Supervisors (1990) 52 Cal.3d 553, 569; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.)

As stated by the Court of Appeal in this case, where an EIR has addressed a topic, but the petitioner claims that the information provided about that topic is insufficient, courts must "draw[] a line that divides *sufficient* discussions from those that are *insufficient*." (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) The Court of Appeal readily admitted that "[t]he terms themselves – sufficient and insufficient – provide little, if any, guidance as to where the line should be drawn. They are simply labels applied once the court has completed its analysis." (*Id.*)

The CEQA Guidelines, however, provide guidance regarding what constitutes a sufficient discussion of impacts. Section 15151 states that "the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." Case law reflects this: "Analysis of environmental effects need not be exhaustive, but will be judged in light of what was reasonably feasible." (*Association of Irritated Residents v. County of Madera, supra,* 107 Cal.App.4th at p. 1390; see also CEQA Guidelines § 15204(a).)

Applying this test, this Court cannot realistically establish a hard-and-fast rule that an analysis correlating air pollution impacts of a project to quantified resulting health impacts is always required, or indeed that it is never required. Simply put, in some cases such an analysis will be "feasible"; in some cases it will not.

For example, air pollution control districts often require a proposed new source of toxic air contaminants to prepare a "health risk assessment" before issuing a permit to construct. District rules often limit the allowable cancer risk the new source may cause to the "maximally exposed individual" (worker and residence exposures). (*See, e.g.*, SCAQMD Rule 1401(c)(8); 1401(d)(1), *supra* note 15.) In order to perform this analysis, it

is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). (SCAQMD, *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588), pp. 11-16*; (last visited Apr. 1, 2015) http://www.aqmd.gov/home/library/documents-support-material; "Guidelines" hyperlink; AB2588; then follow AB2588 Risk Assessment Guidelines hyperlink.)

Thus, it is feasible to determine the health risk posed by a new gas station locating at an intersection in a mixed use area, where receptor locations are known. On the other hand, it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk—it does not necessarily mean anyone will contract cancer as a result of the project.

In order to find the "cancer burden" or expected additional cases of cancer resulting from the project, it is also necessary to know the numbers and location of individuals living within the "zone of impact" of the project: i.e., those living in areas where the projected cancer risk from the project exceeds one in a million. (SCAQMD, Health Risk Assessment Summary form, http://www.aqmd.gov/home/forms ; filter by "AB2588" category; then "Health Risk Assessment" hyperlink (last visited Apr. 1, 2015).) The affected population is divided into bands of those exposed to at least 1 in a million risk, those exposed to at least 10 in a million risk, etc. up to those exposed at the highest levels. (*Id.*) This data allows agencies to calculate an approximate number of additional cancer cases expected from

the project. However, it is not possible to predict which particular individuals will be affected.

For the so-called criteria pollutants[5], such as ozone, it may be more difficult to quantify health impacts. Ozone is formed in the atmosphere from the chemical reaction of the nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. (U.S. EPA, Ground Level Ozone, http://www.epa.gov/airquality/ozonepollution/ (last updated Mar. 25, 2015).) It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. (U.S. EPA, *Guideline on Ozone Monitoring Site Selection* (Aug. 1998) EPA-454/R-98-002 § 5.1.2, http://www.epa.gov/ttnamti1/archive/cpreldoc.html (last visited Apr. 1, 2015).) NO_x and VOC are known as "precursors" of ozone.

Scientifically, health effects from ozone are correlated with increases in the ambient level of ozone in the air a person breathes. (U.S. EPA, *Health Effects of Ozone in the General Population,* Figure 9, http://www.epa.gov/apti/ozonehealth/population.html#levels (last visited Apr. 1, 2015).) However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region. For example, the SCAQMD's 2012 AQMP showed that reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion. (South Coast Air Quality Management District, *Final 2012 AQMP (February 2013)*, http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan; then follow "Appendix V: Modeling & Attainment Demonstrations" hyperlink,

[5] See discussion of types of pollutants, supra, Part I.A.

pp. v-4-2, v-7-4, v-7-24.) SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects.

On the other hand, this type of analysis may be feasible for projects on a regional scale with very high emissions of NO_x and VOCs, where impacts are regional. For example, in 2011 the SCAQMD performed a health impact analysis in its CEQA document for proposed Rule 1315, which authorized various newly-permitted sources to use offsets from the districts "internal bank" of emission reductions. This CEQA analysis accounted for essentially *all* the increases in emissions due to new or modified sources in the District between 2010 and 2030.[6] The SCAQMD was able to correlate this very large emissions increase (e.g., 6,620 pounds per day NO_x (1,208 tons per year), 89,180 pounds per day VOC (16,275 tons per year)) to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to ozone).[7] (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System* (see hyperlink in fn 6*)* at p. 4.1-35, Table 4.1-29.)

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[6] (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, Attachment G, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System, Vol. 1, p.4.0-6,* http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-february-4-2011; the follow "26. Adopt Proposed Rule 1315 – Federal New Source Review Tracking System" (last visited April 1, 2015).)

[7] The SCAQMD was able to establish the location of future NO_x and VOC emissions by assuming that new projects would be built in the same locations and proportions as existing stationary sources. This CEQA document was upheld by the Los Angeles County Superior Court in *Natural Res. Def. Council v SCAQMD*, Los Angeles Superior Court No. BS110792).

However, a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels. Thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from ozone. This is in part because ozone formation is not linearly related to emissions. Ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology and seasonal impacts, and because ozone is formed some time later and downwind from the actual emission. (EPA Guideline on Ozone Monitoring Site Selection (Aug. 1998) EPA-454/R-98-002, § 5.1.2; https://www.epa.gov/ttnamti1/archive/cpreldoc.html; then search "Guideline on Ozone Monitoring Site Selection" click on pdf) (last viewed Apr. 1, 2015).)

SCAQMD has set its CEQA "significance" threshold for NO_x and VOC at 10 tons per year (expressed as 55 lb/day). (SCAQMD, *Air Quality Analysis Handbook*, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook; then follow "SCAQMD Air Quality Significance Thresholds" hyperlink (last visited Apr. 1, 2015).) This is because the federal Clean Air Act defines a "major" stationary source for "extreme" ozone nonattainment areas such as SCAQMD as one emitting 10 tons/year. (42 U.S.C. §§ 7511a(e), 7511a(f); CAA §§ 182(e), 182(f).) Under the Clean Air Act, such sources are subject to enhanced control requirements (42 U.S.C. §§ 7502(c)(5), 7503; CAA §§ 172(c)(5), 173), so SCAQMD decided this was an appropriate threshold for making a CEQA "significance" finding and requiring feasible mitigation. Essentially, SCAQMD takes the position that a source that emits 10 tons/year of NO_x or VOC would contribute cumulatively to ozone formation. Therefore, lead agencies that use SCAQMD's thresholds of significance may determine

that many projects have "significant" air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program.

In the case of particulate matter ($PM_{2.5}$)[8], another "criteria" pollutant, SCAQMD staff is aware of two possible methods of analysis. SCAQMD used regional modeling to predict expected health impacts from its proposed Rule 1315, as mentioned above. Also, the California Air Resources Board (CARB) has developed a methodology that can predict expected mortality (premature deaths) from large amounts of $PM_{2.5}$. (California Air Resources Board, *Health Impacts Analysis: PM Premature Death Relationship*, http://www.arb.ca.gov/research/health/pm-mort/pm-mort_arch.htm (last reviewed Jan. 19, 2012).) SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1837 lbs/day). (Final Environmental Assessment for Rule 1315, *supra*, pp 4.0-12, 4.1-13, 4.1-37 (e.g., 125 premature deaths in the entire SCAQMD in 2030), 4.1-39 (0.05 to 1.77 annual premature deaths from power plants.) Again, this project involved large amounts of additional $PM_{2.5}$ in the District, up to 2.82 tons/day (5,650 lbs/day of $PM_{2.5}$, or, or 1029 tons/year. (*Id.* at table 4.1-4, p. 4.1-10.)

However, the primary author of the CARB methodology has reported that this $PM_{2.5}$ health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties. [9] (SCAQMD, *Final Subsequent Mitigated Negative Declaration for: Warren*

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[8] SCAQMD has not attained the latest annual or 24-hour national ambient air quality standards for "$PM_{2.5}$" or particulate matter less than 2.5 microns in diameter.

[9] Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts. (*Id.* at p. 2-24.)

E&P, Inc. WTU Central Facility, New Equipment Project (certified July 19, 2011), http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2011; then follow "Final Subsequent Mitigated Negative Declaration for Warren E&P Inc. WTU Central Facility, New Equipment Project" hyperlink, pp. 2-22, 2-23 (last visited Apr. 1, 2015).) Therefore, when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small $PM_{2.5}$ increases (3.8 lb/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated $PM_{2.5}$ emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so. (*Id.* at pp 2-22 to 2-24.) SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information. (*Id.* at pp. 2-23, 2-25.) This CEQA document was not challenged in court.

In the above case, while it may have been technically possible to plug the data into the methodology, the results would not have been reliable or meaningful. SCAQMD believes that an agency should not be required to perform analyses that do not produce reliable or meaningful results. This Court has already held that an agency may decline to use even the "normal" "existing conditions" CEQA baseline where to do so would be misleading or without informational value. (*Neighbors for Smart Rail v. Exposition Metro Line* (2013) 57 Cal.4th 439, 448, 457.) The same should be true for a decision that a particular study or analysis would not provide reliable or meaningful results.[10]

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[10] Whether a particular study would result in "informational value" is a part of deciding whether it is "feasible." CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and

Therefore, it is not possible to set a hard-and-fast rule on whether a correlation of air quality impacts with specific quantifiable health impacts is required in all cases. Instead, the result turns on whether such an analysis is reasonably feasible in the particular case.[11] Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths. (California Air Resources Board, *Health Impacts Analysis: PM Mortality Relationship*, http://www.arb.ca.gov/research/health/pm-mort/pm-mort.htm (last reviewed Dec. 29, 2010).) This factor also counsels against setting any hard-and-fast rule in this case.

III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.

A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document

A second issue in this case is whether courts should review an EIR's informational sufficiency under the "substantial evidence" test as argued by Friant Ranch or the "independent judgment" test as argued by Sierra Club.

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technological factors." (Pub. Resources Code § 21061.1.) A study cannot be "accomplished in a *successful* manner" if it produces unreliable or misleading results.

[11] In this case, the lead agency did not have an opportunity to determine whether the requested analysis was feasible because the comment was non-specific. Therefore, SCAQMD suggests that this Court, after resolving the legal issues in the case, direct the Court of Appeal to remand the case to the lead agency for a determination of whether the requested analysis is feasible. Because Fresno County, the lead agency, did not seek review in this Court, it seems likely that the County has concluded that at least some level of correlation of air pollution with health impacts is feasible.

As this Court has explained, "a reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts." (*Vineyard Area Citizens v. City of Rancho Cordova, supra,* 40 Cal.4th at 435.) For questions regarding compliance with proper procedure or other legal questions, courts review an agency's action de novo under the "independent judgment" test. (*Id.*) On the other hand, courts review factual disputes only for substantial evidence, thereby "accord[ing] greater deference to the agency's substantive factual conclusions." (*Id.*)

Here, Friant Ranch and Sierra Club agree that the case involves the question of whether an EIR includes sufficient information regarding a project's impacts. However, they disagree on the proper standard of review for answering this question: Sierra Club contends that courts use the independent judgment standard to determine whether an EIR's analysis is sufficient to meet CEQA's informational purposes,[12] while Friant Ranch contends that the substantial evidence standard applies to this question.

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[12] Sierra Club acknowledges that courts use the substantial evidence standard when reviewing predicate factual issues, but argues that courts ultimately decide as a matter of law what CEQA requires. (Answering Brief, pp. 14, 23.)

SCAQMD submits that the issue is more nuanced than either party contends. We submit that, whether a CEQA document includes sufficient analysis to satisfy CEQA's informational mandates is a mixed question of fact and law,[13] containing two levels of inquiry that should be judged by different standards.[14]

The state CEQA Guidelines set forth standards for the adequacy of environmental analysis. Guidelines Section 15151 states:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

In this case, the basic question is whether the underlying analysis of air quality impacts made the EIR "sufficient" as an informative document. However, whether the EIR's analysis was sufficient is judged in light of what was reasonably feasible. This represents a mixed question of fact and law that is governed by two different standards of review.

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[13] Friant Ranch actually states that the claim that an EIR lacks sufficient relevant information is, "most properly thought of as raising mixed questions of fact and law." (Opening Brief, p. 27.) However, the remainder of its argument claims that the court should apply the substantial evidence standard of review to all aspects of the issue.

[14] Mixed questions of fact and law issues may implicate predominantly factual subordinate questions that are reviewed under the substantial evidence test even though the ultimate question may be reviewed by the independent judgment test. *Crocker National Bank v. City and County of San Francisco* (1989) 49 Cal.3d 881, 888-889.

SCAQMD submits that an EIR's sufficiency as an informational document is ultimately a legal question that courts should determine using their independent judgment. This Court's language in *Laurel Heights I* supports this position. As this Court explained: "The court does not pass upon the correctness of the EIR's environmental conclusions, but only upon its *sufficiency as an informative document.*" (*Laurel Heights I, supra,* 47 Cal.3d at 392-393) (emphasis added.) As described above, the Court in *Vineyard Area Citizens v. City of Rancho Cordova, supra,* 40 Cal.4th at 431, also used its independent judgment to determine what level of analysis CEQA requires for water supply impacts. The Court did not defer to the lead agency's opinion regarding the law's requirements; rather, it determined for itself what level of analysis was necessary to meet "[t]he law's informational demands." (*Id.* at p. 432.) Further, existing case law also holds that where an agency fails to comply with CEQA's information disclosure requirements, the agency has "failed to proceed in the manner required by law." (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 118.)

However, whether an EIR satisfies CEQA's requirements depends in part on whether it was reasonably feasible for an agency to conduct additional or more thorough analysis. EIRs must contain "a detailed statement" of a project's impacts (Pub. Res. Code § 21061), and an agency must "use its best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines § 15144.) Nevertheless, "the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." (CEQA Guidelines § 15151.)

SCAQMD submits that the question of whether additional analysis or a particular study suggested by a commenter is "feasible" is generally a question of fact. Courts have already held that whether a particular alternative is "feasible" is reviewed by the substantial evidence test.

(*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 598-99; *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 883.) Thus, if a lead agency determines that a particular study or analysis is infeasible, that decision should generally be judged by the substantial evidence standard. However, SCAQMD urges this Court to hold that lead agencies must explain the basis of any determination that a particular analysis is infeasible in the EIR itself. An EIR must discuss information, including issues related to the feasibility of particular analyses "in sufficient detail to enable meaningful participation and criticism by the public. '[W]hatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.'" (*Laurel Heights I, supra*, 47 Cal.3d at p. 405 (quoting *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831) (discussing analysis of alternatives).) The evidence on which the determination is based should also be summarized in the EIR itself, with appropriate citations to reference materials if necessary. Otherwise commenting agencies such as SCAQMD would be forced to guess where the lead agency's evidence might be located, thus thwarting effective public participation.

Moreover, if a lead agency determines that a particular study or analysis would not result in reliable or useful information and for that reason is not feasible, that determination should be judged by the substantial evidence test. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, *supra*, 57 Cal.4th 439, 448, 457:

whether "existing conditions" baseline would be misleading or uninformative judged by substantial evidence standard.[15])

If the lead agency's determination that a particular analysis or study is not feasible is supported by substantial evidence, then the agency has not violated CEQA's information disclosure provisions, since it would be infeasible to provide additional information. This Court's decisions provide precedent for such a result. For example, this Court determined that the issue of whether the EIR should have included a more detailed discussion of future herbicide use was resolved because substantial evidence supported the agency's finding that "the precise parameters of future herbicide use could not be predicted." *Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 955.

Of course, SCAQMD expects that courts will continue to hold lead agencies to their obligations to consult with, and not to ignore or misrepresent, the views of sister agencies having special expertise in the area of air quality. (*Berkeley Keep Jets Over the Bay v. Board of Port Commissioners* (2007) 91 Cal.App.4th 1344, 1364 n.11.) In some cases, information provided by such expert agencies may establish that the purported evidence relied on by the lead agency is not in fact "substantial". (*Id.* at pp. 1369-1371.)

In sum, courts retain ultimate responsibility to determine what CEQA requires. However, the law does not require exhaustive analysis, but only what is reasonably feasible. Agencies deserve deference for their factual determinations regarding what type of analysis is reasonably feasible. On the other hand, if a commenter requests more information, and the lead agency declines to provide it but does *not* determine that the

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[15] The substantial evidence standard recognizes that the courts "have neither the resources nor the scientific expertise" to weigh conflicting evidence on technical issues. (*Laurel Heights I, supra,* 47 Cal.3d 376, 393.)

requested study or analysis would be infeasible, misleading or uninformative, the question becomes whether the omission of that analysis renders the EIR inadequate to satisfy CEQA's informational purposes. (*Id.* at pp. 1370-71.) Again, this is predominantly a question of law and should be judged by the de novo or independent judgment standard of review. Of course, this Court has recognized that a "project opponent or reviewing court can always imagine some additional study or analysis that might provide helpful information. It is not for them to design the EIR. That further study...might be helpful does not make it necessary." (*Laurel Heights I, supra,* 47 Cal.3d 376, 415 – see also CEQA Guidelines § 15204(a) [CEQA "does not require a lead agency to conduct every test. . . recommended or demanded by commenters."].) Courts, then, must adjudicate whether an omission of particular information renders an EIR inadequate to serve CEQA's informational purposes.[16]

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[16] We recognize that there is case law stating that the substantial evidence standard applies to "challenges to the scope of an EIR's analysis of a topic" as well as the methodology used and the accuracy of the data relied on in the document "because these types of challenges involve factual questions." (*Bakersfield Citizens for Local Control v. City of Bakersfield, supra,* 124 Cal.App.4th 1184, 1198, and cases relied on therein.) However, we interpret this language to refer to situations where the question of the scope of the analysis really is factual—that is, where it involves whether further analysis is feasible, as discussed above. This interpretation is supported by the fact that the *Bakersfield* court expressly rejected an argument that a claimed "omission of information from the EIR should be treated as inquiries whether there is substantial evidence supporting the decision approving the project. " *Bakersfield, supra,* 124 Cal.App.4th at p. 1208. And the *Bakersfield* court ultimately decided that the lead agency must analyze the connection between the identified air pollution impacts and resulting health impacts, even though the EIR already included some discussion of air-pollution-related respiratory illnesses. *Bakersfield, supra,* 124 Cal.App.4th at p. 1220. Therefore, the court must not have interpreted this question as one of the "scope of the analysis" to be judged by the substantial evidence standard.

B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.

In its brief, Friant Ranch makes a distinction between cases where a required CEQA topic is not discussed at all (to be reviewed by independent judgment as a failure to proceed in the manner required by law) and cases where a topic is discussed, but the commenter claims the information provided is insufficient (to be judged by the substantial evidence test). (Opening Brief, pp. 13-17.) The Court of Appeal recognized these two types of cases, but concluded that both raised questions of law. (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) We believe the distinction drawn by Friant Ranch is unduly narrow, and inconsistent with cases which have concluded that CEQA documents are insufficient. In many instances, CEQA's requirements are stated broadly, and the courts must interpret the law to determine what level of analysis satisfies CEQA's mandate for providing meaningful information, even though the EIR discusses the issue to some extent.

For example, the CEQA Guidelines require discussion of the existing environmental baseline. In *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955, the lead agency had discussed the environmental baseline by describing historic month-end water levels in the affected lakes. However, the court held that this was not an adequate baseline discussion because it failed to discuss the timing and amounts of past actual water releases, to allow comparison with the proposed project. The court evidently applied the independent judgment test to its decision, even though the agency discussed the issue to some extent.

Likewise, in *Vineyard Area Citizens* (2007) 40 Cal.4th 412, this Court addressed the question of whether an EIR's analysis of water supply impacts complied with CEQA. The parties agreed that the EIR was required to analyze the effects of providing water to the development project, "and that in order to do so the EIR had, in some manner, to identify the planned sources of that water." (*Vineyard Area Citizens, supra,* at p. 428.) However, the parties disagreed as to the level of detail required for this analysis and "what level of uncertainty regarding the availability of water supplies can be tolerated in an EIR . . . ." (*Id.*) In other words, the EIR had analyzed water supply impacts for the project, but the petitioner claimed that the analysis was insufficient.

This Court noted that neither CEQA's statutory language or the CEQA Guidelines specifically addressed the question of how precisely an EIR must discuss water supply impacts. (*Id.*) However, it explained that CEQA "states that '[w]hile foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.'" (*Id.*, [Guidelines § 15144].) The Court used this general principle, along with prior precedent, to elucidate four "principles for analytical adequacy" that are necessary in order to satisfy "CEQA's informational purposes." (*Vineyard Area Citizens, supra,* at p. 430.) The Court did not defer to the agency's determination that the EIR's analysis of water supply impacts was sufficient. Rather, this Court used its independent judgment to determine for itself the level of analysis required to satisfy CEQA's fundamental purposes. (*Vineyard Area Citizens, supra*, at p. 441: an EIR does not serve its purposes where it neglects to explain likely sources of water and "... leaves long term water supply considerations to later stages of the project.")

Similarly, the CEQA Guidelines require an analysis of noise impacts of the project. (Appendix G, "Environmental Checklist Form."[17]) In *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1123, the court held that the lead agency's noise impact analysis was inadequate even though it had addressed the issue and concluded that the increase would not be noticeable. If the court had been using the substantial evidence standard, it likely would have upheld this discussion.

Therefore, we do not agree that the issue can be resolved on the basis suggested by Friant Ranch, which would apply the substantial evidence standard to *every* challenge to an analysis that addresses a required CEQA topic. This interpretation would subvert the courts' proper role in interpreting CEQA and determining what the law requires.

Nor do we agree that the Court of Appeal in this case violated CEQA's prohibition on courts interpreting its provisions "in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or in the state guidelines." (Pub. Resources Code § 21083.1.) CEQA requires an EIR to describe *all* significant impacts of the project on the environment. (Pub. Resources Code § 21100(b)(2); *Vineyard Area Citizens, supra,* at p. 428.) Human beings are part of the environment, so CEQA requires EIRs to discuss a project's significant impacts on human health. However, except in certain particular circumstances,[18] neither the CEQA statute nor Guidelines specify the precise level of analysis that agencies must undertake to satisfy the law's requirements. (see, e.g., CEQA Guidelines § 15126.2(a) [EIRs must describe "health and safety problems caused by {a project's} physical changes"].) Accordingly, courts must interpret CEQA as a whole to

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[17] Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) p.287.

[18] E.g., Pub. Resources Code § 21151.8(C)(3)(B)(iii) (requiring specific type of health risk analysis for siting schools).

determine whether a particular EIR is sufficient as an informational document. A court determining whether an EIR's discussion of human health impacts is legally sufficient does not constitute imposing a new substantive requirement.[19] Under Friant Ranch's theory, the above-referenced cases holding a CEQA analysis inadequate would have violated the law. This is not a reasonable interpretation.

IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS

Courts must "scrupulously enforce" CEQA's legislatively mandated requirements. (*Vineyard Area Citizens, supra*, 40 Cal.4th 412, 435.) Case law has firmly established that lead agencies must consult with the relevant air pollution control district before conducting an initial study, and must provide the districts with notice of the intention to adopt a negative declaration (or EIR). (*Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 958.) As *Schenck* held, neither publishing the notice nor providing it to the State Clearinghouse was a sufficient substitute for sending notice directly to the air district. (*Id.*) Rather, courts "must be satisfied that [administrative] agencies have fully complied with the procedural requirements of CEQA, since only in this way can the important public purposes of CEQA be protected from subversion." *Schenck,* 198 Cal.App.4th at p. 959 (citations omitted).[20]

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[19] We submit that Public Resources Code Section 21083.1 was intended to prevent courts from, for example, holding that an agency must analyze economic impacts of a project where there are no resulting environmental impacts (see CEQA Guidelines § 15131) , or imposing new procedural requirements, such as imposing additional public notice requirements not set forth in CEQA or the Guidelines.

[20] Lead agencies must consult air districts, as public agencies with jurisdiction by law over resources affected by the project, *before* releasing an EIR. (Pub. Resources Code §§ 21104(a); 21153.) Moreover, air

Lead agencies should be aware, therefore, that failure to properly seek and consider input from the relevant air district constitutes legal error which may jeopardize their project approvals. For example, the court in *Fall River Wild Trout Foundation v. County of Shasta,* (1999) 70 Cal.App.4th 482, 492 held that the failure to give notice to a trustee agency (Department of Fish and Game) was prejudicial error requiring reversal. The court explained that the lack of notice prevented the Department from providing any response to the CEQA document. (*Id.* at p. 492.) It therefore prevented relevant information from being presented to the lead agency, which was prejudicial error because it precluded informed decision-making. (*Id.*)[21]

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districts should be considered "state agencies" for purposes of the requirement to consult with "trustee agencies" as set forth in Public Resources Code § 20180.3(a). This Court has long ago held that the districts are not mere "local agencies" whose regulations are superseded by those of a state agency regarding matters of statewide concern, but rather have concurrent jurisdiction over such issues. (*Orange County Air Pollution Control District v. Public Util. Com.* (1971) 4 Cal.3d 945, 951, 954.) Since air pollution is a matter of statewide concern, *Id* at 952, air districts should be entitled to trustee agency status in order to ensure that this vital concern is adequately protected during the CEQA process.

[21] In *Schenck,* the court concluded that failure to give notice to the air district was not prejudicial, but this was partly because the trial court had already corrected the error before the case arrived at the Court of Appeal. The trial court issued a writ of mandate requiring the lead agency to give notice to the air district. The air district responded by concurring with the lead agency that air impacts were not significant. (*Schenck,* 198 Cal.App.4th 949, 960.) We disagree with the *Schenck* court that the failure to give notice to the air district would not have been prejudicial (even in the absence of the trial court writ) merely because the lead agency purported to follow the air district's published CEQA guidelines for significance. (*Id.*, 198 Cal.App.4th at p. 960.) In the first place, absent notice to the air district, it is uncertain whether the lead agency properly followed those guidelines. Moreover, it is not realistic to expect that an air district's published guidelines would necessarily fully address all possible air-quality related issues that can arise with a CEQA project, or that those

Similarly, lead agencies must obtain additional information requested by expert agencies, including those with jurisdiction by law, if that information is necessary to determine a project's impacts. (*Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236-37.) Approving a project without obtaining that information constitutes a failure to proceed in the manner prescribed by CEQA. (*Id.* at p. 1236.)

Moreover, a lead agency can save significant time and money by consulting with the air district early in the process. For example, the lead agency can learn what the air district recommends as an appropriate analysis on the facts of its case, including what kinds of health impacts analysis may be available, and what models are appropriate for use. This saves the lead agency from the need to do its analysis all over again and possibly needing to recirculate the document after errors are corrected, if new significant impacts are identified. (CEQA Guidelines § 15088.5(a).) At the same time, the air district's expert input can help the lead agency properly determine whether another commenter's request for additional analysis or studies is reasonable or feasible. Finally, the air district can provide input on what mitigation measures would be feasible and effective.

Therefore, we suggest that this Court provide guidance to lead agencies reminding them of the importance of consulting with the relevant air districts regarding these issues. Otherwise, their feasibility decisions may be vulnerable to air district evidence that establishes that there is no substantial evidence to support the lead agency decision not to provide specific analysis. (*See Berkeley Keep Jets Over the Bay, supra,* 91 Cal.App.4th 1344, 1369-1371.)

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guidelines would necessarily be continually modified to reflect new developments. Therefore we believe that, had the trial court not already ordered the lead agency to obtain the air district's views, the failure to give notice would have been prejudicial, as in *Fall River, supra,* 70 Cal.App.4th 482, 492.

CONCLUSION

The SCAQMD respectfully requests this Court *not* to establish a hard-and-fast rule concerning whether CEQA requires a lead agency to correlate identified air quality impacts of a project with resulting health outcomes. Moreover, the question of whether an EIR is "sufficient as an informational document" is a mixed question of fact and law containing two levels of inquiry. Whether a particular proposed analysis is feasible is predominantly a question of fact to be judged by the substantial evidence standard of review. Where the requested analysis is feasible, but the lead agency relies on legal or policy reasons not to provide it, the question of whether the EIR is nevertheless sufficient as an informational document is predominantly a question of law to be judged by the independent judgment standard of review.

Respectfully submitted,

DATED: April 3, 2015

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
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CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.520(c)(1) of the California Rules of Court, I hereby certify that this brief contains 8,476 words, including footnotes, but excluding the Application, Table of Contents, Table of Authorities, Certificate of Service, this Certificate of Word Count, and signature blocks. I have relied on the word count of the Microsoft Word Vista program used to prepare this Certificate.

DATED: April 3, 2015 Respectfully submitted,

Barbara Baird

Barbara Baird

PROOF OF SERVICE

I am employed in the County of Los Angeles, California. I am over the age of 18 years and not a party to the within action. My business address is 21865 Copley Drive, Diamond Bar, California 91765.

On April 3, 2015 I served true copies of the following document(s) described as **APPLICATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY AND *[PROPOSED]* BRIEF OF *AMICUS CURIAE*** by placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth on the attached service list as follows:

BY MAIL: I enclosed the document(s) in a sealed envelope or package addressed to the persons at the addresses listed in the Service List and placed the envelope for collection and mailing following our ordinary business practices. I am readily familiar with this District's practice for collection and processing of correspondence for mailing. Under that practice, the correspondence would be deposited with the United States Postal Service, with postage thereon fully prepaid at Diamond Bar, California, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on April 3, 2015 at Diamond Bar, California.

Patricia Anderson

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APPENDIX 6

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Los Angeles County, California



Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

NOT FOR CONSULTATION

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

Coastal California Gnatcatcher Polioptila californica californica — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8178

Least Bell's Vireo Vireo bellii pusillus — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

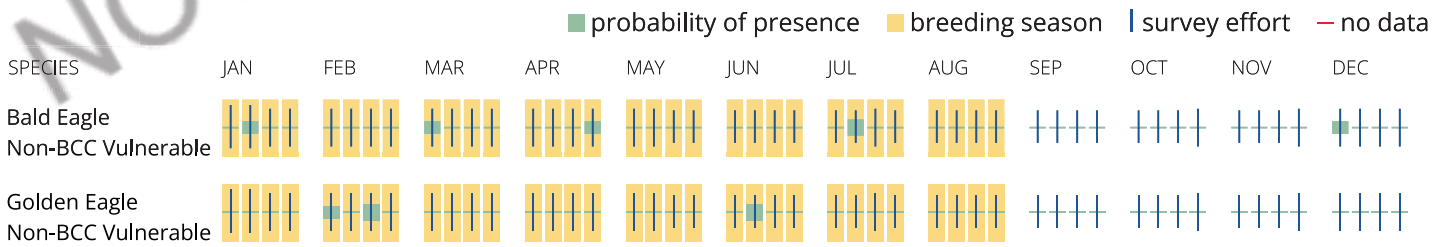
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

NOT FOR CONSULTATION



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and

models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31

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Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

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Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

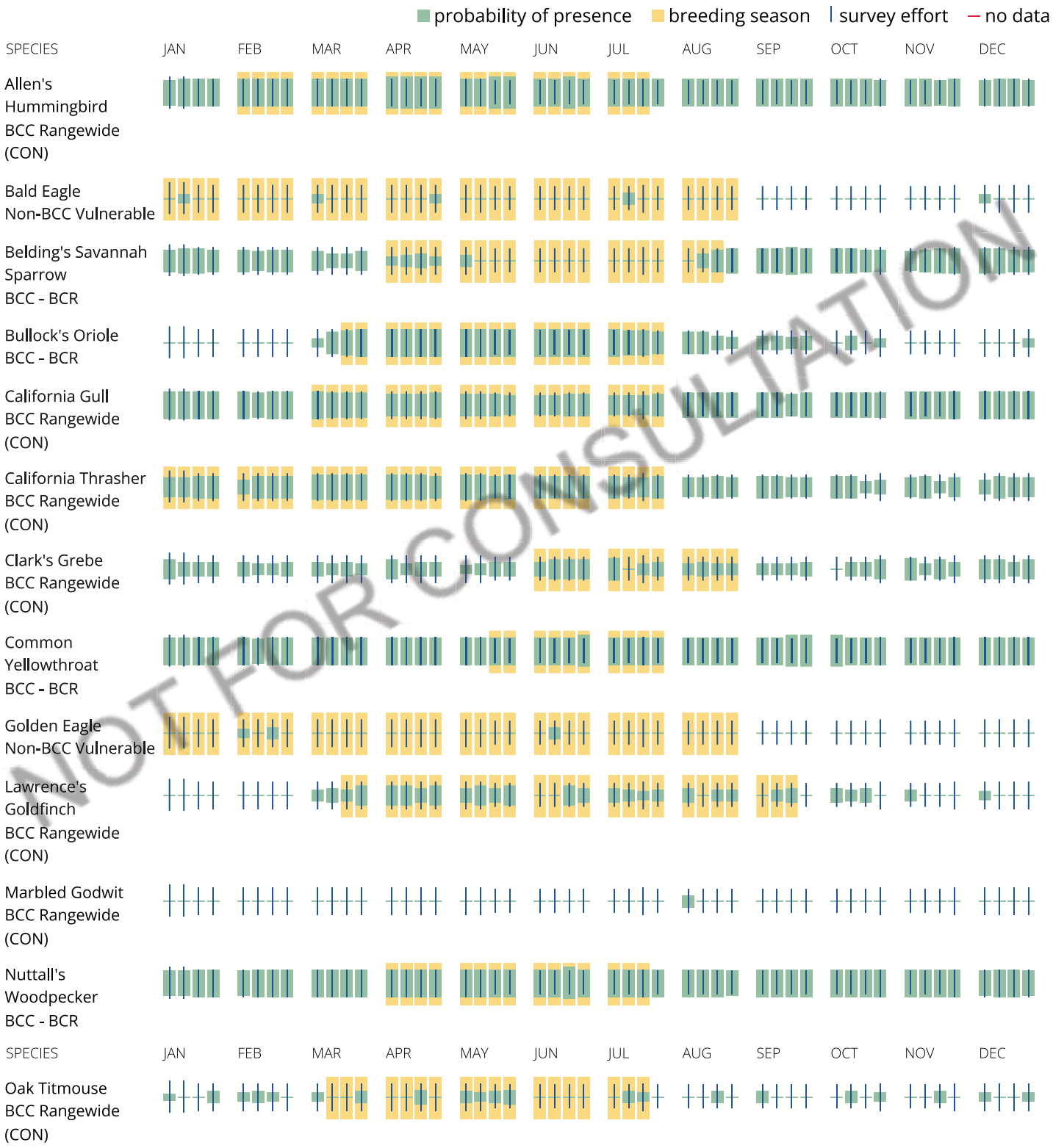
No Data (–)

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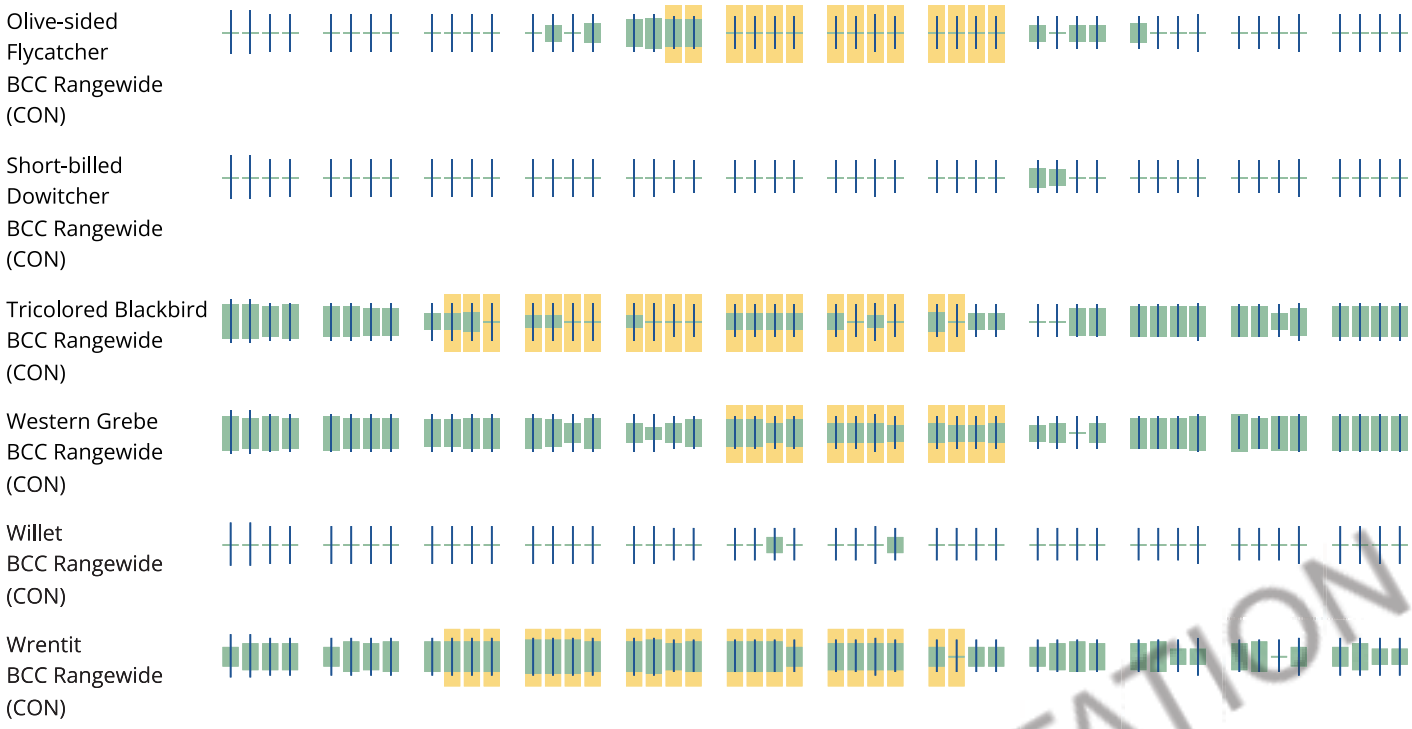
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement

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conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 20

APPENDIX 7

HISTORIC-PERIOD BUILDING EVALUATION

FORMER SECURITY-FIRST NATIONAL BANK BUILDING

12826 Philadelphia Street, Whittier
Los Angeles County, California

Prepared For:

Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405

For Submittal to:

City of Whittier
Community Development Department, Planning Division
13230 Penn Street
Whittier, CA 90602

Prepared by:

CRM TECH
1016 East Cooley Drive, Suite A/B
Colton, CA 92324

Bai "Tom" Tang, Principal Investigator
Michael Hogan, Principal Investigator

January 14, 2022
Revised June 9, 2022
CRM TECH Contract No. 3799

Title: Historic-Period Building Evaluation: Former Security-First National Bank Building, 12826 Philadelphia Street, Whittier, Los Angeles County, California

Author(s): Bai "Tom" Tang, Principal Investigator
Terri Jacquemain, Historian/Architectural Historian

Consulting Firm: CRM TECH
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(909) 824-6400

Date: January 14, 2022; revised June 9, 2022

Prepared for: Kaitlyn Dodson, Vice President
Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405
(909) 882-3612

For Submittal to: City of Whittier
Community Development Department, Planning Division
13230 Penn Street
Whittier, CA 90602
(562) 567-9999

Project Size: Approximately .21 acres

USGS Quadrangle: Whittier, Calif., 7.5' quadrangle; Section 21, T2S R11W, San Bernardino Baseline and Meridian

Keywords: Whittier Hills, eastern Los Angeles County; Assessor's Identification Number 8139-024-027; circa 1952 commercial building (altered in 1975) designated temporarily as Site CRM TECH 3799-1H; not a "historical resource" under CEQA provisions

MANAGEMENT SUMMARY

Between October 2021 and January 2022, at the request of Tom Dodson & Associates, CRM TECH performed a cultural resources study on the former Security-First National Bank building at 12826 Philadelphia Street in the City of Whittier, Los Angeles County, California. Currently vacant, the building is situated at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue, in the southwest quarter of Section 21, Township 2 South Range 11 West, San Bernardino Baseline and Meridian.

The study is a part of the environmental review process for the proposed demolition of the building to accommodate a multi-family residential development on the property. As the lead agency for the project, the City of Whittier required the study pursuant to the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the removal of the building would constitute "a substantial adverse change in the significance of a historical resource." In order to facilitate the significance evaluation of the building and to document its history and characteristics, CRM TECH conducted a cultural resources records search, pursued historical background research, contacted the local historical society, and carried out a field inspection of the building and its environs.

The results of these research procedures indicate that the building dates to 1952 and has been in use for banking, medical, dental, and other commercial purposes since then. In light of its age, the building was recorded into the California Historical Resources Inventory and designated temporarily as Site CRM TECH 3799-1H, pending assignment of a permanent identification number once the California Historical Resources Information System resumed normal operation. However, the building does not appear eligible for listing in the California Register of Historical Resources or for designation by the City of Whittier as a "historic landmark."

Based on these findings, CRM TECH concludes that former Security-First National Bank building does not meet CEQA's definition of a "historical resource." Accordingly, CRM TECH recommends to the City of Whittier a finding that the demolition of the building would not constitute "a substantial adverse change in the significance of a historical resource." No further cultural resources investigation is recommended on this building.

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INTRODUCTION

Between October 2021 and January 2022, at the request of Tom Dodson & Associates, CRM TECH performed a cultural resources study on the former Security-First National Bank building at 12826 Philadelphia Street in the City of Whittier, Los Angeles County, California (Fig. 1). Currently vacant, the building is situated at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue, in the southwest quarter of Section 21, Township 2 South Range 11 West, San Bernardino Baseline and Meridian (Figs. 2, 3).

The study is a part of the environmental review process for the proposed demolition of the building to accommodate a multi-family residential development on the property. As the lead agency for the project, the City of Whittier required the study pursuant to the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the removal of the building would constitute "a substantial adverse change in the significance of a historical resource."

In order to facilitate the significance evaluation of the building and to document its history and characteristics, CRM TECH conducted a cultural resources records search, pursued historical background research, contacted the local historical society, and carried out a field inspection of the building and its environs. The following report is a complete account of the methods, results, and final conclusion of the study. Personnel who participated in the study are named in the appropriate sections below, and their qualifications are provided in Appendix 1.

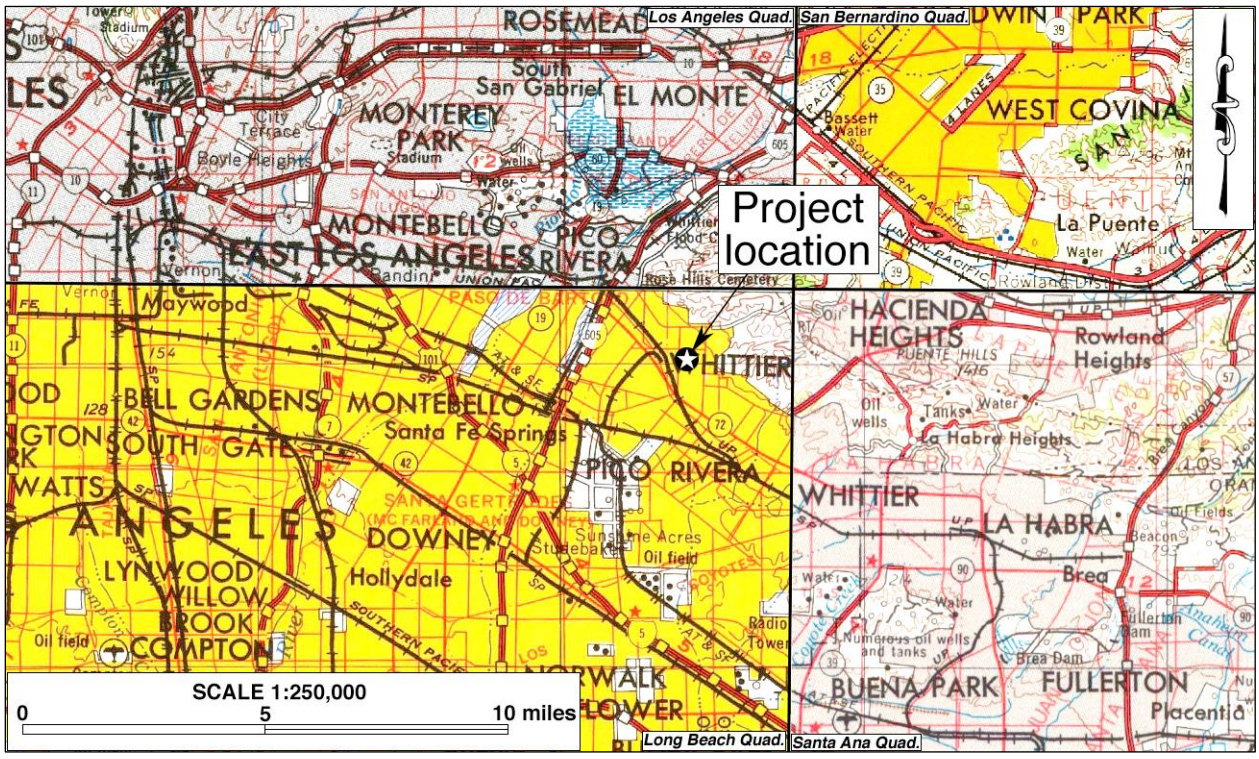


Figure 1. Project vicinity. (Based on USGS Long Beach, Los Angeles, San Bernardino, and Santa Ana, Calif., 120'x60' quadrangles [USGS 1969-1979])

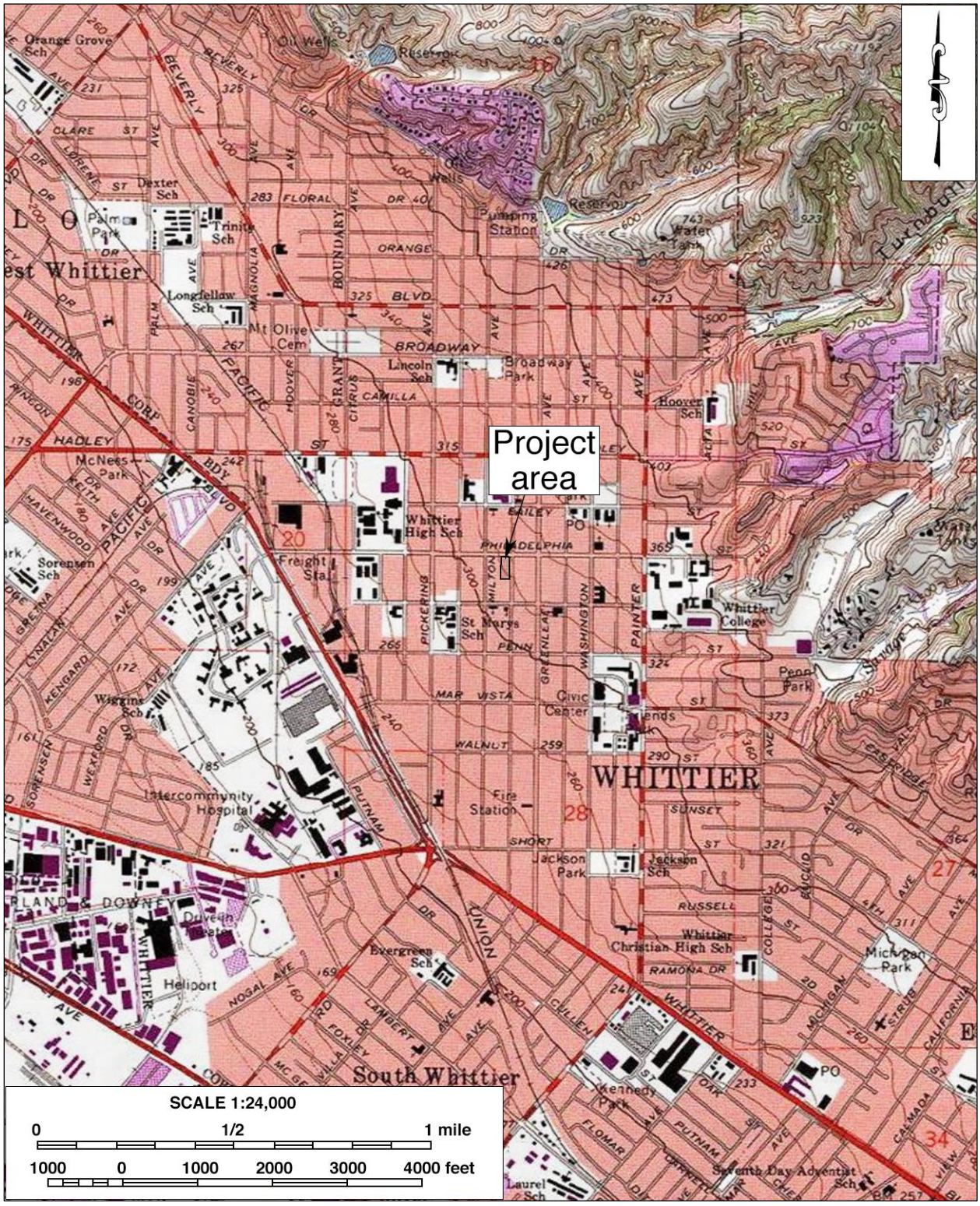


Figure 2. Project location. (Based on USGS Whittier, Calif., 1:24,000 quadrangle [USGS 1981])



Figure 3. Recent satellite image of the project area.

HISTORIC CONTEXT

The earliest Europeans to arrive in present-day southeastern Los Angeles County were Spanish explorers and missionaries, who were awarded jurisdiction over most of the area after Mission San Gabriel was established in 1771 in what is now the City of Montebello. José Manuel Nieto, a Spanish soldier, became the first non-religious settler in the area. Nieto had built an adobe house on a temporary land concession he received in 1784 from Governor Pedro Fages of Alta California, which included all of the land from the mountains to the sea between the San Gabriel River and the Santa Ana River (Bandy and Bandy 1998; Strawther 2012). Alta California eventually changed hands from Spain to Mexico when the latter gained independence in 1821, and then to the United States in 1848 as a result of the Mexican-American War.

In 1835, Nieto's land concession became permanent by grant of the Mexican governor of Alta California, José Figueroa (Bandy and Bandy 1998). After Nieto's death, the land was divided among his heirs into five smaller ranchos, among them the 10,075-acre Rancho Paso de Bartolo left to nephew Juan Crispin Perez, which eventually became portions of the present-day Cities of Whittier, Montebello, and Pico Rivera. The project location, however, lay roughly a mile east of the land grant boundary and thus remained unclaimed when Alta California was annexed by the United States (Whittier Historical Society and Museum n.d.; BLM n.d.). Cattle raising was the most prevalent economic activity in the area until the influx of American settlers eventually brought an end to this now-romanticized lifestyle during the second half of the 19th century.

A land boom in the 1880s spurred by the completion of the competing Southern Pacific and the Santa Fe railways in southern California brought immediate and significant growth to the region. In a pattern often repeated in the history of the American West, dozens of towns, surrounded by irrigated agricultural land, were laid out in the inland valleys before the end of the 19th century, many of them established along the rail lines. To capitalize on rail commerce, the Pickering Land and Water Company purchased 1,259 acres of land in 1887 and laid out the town of Whittier, named by Aquila Pickering for famed American poet John Greenleaf Whittier (Whittier Historical Society and Museum n.d.).

As the mid- and late 20th century unfolded, industrialization and urbanization increasingly assumed dominant roles. Oil was discovered in the rolling hills of southeastern Los Angeles County in the late 1890s, triggering a petroleum boom that made nearby Santa Fe Springs the most productive oil field in California during the 1920s (Da Rold 1979:10). The petroleum industry brought other industrial establishments to the Whittier area as well, and by the 1960s-1970s an eight-mile-long industrial district from Santa Fe Springs to Buena Park had developed (USGS 1951-1981; NETR Online 1954-1980).

For much of the Los Angeles Basin, the post-WWII boom marked a dramatic departure from previous development patterns, when suburban housing tracts and associated shopping centers became the driving force in regional growth. Situated on the southeastern rim of the fast-growing metropolis, the large stretches of farmlands along the Los Angeles-Orange county line became a prime target for tract home developers during the 1940s-1950s. The City of Whittier, which had incorporated in 1898, adopted a charter form of government in 1949 and in 1961 completed the annexation of East Whittier (Whittier Historical Society and Museum n.d.). Today, continued

development has essentially merged the cities in greater Los Angeles into one metropolitan area. At the last complete nationwide census in 2010, the population of Whittier stood at just over 85,000 (USCB n.d.).*

RESEARCH METHODS

RECORDS SEARCH

The historical/archaeological resources records search for this study was conducted by CRM TECH archaeologist Nina Gallardo on December 9, 2021, at the South Central Coastal Information Center (SCCIC), California State University, Fullerton, which is the State of California's official cultural resource records repository for Los Angeles County. The purpose of the records search was to compile a complete inventory of previously identified cultural resources and existing studies within a half-mile radius of the project location. Previously identified cultural resources include properties designated as California Historical Landmarks or Points of Historical Interest as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory. Besides SCCIC records, past studies commissioned by the City of Whittier and on file at the Community Development Department, Planning Division, were also consulted for pertinent information.

FIELD INSPECTION

On November 18, 2021, CRM TECH historian/architectural historian Terri Jacquemain carried out the field inspection of the building and its environs. To facilitate the proper documentation and evaluation of the building, Jacquemain made detailed notations and preliminary photo-documentation of its structural and architectural characteristics, notable features or details, and current condition. The field data was then compiled into standard site record forms for submittal to the SCCIC and inclusion in the California Historical Resources Inventory once the California Historical Resources Information System resumed normal operation (see App. 2).

HISTORICAL BACKGROUND RESEARCH

The general historical background research for this study was conducted by Terri Jacquemain on the basis of published literature in local and regional history, historical maps compiled by the U.S. General Land Office and the U.S. Geological Survey (USGS) between 1868 and 1981, and aerial photographs taken between 1954 and 2021. The historical maps are accessible at the websites of the U.S. Bureau of Land Management and the USGS, and the aerial photographs are available at the Nationwide Environmental Title Research (NETR) Online website and through the Google Earth software.

For information specific to the building under evaluation, Jacquemain pursued more focused and in-depth research to ascertain its construction and ownership history and possible associations with

* An extensive historic context statement for the City of Whittier, especially pertaining to non-residential development and architecture, was commissioned by the City and compiled by GPA Consulting of El Segundo. For further information, see GPA 2016:14-83.

important historic figures or events. Sources consulted during this phase of the research included primarily real property tax assessment and building characteristics records of the of the County of Los Angeles, building safety records of the City of Whittier, and previous cultural resources studies that included the project area.

CONSULTATION WITH LOCAL HISTORICAL SOCIETY

As a part of theis study, on November 1 and December 11, 2021, Terri Jacquemain attaempted to contact the Whittier Historical Society and Museum by electronic mail for additional information on the building and comment regarding its potential significance to the local community. Follow-up solicitation efforts were carried out by telephone on December 3, 2021, and a voice message was left for the organization when the call went unanswered. To date, no response has been received.

RESULTS AND FINDINGS

RECORDS SEARCH

According to SCCIC records, the project location had not been included in a systematic cultural resources survey prior to this study, and no historical/archaeological resources had been recorded within or adjacent to the property boundaries. Within the half-mile scope of the records search, 12 studies have been reported to the SCCIC, all of them completed between 1998 and 2013. Among these are seven studies covering small areas for telecommunication tower sites, three that focused on the Southern Pacific Depot and one each for the demolition of a cafeteria at the Whittier High School and the development of the Whittier Greenway Trail. SCCIC records further show that 14 historic-period cultural resources, including 13 buildings and a memorial plaque, have been identified and recorded within the half-mile radius, as listed below:

- 19-178569 National Bank of Whittier, 13002 Philadelphia Street
- 19-178571 Whittier Union High School, 12417 E. Philadelphia Street
- 19-178609 Standard Oil Building, 7257 Bright Avenue
- 19-178614 Paradox Hybrid Walnut Tree Plaque, 12300 Whittier Boulevard
- 19-180662 Zumaya's Mexican Restaurant, 7315-17 Greenleaf Avenue
- 19-180663 Single-family residence, 7316-20 Comstock Avenue
- 19-180664 Single-family residence, 7317-19 Comstock Avenue
- 19-180665 Single-family residence, 7337-39 Comstock Avenue
- 19-180666 Single-family residence, 7334-38 Comstock Avenue
- 19-187002 Southern Pacific Railroad Depot, 7333 Greenleaf Avenue
- 19-187009 Hoover Hotel, 7035 Greenleaf Avenue
- 19-187059 Single-family residence, 6201 Friends Avenue
- 19-187718 First Christian Church, 6355 Greenleaf Avenue
- 19-190653 St. Mary's Jacobite Syrian Orthodox Church, 12625 Penn Street

Among these 14 known cultural resources, Sites 19-178609, 19-187002, and 19-187009 are now listed in the National Register of Historic Places or have been determined eligible for listing. None of the 14 sites, however, are located in the immediate vicinity of the former Security-First National Bank building. As such, they require no further consideration for the purpose of this study. No

cultural resources of prehistoric—i.e., Native American—origin were previously reported within the scope of the records search.

In addition to the 14 known cultural resources listed above, City of Whittier records indicate that a number of historic-period buildings in the project vicinity were inspected and evaluated during a 2012-2013 survey of residential properties and a 2015-2016 survey of non-residential properties but were not formally recorded into the California Historical Resources Inventory (Chattel 2013; GPA 2016). The subject building of this study was one of them. Included in the 2015-2016 survey of non-residential properties, the building was assigned a status code of 6Z at the time, meaning that it was considered not to be eligible for the National Register of Historic Places, the California Register of Historical Resources, or any local designation (GPA 2016:App. A:14).

FIELD INSPECTION

During the field inspection, the former Security-First National Bank building at 12826 Philadelphia Street was found to have been significantly altered since its original completion. Nonetheless, the building was formally recorded into the California Historical Resources Inventory based on its age (see App. 2) and designated temporarily as Site CRM TECH 3799-1H, pending assignment of a permanent identification number by the SCCIC.

The building is a generally rectangular-shape masonry building with white stucco coating on the exterior walls (Fig. 4). The primary façade, facing Philadelphia Street to the north, features a centered, deep-set front entry in the main, two-story mass framed by beveled walls and filled with a steel-framed, smoked-glass double door surrounded by plate-glass panels. A one-story addition



Figure 4. Former Security-First National Bank building, view to the southwest. (Photograph taken on November 18, 2021)

attached to the eastern side has a similar double door on its northern elevation. The centered entry at the rear of the main mass opens to a paved parking lot, where a tall drive-up banking canopy is located. The western side of the building is blind, and the eastern side features three pairs of smoked-glass windows and an employee entrance near the rear. A more detailed building description is presented in the site record forms in Appendix 2.

HISTORICAL BACKGROUND RESEARCH

Historic maps show the development of Whittier and the project area from 1853 through 1965 as it changed from grazing and pasture land to a relatively densely populated urban center (Figs. 5-8). Around the turn of the 20th century, Whittier's urban core was well-established, as demonstrated by buildings lining a regular street grid, while a wider grid provided access to residential properties on the outskirts (Fig. 5). The discovery of oil in the region in the 1920s and ensuing development of the petroleum industry in the vicinity expanded other growth as well, further solidifying Whittier's urban core (Fig. 6; Da Rold 1979:10). By the late 1940s, the city and the entire region west of the Puente Hills had virtually melded into the greater Los Angeles metropolis (Fig. 7; NETR Online 1954).

The former Security-First National Bank building evidently dates to the first decade of the Post-World War II years. In 1952, a permit for the construction of a bank building was issued to the Pacific Southwest Realty Company (County of Los Angeles n.d.; City of Whittier 1952). Previously, the project location had been occupied by a boarding house and a laundry prior to the turn of the 20th century and by a mortuary and apartments in 1907, which were later joined by a gas

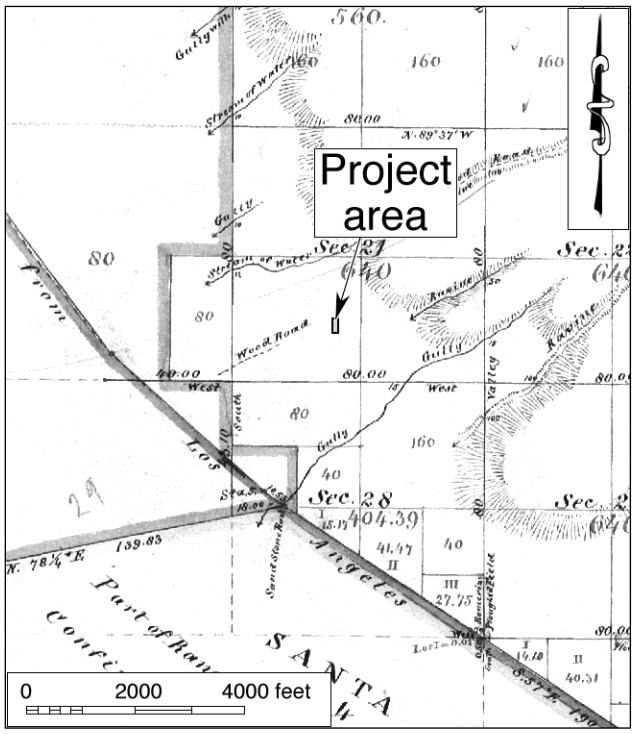


Figure 5. The project area and vicinity in 1853-1868. (Source: GLO 1868)

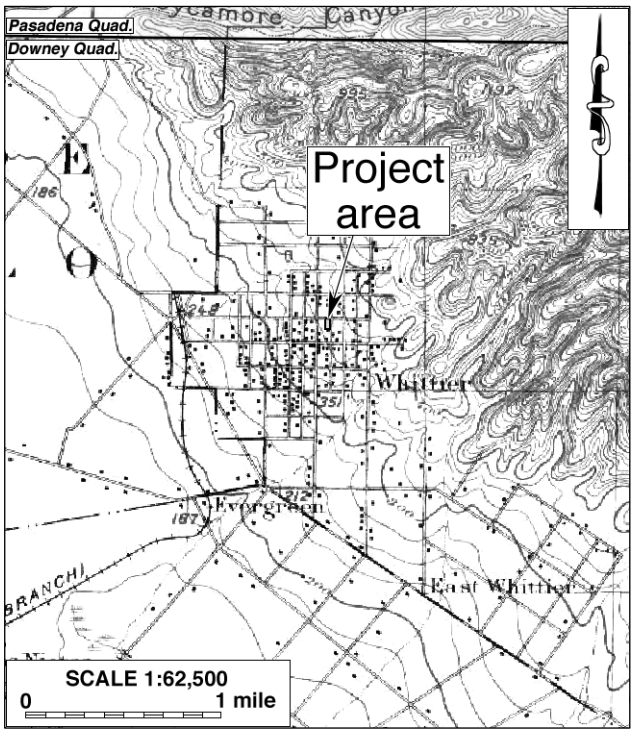


Figure 6. The project area and vicinity in 1893-1894. (Source: USGS 1900; 1902)

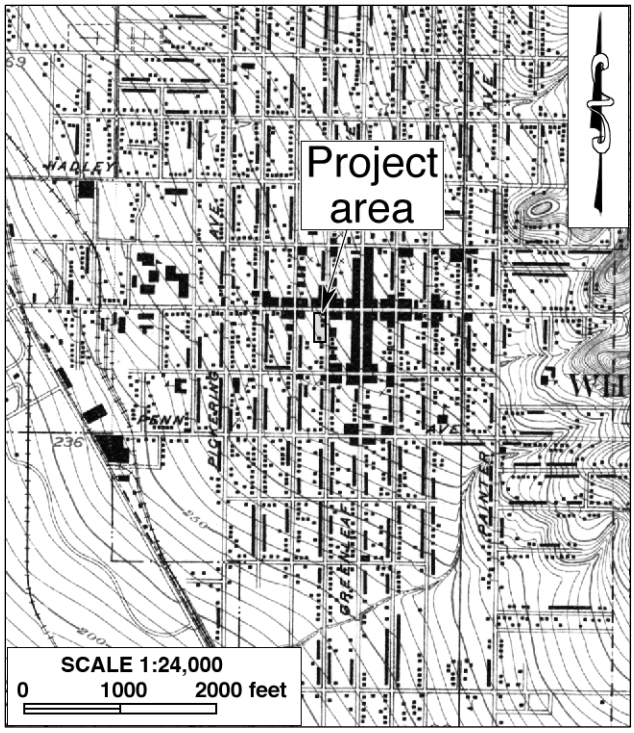


Figure 7. The project area and vicinity in 1923. (Source: USGS 1925)

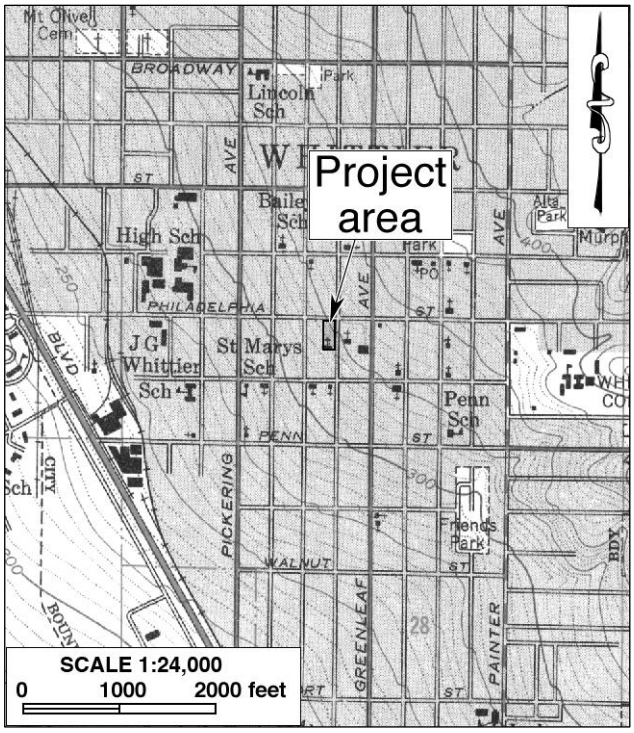


Figure 8. The project area and vicinity in 1947-1949. (Source: USGS 1951)

station around 1912 (PIC Environmental Services 2021:2). The mortuary was apparently converted to a furniture store by 1949, but the property was cleared of all structures prior to the construction of the current building in 1952 (*ibid*.).

Security-First National Bank operated at this location (Fig. 9) through the late 1990s, after which the building was converted to other commercial uses, such as dental and medical offices (City of Whittier 1999). Most of the prominent alterations to the building occurred in 1975, including modifications to the front and rear entrances and the addition of a second floor on the interior and of the lower, single-story expansion on the eastern side (Figs. 4, 9; NETR Online 1972-2000; City of Whittier 1975). The free-standing drive-up canopy in the parking lot behind the building was constructed around the same time (NETR Online 1972-2000; City of Whittier 1975).



Figure 9. Original appearance of the former Security-First National Bank building, view to the southwest. (Date unknown [1950s-1960s?]; source: LAPLPC n.d.)

The 1975 remodeling was designed by Griffin and Banks, a now-dissolved Buena Park firm that had incorporated only two years earlier, in 1973 (OpenCorporates.com n.d.). Structural engineering was provided by Wheeler and Gray

of Anaheim, which counted Disneyland, the Rose Bowl and Jet Propulsion Lab among its other projects (Wheeler and Gray Consulting Engineers n.d.).

DISCUSSION

STATUTORY AND REGULATORY GUIDELINES

As stated above, the purpose of this study is to assist the City of Whittier in determining whether the former Security-First National Bank at 12826 Philadelphia Street meet the official definition of "historical resources," as provided in the California Public Resources Code, in particular CEQA. According to PRC §5020.1(j), "'historical resource' includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

More specifically, CEQA guidelines state that the term "historical resources" applies to any properties listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (Title 14 CCR §15064.5(a)(1)-(3)). In other words, buildings, structures, sites, or districts that belong to one or more of the following three categories are to be considered "historical resources" for the purposes of CEQA compliance (160 Cal. App. 4th 1051):

- Mandatory historical resources: properties that are listed in or formally determined to be eligible for listing in the California Register of Historical Resources;
- Presumptive historical resources: properties that are designated in an officially established local register, recognized by local ordinance, resolution, or general plan, or identified in a local survey prepared in accordance with PRC §5024.1(g), unless determined not to be historically or culturally significant by the lead agency upon a preponderance of the evidence;
- Discretionary historical resources: properties that are determined to be historically significant in the lead agency's discretion, independent of any decision to list or designate them in a national, state, or local register of historical resources.

Regarding the proper criteria of historic significance evaluation of potential "discretionary historical resources," CEQA guidelines mandate that "generally a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
(2) Is associated with the lives of persons important in our past.
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
(4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

For individual properties in the City of Whittier, the City's Historic Resources Ordinance provides for the designation of "historic landmarks" by the City Council. Pursuant to Whittier Municipal Code §18.84.050, "a historic resource shall be designated a historic landmark if the council finds that it meets the criteria for listing on the National Register of Historic Places or the California Register of Historical Resources; or meets one or more of the following [local] criteria:"

A. It is particularly representative of a distinct historical period, type, style, region or way of life;
B. It is connected with someone renowned, important, or a local personality;
C. It is connected with a use that was once common, but is now rare;
D. It represents the work of a master builder, engineer, designer, artist or architect whose individual genius influenced his age;
E. It is the site of an important historic event or is associated with events that have made a meaningful contribution to the nation, state or city;
F. It exemplifies a particular architectural style;
G. It exemplifies the best remaining architectural type of a neighborhood;
H. It embodies elements of outstanding attention to architectural or engineering design, detail, material or craftsmanship; or
I. It has a unique location, singular characteristic or is an established and familiar visual feature of a neighborhood, community or the city."

Since the subject building of this study has not been listed in the California Register of Historical Resources, formally determined eligible for such listing, or designated in an officially established local register, it does not meet the definition of "historical resources" in the categories of "mandatory historical resources" and "presumptive historical resources," as outlined above. Therefore, it requires evaluation as potential "discretionary historical resource."

SIGNIFICANCE EVALUATION

The results of this study indicate that the former Security-First National Bank building was built in 1952 and used for its original function for many years before being converted to other commercial uses, such as dental and medical offices. At the time of its construction, Whitter's downtown core was well-established but expanding in service industry enterprises catering to the post-World War II residential boom. This building is certainly related to that episode that helped shape the subsequent history of the city, but as one of numerous commercial buildings of similar vintage easily found across the region today, it does not demonstrate a unique, important, or particularly close association with this pattern of events or any other established themes in local and regional history.

Historical research has uncovered no evidence that the building is closely associated with any persons or specific events of recognized significance in national, state, or local history, nor have any prominent architects, designers, or builders been identified in its construction. In terms of architectural or engineering qualities, the building is not known to be an important or notable example of any architectural style, property type, period, region, or method of construction, either in relation to the original 1952 design or the 1975 remodeling, on the national, state, local, or neighborhood level.

In its current conditions, the building stands as unremarkable specimen of the Brutalist architecture that was popular among commercial and public buildings in the 1950s-1970s. What little information could be gathered from available sources on the designer for the project, Griffin and Banks, yielded no evidence that the firm gained any particular distinction or renown in the field of architecture. The contractor, Wheeler and Gray, appears to be somewhat more prominent in its field, but this building would certainly not be considered one of the firm's more prominent undertakings in its large body of work.

As an extensively altered late-historic-period building of common design and construction practice, the building does not exhibit a high level of artistic or aesthetic merit or an outstanding attention to design, detail, material, or craftsmanship. Nor does it hold the potential for any important data for the study of the history of downtown commercial development in Whittier, which is well-documented in both historical literature and contemporary publications. Based on these considerations, and in light of the criteria listed above, the present study concurs with the 2015-2016 evaluation that the former Security-First National Bank building at 12826 Philadelphia Street does not appear eligible for listing in the California Register of Historical Resources or for designation by the City of Whittier as a "historic landmark." As such, it does not meet CEQA's definition of "historical resources" in the category of "discretionary historical resources."

CONCLUSION AND RECOMMENDATIONS

CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired." Since the present study has concluded that the former Security-First National Bank building at 12826 Philadelphia Street does not meet CEQA's definition of "historical resources," CRM TECH presents the following recommendations to the City of Whittier pursuant to PRC §21084.1:

- The demolition of the existing former Security-First National Bank building would not constitute "a substantial adverse change in the significance of a historical resource."
- No further cultural resources investigation will be necessary on this building.

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APPENDIX 1:
PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR, HISTORY/ARCHITECTURAL HISTORY
Bai "Tom" Tang, M.A.

Education

1988-1993	Graduate Program in Public History/Historic Preservation, University of California, Riverside.
1987	M.A., American History, Yale University, New Haven, Connecticut.
1982	B.A., History, Northwestern University, Xi'an, China.
2000	"Introduction to Section 106 Review," presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
1994	"Assessing the Significance of Historic Archaeological Sites," presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside/Colton, California.
1993-2002	Project Historian/Architectural Historian, CRM TECH, Riverside, California.
1993-1997	Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993	Project Historian, Archaeological Research Unit, University of California, Riverside.
1990	Intern Researcher, California State Office of Historic Preservation, Sacramento.
1990-1992	Teaching Assistant, History of Modern World, University of California, Riverside.
1988-1993	Research Assistant, American Social History, University of California, Riverside.
1985-1988	Research Assistant, Modern Chinese History, Yale University.
1985-1986	Teaching Assistant, Modern Chinese History, Yale University.
1982-1985	Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (with Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

PRINCIPAL INVESTIGATOR, ARCHAEOLOGY
Michael Hogan, Ph.D., RPA*

Education

1991	Ph.D., Anthropology, University of California, Riverside.
1981	B.S., Anthropology, University of California, Riverside; with honors.
1980-1981	Education Abroad Program, Lima, Peru.
2002	Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
2002	"Recognizing Historic Artifacts," workshop presented by Richard Norwood, Historical Archaeologist.
2002	"Wending Your Way through the Regulatory Maze," symposium presented by the Association of Environmental Professionals.
1992	"Southern California Ceramics Workshop," presented by Jerry Schaeffer.
1992	"Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside/Colton, California.
1999-2002	Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998	Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998	Assistant Research Anthropologist, University of California, Riverside
1992-1995	Project Director, Archaeological Research Unit, U. C. Riverside.
1993-1994	Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
1991-1992	Crew Chief, Archaeological Research Unit, U. C. Riverside.
1984-1998	Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists; Society for American Archaeology; Society for California Archaeology; Pacific Coast Archaeological Society; Coachella Valley Archaeological Society.

PROJECT HISTORIAN/ARCHITECTURAL HISTORIAN
Terri Jacquemain, M.A.

Education

2004	M.A., Public History and Historic Resource Management, University of California, Riverside.
2002	B.S., Anthropology, University of California, Riverside.
2001	Archaeological Field School, University of California, Riverside.
1991	A.A., Riverside Community College, Norco Campus.

Professional Experience

2003-	Historian/Architectural Historian/Report Writer, CRM TECH, Riverside/ Colton, California.
2002-2003	Teaching Assistant, Religious Studies Department, University of California, Riverside.
2002	Interim Public Information Officer, Cabazon Band of Mission Indians.
2000	Administrative Assistant, Native American Student Programs, University of California, Riverside.
1997-2000	Reporter, *Inland Valley Daily Bulletin*, Ontario, California.
1991-1997	Reporter, *The Press-Enterprise*, Riverside, California.

Membership

California Preservation Foundation.

PROJECT ARCHAEOLOGIST
Nina Gallardo, B.A.

Education

2004	B.A., Anthropology/Law and Society, University of California, Riverside.

Professional Experience

2004-	Project Archaeologist, CRM TECH, Riverside/Colton, California.

Cultural Resources Management Reports

Co-author of and contributor to numerous cultural resources management reports since 2004.

APPENDIX 2

CALIFORNIA HISTORICAL RESOURCES INVENTORY RECORD FORMS

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

*Resource Name or # (Assigned by recorder) CRM TECH 3799-1H

P1. Other Identifier: Former Security-First National Bank building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Los Angeles
and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Whittier, Calif. **Date** 1981
T2S; **R**11W; SE **1/4 of** SW **1/4 of Sec** 21 ; S.B. **B.M.** **Elevation:** Approximately 320 feet above mean sea level

c. **Address** 12826 Philadelphia Street **City** Whittier **Zip** 90602

d. **UTM:** (Give more than one for large and/or linear resources) **Zone** 11 ; 404,052 **mE**/ 3,760,292 **mN**
UTM Derivation: ☐ USGS Quad ☐ GIS ☒ Google Earth

e. **Other Locational Data:** (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate) Assessor's Identification Number 8139-024-027; on the southwest corner of Philadelphia Street and Comstock Avenue

***P3a Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This rectangular-shaped, two-story masonry building with white stucco coating on the exterior walls rests on board-formed concrete footings that are adjusted for the sloping grade and has a basement. The flat roof is concealed on all sides by a medium-height parapet. The slightly extended, rounded corners lend some design elements to the otherwise plain design. The primary façade, facing Philadelphia Street to the north, features a centered, deep-set front entry in the main, two-story mass framed by beveled walls and filled with a steel-framed, smoked-glass double door surrounded by plate-glass panels. (*Continued on p. 4*)

***P3b. Resource Attributes:** (List attributes and codes) HP6: 1-3 story commercial building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo (view, date, accession number): Photo taken on November 18, 2021; view to the southwest (also see p. 5)

***P6. Date Constructed/Age and Sources:** ☒ Historic ☐ Prehistoric ☐ Both Ca. 1952

***P7. Owner and Address:** Unknown

***P8. Recorded by** (Name, affiliation, & address): Terri Jacquemain, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

***P9. Date Recorded:** November 18, 2021

***P10. Survey Type** (describe): Building evaluation for CEQA compliance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Bai "Tom" Tang and Terri Jacquemain (2022): Historic Building Evaluation: Former Security-First National Bank Building, 12826 Philadelphia Street, City of Whittier, Los Angeles County, California

***Attachments:** ☐None ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Resource Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** (Assigned by recorder) CRM TECH 3799-1H

B1. Historic Name: Security-First National Bank B2. Common Name: None

B3. Original Use: Bank B4. Present Use: Vacant

***B5. Architectural Style:** Modern (altered)

***B6. Construction History:** (Construction date, alterations, and date of alterations) A permit for the construction of a branch of Security-First National Bank was issued to the Pacific Southwest Realty Company in 1952, with Howard Hastings, Inc., listed as the contractor but no architect identified. The bank operated at this location through the late 1990s, after which the building was converted to other commercial uses, such as dental and medical offices. Most of the (*Continued on p. 4*)

***B7. Moved?** √ No Yes Unknown **Date:** **Original Location:**

***B8. Related Features:** See Item P3a

B9a. Architect: Unknown b. Builder: Howard Hastings, Inc.

***B10. Significance: Theme** Post-WWII commercial development

Area Whittier **Period of Significance** 1945-1970

Property Type Commercial/banking **Applicable Criteria** N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) When this building was constructed in 1952, Whitter's downtown core was well-established but expanding in service industry enterprises catering to the post-World War II residential boom. This building is certainly related to that episode that helped shape the subsequent history of the city, but as one of numerous commercial buildings of similar vintage easily found across the region today, it does not demonstrate a unique, important, or particularly close association with this pattern of events or any other established themes in local and regional history. (*Continued on p. 4*)

B11. Additional Resource Attributes: (List attributes and codes)

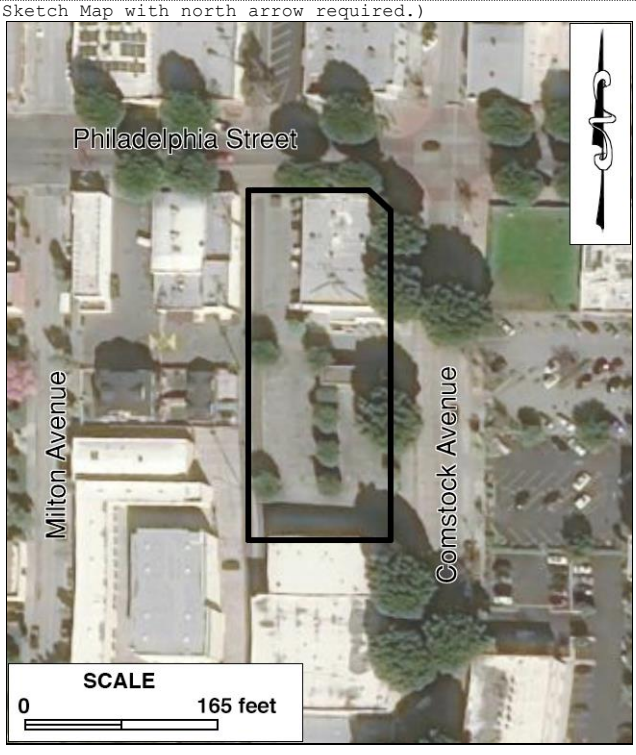
***B12. References:** Los Angeles County Department of Public Works online records (https://dpw.lacounty.gov/bsd/bpv/) and County Assessor's Property Assessment Information System (http://maps.assessor.lacounty.gov/); City of Whittier building and safety records.

B13. Remarks:

***B14. Evaluator:** Terri Jacquemain

***Date of Evaluation:** December 3, 2021

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

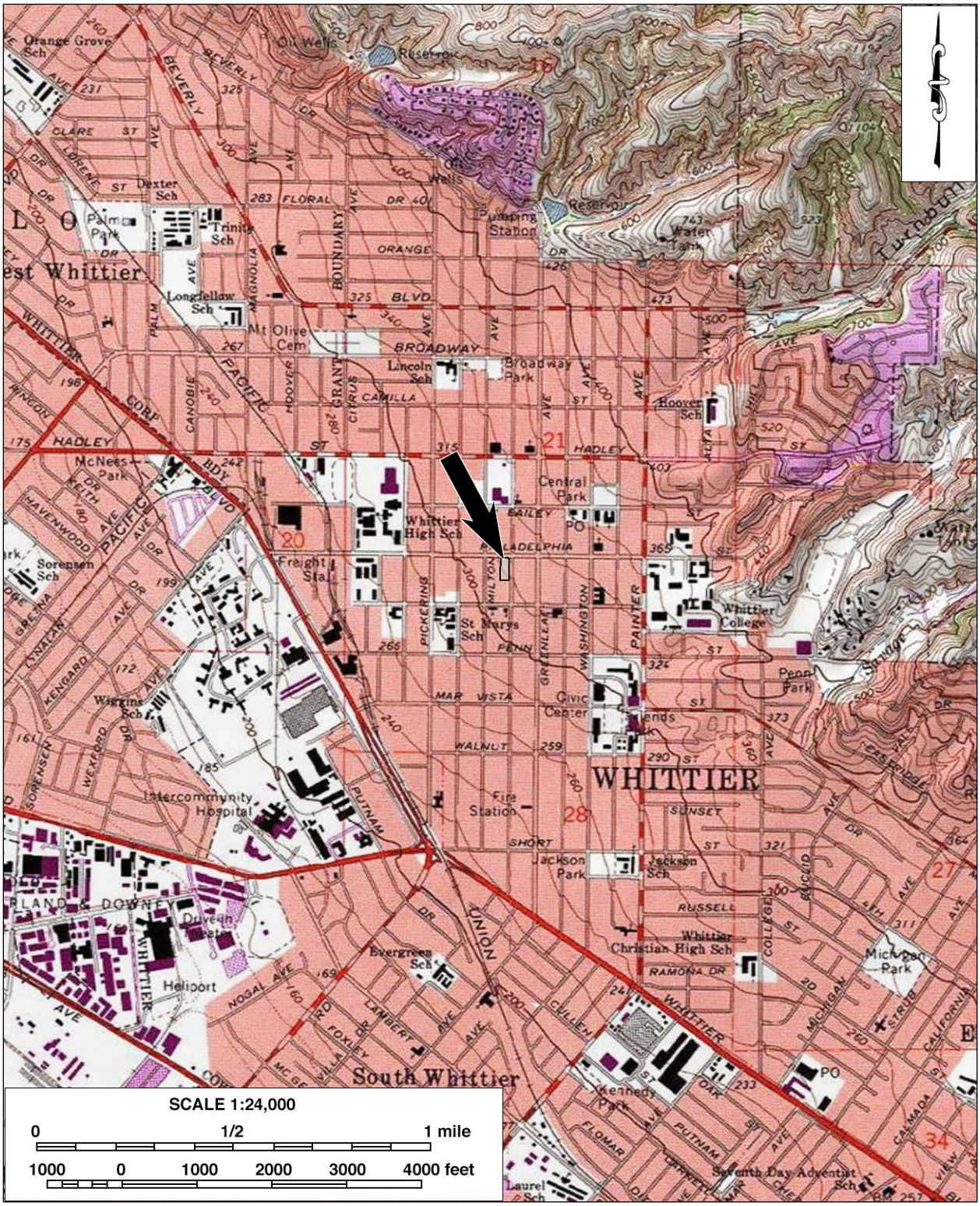
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

*Resource Name or # (Assigned by recorder) CRM TECH 3799-1H

*Map Name: Whittier, Calif. *Scale: 1:24,000 *Date of Maps: 1981



* Required information

Recorded by: Terri Jacquemain
***Date:** November 18, 2021 √ Continuation Update

***P3a. Description (continued):** A one-story addition attached to the eastern side has a similar double door on its northern elevation. Several spots above door height bear evidence of adhesive where signs have been removed. The eastern elevation features three pairs of steel-framed fixed windows that are set deeply into the walls, forming a wide ledge at the bottom. A single inset entry with a steel-framed door near the southeast corner of the building appears to be an employee entrance. The centered entry at the rear of the main mass opens to a paved parking lot and is sheltered by a projecting portico supported by a massive, stucco-clad rectangular pillar. The rear entry is accessed by both a concrete ramp and wide steps leading to a single smoked glass-and-steel door. The western side of the building is blind.

The building stands on the southwest corner of this busy intersection. The areas around the building on the west and south sides are paved with asphalt and concrete with entries from the east and north. A detached drive-up banking canopy stands in the parking lot at the rear of the building, which is currently vacant but in good condition despite visible signs of deterioration, such as areas of crumbling and cracking stucco, and possible mold.

***B6. Construction History (continued):** prominent alterations to the building occurred in 1975, including the addition of a second floor on the interior, the expansion on the eastern side, changes to the front and rear entrances, and the construction of the free-standing drive-up canopy. The remodeling was designed by Griffin and Banks, a now-dissolved Buena Park firm that had incorporated only two years earlier, in 1973. Structural engineering was provided by Wheeler and Gray of Anaheim, who counted Disneyland, the Rose Bowl and Jet Propulsion Lab among their other projects. Other permits issued for this address include those for replacing a drive-up window with an ATM in 1981, removing a planter and adding lights in 1985, and conversion into medical office use and roof replacement in 1999. Additional occupants identified in archival sources include a pharmacy, dental offices, and a graphics printing shop.

***B10. Significance (continued):** Historical research has uncovered no evidence that the building is closely associated with any persons or specific events of recognized significance in national, state, or local history, nor have any prominent architects, designers, or builders been identified in its construction. In terms of architectural or engineering qualities, the building is not known to be an important or notable example of any architectural style, property type, period, region, or method of construction, either in relation to the original 1952 design or the 1975 remodeling.

In its current conditions, the building stands as unremarkable specimen of the Brutalist architecture that was popular among commercial and public buildings in the 1950s-1970s. What little information could be gathered from available sources on the designer for the project, Griffin and Banks, yielded no evidence that the firm gained any particular distinction or renown in the field of architecture. The contractor, Wheeler and Gray, appears to be somewhat more prominent in its field, but this building would certainly not be considered one of the firm's more prominent undertakings in its large body of work.

Recorded by: Terri Jacquemain
***Date:** November 18, 2021 √ Continuation ___ Update

***B10. Significance (continued):** As an extensively altered late-historic-period building of common design and construction practice, the building does not exhibit a high level of artistic or aesthetic merit, nor does it hold the potential for any important data for the study of the history of downtown commercial development in Whittier, which is well-documented in both historical literature and contemporary publications. Based on these considerations, and in light of the criteria listed above, the present study concludes that the former Security-First National Bank building at 12826 Philadelphia Street does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

Additional Photographs:



Clockwise from top left: overview of the building to the southeast; the eastern side, view to the northwest; rear of the building, view to the northeast; drive-up banking canopy to the rear of the building, view to the north.

Recorded by: Terri Jacquemain
***Date:** November 18, 2021 √ Continuation Update

Historical Photograph:



Original appearance of the former Security-First National Bank building (date unknown [1950s-1960s?]). Source: Los Angeles Public Library Photo Collection (https://calisphere.org/item/b7a31b197964b5e6517469ad13c6885e/).

APPENDIX 8

Philadelphia & Comstock Townhouse

ENERGY ANALYSIS

CITY OF WHITTIER

Prepared by:

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SEPTEMBER 27, 2024

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LIST OF ABREVIATED TERMS

%	Percent
(1)	Reference
AQIA	*Air Quality Impact Analysis*
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
City	City of Whittier
CPUC	California Public Utilities Commission
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
PG&E	Pacific Gas and Electric
Project	Philadelphia & Comstock Townhouse
SCE	Southern California Edison
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

The results of this *Philadelphia & Comstock Townhouse Energy Analysis* are summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the *CEQA Guidelines* (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	5.0	*Less Than Significant*	*n/a*
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	5.0	*Less Than Significant*	*n/a*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards – Energy Code
- California Code Title 24, Part 11, Green Building Standards - CalGreen
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations is discussed in detail in section 5 of this report.

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Philadelphia & Comstock Townhouse (Project). The purpose of this report is to ensure that energy implication is considered by the City of Whittier (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed Philadelphia & Comstock Townhouse ("Project") is at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier. The Project's location in relation to the surrounding area is shown on Exhibit 1-A.

The Project site is generally surrounded by commercial, medical, and residential land uses, with the nearest residential land use is approximately 33 feet south of the Project site and the Whittier Hospital Women's Health Center is located 80 feet north of the Project site.

1.2 PROJECT DESCRIPTION

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP). The preliminary site plan is shown on Exhibit 1-B.

The site is currently occupied by a vacant 7,172 square foot office building. No credit has been taken for the existing office building for the purposes of this assessment.

EXHIBIT 1-A: LOCATION MAP

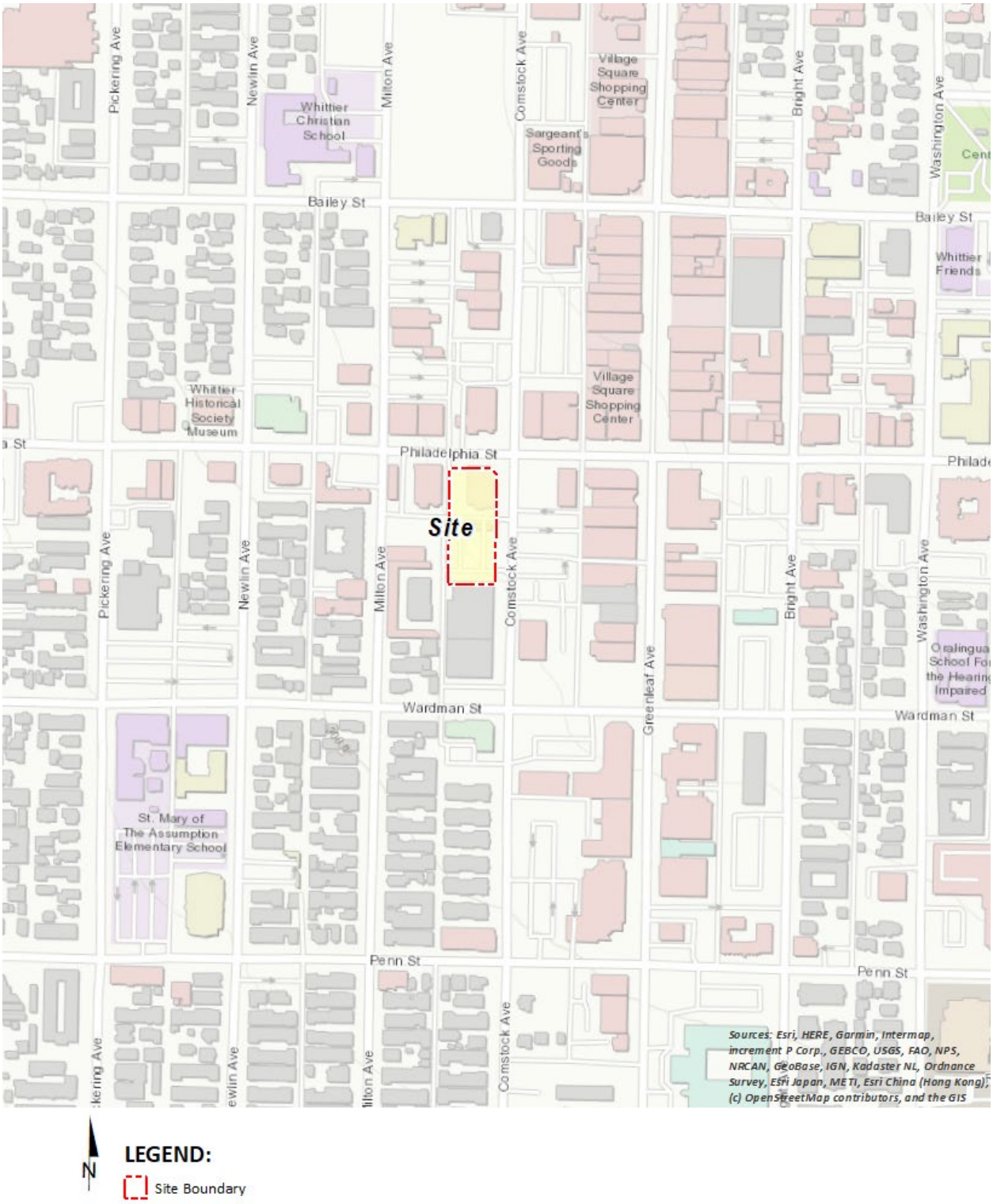
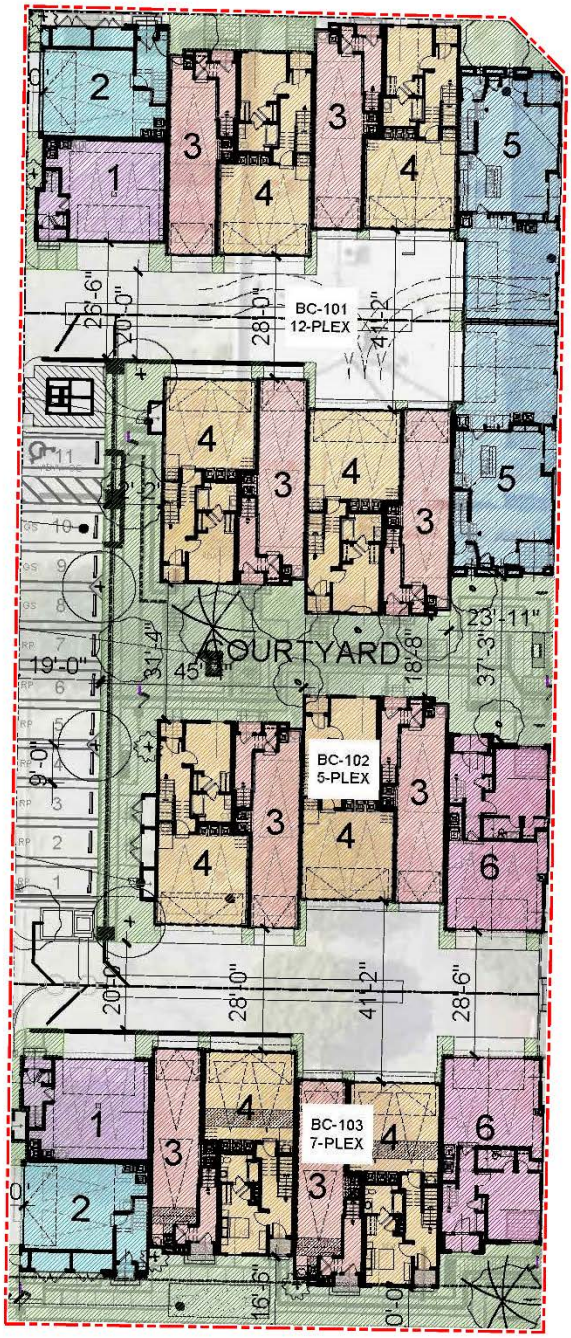


EXHIBIT 1-B: PRELIMINARY SITE PLAN



N

LEGEND:

Site Boundary

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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2021, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (2):

- As of 2021, approximately 7,359 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2021, approximately 605 million barrels of petroleum
- As of 2021, approximately 2,101 billion cubic feet of natural gas
- As of 2021, approximately 1 million short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (3). In 2022, about 251,923 million gallons (or about 5.99 million barrels) of finished petroleum products were consumed in the U.S., an average of about 690 million gallons per day (or about 16.4 million barrels per day) (4). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day) (5).

The most recent data provided by the EIA for energy use in California is reported from 2021 and provided by demand sectors as follows:

- Approximately 37.8% transportation sector
- Approximately 23.2% industrial sector
- Approximately 20.0% residential sector
- Approximately 19.0% commercial sector (6)

According to the EIA, California used approximately 247,250 gigawatt hours of electricity in 2021 (7). By sector in 2021, residential uses utilized 36.5% of the state's electricity, followed by 43.9% for commercial uses, 19.2% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building (7).

According to the EIA, California used approximately 200,871 million therms of natural gas in 2021 (8). In 2021 (the most recent year for which data is available), by sector, industrial uses utilized 33% of the state's natural gas, followed by 30% used as fuel in the electric power sector, 21% from residential, 11% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself (8). While the supply

of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (8).

In 2022, total system electric generation for California was 287,220 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 203,257 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (17%) (9). Natural gas is the main source for electricity generation at 47.46% of the total in-state electric generation system power as shown in Table 2-1.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below (10):

- In 2022, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2022, the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- In 2020, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all but three other states.
- In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49% of California's in-state electricity generation. Natural gas fueled another 42%. Nuclear power supplied almost all the rest.
- In 2022, California was the fourth-largest electricity producer in the nation. The state was also the nation's third-largest electricity consumer, and additional needed electricity supplies came from out-of-state generators.

As indicated below, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2022)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	273	0.13%	181	5,716	5,897	6,170	2.15%
Natural Gas	96,457	47.46%	44	7,994	8,038	104,495	36.38%
Oil	65	0.03%	-	-	-	65	0.2%
Other (Waste Heat/Petroleum Coke)	315	0.15%	-	-	-	315	0.11%
Unspecified	-	0.0%	12,485	7,943	20,428	20,428	7.11%
Total Thermal and Unspecified	**97,110**	**47.78%**	**12,710**	**21,653**	**34,363**	**121,473**	**45.77%**
Nuclear	17,627	8.67%	397	8,342	8,739	26,366	9.18%
Large Hydro	14,607	7.19%	10,803	1,118	11,921	26,528	9.24%
Biomass	5,366	2.64%	771	25	797	6,162	2.15%
Geothermal	11,110	5.47%	253	2,048	2,301	13,412	4.67%
Small Hydro	3,005	1.48%	211	13	225	3,230	1.12%
Solar	40,494	19.92%	231	8,225	8,456	48,950	17.04%
Wind	13,938	6.86%	8,804	8,357	17,161	31,099	10.83%
Total Non-GHG and Renewables	**106,147**	**52.22%**	**21,471**	**28,129**	**49,599**	**155,747**	**54.23%**
SYSTEM TOTALS	***203,257***	***100.0%***	***34,180***	***49,782***	***83,962***	***287,220***	***100.0%***

2.2 ELECTRICITY

The usage associated with electricity use were calculated using CalEEMod Version 2022.1.1.21. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (11). Similarly, the subsequent 2022 IEPR's provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (12).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (13).

Table 2-2, SCE's specific proportional shares of electricity sources in 2022. As indicated in Table 2-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0% (14).

TABLE 2-2: SCE 2022 POWER CONTENT MIX

Energy Resources	2022 SCE Power Mix
Eligible Renewable	**33.2%**
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
Coal	**0.0%**
Large Hydroelectric	**3.4%**
Natural Gas	**24.7%**
Nuclear	**8.3%**
Other	**0.1%**
Unspecified Sources of power*	30.3%
Total	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

> *"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.*
>
> *California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.*
>
> *The overwhelming majority of natural gas utility customers in California are residential and small commercials customers, referred to as "core" customers. Larger volume gas*

customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild

Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the

backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (15)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California (6), and those vehicles consume an estimated 17.2 billion gallons of fuel each year[1]. Gasoline (and other vehicle fuels) are

[1] Fuel consumptions estimated utilizing information from EMFAC2021.

commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles (6). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector (16).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2021, about 33% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2021. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (16).

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States (U.S.) Department of Transportation, the United States Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2022 IEPR was adopted February 2023, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2022 IEPR introduces a new

framework for embedding equity and environmental justice at the CEC and the California Energy Planning Library which allows for easier access to energy data and analytics for a wide range of users. Additionally, energy reliability, western electricity integration, gasoline cost factors and price spikes, the role of hydrogen in California's clean energy future, fossil gas transition and distributed energy resources are topics discussed within the 2022 IEPR (17).

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. 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 least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (18). The Project would be required to comply with the applicable standards in place at the time building permit document submittals are made. These require, among other items (19):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to

install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

  - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.
  - Information from CALFIRE on maintenance of defensible space around residential structures.
- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission

limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 44% of total retail sales by 2024 (20).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

Appendix F of the *State CEQA Guidelines* (21), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, and oil; and
- Increasing reliance on renewable energy sources.

In compliance with Appendix G of the *State CEQA Guidelines* (22), this report analyzes the Project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.2 METHODOLOGY

Information from the CalEEMod Version 2022 outputs for the *Philadelphia & Comstock Townhouse Air Quality Impact Analysis* (AQIA) (23) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CALEEMOD

In May 2022, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1.1.21. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage (24). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendix 4.1.

4.2.2 EMISSION FACTORS MODEL

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of

analysis, the 2024 and 2025 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Outputs from the EMFAC2021 model run is provided in Appendix 4.2.

4.3 CONSTRUCTION ENERGY DEMANDS

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

4.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

CONSTRUCTION DURATION

For purposes of analysis, construction of the Project is expected to commence in August 2024 and would last through January 2025. The construction schedule utilized in the analysis, shown in Table 4-1, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent[2]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (26). The duration of construction activities was based on Project specific data provided by the Project applicant, where available.

TABLE 4-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Demolition	8/1/2024	8/14/2024	10
Site Preparation	8/15/2024	8/15/2024	1
Grading	8/16/2024	8/19/2024	2
Building Construction	8/20/2024	1/6/2025	100
Paving	12/31/2024	1/6/2025	5
Architectural Coating	12/31/2024	1/6/2025	5

PROJECT CONSTRUCTION POWER COST

The *2024 National Construction Estimator* identifies a typical power cost per 1,000 square feet of construction per month of $2.66, which was used to calculate the Project's total construction power cost (27).

[2] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

As shown on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $792.41.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF of construction per month)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
Condo/Townhomes	$2.66	39.026	5	$519.05
Parking Lot	$2.66	8.364	5	$111.23
Landscape	$2.66	12.190	5	$162.13
			CONSTRUCTION POWER COST	***$792.41***

4.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kilowatt hour (kWh) of electricity.

PROJECT CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule was used to determine the Project's electrical usage. As of January 1, 2024, SCE's general service rate is $0.14 per kilowatt hours (kWh) of electricity for general services and $0.16 for residential services (28). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 5,197 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Condo/Townhomes	$0.16	3,244
Parking Lot	$0.14	795
Landscape	$0.14	1,158
CONSTRUCTION ELECTRICITY USAGE		***5,197***

4.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Demolition	Tractors/Loaders/Backhoes	2	8
	Rubber Tired Dozers	1	8
	Concrete/Industrial Saws	1	8
Site Preparation	Graders	1	8
	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8
Building Construction	Cranes	1	8
	Forklifts	2	8
	Tractors/Loaders/Backhoes	2	8
Paving	Tractors/Loaders/Backhoes	1	8
	Cement and Mortar Mixers	4	8
	Pavers	1	8
	Rollers	1	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (29). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered, which is consistent with industry standards.

Diesel fuel would be supplied by existing residential fuel providers serving the Project area and region[3]. As presented in Table 4-5, Project construction activities would consume an estimated 10,228 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require ongoing or permanent commitment of diesel fuel resources for this purpose.

[3] Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Demolition	10	Tractors/Loaders/Backhoes	84	2	8	0.37	497	269
		Rubber Tired Dozers	367	1	8	0.40	1,174	635
		Concrete/Industrial Saws	33	1	8	0.73	193	104
Site Preparation	1	Graders	148	1	8	0.41	485	26
		Crawler Tractors	87	1	8	0.43	299	16
Grading	2	Graders	148	1	8	0.41	485	52
		Rubber Tired Dozers	367	1	8	0.40	1,174	127
		Crawler Tractors	87	1	8	0.43	299	32
Building Construction	100	Cranes	367	1	8	0.29	851	4,602
		Forklifts	82	2	8	0.20	262	1,418
		Tractors/Loaders/Backhoes	84	2	8	0.37	497	2,688
Paving	5	Tractors/Loaders/Backhoes	84	1	8	0.37	249	67
		Cement and Mortar Mixers	10	4	8	0.56	179	48
		Pavers	81	1	8	0.42	272	74
		Rollers	36	1	8	0.38	109	30
Architectural Coating	5	Air Compressors	37	1	8	0.48	142	38
CONSTRUCTION FUEL DEMAND (GALLONS FUEL)								***10,228***

4.3.4 CONSTRUCTION TRIPS AND VMT

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips are presented below in Table 4-6. Worker trips for all phases are based on client provided data. It should be noted that for vendor trips specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Hauling trips are based on CalEEMod defaults.

TABLE 4-6: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Demolition	80	0	8
Site Preparation	80	0	0
Grading	80	0	32
Building Construction	80	3	0
Paving	80	0	0
Architectural Coating	80	0	0

4.3.5 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips (personal vehicles used by workers commuting to the Project from home) would generate an estimated 182,040 VMT during the 5 months of construction (30). Based on CalEEMod methodology, it is assumed that 50% of all construction worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1[4]), and 25% are from light-duty-trucks (LDT2[5]). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the Los Angeles (SC) sub-area for the 2024 and 2025 calendar years. Data from EMFAC2021 is shown in Appendix 4.2.

As shown in Table 4-7, the estimated annual fuel consumption resulting from Project construction worker trips is 6,660 gallons during full construction of the Project. It should be

[4] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[5] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

noted that construction worker trips would represent a "single-event" gasoline fuel demand and would not require ongoing or permanent commitment of fuel resources for this purpose.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2024	LDA						
	Demolition	10	40	18.5	7,400	31.24	237
	Site Preparation	1	40	18.5	740	31.24	24
	Grading	2	40	18.5	1,480	31.24	47
	Building Construction	96	40	18.5	71,040	31.24	2,274
	Paving	1	40	18.5	740	31.24	24
	Architectural Coating	1	40	18.5	740	31.24	24
	LDT1						
	Demolition	10	20	18.5	3,700	24.32	152
	Site Preparation	1	20	18.5	370	24.32	15
	Grading	2	20	18.5	740	24.32	30
	Building Construction	96	20	18.5	35,520	24.32	1,461
	Paving	1	20	18.5	370	24.32	15
	Architectural Coating	1	20	18.5	370	24.32	15
	LDT2						
	Demolition	10	20	18.5	3,700	24.04	154
	Site Preparation	1	20	18.5	370	24.04	15
	Grading	2	20	18.5	740	24.04	31
	Building Construction	96	20	18.5	35,520	24.04	1,477
	Paving	1	20	18.5	370	24.04	15
	Architectural Coating	1	20	18.5	370	24.04	15
2025	LDA						
	Building Construction	4	40	18.5	2,960	32.24	92
	Paving	4	40	18.5	2,960	32.24	92
	Architectural Coating	4	40	18.5	2,960	32.24	92
	LDT1						
	Building Construction	4	20	18.5	1,480	24.82	60
	Paving	4	20	18.5	1,480	24.82	60
	Architectural Coating	4	20	18.5	1,480	24.82	60

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	LDT2						
	Building Construction	4	20	18.5	1,480	24.75	60
	Paving	4	20	18.5	1,480	24.75	60
	Architectural Coating	4	20	18.5	1,480	24.75	60
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION							***6,660***

4.3.6 CONSTRUCTION VENDOR AND HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 6,899 VMT along area roadways for the Project over the duration of construction activity (30). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD), 50% of all vendor trips are from heavy-heavy duty trucks (HHD), and 100% of all hauling trips are from HHDs. These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (30). Vehicle fuel efficiencies for MHDs and HHDs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHD and HHD vehicle classes within the Los Angeles (SC) sub-area for the 2024 and 2025 calendar years. Data from EMFAC2021 is shown in Appendix 4.2.

Based on Table 4-8, it is estimated that 1,073 gallons of fuel will be consumed related to construction vendor trips during full construction of the Project. It should be noted that Project construction vendor trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-8: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2024	MHD						
	Building Construction	96	2	10.2	1,958	7.60	258
	HHD (Vendor)						
	Building Construction	96	2	10.2	1,958	6.04	324
	HHD (Hauling)						
	Demolition	10	8	20	1,600	6.04	265
	Grading	2	32	20	1,280	6.04	212
2025	MHD						
	Building Construction	4	2	10.2	82	7.73	11
	HHD (Vendor)						
	Building Construction	1	2	10.2	20	6.14	3

Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
TOTAL CONSTRUCTION VENDOR FUEL CONSUMPTION							***1,073***

4.3.6 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures. For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as

the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car vehicles accessing the Project site), fuel demands from operational equipment, and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (25). EMFAC2021 was run for the Los Angeles (SC) sub-area for the 2024 and 2025 calendar years. Data from EMFAC2021 is shown in Appendix 4.2.

The estimated transportation energy demands are summarized on Table 4-9. As summarized on Table 4-9, the Project would result in 540,093 annual VMT and an estimated annual fuel consumption of 21,635 gallons of fuel.

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION

Vehicle Type	**Average Vehicle Fuel Economy** (mpg)	**Annual VMT**	**Estimated Annual Fuel Consumption** (gallons)
LDA	32.24	273,019	8,468
LDT1	24.82	23,697	955
LDT2	24.75	125,290	5,063
MDV	20.32	75,758	3,728
LHDT1	15.80	14,104	893
LHDT2	15.07	3,523	234
MHDT	7.73	5,846	757
HHDT	6.14	4,623	753
OBUS	6.11	467	76
UBUS	3.27	337	103
MCY	41.35	11,535	279
SBUS	6.54	348	53
MH	5.67	1,547	273
PROJECT FUEL CONSUMPTION (ALL VEHICLES)		***540,093***	***21,635***

4.4.2 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity, which would be supplied to the Project by SoCal Gas and SCE. Electricity usage associated with the Project was calculated based on CalEEMod defaults. As summarized on Table 4-10, the Project would result in 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity.

TABLE 4-10: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Land Use	Natural Gas Demand (kBTU/year)	Electricity Demand (kWh/year)
Condo/Townhomes	576,729	110,212
Parking Lot	0	7,326
PROJECT ENERGY DEMAND	***576,729***	***117,538***

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-9 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately $792.41. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 5,197 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 10,228 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 6,660 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDs and HHDs) will total approximately 1,073 gallons. Diesel fuel would be supplied by the City and regional residential vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2022 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (17). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 Operational Energy Demands

Transportation Energy Demands

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 540,093 annual VMT and 21,635 gallons per year during operations.

Fuel would be provided by current and future residential vendors. Trip generation and VMT generated by the Project are consistent with other residential uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other residential developments of similar size.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the

Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational net energy demands are estimated at: 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional residential uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration.

Implementation of the Project would increase the demand for electricity at the Project site and petroleum consumption in the region during operation. However, the electrical consumption demands of the Project during operation would conform to the state's Title 24 and to CALGreen standards, which implement conservation measures. Further, the proposed Project would not directly require the construction of new energy generation or supply facilities and providers of electricity are in compliance with regulatory requirements that assist in conservation, including requirements that electrical providers achieve state-mandated renewal energy production requirements. With compliance with Title 24 conservation standards and other regulatory requirements, the Project would not be wasteful or inefficient or unnecessarily consume energy resources during construction or operation and would result in a less-than-significant impact with respect to consumption of energy resources.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

4.6 ENERGY FINDINGS AND RECOMMENDATIONS

5.1 ENERGY IMPACT 1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

A significant impact would occur if the proposed Project would result in the inefficient, wasteful, or unnecessary use of energy.

Construction

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with future development projects, construction-related vehicle trips would result in approximately 188,939 VMT and consume an estimated 7,733 gallons of gasoline and diesel combined during future development projects construction phases. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel- powered equipment and are enforced by the ARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operation

Electricity and Natural Gas

Operation of the proposed project would consume energy as part of building operations and transportation activities. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on client provided energy use estimations, operations for the Project would result in approximately 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity annually.

Future development projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely

regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Fuel

Operational energy would also be consumed during vehicle trips associated with future development projects envisioned under the proposed project. Fuel consumption would be primarily related to vehicle use by residents, visitors, and employees associated with future development projects. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 540,093 VMT and consume an estimated 21,635 gallons of gasoline and diesel combined, annually (see Appendix 4.2).

The Project is located on an infill site that is surrounded by existing urban uses, the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses in close proximity to the Project, thus further reducing fuel consumption demand. Additionally, the Project will also be providing parking and EV infrastructure that would further promote fuel efficient vehicles. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

5.2 ENERGY IMPACT 2

Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

A significant impact would occur if the proposed Project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction

As discussed in Section 5.1, above, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on- road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

California's Renewable Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to meet the 2022 Scoping Plan greenhouse gas emissions reductions. As discussed in Section 5.1, above, the Project would result in approximately a 576,729 kBTU/year of natural gas and 117,538 kWh/year of electricity annually.

Future development projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that future development projects would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

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7 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Philadelphia & Comstock Townhouse. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

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University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – CARB • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006

Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 4.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

14480 - Whittier Residential Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14480 - Whittier Residential
Construction Start Date	8/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	12826 Philadelphia St a, Whittier, CA 90601, USA
County	Los Angeles-South Coast
City	Whittier
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4809
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

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
Condo/Townhouse	24.0	Dwelling Unit	0.63	39,026	12,190	—	71.0	—

Parking Lot	72.0	Space	0.19	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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.61	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.11	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158

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

2024	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
2025	52.4	52.0	15.0	31.0	0.03	0.58	3.16	3.74	0.53	0.74	1.27	—	6,254	6,254	0.27	0.16	0.32	6,308
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.53	0.47	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
2025	0.62	0.61	0.18	0.37	< 0.005	0.01	0.04	0.04	0.01	0.01	0.01	—	74.0	74.0	< 0.005	< 0.005	0.06	74.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158
2025	0.11	0.11	0.03	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.4

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Area	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Area	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.66	0.59	0.50	4.85	0.01	0.01	1.04	1.04	0.01	0.26	0.27	—	1,153	1,153	0.06	0.05	1.89	1,172
Area	0.99	0.99	0.04	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	37.1	37.1	< 0.005	< 0.005	—	37.2
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
Area	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15
Energy	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.2	49.2	< 0.005	< 0.005	—	49.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Waste	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	14.4	14.1	0.02	0.62	—	0.62	0.57	—	0.57	—	2,203	2,203	0.09	0.02	—	2,211
Demolition	—	—	—	—	—	—	0.70	0.70	—	0.11	0.11	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.99	9.99	< 0.005	< 0.005	—	10.0
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.04	0.01	0.73	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	585	585	0.03	0.09	1.34	615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.8	29.8	< 0.005	< 0.005	0.05	30.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.93	4.93	< 0.005	< 0.005	0.01	5.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.79

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.72	6.24	6.16	0.01	0.40	—	0.40	0.37	—	0.37	—	916	916	0.04	0.01	—	919
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.51	2.51	< 0.005	< 0.005	—	2.52
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.42	0.42	< 0.005	< 0.005	—	0.42
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.98	2.98	< 0.005	< 0.005	0.01	3.02
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.50
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	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	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11	1.77	16.6	14.6	0.02	0.87	—	0.87	0.80	—	0.80	—	2,294	2,294	0.09	0.02	—	2,302
Dust From Material Movement	—	—	—	—	—	—	1.98	1.98	—	0.91	0.91	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.08	2.08	< 0.005	< 0.005	—	2.09
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.17	0.05	2.78	1.07	0.01	0.03	0.58	0.61	0.03	0.16	0.19	—	2,221	2,221	0.12	0.36	5.10	2,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.95	5.95	< 0.005	< 0.005	0.01	6.04
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.12

3.7. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	2.10	2.38	< 0.005	0.09	—	0.09	0.09	—	0.09	—	492	492	0.02	< 0.005	—	494
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.5	81.5	< 0.005	< 0.005	—	81.7
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.22	86.5
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.01	86.3
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.12	1.41	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	285	285	0.01	0.01	0.50	289
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.7	21.7	< 0.005	< 0.005	0.03	22.6
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.08	47.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	< 0.005	3.75
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	0.00	0.00

3.9. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.75	7.34	9.02	0.02	0.31	—	0.31	0.29	—	0.29	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.65	3.65	< 0.005	< 0.005	—	3.66
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.4	81.4	< 0.005	0.01	0.01	84.9
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
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	0.00	0.00

3.11. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.63	5.41	6.27	0.01	0.25	—	0.25	0.23	—	0.23	—	973	973	0.04	0.01	—	976
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.90	1.90	< 0.005	< 0.005	—	1.91
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.13. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.24	6.25	0.01	0.23	—	0.23	0.21	—	0.21	—	973	973	0.04	0.01	—	977
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.89	1.89	< 0.005	< 0.005	—	1.90
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	0.00	0.00

3.15. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.17. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179

Architectural Coating	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
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	0.00	0.00
Total	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
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	0.00	0.00
Total	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
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	0.00	0.00
Total	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.16	1.16	< 0.005	< 0.005	—	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6	< 0.005	< 0.005	—	18.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7
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
Total	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.12	0.01	1.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Total	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.73	5.73	< 0.005	< 0.005	—	5.74
Consumer Products	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41
Total	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Demolition	Demolition	8/1/2024	8/14/2024	5.00	10.0	10
Site Preparation	Site Preparation	8/15/2024	8/15/2024	5.00	1.00	1
Grading	Grading	8/16/2024	8/19/2024	5.00	2.00	2
Building Construction	Building Construction	8/20/2024	1/6/2025	5.00	100	100
Paving	Paving	12/31/2024	1/6/2025	5.00	5.00	5
Architectural Coating	Architectural Coating	12/31/2024	1/6/2025	5.00	5.00	5

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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	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
Demolition	—	—	—	—
Demolition	Worker	80.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.30	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	80.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	80.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	31.5	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	80.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.57	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	80.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	80.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	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

Non-applicable. No control strategies activated by user.

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	79,028	26,343	0.00	0.00	502

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,172	—
Site Preparation	—	—	1.00	0.00	—
Grading	—	500	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.19

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	0.19	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005
2025	0.00	349	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
Condo/Townhouse	174	210	172	65,300	1,439	1,739	1,423	540,093
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	24
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

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)
79027.65	26,343	0.00	0.00	502

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Condo/Townhouse	110,212	349	0.0330	0.0040	576,729
Parking Lot	7,326	349	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)
Condo/Townhouse	894,571	208,951
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	17.7	—
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

Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.9	annual days of extreme heat
Extreme Precipitation	5.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.43	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	64.7
AQ-PM	75.7
AQ-DPM	41.6
Drinking Water	57.7
Lead Risk Housing	65.1
Pesticides	0.00
Toxic Releases	82.6
Traffic	30.5
Effect Indicators	—
CleanUp Sites	72.0
Groundwater	27.8
Haz Waste Facilities/Generators	54.6
Impaired Water Bodies	0.00
Solid Waste	24.8
Sensitive Population	—
Asthma	64.5
Cardio-vascular	75.5
Low Birth Weights	12.8

Socioeconomic Factor Indicators	—
Education	57.9
Housing	92.7
Linguistic	78.2
Poverty	84.3
Unemployment	7.14

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.36442962
Employed	56.3839343
Median HI	16.98960606
Education	—
Bachelor's or higher	32.33671243
High school enrollment	100
Preschool enrollment	72.66777878
Transportation	—
Auto Access	6.775311177
Active commuting	48.89002951
Social	—
2-parent households	13.78159887
Voting	70.21686129
Neighborhood	—
Alcohol availability	15.38560246
Park access	81.35506224
Retail density	62.60746824

Supermarket access	18.52944951
Tree canopy	81.67586295
Housing	—
Homeownership	7.096111895
Housing habitability	23.04632362
Low-inc homeowner severe housing cost burden	25.38175286
Low-inc renter severe housing cost burden	46.6957526
Uncrowded housing	39.26600796
Health Outcomes	—
Insured adults	47.91479533
Arthritis	19.5
Asthma ER Admissions	24.7
High Blood Pressure	18.2
Cancer (excluding skin)	29.3
Asthma	58.2
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	15.4
Life Expectancy at Birth	52.9
Cognitively Disabled	4.6
Physically Disabled	12.2
Heart Attack ER Admissions	8.5
Mental Health Not Good	39.8
Chronic Kidney Disease	7.4
Obesity	34.3
Pedestrian Injuries	19.6
Physical Health Not Good	23.8
Stroke	13.0

Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	49.4
No Leisure Time for Physical Activity	26.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	18.5
English Speaking	38.9
Foreign-born	38.0
Outdoor Workers	90.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.9
Traffic Density	26.7
Traffic Access	23.0
Other Indices	—
Hardship	65.9
Other Decision Support	—
2016 Voting	22.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	28.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data. Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis.
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days.
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Trip characteristics taken from information based on Trip Generation.
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Architectural Coatings	SCAQMD Rule 1113
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Construction: Trips and VMT	Based on the Project Applicant, there will be between 30 and 40 construction workers on site at any give time during construction.

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APPENDIX 4.2:

EMFAC 2021 MODEL OUTPUTS

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (SC)	2024	HHDT	Aggregate	Aggregate	Gasoline	43.66381395	2950.780026	0.728709358	728.7093583	1157130.862	2950.780026	6988727.018	6.04	HHDT
Los Angeles (SC)	2024	HHDT	Aggregate	Aggregate	Diesel	52323.86623	6605322.598	1094.182277	1094182.277		6605322.598			
Los Angeles (SC)	2024	HHDT	Aggregate	Aggregate	Electricity	159.3276671	16508.79771	0	0		16508.79771			
Los Angeles (SC)	2024	HHDT	Aggregate	Aggregate	Natural Gas	5707.00382	363944.8425	62.21987558	62219.87558		363944.8425			
Los Angeles (SC)	2024	LDA	Aggregate	Aggregate	Gasoline	3312060.357	130838318.3	4512.231245	4512231.245	4595495.72	130838318.3	143571148.1	31.24	LDA
Los Angeles (SC)	2024	LDA	Aggregate	Aggregate	Diesel	8789.19002	256968.192	6.410626351	6410.626351		256968.192			
Los Angeles (SC)	2024	LDA	Aggregate	Aggregate	Electricity	171677.6521	8196290.291	0	0		8196290.291			
Los Angeles (SC)	2024	LDA	Aggregate	Aggregate	Plug-in Hybric	91933.06913	4279571.308	76.85384871	76853.84871		4279571.308			
Los Angeles (SC)	2024	LDT1	Aggregate	Aggregate	Gasoline	311828.9204	11357946.66	469.1348945	469134.8945	469632.8943	11357946.66	11419457.89	24.32	LDT1
Los Angeles (SC)	2024	LDT1	Aggregate	Aggregate	Diesel	118.5293676	2368.568506	0.102906474	102.9064741		2368.568506			
Los Angeles (SC)	2024	LDT1	Aggregate	Aggregate	Electricity	868.5158405	34958.66479	0	0		34958.66479			
Los Angeles (SC)	2024	LDT1	Aggregate	Aggregate	Plug-in Hybric	472.0350753	24183.9963	0.39509337	395.0933696		24183.9963			
Los Angeles (SC)	2024	LDT2	Aggregate	Aggregate	Gasoline	1566130.15	64695889.13	2725.55071	2725550.71	2743945.965	64695889.13	65972702.04	24.04	LDT2
Los Angeles (SC)	2024	LDT2	Aggregate	Aggregate	Diesel	4948.489318	214828.9903	6.830852294	6830.852294		214828.9903			
Los Angeles (SC)	2024	LDT2	Aggregate	Aggregate	Electricity	10499.25109	385269.4446	0	0		385269.4446			
Los Angeles (SC)	2024	LDT2	Aggregate	Aggregate	Plug-in Hybric	13716.62465	676714.4758	11.56440192	11564.40192		676714.4758			
Los Angeles (SC)	2024	LHDT1	Aggregate	Aggregate	Gasoline	123836.5988	4934814.469	365.1227387	365122.7387	485959.102	4934814.469	7442807.712	15.32	LHDT1
Los Angeles (SC)	2024	LHDT1	Aggregate	Aggregate	Diesel	55652.48261	2469363.403	120.8363633	120836.3633		2469363.403			
Los Angeles (SC)	2024	LHDT1	Aggregate	Aggregate	Electricity	510.884395	38629.84069	0	0		38629.84069			
Los Angeles (SC)	2024	LHDT2	Aggregate	Aggregate	Gasoline	18962.98073	709989.1461	60.2102533	60210.2533	123660.7251	709989.1461	1812758.289	14.66	LHDT2
Los Angeles (SC)	2024	LHDT2	Aggregate	Aggregate	Diesel	25083.1257	1093295.739	63.45047175	63450.47175		1093295.739			
Los Angeles (SC)	2024	LHDT2	Aggregate	Aggregate	Electricity	132.2328573	9473.403689	0	0		9473.403689			
Los Angeles (SC)	2024	MCY	Aggregate	Aggregate	Gasoline	146992.0035	969260.7434	23.52047988	23520.47988	23520.47988	969260.7434	969260.7434	41.21	MCY
Los Angeles (SC)	2024	MDV	Aggregate	Aggregate	Gasoline	941104.6897	35897503.31	1857.587206	1857587.206	1881896.927	35897503.31	37098730.05	19.71	MDV
Los Angeles (SC)	2024	MDV	Aggregate	Aggregate	Diesel	10836.3418	423746.7965	18.00577922	18005.77922		423746.7965			
Los Angeles (SC)	2024	MDV	Aggregate	Aggregate	Electricity	11444.7591	420107.4512	0	0		420107.4512			
Los Angeles (SC)	2024	MDV	Aggregate	Aggregate	Plug-in Hybric	7947.75957	357372.4851	6.303941889	6303.941889		357372.4851			
Los Angeles (SC)	2024	MH	Aggregate	Aggregate	Gasoline	15037.72111	149209.683	30.84240042	30842.40042	36511.49942	149209.683	205681.0599	5.63	MH
Los Angeles (SC)	2024	MH	Aggregate	Aggregate	Diesel	5352.033135	56471.37694	5.669099008	5669.099008		56471.37694			
Los Angeles (SC)	2024	MHDT	Aggregate	Aggregate	Gasoline	14716.96009	800329.4685	155.2858895	155285.8895	442188.5098	800329.4685	3360494.609	7.60	MHDT
Los Angeles (SC)	2024	MHDT	Aggregate	Aggregate	Diesel	59315.44342	2506987.886	281.725312	281725.312		2506987.886			
Los Angeles (SC)	2024	MHDT	Aggregate	Aggregate	Electricity	193.0645447	11118.76621	0	0		11118.76621			
Los Angeles (SC)	2024	MHDT	Aggregate	Aggregate	Natural Gas	877.2928396	42058.48817	5.177308374	5177.308374		42058.48817			
Los Angeles (SC)	2024	OBUS	Aggregate	Aggregate	Gasoline	3692.490323	145452.6476	28.9039628	28903.9628	55393.72274	145452.6476	332652.1346	6.01	OBUS
Los Angeles (SC)	2024	OBUS	Aggregate	Aggregate	Diesel	2097.35841	166829.4354	24.19368289	24193.68289		166829.4354			
Los Angeles (SC)	2024	OBUS	Aggregate	Aggregate	Electricity	7.843994974	589.8873145	0	0		589.8873145			
Los Angeles (SC)	2024	OBUS	Aggregate	Aggregate	Natural Gas	328.2793362	19780.16427	2.296077049	2296.077049		19780.16427			
Los Angeles (SC)	2024	SBUS	Aggregate	Aggregate	Gasoline	1372.011029	60689.4237	6.779512867	6779.512867	20034.60256	60689.4237	130247.1868	6.50	SBUS
Los Angeles (SC)	2024	SBUS	Aggregate	Aggregate	Diesel	1597.022329	32040.99119	4.380138125	4380.138125		32040.99119			
Los Angeles (SC)	2024	SBUS	Aggregate	Aggregate	Electricity	11.68207238	360.2140355	0	0		360.2140355			
Los Angeles (SC)	2024	SBUS	Aggregate	Aggregate	Natural Gas	1503.388379	37156.55788	8.874951572	8874.951572		37156.55788			
Los Angeles (SC)	2024	UBUS	Aggregate	Aggregate	Gasoline	437.5652487	30984.43511	6.753553835	6753.553835	141592.4336	30984.43511	453376.8676	3.20	UBUS
Los Angeles (SC)	2024	UBUS	Aggregate	Aggregate	Diesel	9.459880331	1241.732151	0.213406841	213.4068407		1241.732151			
Los Angeles (SC)	2024	UBUS	Aggregate	Aggregate	Electricity	97.83776932	8157.187193	0	0		8157.187193			
Los Angeles (SC)	2024	UBUS	Aggregate	Aggregate	Natural Gas	3846.599176	412993.5131	134.6254729	134625.4729		412993.5131			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (SC)	2025	HHDT	Aggregate	Aggregate	Gasoline	38.00970234	2730.114768	0.659261572	659.2615723	1161180.927	2730.114768	7131494.242	6.14	HHDT
Los Angeles (SC)	2025	HHDT	Aggregate	Aggregate	Diesel	53941.61643	6714617.667	1096.961053	1096961.053		6714617.667			
Los Angeles (SC)	2025	HHDT	Aggregate	Aggregate	Electricity	350.9297763	38109.97971	0	0		38109.97971			
Los Angeles (SC)	2025	HHDT	Aggregate	Aggregate	Natural Gas	5971.193469	376036.48	63.56061265	63560.61265		376036.48			
Los Angeles (SC)	2025	LDA	Aggregate	Aggregate	Gasoline	3261717.882	128067964.6	4326.798843	4326798.843	4411967.205	128067964.6	142243405	32.24	LDA
Los Angeles (SC)	2025	LDA	Aggregate	Aggregate	Diesel	8115.47098	234266.2649	5.77506153	5775.06153		234266.2649			
Los Angeles (SC)	2025	LDA	Aggregate	Aggregate	Electricity	193284.3415	9414235.572	0	0		9414235.572			
Los Angeles (SC)	2025	LDA	Aggregate	Aggregate	Plug-in Hybric	98452.19235	4526938.566	79.39330032	79393.30032		4526938.566			
Los Angeles (SC)	2025	LDT1	Aggregate	Aggregate	Gasoline	307303.6162	11174163.84	452.812407	452812.407	453446.8405	11174163.84	11256046.11	24.82	LDT1
Los Angeles (SC)	2025	LDT1	Aggregate	Aggregate	Diesel	107.1360043	2101.61697	0.09123334	91.23333958		2101.61697			
Los Angeles (SC)	2025	LDT1	Aggregate	Aggregate	Electricity	1046.875547	45556.73451	0	0		45556.73451			
Los Angeles (SC)	2025	LDT1	Aggregate	Aggregate	Plug-in Hybric	677.1342963	34223.91571	0.543200163	543.2001627		34223.91571			
Los Angeles (SC)	2025	LDT2	Aggregate	Aggregate	Gasoline	1598846.897	65845213.92	2702.160348	2702160.348	2722312.182	65845213.92	67367143.06	24.75	LDT2
Los Angeles (SC)	2025	LDT2	Aggregate	Aggregate	Diesel	5200.085859	223595.1163	6.948576996	6948.576996		223595.1163			
Los Angeles (SC)	2025	LDT2	Aggregate	Aggregate	Electricity	14017.6954	505882.2277	0	0		505882.2277			
Los Angeles (SC)	2025	LDT2	Aggregate	Aggregate	Plug-in Hybric	16355.85292	792451.7915	13.20325761	13203.25761		792451.7915			
Los Angeles (SC)	2025	LHDT1	Aggregate	Aggregate	Gasoline	123869.9548	4952849.986	357.8993576	357899.3576	484130.8044	4952849.986	7647444.842	15.80	LHDT1
Los Angeles (SC)	2025	LHDT1	Aggregate	Aggregate	Diesel	58715.67018	2596323.511	126.2314468	126231.4468		2596323.511			
Los Angeles (SC)	2025	LHDT1	Aggregate	Aggregate	Electricity	1406.155134	98271.34501	0	0		98271.34501			
Los Angeles (SC)	2025	LHDT2	Aggregate	Aggregate	Gasoline	18894.4929	706862.803	58.68448201	58684.48201	125164.3699	706862.803	1886711.482	15.07	LHDT2
Los Angeles (SC)	2025	LHDT2	Aggregate	Aggregate	Diesel	26698.07852	1155746.821	66.47988792	66479.88792		1155746.821			
Los Angeles (SC)	2025	LHDT2	Aggregate	Aggregate	Electricity	363.0686742	24101.85724	0	0		24101.85724			
Los Angeles (SC)	2025	MCY	Aggregate	Aggregate	Gasoline	150473.4563	988230.8863	23.89776829	23897.76829	23897.76829	988230.8863	988230.8863	41.35	MCY
Los Angeles (SC)	2025	MDV	Aggregate	Aggregate	Gasoline	952282.7935	36302116.46	1830.76438	1830764.38	1855973.468	36302116.46	37711894.29	20.32	MDV
Los Angeles (SC)	2025	MDV	Aggregate	Aggregate	Diesel	11031.50419	427142.2782	17.78163752	17781.63752		427142.2782			
Los Angeles (SC)	2025	MDV	Aggregate	Aggregate	Electricity	15185.9899	547666.3841	0	0		547666.3841			
Los Angeles (SC)	2025	MDV	Aggregate	Aggregate	Plug-in Hybric	9770.106857	434969.1711	7.4274497	7427.4497		434969.1711			
Los Angeles (SC)	2025	MH	Aggregate	Aggregate	Gasoline	14653.52741	147454.4598	30.47047491	30470.47491	36338.87331	147454.4598	205880.1098	5.67	MH
Los Angeles (SC)	2025	MH	Aggregate	Aggregate	Diesel	5521.467554	58425.64998	5.868398404	5868.398404		58425.64998			
Los Angeles (SC)	2025	MHDT	Aggregate	Aggregate	Gasoline	14350.96956	779405.2776	149.5355578	149535.5578	437224.2475	779405.2776	3378237.322	7.73	MHDT
Los Angeles (SC)	2025	MHDT	Aggregate	Aggregate	Diesel	60424.47324	2523668.137	282.3073209	282307.3209		2523668.137			
Los Angeles (SC)	2025	MHDT	Aggregate	Aggregate	Electricity	556.2217861	31387.25683	0	0		31387.25683			
Los Angeles (SC)	2025	MHDT	Aggregate	Aggregate	Natural Gas	931.9857944	43776.65045	5.381368788	5381.368788		43776.65045			
Los Angeles (SC)	2025	OBUS	Aggregate	Aggregate	Gasoline	3574.776306	137680.6627	27.09622544	27096.22544	53416.63406	137680.6627	326343.1493	6.11	OBUS
Los Angeles (SC)	2025	OBUS	Aggregate	Aggregate	Diesel	2154.536699	166927.5847	23.99324793	23993.24793		166927.5847			
Los Angeles (SC)	2025	OBUS	Aggregate	Aggregate	Electricity	19.22602896	1412.471949	0	0		1412.471949			
Los Angeles (SC)	2025	OBUS	Aggregate	Aggregate	Natural Gas	344.2470166	20322.42992	2.327160685	2327.160685		20322.42992			
Los Angeles (SC)	2025	SBUS	Aggregate	Aggregate	Gasoline	1407.566843	61982.31618	6.890584573	6890.584573	20153.09483	61982.31618	131760.7587	6.54	SBUS
Los Angeles (SC)	2025	SBUS	Aggregate	Aggregate	Diesel	1545.162913	30783.48004	4.197055222	4197.055222		30783.48004			
Los Angeles (SC)	2025	SBUS	Aggregate	Aggregate	Electricity	25.60383708	817.4949517	0	0		817.4949517			
Los Angeles (SC)	2025	SBUS	Aggregate	Aggregate	Natural Gas	1561.068871	38177.46755	9.065455038	9065.455038		38177.46755			
Los Angeles (SC)	2025	UBUS	Aggregate	Aggregate	Gasoline	434.3887861	30651.97854	6.643775924	6643.775924	139008.0038	30651.97854	454294.1088	3.27	UBUS
Los Angeles (SC)	2025	UBUS	Aggregate	Aggregate	Diesel	6.356431667	939.4744674	0.16146728	161.4672802		939.4744674			
Los Angeles (SC)	2025	UBUS	Aggregate	Aggregate	Electricity	152.2443728	15265.9648	0	0		15265.9648			
Los Angeles (SC)	2025	UBUS	Aggregate	Aggregate	Natural Gas	3807.336326	407436.691	132.2027606	132202.7606		407436.691			

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APPENDIX 9

May 17, 2021 Project No. 21051-01

Mr. Matthew J. Waken
MW Investment Group, LLC
27702 Crown Valley Parkway, Suite D-4-197
Ladera Ranch, CA 92694

Subject: ***Preliminary Geotechnical Evaluation and Recommendations, Proposed Multi-Family Residential Development Located at the Intersection of Philadelphia Street and Comstock Avenue, Whittier, California***

In accordance with your request and authorization, LGC Geotechnical, Inc. has performed a preliminary geotechnical evaluation for the proposed multi-family residential development located at the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier, California. The purpose of our study was to evaluate the existing onsite geotechnical conditions and to provide geotechnical recommendations, including infiltration testing, relative to the proposed residential development.

Should you have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully Submitted,

LGC Geotechnical, Inc.



Ryan Douglas, PE, GE 3147
Project Engineer

RLD/BPP/amm

Distribution: (1) Addressee (electronic copy)
(1) KHR Associates (electronic version)
Attn: Mr. James Kawamura

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1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our preliminary geotechnical evaluation for the proposed approximately 0.8-acre residential development located at the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier, California. Refer to the Site Location Map (Figure 1).

The purpose of our study was to provide a geotechnical evaluation relative to the proposed residential development. As part of our scope of work, we have: 1) reviewed available geotechnical information and in-house geologic maps pertinent to the site (Appendix A); 2) performed a subsurface geotechnical evaluation of the site consisting of the excavation and sampling of four small-diameter borings ranging from approximately 15 to 46.5 feet below existing ground surface, 3) performed two falling head infiltration tests within borings; 4) performed laboratory testing of select soil samples obtained during our subsurface evaluation; and 5) prepared this preliminary geotechnical summary report presenting our findings and preliminary conclusions and recommendations for the development of the proposed project.

It should be noted that our evaluation and this report only address geotechnical issues associated with the site and do not address any environmental issues.

1.2 Background

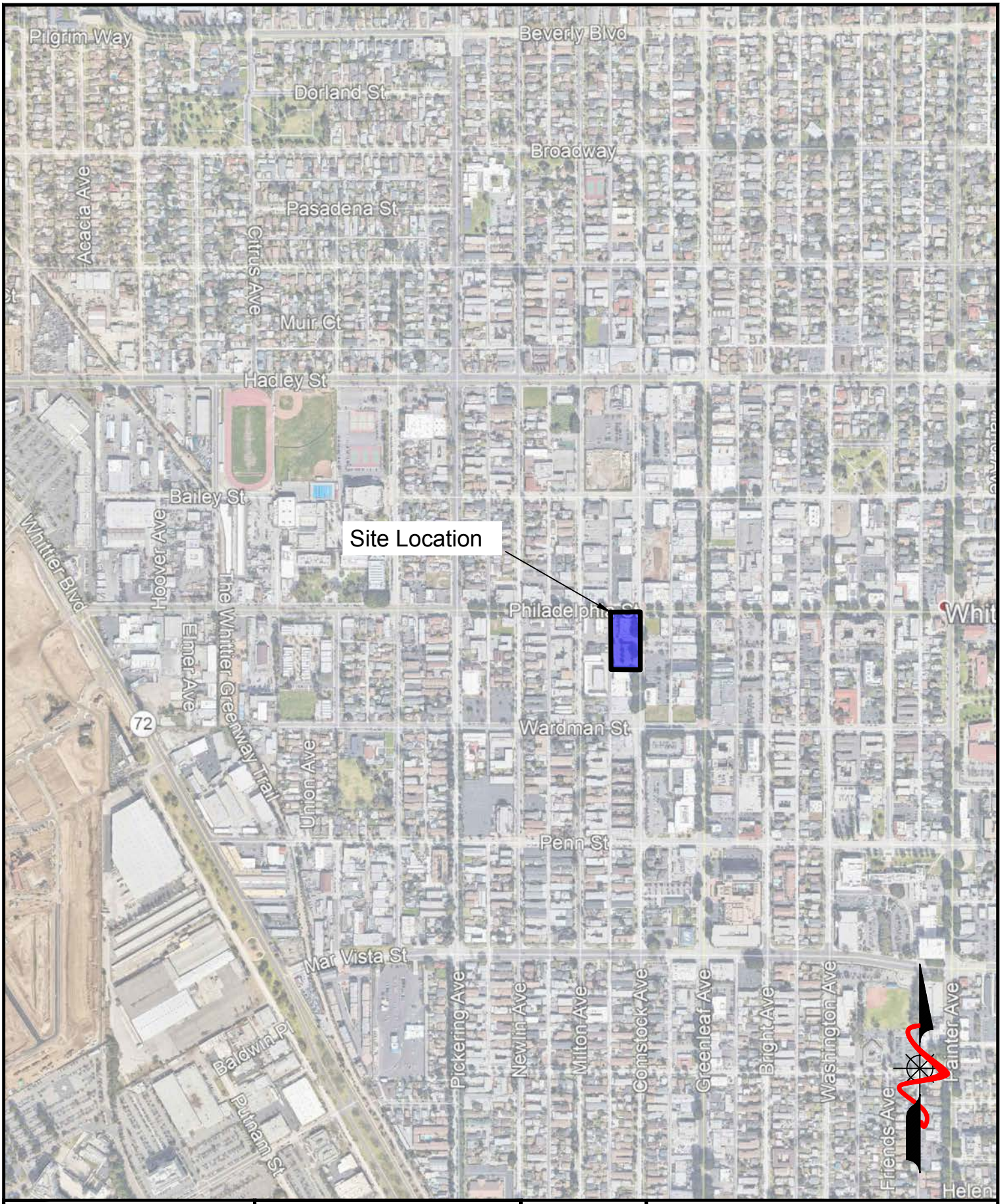
Review of historical aerials indicates the site had been undeveloped in 1954. It appears between the years of 1954 and 1963 the current building and parking lot were constructed (Historic Aerials, 2021).

1.3 Project Description

The approximately 0.8-acre site is bound to the north by Philadelphia Street, to the east by Comstock Avenue, to the south by an existing commercial development, and to the west by an alley. The site is currently occupied by an existing commercial structure and on-grade asphalt concrete parking lot.

Proposed development will consist of one 4-level residential structure with 51 multi-family dwelling units, on-grade parking, amenity deck, and a water quality system. The proposed residential development is anticipated to consist of relatively light building loads (column and wall loads maximum of 40 kips and 2 kips per linear foot, respectively).

The recommendations given in this report are based upon at-grade structures with estimated structural loads and grading information indicated above. LGC Geotechnical should be provided with any updated project information, plans and/or any structural loads when they become available, in order to either confirm or modify the recommendations provided herein.



PROJECT NAME	MWIG- Whittier
PROJECT NO.	21051-01
ENG. / GEOL.	RLD
SCALE	Not to Scale
DATE	May 2021

LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

1.4 Subsurface Geotechnical Evaluation

A limited subsurface geotechnical evaluation of the site was performed by LGC Geotechnical. Our exploration program consisted of drilling and sampling four small-diameter exploratory hollow-stem borings (HS-1, HS-2, I-1 & I-2) for the purpose of obtaining samples for evaluation and laboratory testing of site soils, with two of the borings (I-1 and I-2) utilized for percolation testing. The borings were drilled by Cal Pac Drilling, Inc., under subcontract to LGC Geotechnical. The depths of the borings ranged from approximately 15 to 46.5 feet below existing grade. An LGC Geotechnical representative observed the drilling operations, logged the borings, and collected soil samples for laboratory testing. The borings were performed using a truck-mounted drill rig equipped with 8-inch-diameter hollow-stem augers. Bulk samples of the near-surface soils were logged and collected for laboratory testing from select borings. Driven soil samples were collected by means of the Standard Penetration Test (SPT) and Modified California Drive (MCD) sampler generally obtained at 2.5 and 5-foot vertical increments. The MCD is a split-barrel sampler with a tapered cutting tip and lined with a series of 1-inch-tall brass rings. The SPT sampler (1.4-inch ID) and MCD sampler (2.4-inch ID, 3.0-inch OD) were driven using a 140-pound automatic hammer falling 30 inches to advance the sampler a total depth of 18 inches or until refusal. The raw blow counts for each 6-inch increment of penetration were recorded on the boring logs. The borings were subsequently backfilled with cuttings, tamped and capped with asphalt coldpatch, where necessary.

Infiltration testing was performed within two of the borings, I-1 and I-2, to depths of approximately 15 feet below existing grade. An LGC Geotechnical geologist installed standpipes, backfilled the borings with crushed rock and pre-soaked the infiltration holes prior to testing. Infiltration testing was performed per the County of Los Angeles testing guidelines. Standpipes were removed and the locations were subsequently backfilled with native soils at the completion of testing. Some settlement of the backfill soils may occur over time.

The approximate locations of our subsurface explorations are provided on the Boring Map, Figure 2. The boring and infiltration testing logs are provided in Appendix B and Appendix D, respectively.

1.5 Field Infiltration Testing

Two shallow infiltration test wells were installed in Borings I-1 and I-2 to approximate depths of 15 feet below existing grade. The approximate infiltration test boring locations are shown on the Boring Map (Figure 2).

Estimation of infiltration rates was performed in general accordance with the "Boring Percolation Test Procedure" guidelines set forth by the County of Los Angeles (2017). The borings for the infiltration tests were excavated using a drill rig equipped with 8-inch diameter hollow-stem augers. A 3-inch diameter perforated PVC pipe was placed in the borehole above a thin layer of gravel and the annulus was backfilled with gravel. Infiltration tests were performed using relatively clean water free of particulates, silt, etc. The infiltration wells were pre-soaked approximately 1 hour prior to testing. During the pre-test, water was added to the boring and was observed after 10 minutes and 30 minutes to determine test methodology. In infiltration test holes I-1 and I-2 water remained in the borings after 30 minutes. Therefore, the test procedure utilizing a thirty-minute reading interval was performed on both infiltration test

holes (I-1 & I-2). Readings were taken a minimum of 8 times or until a "stabilized rate" was established. A "stabilized rate" is when the highest and lowest readings are within 10 percent of each other over three consecutive readings. At the completion of infiltration testing, the pipe was removed and backfilled with cuttings and tamped. Some settlement of the backfill should be expected.

Based on the County of Los Angeles testing guidelines (2017), the infiltration rate is calculated by dividing the volume of water discharged by the surface area of the test section (including the sidewalls and bottom of the boring) over a specific time period. The measured infiltration rate is taken as the average of the last three readings during which a "stabilized rate" is achieved. The measured infiltration rates are provided in Table 1 below.

TABLE 1

Summary of Field Infiltration Testing

Infiltration Test Location	Approximate Infiltration Test Depth (ft)	Measured Infiltration Rate* (inch/hr.)
I-1	15	0.2
I-2	15	0.1

*Does Not Include Required Reduction Factors for Design.

Please note that the values provided in Table 1 do not include reduction factors associated with the test procedure, site variability, and long-term siltation plugging that are used to calculate the design infiltration rate. Infiltration test data is presented in Appendix D. Refer to Section 4.6 for recommendations regarding infiltration of stormwater.

1.6 Laboratory Testing

Representative bulk, grab, and driven (relatively undisturbed) samples were retained for laboratory testing during our field evaluation. Laboratory testing included in-situ moisture content and in-situ dry density, sieve analysis, Atterberg limits, consolidation, direct shear, expansion index, laboratory compaction, and corrosion (sulfate, chloride, pH and minimum resistivity).

The following is a summary of the laboratory test results:

- Dry density of the samples collected ranged from approximately 104.9 pounds per cubic foot (pcf) to 119.6 pcf, with an average of 114.1 pcf. Field moisture contents ranged from approximately 1.4 to 17.0 percent, with an average of approximately 12.4 percent.
- Two sieve particle size analysis tests were performed and indicated a fines content (passing No. 200 sieve) of approximately 60 to 82 percent. Based on the Unified Soils Classification System (USCS), the tested samples would be classified as "fine-grained."
- One Atterberg Limit (liquid limit and plastic limit) test was performed. Results indicated a Plasticity Index (PI) value of 19.

- One consolidation test was performed. The load versus deformation plot is provided in Appendix C.
- One direct shear test was performed. The plot is provided in Appendix C.
- Expansion potential testing indicated an expansion index of 47, corresponding to "Low" expansion potential.
- Laboratory compaction of a near-surface bulk sample resulted in a maximum dry density of 120.5 pcf at an optimum moisture content of 10.2 percent.
- Corrosion testing indicated soluble sulfate content of less than 0.02 percent, a chloride content of 60 parts per million (ppm), pH of 6.50 and a minimum resistivity of 1,860 ohm-centimeters.

A summary of the laboratory test results is presented in Appendix C. The moisture and dry density results are presented on the boring logs in Appendix B.

2.0 GEOTECHNICAL CONDITIONS

2.1 Regional Geology

The subject site is generally located within the Peninsular Ranges Geomorphic Province of California, more specifically just north of the Downey Plains region and south of the Puente Hills. The site is located on a younger alluvial fan deposit generated from the nearby canyons in the Puente Hills. Regional topography is mostly flat lying to the south of the site, with the hills to the north of the site defined by the steeper and overturned stratigraphy of the Whittier fault zone (approximately one mile northeast of the site). The trace of the Workman Hill fault is also located further northwest on the northern edge of the Puente Hills. The San Gabriel River is located about 2.4 miles west of the site where it flows in a southwestern direction (CDMG, 1998 and Dibblee, 2001).

2.2 Site-Specific Geology

Based on review of available geologic maps (Dibblee, 2001), the primary geologic unit underlying the site is Holocene age, young alluvial fan deposits. The site is specifically on the Northeastern extent of young alluvial fan deposits emanating from Puente Hills. The fan is largely described as alluvial gravel, sand and silt (Dibblee, 2001). As encountered at the subject site, the alluvial fan deposits generally consist of brown to reddish brown silt, clay and sand with variable amounts of gravel.

2.3 Generalized Subsurface Conditions

The field explorations (borings) indicate minor amounts of undocumented artificial fill soils overlying native alluvial soils. The undocumented artificial fill soils consisted of variable amounts of sand, silt, clay, and gravel, that is brown to grayish brown, slightly moist to moist, and loose to very stiff up to approximately 5 feet below existing grade. The native alluvial soils consisted of primarily silt with varying amounts of sand and clay, that is brown to dark brown, dry to moist, and very stiff to hard for fine-grained soils and medium dense for coarse-grained soils (see Appendix B for Boring Logs).

It should be noted that borings are only representative of the location and time where/when they are performed, and varying subsurface conditions may exist outside of the performed location. In addition, subsurface conditions can change over time. The soil descriptions provided above should not be construed to mean that the subsurface profile is uniform, and that soil is homogeneous within the project area. For details on the stratigraphy at the exploration locations, refer to Appendix B.

2.4 Groundwater

Groundwater was not encountered to the maximum depth of approximately 46.5 feet below existing ground surface during our subsurface evaluation. Historic high groundwater is

approximately 100 feet below current grade per the Seismic Hazard Zone Report for the Whittier 7.5-Minute Quadrangle (CDMG, 1998).

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed.

2.5 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2019 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.9786 degrees north and longitude -118.0389 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 2 on the following page. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 6.85 at a distance of approximately 8.9 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 6.74 at a distance of approximately 13.9 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2019 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.884g (SEAOC, 2021).

TABLE 2

Seismic Design Parameters

Selected Parameters from 2019 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.852g	From SEAOC, 2021
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.66g	From SEAOC, 2021
F_a (per Table 1613.2.3(1))	1.000	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.700	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.852g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	1.122g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	1.235g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.748g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.897	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.899	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

2.6 Faulting

Prompted by damaging earthquakes in California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the State requires detailed fault evaluations be performed so that

engineering geologists can mitigate the hazards associated with active faulting by identifying the location of active faults and allowing for a setback from zones of previous ground rupture.

The subject site is not located within an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during our site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching, shallow ground rupture, soil liquefaction and dynamic settlement. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependant on the distance between the site and causative fault and the onsite geology. Some of the major active nearby faults that could produce these secondary effects include the Whittier, Puente Hills, Compton, Elysian Park, and Anaheim Fault Zones, among others (CGS, 2018). A discussion of these secondary effects is provided in the following sections.

2.6.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that saturated, loose to medium dense, near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on our review of the State of California Seismic Hazard Zone for liquefaction potential (CDMG, 1999), the site is not located within a liquefaction hazard zone. Due to the absence of groundwater and the presence of very stiff fine-grained soils in the upper 50 feet, the potential for liquefaction is considered very low to remote.

2.6.2 Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to depth to groundwater, very low potential for liquefaction and lack of nearby "free face" conditions, the potential for lateral spreading is also considered very low to remote.

2.7 Oversized Material

Oversized material (material larger than 8 inches in maximum dimension) is not anticipated during site grading. However, if encountered, recommendations are provided for appropriate handling of oversized materials in Appendix E. If feasible, crushing oversized materials onsite or exporting oversized materials may be considered. Special handling recommendations should be provided on a case-by case basis, if encountered.

2.8 Expansion Potential

Based on the results of our recent laboratory testing and our experience with similar soils in the area, site soils are anticipated to have a "Low" to "Medium" expansion potential. Final expansion potential of site soils should be determined at the completion of grading. Results of expansion testing at finish grades will be utilized to confirm final foundation design.

3.0 CONCLUSIONS

Based on the results of our geotechnical evaluation, it is our opinion that the proposed development is feasible from a geotechnical standpoint, provided the following conclusions and recommendations are implemented.

The following is a summary of the primary geotechnical factors that may affect future development of the site:

- In general, field explorations (borings) indicate minor amounts of undocumented artificial fill soils overlying native alluvial soils. The undocumented artificial fill soils consisted of variable amounts of sand, silt, clay, and gravel, that is brown to grayish brown, slightly moist to moist, and loose to very stiff up to approximately 5 feet below existing grade. The native alluvial soils consisted of primarily silt with varying amounts of sand and clay, that is brown to dark brown, dry to moist, and very stiff too hard for fine-grained soils and medium dense for coarse-grained soils (see Appendix B for Boring Logs). The near-surface loose and compressible soils are not suitable for the planned improvements in their present condition (refer to Section 4.1).
- Groundwater was not encountered during our subsurface evaluation to the maximum explored depth of approximately 46.5 feet below current grade. Historic high groundwater is estimated to be approximately 100 feet below current grade (CDMG, 1998).
- The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo). The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- The site is not located within a State of California Seismic Hazard Zone for liquefaction potential (CDMG, 1999). The potential for liquefaction is considered very low to remote due to the presence of very dense fine-grained soils and the lack of a groundwater in the upper 50 feet.
- Based on the results of preliminary laboratory testing and our experience with similar soils in the area, site soils are anticipated to have "Low" to "Medium" expansion potential. Final design expansion potential must be determined at the completion of grading.
- Pre-soaking of the subgrade for building slabs will be required due to site expansive soils. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically 1 to 2 weeks).
- Based on the corrosion test results, soils are not considered corrosive per the Caltrans criteria (Caltrans, 2018).
- Excavations into the existing site soils should be feasible with heavy construction equipment in good working order. From a geotechnical perspective, the existing onsite soils are suitable material for use as fill, provided that they are relatively free from rocks (larger than 8 inches in maximum dimension), construction debris, and significant organic material.
- Oversize particles (larger than 8 inches in maximum dimension) are not anticipated; however, if encountered, it will require reduction in size or export from the site.

4.0 PRELIMINARY RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2019 CBC requirements. With regard to the potential occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvements may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that although our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions, they cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

We anticipate that earthwork at the site will consist of the removal of existing improvements associated with the former land use followed by the required earthwork removals, precise grading and construction of the proposed new improvements, including the residential structures, subsurface utilities, interior streets, etc.

We recommend that earthwork onsite be performed in accordance with the following recommendations, future grading plan review report(s), the 2019 CBC/City of Whittier grading requirements, and the General Earthwork and Grading Specifications included in Appendix E. In case of conflict, the following recommendations shall supersede those included in Appendix E. The following recommendations should be considered preliminary and may be revised within the future grading plan review report or based on the actual conditions encountered during site grading.

4.1.1 Site Preparation

Prior to grading of areas to receive structural fill or engineered improvements, the areas should be cleared of existing asphalt, surface obstructions, structures, foundations and

demolition debris. Vegetation and debris should be removed and properly disposed of off-site. Holes resulting from the removal of buried obstructions, which extend below proposed finish grades, should be replaced with suitable compacted fill material. Any abandoned sewer or storm drain lines should be completely removed and replaced with properly placed compacted fill. Deeper demolition may be required in order to remove existing foundations. We recommend the trenches associated with demolition which extend below the remedial grading depth be backfilled and properly compacted prior to the demolition contractor leaving the site.

If cesspools or septic systems are encountered, they should be removed in their entirety. The resulting excavation should be backfilled with properly compacted fill soils. As an alternative, cesspools can be backfilled with lean sand-cement slurry. Any encountered wells should be properly abandoned in accordance with regulatory requirements. At the conclusion of the clearing operations, a representative of LGC Geotechnical should observe and accept the site prior to further grading.

4.1.2 Removal and Recompaction Depths and Limits

In order to provide a relatively uniform bearing condition for the planned building structures, upper loose/compressible soils are to be temporarily removed and recompacted as properly compacted fills. Existing undocumented artificial fill within the influence of the proposed structural improvements should be removed to suitable, competent native materials prior to placement of artificial fill to design grades. For preliminary planning purposes, the depth of required removals and recompaction may be estimated as indicated below. It should be noted that updated recommendations may be required based on changes to building layouts and/or grading plan.

Building Structures: We recommend that soils within building pads be removed and recompacted to a minimum depth of 5 feet below existing grade or 3 feet below the base of the foundations, whichever is deeper. Where space is available, the envelope for removal and recompaction should extend laterally a minimum distance equal to the depth of removal and recompaction below finish grade or 5 feet beyond the edges of the proposed building improvements, whichever is larger.

Minor Site Structures: For minor site structures such as free-standing walls, retaining walls, etc., removal and recompaction should extend a minimum of 3 feet below existing grade or 2 feet below proposed footings, whichever is greater. Where space is available, the envelope for removal and recompaction should extend laterally a minimum distance of 3 feet beyond the edges of the proposed minor site structure improvements.

Pavement and Hardscape Areas: Within pavement and hardscape areas, removal and recompaction should extend to a depth of at least 2 feet below existing grade. Removal and recompaction in any design cut areas of the pavement may be reduced by the depth of the design cut but should not be less than 1-foot below the finished subgrade (i.e., below planned aggregate base/asphalt concrete). In general, the envelope for removal and recompaction should extend laterally a minimum lateral distance of 2 feet beyond the edges of the proposed pavement or hardscape improvements.

Local conditions may be encountered during excavation that could require additional over-excavation beyond the above noted minimum in order to obtain an acceptable subgrade. The actual depths and lateral extents of grading will be determined by the geotechnical consultant, based on subsurface conditions encountered during grading. Removal areas and areas to be over-excavated should be accurately staked in the field by the Project Surveyor.

4.1.3 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and all Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter.

Based on our field evaluation, the majority of the site soils within the upper 5 to 10 feet are anticipated to be OSHA Type "B" soils (refer to the attached boring logs). Sandy soils are present and should be considered susceptible to caving. Soil conditions should be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person", required by OSHA standards, to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility of the contractor.

Where proposed improvements will be adjacent to property lines, the potential for impacting existing offsite improvements may be reduced by performing "ABC" slot cuts while performing earthwork removal and recompaction. "ABC" slot cuts are defined as excavations perpendicular to sensitive property boundaries that are divided into multiple "slots" of equal width. If slots are labeled A, B, C, A, B, C, etc., then all "A" slots can be excavated at the same time but must be backfilled before all "B" slots can be excavated, etc. Any given slot should be backfilled immediately with properly compacted fill to finish grade prior to excavation of the adjacent two slots. Please note sands susceptible to caving are present at the site. Recommendations for slot cut dimensions should be evaluated during grading. Protection of the existing offsite improvements during grading is the responsibility of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a distance equivalent to a 1:1 projection from the bottom of the excavation. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring parameters will be provided.

4.1.4 Removal Bottoms and Subgrade Preparation

In general, removal bottom areas and any areas to receive compacted fill should be scarified to a minimum depth of 6 inches, brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content), and re-compacted per project recommendations.

Removal bottoms, over-excavation bottoms and areas to receive fill should be observed and accepted by the geotechnical consultant prior to subsequent fill placement. Soil subgrade for planned footings and improvements (e.g., slabs, etc.) should be firm and competent.

4.1.5 Material for Fill

From a geotechnical perspective, the onsite soils are generally considered suitable for use as general compacted fill, provided they are screened of organic materials, construction debris and oversized material (8 inches in greatest dimension).

From a geotechnical viewpoint, any required import soils for general fill (i.e., non-retaining wall backfill) should consist of clean, granular soils of "Low" expansion potential (expansion index 50 or less based on ASTM D 4829), and generally free of organic materials, construction debris and material greater than 3 inches in maximum dimension. Import for required retaining wall backfill should meet the criteria outlined in the following paragraph. Source samples should be provided to the geotechnical consultant for laboratory testing a minimum of four working days prior to planned importation.

Retaining wall backfill should consist of sandy soils with a maximum of 35 percent fines (passing the No. 200 sieve) per American Society for Testing and Materials (ASTM) Test Method D1140 (or ASTM D6913/D422) and a "Very Low" expansion potential (EI of 20 or less per ASTM D4829). Soils should also be screened of organic materials, construction debris, and any material greater than 3 inches in maximum dimension. Onsite soils are not suitable for retaining wall backfill due to their fines content and expansion index; therefore, import of soils meeting the criteria outlined above will be required by the contractor for obtaining suitable retaining wall backfill soil. These preliminary findings should be confirmed during grading.

Aggregate base (crushed aggregate base or crushed miscellaneous base) should conform to the requirements of Section 200-2 of the Standard Specifications for Public Works Construction ("Greenbook") for untreated base materials (except processed miscellaneous base) or Caltrans Class 2 aggregate base.

The placement of demolition materials in compacted fill is acceptable from a geotechnical viewpoint provided the demolition material is broken up into pieces not larger than typically used for aggregate base (approximately 1-inch in maximum dimension) and well blended into fill soils with essentially no resulting voids. Demolition material placed in fills must be free of construction debris (wood, brick, etc.) and reinforcing steel. If asphalt concrete fragments will be incorporated into the demolition materials, approval from an environmental viewpoint may be required and is not the purview of the geotechnical

consultant. From our previous experience, we recommend that asphalt concrete fragments be limited to fill areas within planned streets, alleys or non-structural areas (i.e., not within building pad areas).

4.1.6 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Soils are present that will require additional moisture in order to achieve the required compaction. Drying and/or mixing the very moist soils may also be required prior to reusing the materials in compacted fills.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing performed by the geotechnical consultant. Oversized material as previously defined should be removed from site fills. During backfill of excavations, the fill should be properly benched into firm and competent soils of temporary backcut slopes as it is placed in lifts.

Aggregate base material should be compacted to at least 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to at least 90 percent relative compaction per ASTM D1557 at or slightly above optimum moisture content (generally within optimum and 2 percent above optimum moisture content).

If gap-graded ¾-inch rock is used for backfill (around storm drain storage chambers, retaining wall backfill, etc.) it will require compaction. Rock shall be placed in thin lifts (typically not exceeding 6 inches) and mechanically compacted with observation by geotechnical consultant. Backfill rock shall meet the requirements of ASTM D2321. Gap-graded rock is required to be wrapped in filter fabric (Mirafi 140N or approved alternative) or at the very minimum to be vertically separated from the trench backfill to prevent the migration of fines into the rock backfill.

4.1.7 Trench and Retaining Wall Backfill and Compaction

The onsite soils may generally be suitable as trench backfill, provided the soils are screened of rocks and other material greater than 6 inches in diameter and organic matter. If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 30 or greater may be used to bed and shade the pipes. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamping to ensure adequate compaction. Subsequent trench

backfill should be compacted in uniform thin lifts by mechanical means to at least the recommended minimum relative compaction (per ASTM D1557).

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.5. The limits of select sandy backfill should extend at minimum ½ the height of the retaining wall or the width of the heel (if applicable), whichever is greater (Figure 3). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, typically sand-cement slurry may be substituted for compacted backfill. The slurry should contain about one sack of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil. Sand cement slurry placed near the surface within landscape areas should be evaluated for potential impacts on planned improvements.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.8 Shrinkage and Subsidence

Allowance in the earthwork volumes budget should be made for an estimated 5 to 15 percent reduction (shrink) in volume of near-surface (upper approximate 5 feet) soils. It should be stressed that these values are only estimates and that an actual shrinkage factor would be extremely difficult to predetermine. Subsidence, due to earthwork operations, is expected to be on the order of 0.1 feet. These values are estimates only and exclude losses due to removal of vegetation or debris. The effective shrinkage of onsite soils will depend primarily on the type of compaction equipment and method of compaction used onsite by the contractor and accuracy of the topographic survey.

4.2 Preliminary Foundation Recommendations

The site may be considered suitable for the support of the proposed structures using a rigid slab-on-grade conventionally reinforced or post-tensioned slab foundation designed in accordance with Chapter 18 of the 2019 CBC. It should be noted that, as with many structures in Southern California, risk does remain that the proposed structures could suffer some damage as a result of an earthquake. Repair and remedial work may be required after a seismic event.

The following sections summarize our preliminary recommendations. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical at the completion of grading. The proposed foundations should be designed by the foundation engineer in accordance with the following recommendations. The following recommendations may be superseded by the requirements of the foundation engineer, structural engineer and/or local jurisdictions. Proposed foundations should be designed to accommodate estimated site static settlements.

4.2.1 Provisional Conventional Foundation Design Parameters

Given that the expansion index exceeds 20, the foundation systems shall be designed for effects of expansive soil. Conventional foundations may be designed in accordance with Wire Reinforcement Institute (WRI) procedure for slab-on-ground foundations per Section 1808 of the 2019 CBC to resist expansive soils. The following preliminary soil parameters may be used:

- Effective Plasticity Index: 25
- Climatic Rating: Cw = 15
- Reinforcement: Per structural designer.
- Moisture condition slab subgrade soils to 120 % of optimum moisture content to a depth of 18 inches prior to trenching for footings.

Other types of stiff slabs may be used in place of the WRI design procedure provided that, in the opinion of the foundation structural designer, the alternative of slab is at least as stiff and strong as that designed by the WRI to resist expansive soils.

4.2.2 Post-Tensioned Foundation Design Parameters

The geotechnical parameters provided herein may be used for post-tensioned slab foundations with a deepened perimeter footing or a post-tensioned mat slab. These parameters have been determined in general accordance with the Post-Tensioning Institute (PTI) Standard Requirements for Design of Shallow Post-Tensioned Concrete Foundations on Expansive Soils, referenced in Chapter 18 of the 2019 CBC. In utilizing these parameters, the foundation engineer should design the foundation system in accordance with the allowable deflection criteria of applicable codes and the requirements of the structural designer/architect. Other types of stiff slabs may be used in place of the CBC post-tensioned slab design provided that, in the opinion of the foundation structural designer, the alternative type of slab is at least as stiff and strong as that designed by the CBC/PTI method.

Our design parameters are based on our experience with similar projects and the anticipated nature of the soil (with respect to expansion potential). Please note that implementation of our recommendations will not eliminate foundation movement (and related distress) should the moisture content of the subgrade soils fluctuate. It is the intent of these recommendations to help maintain the integrity of the proposed structures and reduce (not eliminate) movement, based upon the anticipated site soil conditions. Should future owners and/or property maintenance personnel not properly maintain the areas surrounding the foundation, for example by overwatering, then we anticipate for highly expansive soils the maximum differential movement of the perimeter of the foundation to the center of the foundation to be on the order of a couple of inches. Soils of lower expansion potential are anticipated to show less movement.

TABLE 3

Provisional Geotechnical Parameters for Post-Tensioned Foundation Slab Design with "Medium" Expansion Potential Subgrade Soils

Parameter	PT Slab with Perimeter Footing	PT Mat with Thickened Edge
Expansion Index	Medium	Medium
Thornthwaite Moisture Index	-20	-20
Constant Soil Suction	PF 3.9	PF 3.9
Center Lift Edge moisture variation distance, e_m Center lift, y_m	 9.0 feet 0.5 inch	 9.0 feet 0.6 inch
Edge Lift Edge moisture variation distance, e_m Edge lift, y_m	 4.7 feet 1.1 inch	 4.7 feet 1.3 inch
Modulus of Subgrade Reaction, k (assuming presoaking as indicated below)	150 pci	150 pci
Minimum perimeter footing/thickened edge embedment below finish grade	18 inches	6 inches

1. Recommendations for foundation reinforcement and slab thickness are ultimately the purview of the foundation engineer/structural engineer based upon geotechnical criteria and structural engineering considerations.
2. The sand layer requirements are the purview of the foundation engineer/structural engineer and should be provided in accordance with ACI Publication 302 "Guide for Concrete Floor and Slab Construction".
3. Recommendations for vapor retarders below slabs are also the purview of the foundation engineer/structural engineer and should be provided in accordance with applicable code requirements.
4. Moisture condition to 120% of optimum moisture content to a depth of 18 inches prior to trenching.

4.2.3 Foundation Subgrade Preparation and Maintenance

Moisture conditioning of the subgrade for building slabs will be required due to site expansive soils. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically 1 to 2 weeks). The subgrade moisture condition of the building pad soils should be maintained at the recommended moisture content up to the time of concrete placement. This moisture content should be maintained around the immediate perimeter of the slab during construction and up to occupancy of the building structures. As an alternative to presoaking, the upper 18 inches of subgrade soils may be placed at a higher moisture content and maintained up until the time of concrete placement. The upper 18 inches of subgrade would have to be placed at 120% of optimum moisture content, compacted to

90 percent relative compaction per the project specifications and maintained up until the time of concrete placement.

The geotechnical parameters provided in the section above assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future owners/property management personnel should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future owners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative, unless specifically provided with root barriers to prevent root growth below the building foundation.

It is the owner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future owners and property management personnel should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The developer should provide these recommendations to future owners and property management personnel.

4.2.4 Slab Underlayment Guidelines

The following is for informational purposes only since slab underlayment (e.g., moisture retarder, sand or gravel layers for concrete curing and/or capillary break) is unrelated to the geotechnical performance of the foundation and thereby not the purview of the geotechnical consultant. Post-construction moisture migration should be expected below the foundation. The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer), in conjunction with the vapor retarder, is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect.

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 1,500 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 12 inches below lowest adjacent ground surface. This value may be increased by 300 psf for each additional foot of embedment of 150 psf for each additional foot of foundation width to a maximum value of 2,500 psf. A mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

In utilizing the above-mentioned allowable bearing capacity, and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be 1-inch or less. Differential settlement may be taken as half of the total settlement (i.e., ½-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.3 may be assumed with dead-load forces. An allowable passive lateral earth pressure of 225 psf per foot of depth (or pcf) to a maximum of 2,250 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 300 pcf (maximum of 3,000 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions. Frictional resistance and passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions, respectively.

4.4 Lateral Earth Pressures for Retaining Walls

Lateral earth pressures for approved native sandy or import soils meeting indicated project requirements are provided below. Lateral earth pressures are provided as equivalent fluid unit weights, in psf per foot of depth (or pcf). These values do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

The following lateral earth pressures are presented in Table 4 on the following page for approved granular soils with a maximum of 35 percent fines (passing the No. 200 sieve per ASTM D-421/422) and a “Very Low” expansion potential (EI of 20 or less per ASTM D4829). The site soils are not suitable for retaining wall backfill due to their fines content and expansion index; therefore, import of soils meeting the criteria outlined above will be required by the contractor for obtaining suitable retaining wall backfill soil. The wall designer should clearly indicate on the retaining wall plans the required imported select sandy soil backfill criteria.

TABLE 4

Lateral Earth Pressures – Approved Imported Sandy Soils

Conditions	Equivalent Fluid Unit Weight (pcf)	Equivalent Fluid Unit Weight (pcf)
	Level Backfill	2:1 Sloped Backfill
	Approved Sandy Soils	Approved Sandy Soils
Active	35	55
At-Rest	55	70

If the wall can yield enough to mobilize the full shear strength of the soil, it can be designed for "active" pressure. If the wall cannot yield under the applied load, the earth pressure will be higher. This would include 90-degree corners of retaining walls. Such walls should be designed for "at-rest." The equivalent fluid pressure values assume free-draining conditions. If conditions other than those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical engineer.

Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. To reduce, but not eliminate, saturation of near-surface (upper approximate 1-foot) soils in front of the retaining walls, the perforated subdrain pipe should be located as low as possible behind the retaining wall. The outlet pipe should be sloped to drain to a suitable outlet. In general, we do not recommend retaining wall outlet pipes be connected to area drains. If subdrains are connected to area drains, special care and information should be provided to homeowners to maintain these drains. Typical retaining wall drainage is illustrated in Figure 3. It should be noted that the recommended subdrain does not provide protection against seepage through the face of the wall and/or efflorescence. Efflorescence is generally a white crystalline powder (discoloration) that results when water containing soluble salts migrates over a period of time through the face of a retaining wall and evaporates. If such seepage or efflorescence is undesirable, retaining walls should be waterproofed to reduce this potential. Please note that waterproofing and outlet systems are not the purview of the geotechnical consultant.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining wall. In addition to the recommended earth pressure, retaining walls adjacent to streets should be designed to resist a uniform lateral pressure of 80 pounds per square foot (psf) due to normal street vehicle traffic if applicable. Uniform lateral surcharges may be estimated using the applicable coefficient of lateral earth pressure using a rectangular distribution. A factor of 0.45 and 0.3 may be used for at-rest and active conditions, respectively. The retaining wall designer should contact the geotechnical engineer for any required geotechnical input in estimating any applicable surcharge loads.

If required, the retaining wall designer may use seismic lateral earth pressure increment of 10 or 20 pcf for level backfill or 2:1 sloped backfill conditions, respectively. These increments should be

applied (in addition to the provided static lateral earth pressure) using a triangular distribution with the resultant acting at H/3 in relation to the base of the retaining structure (where H is the retained height). Per Section 1803.5.12 of the 2019 CBC, the seismic lateral earth pressure is applicable to structures assigned to Seismic Design Category D through F for retaining wall structures supporting more than 6 feet of backfill height. This seismic lateral earth pressure is estimated using the procedure outlined by the Structural Engineers Association of California (Lew, et al, 2010).

Soil bearing and lateral resistance (friction coefficient and passive resistance) are provided in Section 4.3. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 (Site Earthwork) and the subsequent earthwork related sub-sections.

4.5 Control of Surface Water and Drainage Control

From a geotechnical perspective, we recommend that compacted finished grade soils adjacent to proposed residences be sloped away from the proposed residence and towards an approved drainage device or unobstructed swale. Drainage swales, wherever feasible, should not be constructed within 5 feet of buildings. Where lot and building geometry necessitates that the side yard drainage swales be routed closer than 5 feet to structural foundations, we recommend the use of area drains together with drainage swales. Drainage swales used in conjunction with area drains should be designed by the project civil engineer so that a properly constructed and maintained system will prevent ponding within 5 feet of the foundation. Code compliance of grades is not the purview of the geotechnical consultant.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

4.6 Subsurface Water Infiltration

It should be noted that intentionally infiltrating storm water conflicts with the geotechnical engineering objective of directing surface water away from structures and improvements. The geotechnical stability and integrity of a site is reliant upon appropriately handling surface water.

In general, the vast majority of geotechnical distress issues are directly related to improper drainage. Distress in the form of movement of foundations and other improvements could occur as a result of soil saturation and loss of soil support of foundations and pavements, settlement, collapse, internal soil erosion, and/or expansion. Additionally, off-site properties and improvements may be subjected to seepage, springs, instability, movements of foundations or other impacts as a result of water infiltration and migration. Infiltrated water may enter underground utility pipe zones or other highly permeable layers and migrate laterally along these layers, potentially impacting other improvements located far away from the point of infiltration. Any proposed infiltration system should not be located near slopes or settlement sensitive existing/proposed improvements in order to reduce the potential for slope failures and geotechnical distress issues related to infiltration.

If water must be infiltrated due to regulatory requirements, we recommend the absolute minimum amount of water be infiltrated and that the infiltration areas not be located near settlement-sensitive existing/proposed improvements, basement/retaining walls, or any slopes. As with all systems that are designed to concentrate surface flow and direct the water into the subsurface soils, some minor settlement, nuisance type localized saturation and/or other water related issues should be expected. Due to variability in geologic and hydraulic conductivity characteristics, these effects may be experienced at the onsite location and/or potentially at other locations beyond the physical limits of the subject site. Infiltrated water may enter underground utility pipe zones or flow along heterogeneous soil layers or geologic structure and migrate laterally impacting other improvements which may be located far away or at an elevation much lower than the infiltration source. Recommendations for subsurface water infiltration are provided below.

The design infiltration rate is determined by dividing the measured infiltration rate by a series of reduction factors including; test procedure (RF_t), site variability (RF_v) and long-term siltation plugging and maintenance (RF_s). Based on the Los Angeles County testing guidelines (2017), the reduction factor for long-term siltation plugging and maintenance (RF_s) is the purview of the infiltration system designer. The test procedure reduction factor and recommended site variability reduction factor applied to the measured infiltration rate is provided in Table 5 below. The design infiltration rate is the measured infiltration rate divided by the total reduction factor (RF_t x RF_v x RF_s).

TABLE 5

Shallow Surface Infiltration - Reduction Factors Applied to Measured Infiltration Rate

Consideration	Reduction Factor
Test procedure, boring percolation, RF_t	2
Site variability, number of tests, etc., RF_v	1.5
Long-term siltation plugging and maintenance, RF_s	Per Infiltration Designer
Total Reduction Factor, RF = RF_t x RF_v x RF_s	**TBD**

Per the requirements of the Los Angeles County testing guidelines (2017), subsurface materials shall have a design infiltration rate equal to or greater than 0.3 inches per hour. The test procedure and site variability considerations (RF_t and RF_v) result in a minimum reduction factor of 3 (not including long-term siltation plugging and maintenance). When total reduction factor is applied to the measured infiltration rates presented in Table 1, the resulting design infiltration rate is anticipated to be less than the minimum required by the County of Los Angeles for infiltration.

Based on the results of field infiltration testing indication of extremely low infiltration rates (less than the minimum County design infiltration rate) and the presence of low permeability silts and clays to maximum explored depth of approximately 46.5 feet below existing grade, we strongly recommend against the intentional infiltration of stormwater into the subsurface soils.

4.7 Preliminary Asphalt Pavement Sections

For the purpose of these preliminary recommendations, we have selected a preliminary design R-value of 25 (assumed) and calculated pavement sections for Traffic Index (TI) of 5.0 (or less) and 5.5. The California Department of Transportation Highway Design Manual (Caltrans, 2017) allows for a maximum R-Value of 50 to be used in pavement design. These recommendations must be confirmed with R-Value testing of representative near-surface soils at the completion of grading and after underground utilities have been installed and backfilled. Final street sections should be confirmed by the project civil engineer based upon the final design Traffic Index. Determination of the TI is not the purview of the geotechnical consultant. If requested, LGC Geotechnical will provide sections for alternate TI values.

TABLE 6

Preliminary Pavement Sections

Assumed Traffic Index	5.0 or less	5.5
R -Value Subgrade	25	25
AC Thickness	4.0 inches	4.0 inches
Base Thickness	5.0 inches	6.0 inches

The thicknesses shown are for minimum thicknesses. Increasing the thickness of any or all of the above layers will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations are based on the assumption that proper maintenance and irrigation of the areas adjacent to the roadway will occur through the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in Section 4.1 "Site Earthwork" and the related sub-sections of this report.

4.8 Soil Corrosivity

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of near-surface bulk samples indicated soluble sulfate contents less than 0.02 percent, a chloride content of 60 parts per million (ppm), pH of 6.50 and minimum resistivity of 1,860 ohm-centimeters. Based on Caltrans Corrosion Guidelines (Caltrans, 2018), soils are considered corrosive to structural elements if the pH is 5.5 or less, or the chloride concentration is 500 ppm or greater, or the sulfate concentration is 1,500 ppm (0.15 percent) or greater. Based on the test results, soils are not considered corrosive using Caltrans criteria.

Based on laboratory sulfate test results, the near surface soils are designated to a class "S0" per ACI 318, Table 19.3.1.1 with respect to sulfates. Concrete in direct contact with the onsite soils can be designed according to ACI 318, Table 19.3.2.1 using the "S0" sulfate classification.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.9 Nonstructural Concrete Flatwork

Nonstructural concrete flatwork (such as walkways, bicycle trails, patio slabs, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete may be designed in accordance with the minimum guidelines outlined in Table 7. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 7

Nonstructural Concrete Flatwork for Medium Expansion Potential

	Private Drives	**Patios/Entryways**	**City Sidewalk Curb and Gutters**
Minimum Thickness (in.)	5 (full)	5 (full)	City/Agency Standard
Presoaking	Presoak to 12 inches	Presoak to 12 inches	City/Agency Standard
Reinforcement	No. 3 at 24 inches on centers	No. 3 at 24 inches on centers	City/Agency Standard
Thickened Edge (in.)	8 x 8	—	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	10 feet or quarter cut whichever is closer	6 feet	City/Agency Standard

Aggregate Base Thickness (in.)	—	—	City/Agency Standard

4.10 Geotechnical Plan Review

When available, project plans (grading, foundation, retaining wall etc.) should be reviewed by LGC Geotechnical in order to verify our geotechnical recommendations are implemented. Updated recommendations and/or additional field work may be necessary.

4.11 Geotechnical Observation and Testing During Construction

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2019 CBC.

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc.);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;
- After presoaking building pads and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base and asphalt concrete pavement;
- After building and wall footing excavation and prior to placing reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

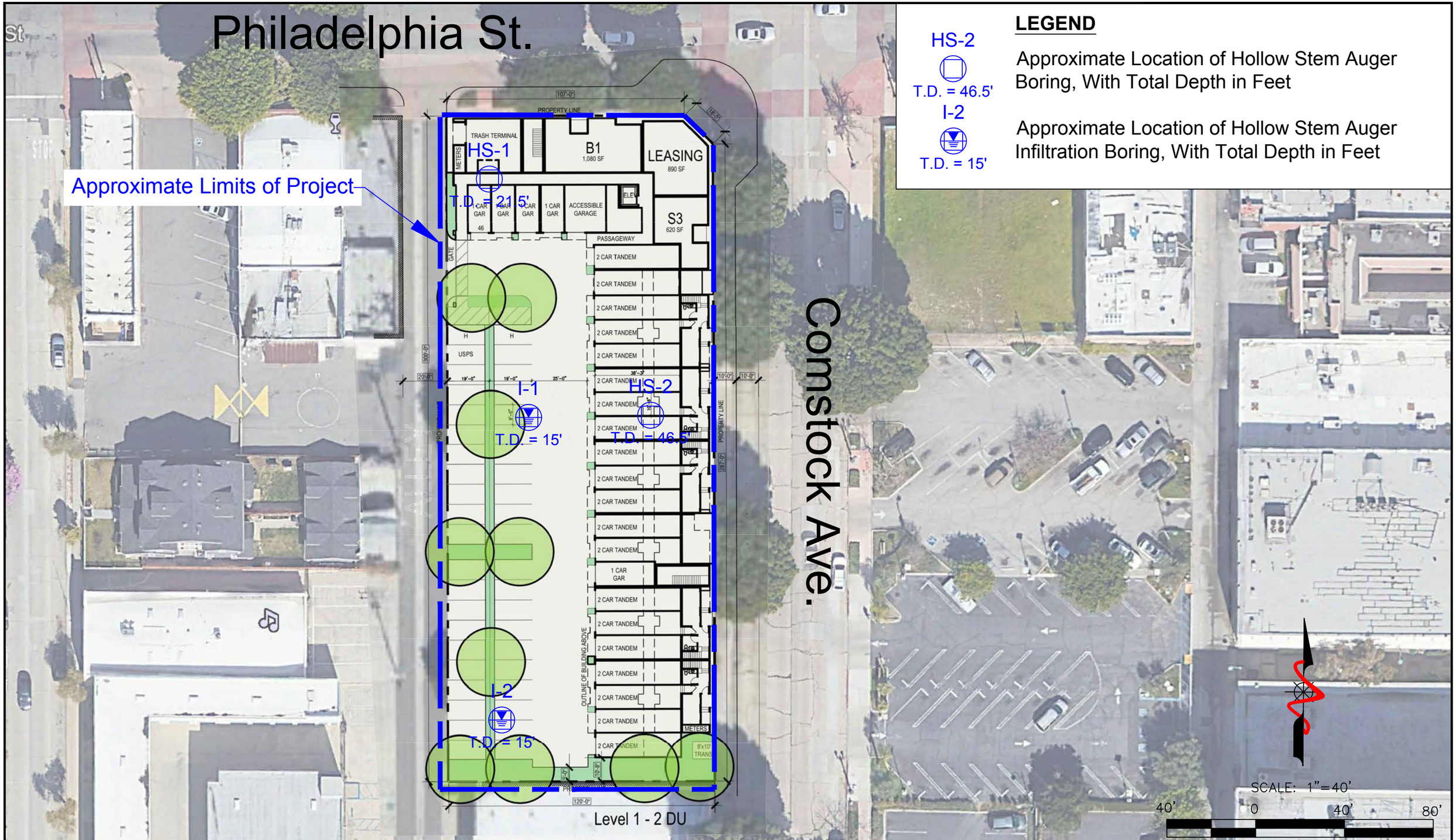
Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

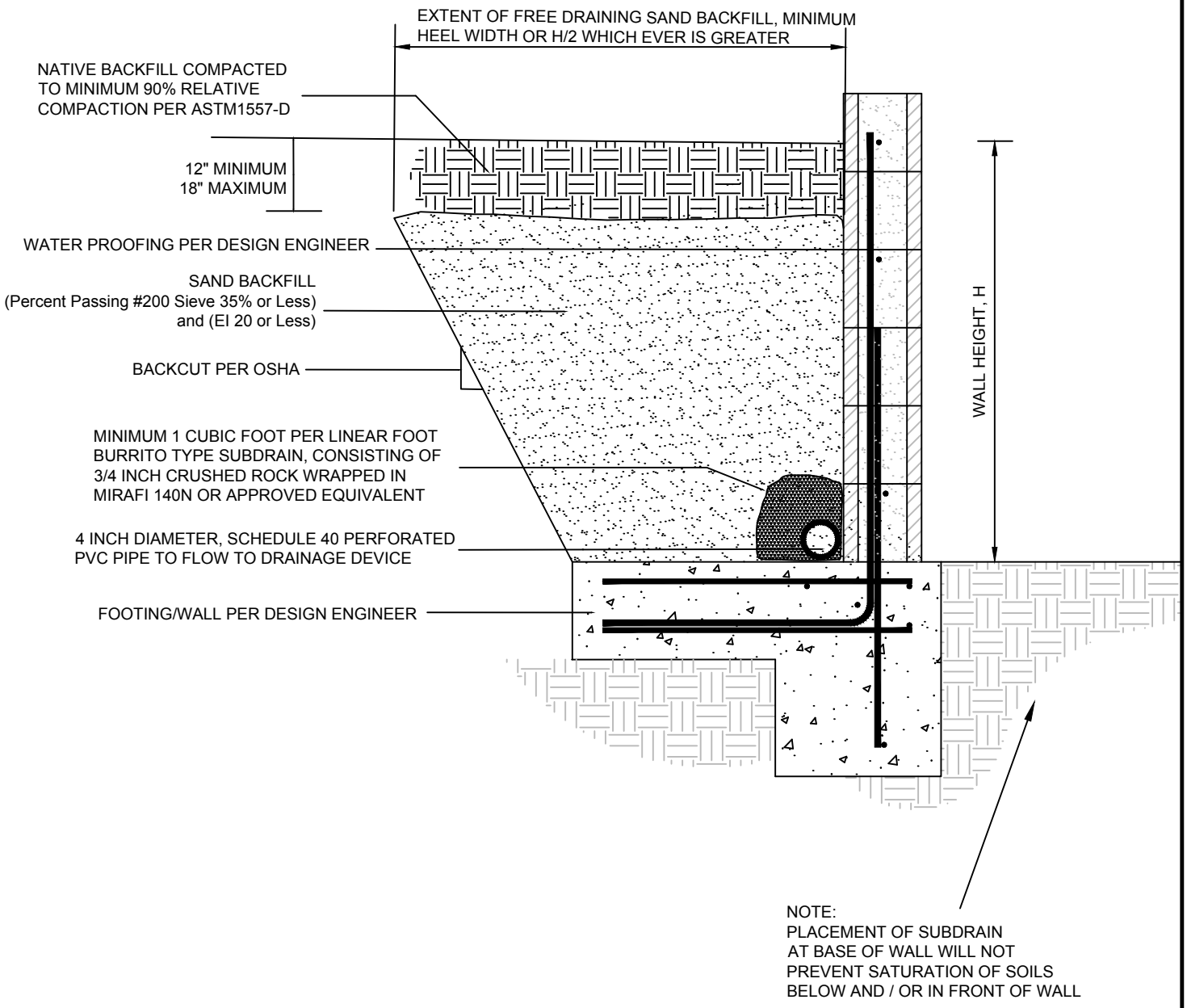
In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.



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Figure 2
Boring Location Map

PROJECT NAME	MWIG - Whittier
PROJECT NO.	21051-01
ENG. / GEOL.	RLD
SCALE	1:40
DATE	May 2021



LGC Geotechnical, Inc.

FIGURE 3
Retaining Wall Backfill Detail

PROJECT NAME	*MWIG - Whittier*
PROJECT NO.	*21051-01*
ENG. / GEOL.	*RLD*
SCALE	*Not to Scale*
DATE	*May 2021*

Appendix A
References

APPENDIX A

References

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Appendix B
Field Exploration Logs

Geotechnical Boring Log Borehole HS-1

Date: 4/6/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Whittier | **Type of Rig:** CME 75

Project Number: 21051-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~319' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0	B-1						**@0' to 5'- Undocumented Artificial Fill (afu):**	MD
								@0'- 3 inches of Asphalt over 9 inches of Base	EI
			R-1	6 10 12	111.4	11.0	ML	@2.5'- Sandy SILT: brown, moist, very stiff	CR DS
315									
	5		R-2	8 17 31	116.6	15.5		**@5' to T.D.- Quaternary Alluvium (Qa):**	
							CL	@5'- CLAY with Sand: brown, moist, hard	
			R-3	7 14 11	111.2	12.9		@7.5'- CLAY: dark yellowish brown, moist, very stiff	CO AL
310									
	10		SPT-1	3 3 5		3.5	SM	@10'- Silty SAND: dusky brown, dry, medium dense	
305									
	15		R-1	17 40 50/3"	119.6	14.7	CL	@15'- CLAY with Gravel: brown, moist, hard	
300									
	20		SPT-2	8 10 10		8.5	ML	@20'- Sandy SILT: dusky brown, slightly moist, very stiff	
295								Total Depth = 21.5' Groundwater Not Encountered Backfilled with Cuttings on 4/6/2021	
	25								
290									
	30								

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THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
⏚	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/3/2021

Geotechnical Boring Log Borehole HS-2

Date: 4/6/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Whittier | **Type of Rig:** CME 75

Project Number: 21051-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~319' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0	B-1						**@0' to 5'- Undocumented Artificial Fill (afu):** @0'- 2 inches of Asphalt over 3 inches of Base	
			R-1	6 8 4	104.9	5.8	SP	@2.5'- SAND with Gravel: gray/brown, slightly moist, loose	
315	5		R-2	3 7 11	110.8	1.4	SP	**@5' to T.D.- Quaternary Alluvium (Qa):** @5'- SAND with Gravel: dusky gray/brown, dry, medium dense	
			R-3	11 16 23	117.4	14.0	ML	@7.5'- Sandy SILT: brown, moist, hard	
310	10		R-4	10 20 26	118.5	14.4		@10'- Sandy SILT: brown, moist, hard	
305	15		SPT-1	5 7 12		17.0		@15'- Sandy SILT: brown, very moist, very stiff	-#200
300	20		R-5	26 50/5"	115.8	14.9		@20'- Sandy SILT: brown, moist, hard	
295	25		SPT-2	8 13 16		14.4		@25'- Sandy SILT: dusky brown, moist, hard	
290	30								

LGC Geotechnical, Inc.

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Last Edited: 5/3/2021

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Date: 4/6/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Whittier | **Type of Rig:** CME 75

Project Number: 21051-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~319' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	30		R-6	16 39 50/4"	118.0	15.0	CL	@30'- CLAY with Sand: brown, moist, hard	
285									
	35		SPT-3	8 12 10		11.8	ML	@35'- Sandy SILT: brown, moist, very stiff	-#200
280									
	40		R-7	9 23 50/6"	111.1	9.8		@40'- Sandy SILT: pinkish brown, slightly moist, hard	
275									
	45		SPT-4	10 21 41		15.1	CL	@45'- CLAY: reddish brown, moist, hard @46.5'- Refusal	
270								Total Depth = 46.5' Groundwater Not Encountered Backfilled with Cuttings on 4/6/2021	
	50								
265									
	55								
260									
	60								

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AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole I-1

Date: 4/6/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Whittier | **Type of Rig:** CME 75

Project Number: 21051-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~316' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
315	0							**@0' to 5'- Undocumented Artificial Fill (afu):** @0'- 4 inches of Asphalt over 5 inches of Base	
310	5		SPT-1	7 11 14		14.0	CL	**@5' to T.D.- Quaternary Alluvium (Qa):** @5'- CLAY with Sand: dark brown, moist, hard	
305	10		R-1	6 22 34	112.3	12.4	ML	@10'- Sandy SILT: dusky brown, moist, hard	
			SPT-2	13 19 19		10.7	CL	@13'- Sandy CLAY: brown, slightly moist, hard	
300	15							Total Depth = 15' Groundwater Not Encountered Pipe Pulled and Backfilled with Cuttings on 4/7/2021	
295	20								
290	25								
	30								

LGC Geotechnical, Inc.

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CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/3/2021

Geotechnical Boring Log Borehole I-2

Date: 4/6/2021	**Drilling Company:** Cal Pac Drilling
Project Name: MWIG - Whittier	**Type of Rig:** CME 75
Project Number: 21051-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~313' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By MJG
Sampled By MJG
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
310	0							**@0' to 5'- Undocumented Artificial Fill (afu):** @0'- 6 inches of Asphalt over 5 inches of base	
305	5		R-1	9 11 18	111.2	16.5	CL	**@5' to T.D.- Quaternary Alluvium (Qa):** @5'- Sandy CLAY: brown, moist, very stiff	
	10		SPT-1	5 8 8		12.0	ML	@10'- Sandy SILT: dusky brown, moist, very stiff	
300			R-2	13 23 30	119.0	10.1		@13'- Sandy SILT: dusky brown, moist, hard	
295	15							Total Depth = 15' Groundwater Not Encountered Pipe Pulled and Backfilled with Cuttings on 4/7/2021	
290	20								
285	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

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RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/3/2021

Appendix C
Laboratory Test Results

APPENDIX C

Laboratory Testing Procedures and Test Results

The laboratory testing program was formulated towards providing data relating to the relevant engineering properties of the soils with respect to residential construction. Samples considered representative of site conditions were tested in general accordance with American Society for Testing and Materials (ASTM) procedure and/or California Test Methods (CTM), where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Moisture and Density Determination Tests: Moisture content (ASTM D2216) and dry density determinations (ASTM D2937) were performed on relatively undisturbed samples obtained from the test borings and/or trenches. The results of these tests are presented in the boring logs. Where applicable, only moisture content was determined from undisturbed or disturbed samples.

Expansion Index: The expansion potential of a selected sample was evaluated by the Expansion Index Test, Standard ASTM D4829. Specimens are molded under a given compactive energy to approximately the optimum moisture content and approximately 50 percent saturation or approximately 90 percent relative compaction. The prepared 1-inch-thick by 4-inch-diameter specimens are loaded to an equivalent 144 psf surcharge and are inundated with tap water until volumetric equilibrium is reached. The results of these tests are presented in the table below.

Sample Location	Expansion Index	Expansion Potential*
HS-1 @ 1-5 feet	47	Low

* ASTM D4829

Grain Size Distibution/Fines Content: Representative samples were dried, weighed and soaked in water until individual soil particles were separated (per ASTM D421) and then washed on a No. 200 sieve (ASTM D1140). Where applicable, the portion retained on the No. 200 sieve and dried and then sieved on a U.S. Standard brass sieve set in accordance with ASTM D6913 (sieve).

Sample Location	Description	% Passing # 200 Sieve
HS-2 @ 15 feet	Sandy Silt	82
HS-2 @ 35 feet	Sandy Silt	60

Laboratory Testing Procedures and Test Results

Atterberg Limits: The liquid and plastic limits ("Atterberg Limits") were determined per ASTM D4318 for engineering classification of fine-grained material and presented in the table below. The USCS soil classification indicated in the table below is based on the portion of sample passing the No. 40 sieve and may not necessarily be representative of the entire sample. The plot is provided in this Appendix.

Sample Location	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Soil Classification
HS-1 @ 7.5 ft	35	16	19	CL

Consolidation: One consolidation test was performed per ASTM D2435. A sample (2.4 inches in diameter and 1 inch in height) was placed in a consolidometer and increasing loads were applied. The sample was allowed to consolidate under "double drainage" and total deformation for each loading step was recorded. The percent consolidation for each load step was recorded as the ratio of the amount of vertical compression to the original sample height. The consolidation pressure curve is provided in this Appendix.

Direct Shear: One direct shear test was performed on remolded samples, which was soaked for a minimum of 24 hours prior to testing. The samples were tested under various normal loads using a motor-driven, strain-controlled, direct shear testing apparatus (ASTM D3080). The plot is provided in this Appendix.

Maximum Density Tests: The maximum dry density and optimum moisture content of typical materials were determined in accordance with ASTM D1557. The results of this test are presented in the table below:

Sample Location	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HS-1 @ 1-5 feet	Dark Yellowish Brown Clay with Sand	120.5	10.2

Chloride Content: Chloride content was tested in accordance with Caltrans Test Method (CTM) 422. The results are presented below.

Sample Location	Chloride Content, ppm
HS-1 @ 1-5 feet	60

Laboratory Testing Procedures and Test Results

Soluble Sulfates: The soluble sulfate contents of selected samples were determined by standard geochemical methods (CTM 417). The soluble sulfate content is used to determine the appropriate cement type and maximum water-cement ratios. The test results are presented in the table below.

Sample Location	Sulfate Content (ppm)	Sulfate Exposure Class *
HS-1 @ 1-5 feet	140	S0

*Based on ACI 318R-14, Table 19.3.1.1

Minimum Resistivity and pH Tests: Minimum resistivity and pH tests were performed in general accordance with CTM 643 and standard geochemical methods. The results are presented in the table below.

Sample Location	pH	Minimum Resistivity (ohms-cm)
HS-1 @ 1-5 feet	6.50	1860

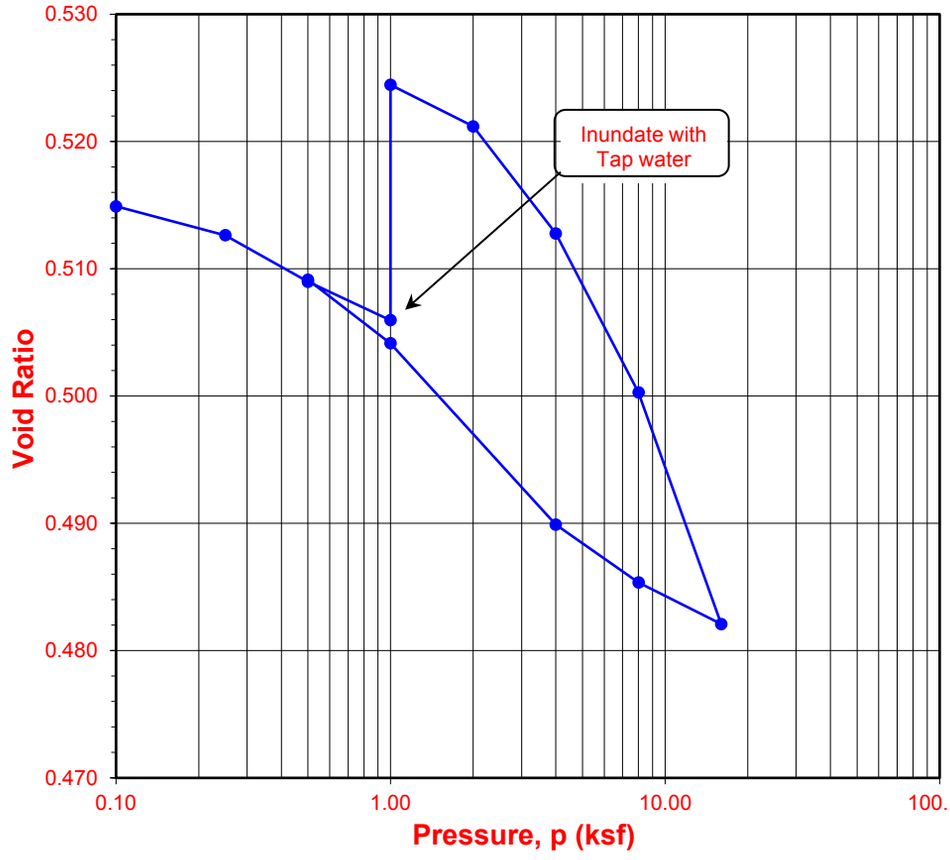
ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS

ASTM D 2435

Project Name: Whittier
Project No.: 21051-01
Boring No.: HS-1
Sample No.: R-3
Soil Identification: Dark yellowish brown lean clay (CL)

Tested By: GB/YN Date: 04/13/21
Checked By: J. Ward Date: 05/04/21
Depth (ft.): 7.5
Sample Type: Ring

Sample Diameter (in.)	2.415
Sample Thickness (in.)	1.000
Wt. of Sample + Ring (g)	194.04
Weight of Ring (g)	43.10
Height after consol. (in.)	0.9958
Before Test	
Wt.Wet Sample+Cont. (g)	297.31
Wt.of Dry Sample+Cont. (g)	272.29
Weight of Container (g)	77.78
Initial Moisture Content (%)	12.9
Initial Dry Density (pcf)	111.2
Initial Saturation (%)	67
Initial Vertical Reading (in.)	0.3014
After Test	
Wt.of Wet Sample+Cont. (g)	264.23
Wt. of Dry Sample+Cont. (g)	241.02
Weight of Container (g)	64.37
Final Moisture Content (%)	17.38
Final Dry Density (pcf)	111.5
Final Saturation (%)	92
Final Vertical Reading (in.)	0.2937
Specific Gravity (assumed)	2.70
Water Density (pcf)	62.43

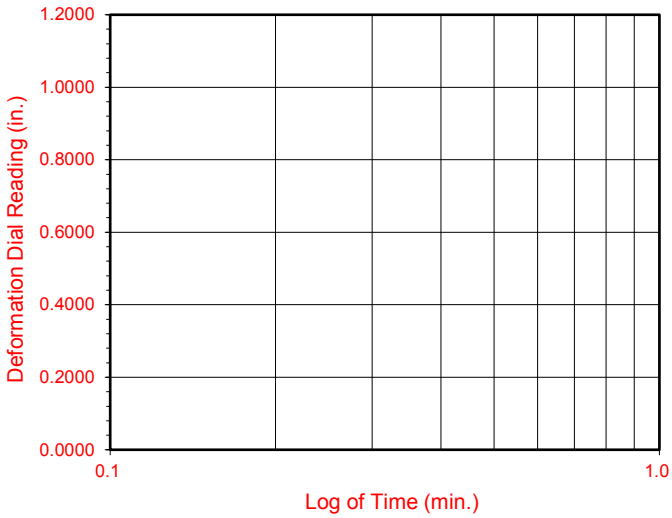


Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.3010	0.9996	0.00	0.04	0.515	0.04
0.25	0.2992	0.9978	0.03	0.22	0.513	0.19
0.50	0.2965	0.9951	0.06	0.49	0.509	0.43
1.00	0.2940	0.9926	0.11	0.74	0.506	0.63
1.00	0.3062	1.0048	0.11	-0.48	0.524	-0.59
2.00	0.3032	1.0018	0.20	-0.17	0.521	-0.37
4.00	0.2963	0.9949	0.33	0.51	0.513	0.18
8.00	0.2866	0.9852	0.48	1.49	0.500	1.01
16.00	0.2727	0.9713	0.67	2.88	0.482	2.21
8.00	0.2757	0.9743	0.58	2.57	0.485	1.99
4.00	0.2795	0.9781	0.50	2.19	0.490	1.69
1.00	0.2900	0.9886	0.39	1.14	0.504	0.75
0.50	0.2937	0.9923	0.35	0.77	0.509	0.42

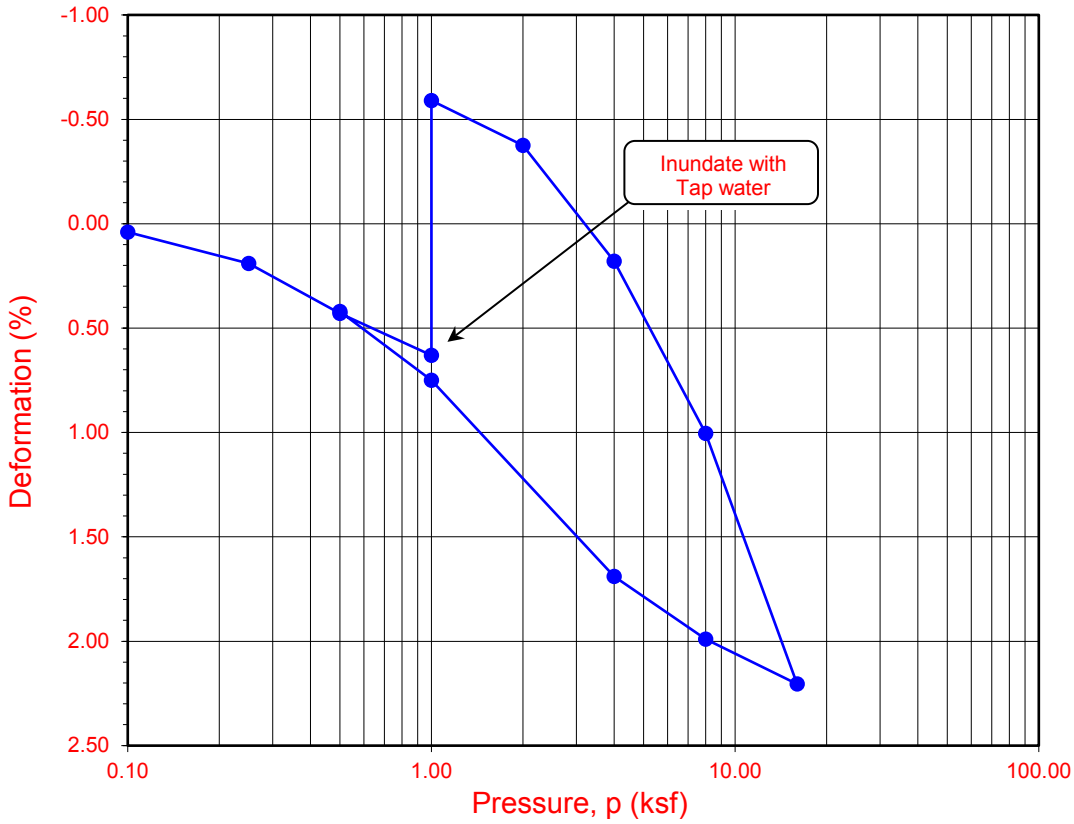
Time Readings

Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rdgs. (in.)

Time Readings







Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
HS-1	**R-3**	**7.5**	**12.9**	**17.4**	**111.2**	**111.5**	**0.516**	**0.509**	**67**	**92**

Soil Identification: Dark yellowish brown lean clay (CL)

ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS
ASTM D 2435

Project No.: 21051-01

Whittier

05-21

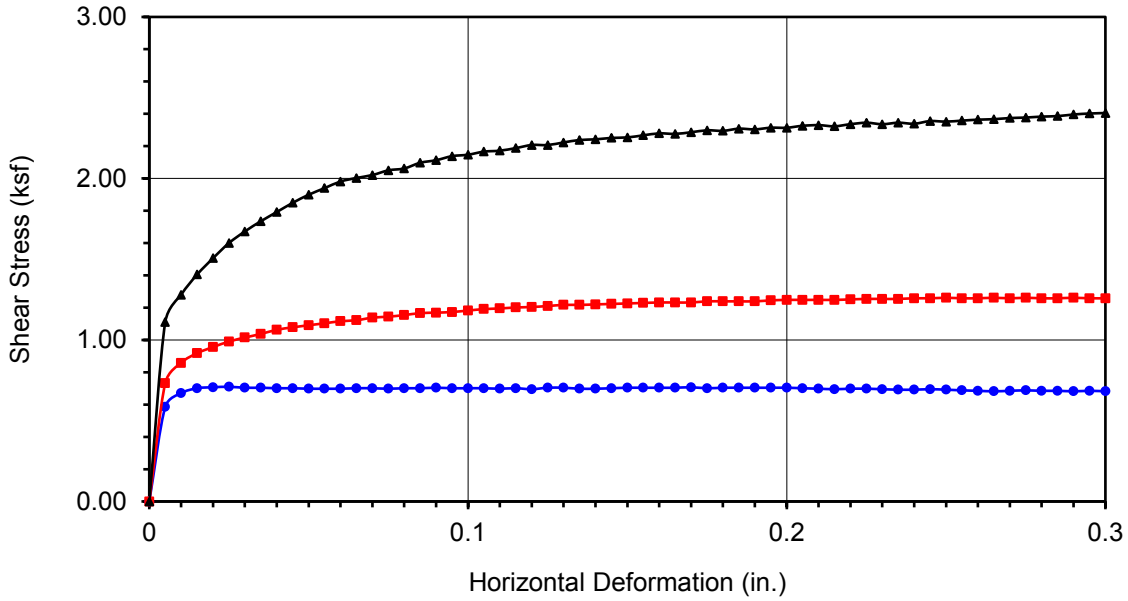
DIRECT SHEAR TEST

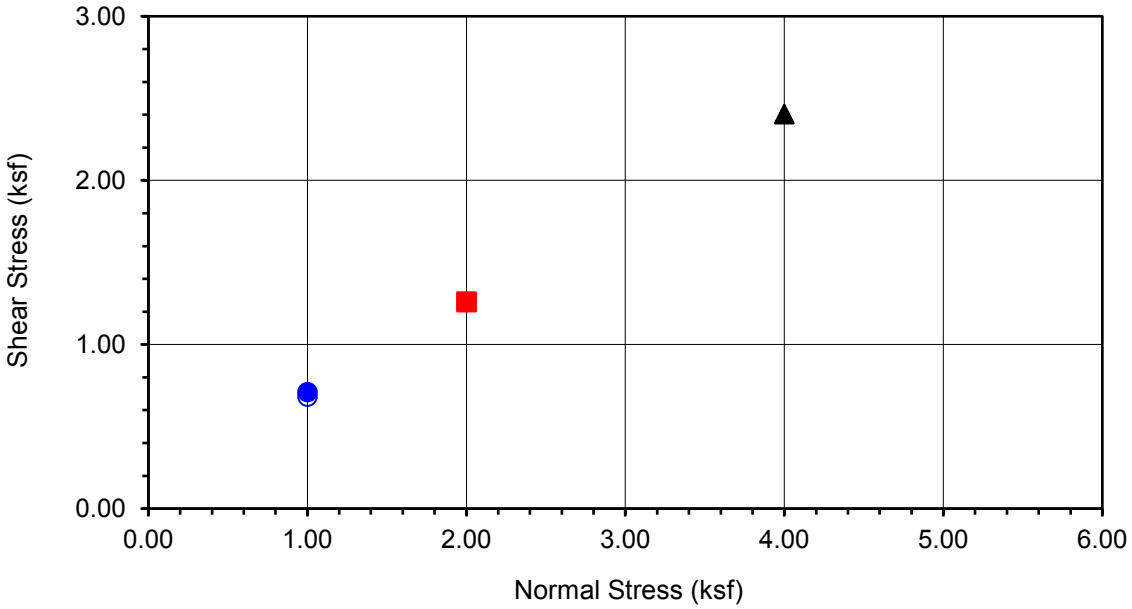
Consolidated Drained - ASTM D 3080

Project Name:	Whittier	Tested By:	G. Bathala	Date:	04/19/21
Project No.:	21051-01	Checked By:	J. Ward	Date:	05/04/21
Boring No.:	HS-1	Sample Type:	90% Remold		
Sample No.:	B-1	Depth (ft.):	1-5		

Soil Identification: Dark yellowish brown lean clay with sand (CL)s

Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	186.81	187.77	188.30
Weight of Ring(gm):	44.44	45.35	45.45
Before Shearing			
Weight of Wet Sample+Cont.(gm):	157.30	157.30	157.30
Weight of Dry Sample+Cont.(gm):	148.05	148.05	148.05
Weight of Container(gm):	61.21	61.21	61.21
Vertical Rdg.(in): Initial	0.0000	0.2442	0.2661
Vertical Rdg.(in): Final	0.0153	0.2558	0.2892
After Shearing			
Weight of Wet Sample+Cont.(gm):	226.79	218.56	214.49
Weight of Dry Sample+Cont.(gm):	200.66	193.84	191.46
Weight of Container(gm):	72.43	65.76	63.41
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43





Boring No.	**HS-1**
Sample No.	**B-1**
Depth (ft)	**1-5**
Sample Type: 90% Remold	
Soil Identification: Dark yellowish brown lean clay with sand (CL)s	

Normal Stress (kip/ft²)	1.000	2.000	4.000
Peak Shear Stress (kip/ft²)	● 0.710	■ 1.261	▲ 2.405
Shear Stress @ End of Test (ksf)	○ 0.682	□ 1.258	△ 2.405
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	10.65	10.65	10.65
Dry Density (pcf)	107.0	107.0	107.4
Saturation (%)	50.0	50.0	50.5
Soil Height Before Shearing (in.)	1.0153	0.9884	0.9769
Final Moisture Content (%)	20.4	19.3	18.0

DIRECT SHEAR TEST RESULTS

Consolidated Drained - ASTM D 3080

Project No.: 21051-01

Whittier

04-21

Appendix D
Infiltration Test Results

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite A, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: MWIG - Whittier
Project Number: 21051-01
Date: 4/8/2021
Location: I-1

Test hole dimensions (if circular)	
Boring Depth (feet)*:	15
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

Pre-Soak /Pre-Test

No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Comments
PS-1	8:23	8:33	10.0	12.93	13.00	0.07	
PS-2	8:33	8:43	10.0	13	13.05	0.05	
Pre-Test	8:43	8:53	10.0	13.05	13.09	0.04	

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Surface Area of Test Section (feet ^2)	Raw Percolation Rate (in/hr)
1	8:56	9:26	30.0	12.90	13.03	0.13	4.75	0.2
2	9:26	9:56	30.0	13.03	13.10	0.07	4.48	0.1
3	9:56	10:26	30.0	13.10	13.19	0.09	4.33	0.2
4	10:26	10:56	30.0	13.06	13.14	0.08	4.41	0.2
5	10:56	11:26	30.0	12.93	13.03	0.10	4.68	0.2
6	11:26	11:56	30.0	13.03	13.12	0.09	4.48	0.2
7	11:56	12:26	30.0	12.93	13.02	0.09	4.68	0.2
8	12:26	12:56	30.0	13.02	13.10	0.08	4.50	0.1
9								
10								
11								
12								

Measured Infiltration Rate	**0.2**
Feasibility Reduction Factor	See Report
Feasibility Infiltration Rate	**See Report**

Sketch:

Notes:

Based on Guidelines from: LA County dated 06/2017
Spreadsheet Revised on: 12/23/2019

LGC Geotechnical, Inc.

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite A, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: MWIG - Whittier
Project Number: 21051-01
Date: 4/8/2021
Location: I-2

Test hole dimensions (if circular)	
Boring Depth (feet)*:	15
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

Pre-Soak /Pre-Test

No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Comments
PS-1	8:29	8:39	10.0	11.91	11.95	0.04	
PS-2	8:39	8:49	10.0	11.95	11.98	0.03	
Pre-Test	8:49	8:59	10.0	11.98	12.01	0.03	

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Surface Area of Test Section (feet ^2)	Raw Percolation Rate (in/hr)
1	9:00	9:30	30.0	12.01	12.11	0.10	6.61	0.1
2	9:30	10:00	30.0	12.11	12.20	0.09	6.40	0.1
3	10:00	10:30	30.0	12.20	12.27	0.07	6.21	0.1
4	10:30	11:00	30.0	12.10	12.19	0.09	6.42	0.1
5	11:00	11:30	30.0	11.96	12.05	0.09	6.72	0.1
6	11:30	12:00	30.0	12.05	12.13	0.08	6.53	0.1
7	12:00	12:30	30.0	12.13	12.22	0.09	6.36	0.1
8	12:30	13:00	30.0	12.09	12.17	0.08	6.44	0.1
9								
10								
11								
12								

Measured Infiltration Rate	**0.1**
Feasibility Reduction Factor	See Report
Feasibility Infiltration Rate	**See Report**

Sketch:

Notes:

Based on Guidelines from: LA County dated 06/2017
Spreadsheet Revised on: 12/23/2019

LGC Geotechnical, Inc.

Appendix E
General Earthwork & Grading Specifications for Rough Grading

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

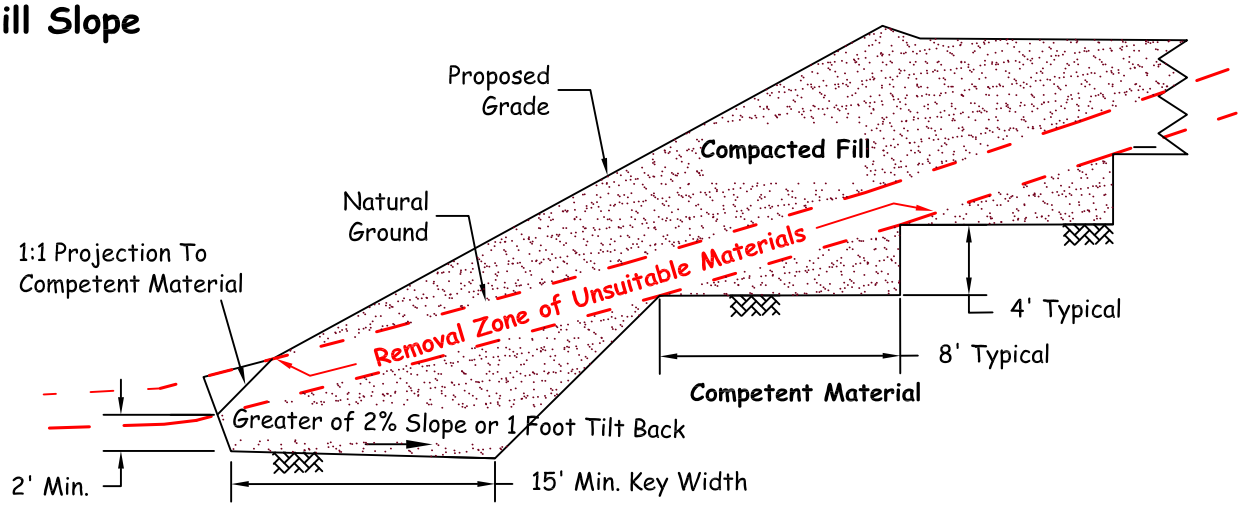
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

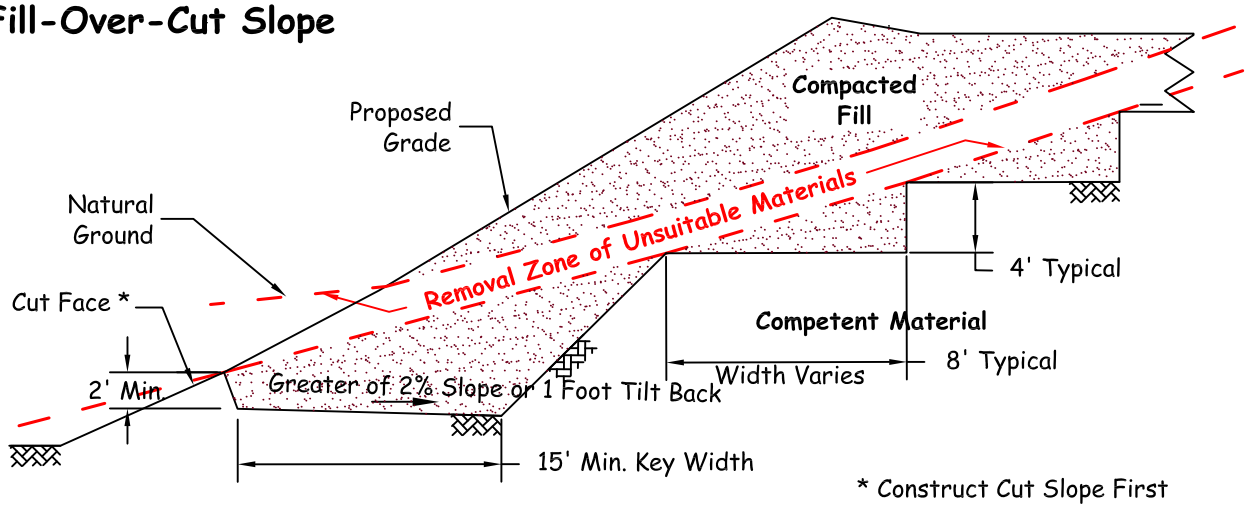
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

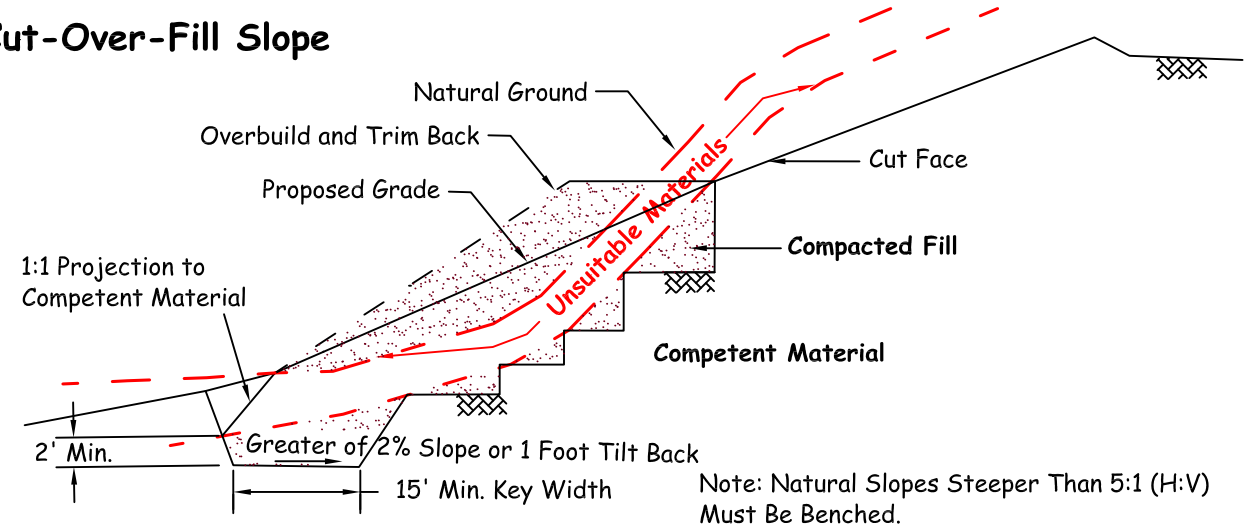


Fill-Over-Cut Slope



* Construct Cut Slope First

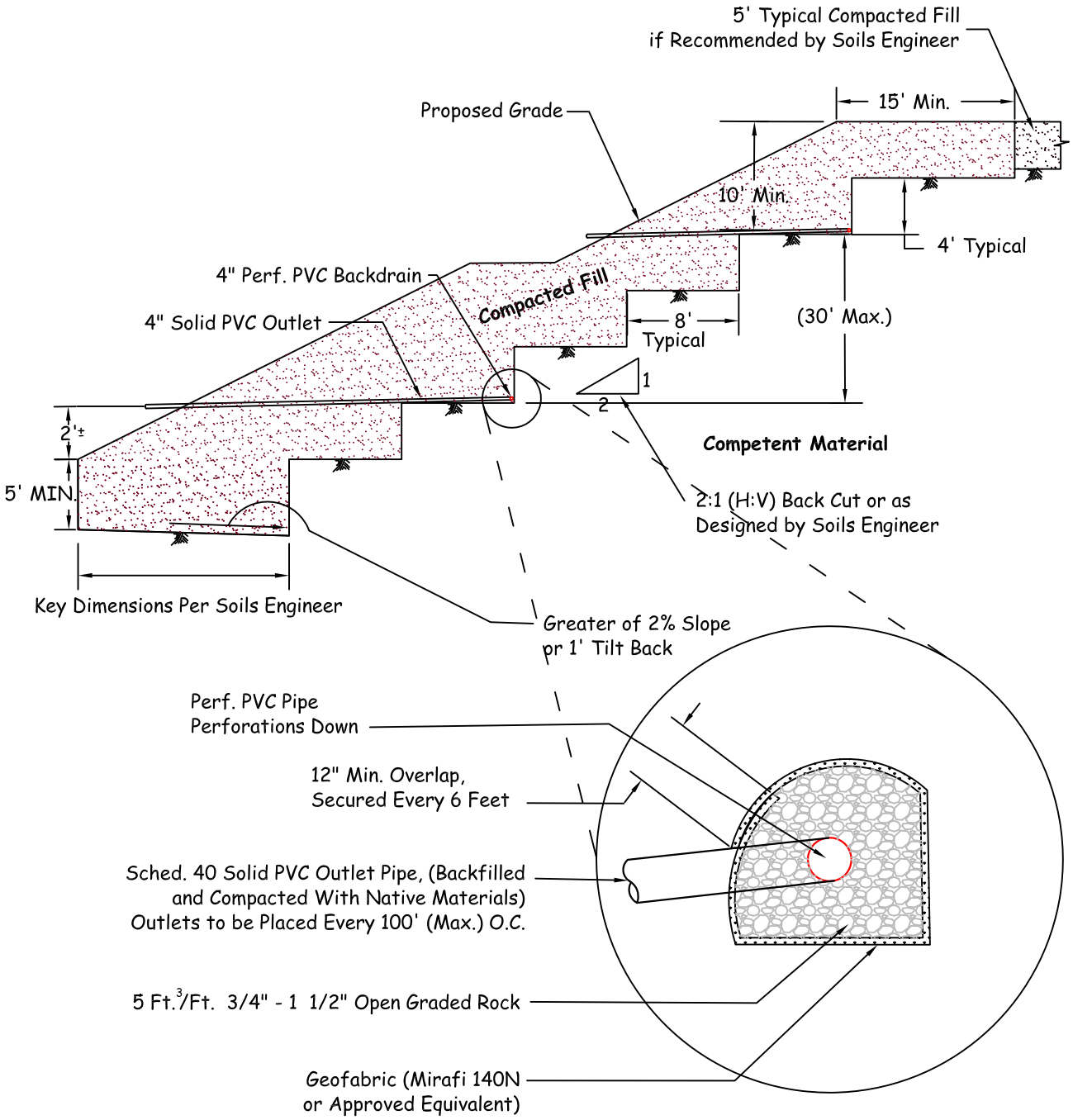
Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

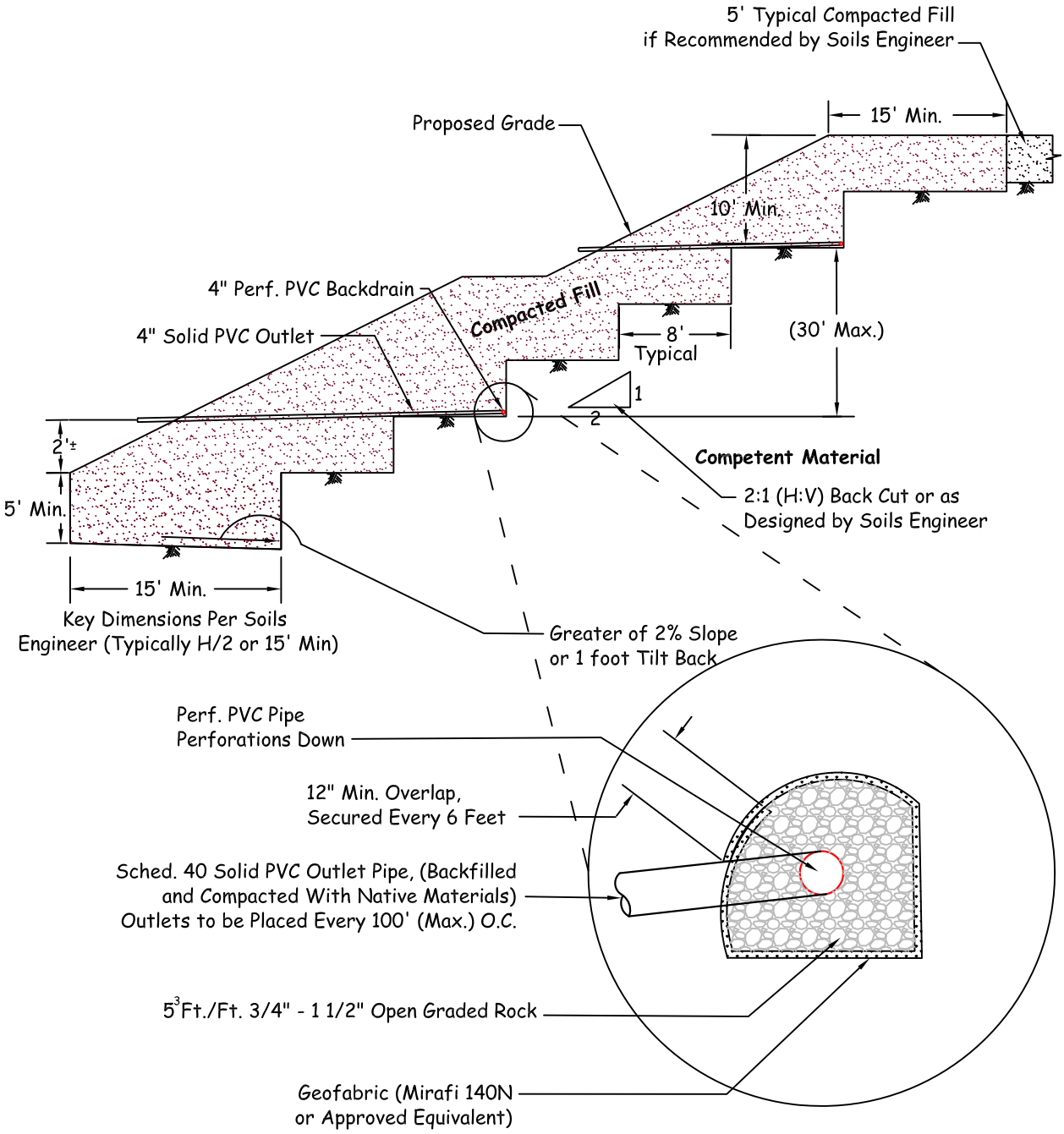
LGC Geotechnical, Inc.

KEYING AND BENCHING



LGC Geotechnical, Inc.

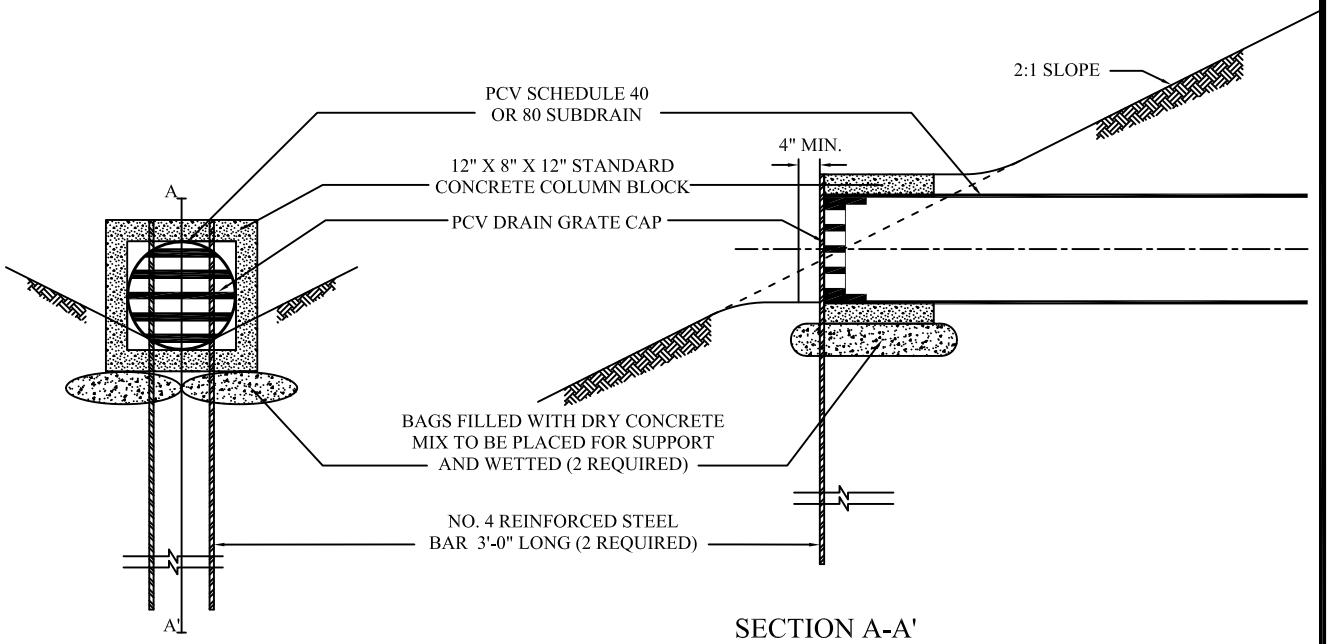
TYPICAL BUTTRESS DETAIL



LGC Geotechnical, Inc.

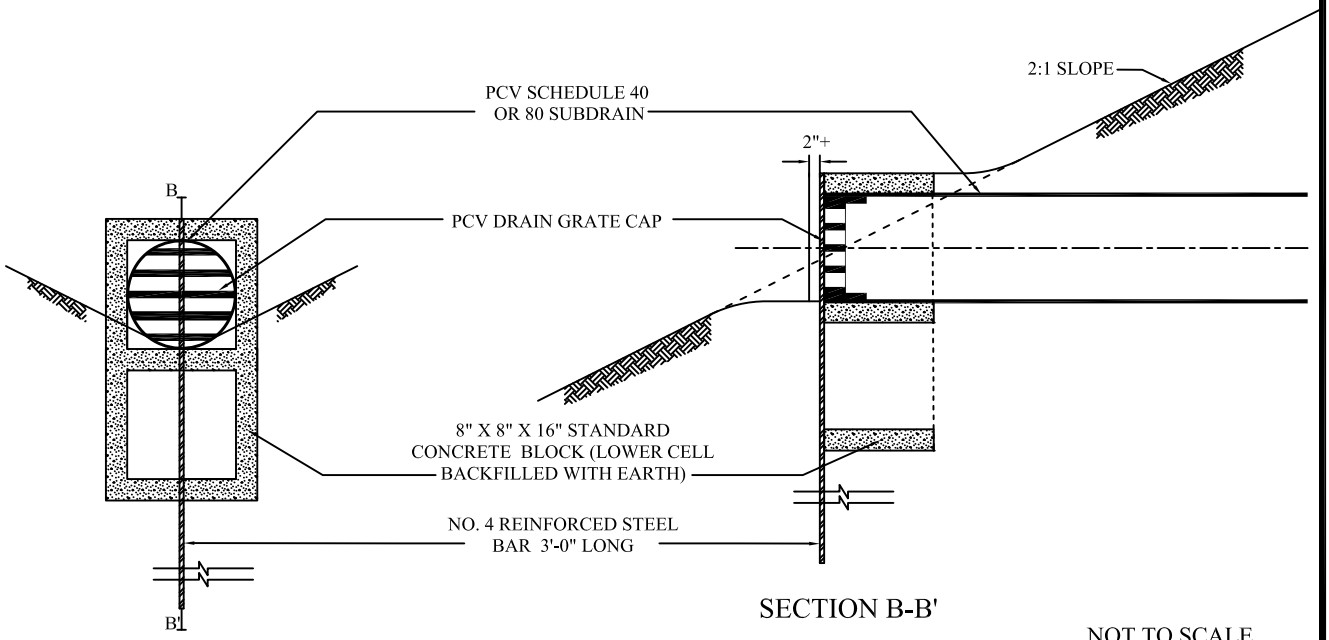
TYPICAL STABILIZATION FILL DETAIL

SUBDRAIN OUTLET MARKER -6" & 8" PIPE



SECTION A-A'

SUBDRAIN OUTLET MARKER -4" PIPE



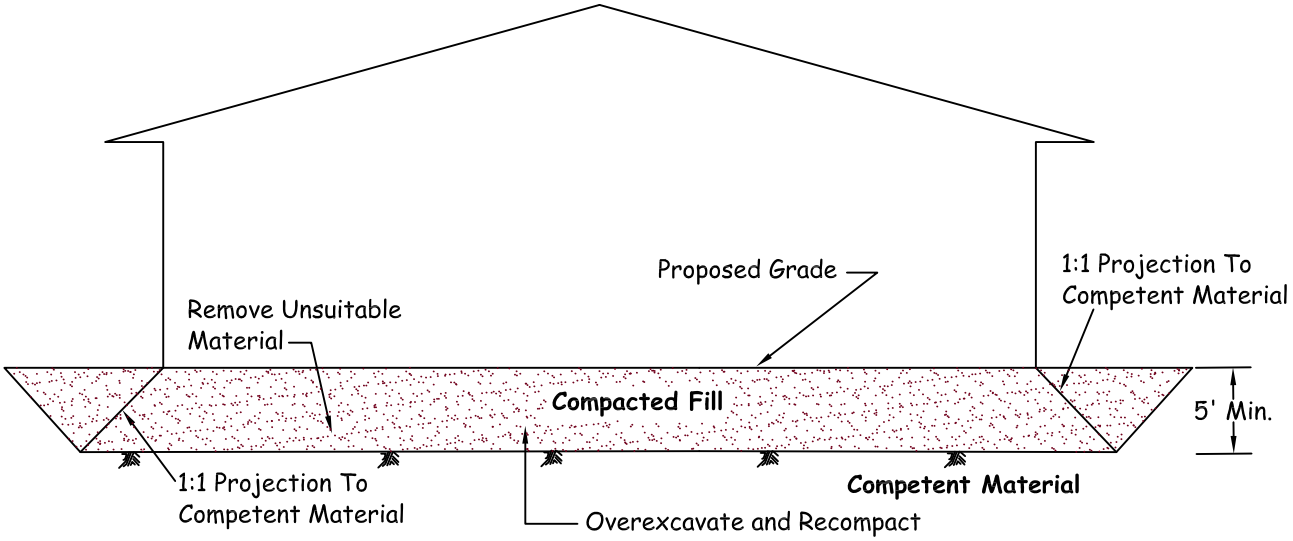
SECTION B-B'

NOT TO SCALE

LGC Geotechnical, Inc.

SUBDRAIN OUTLET MARKER DETAIL

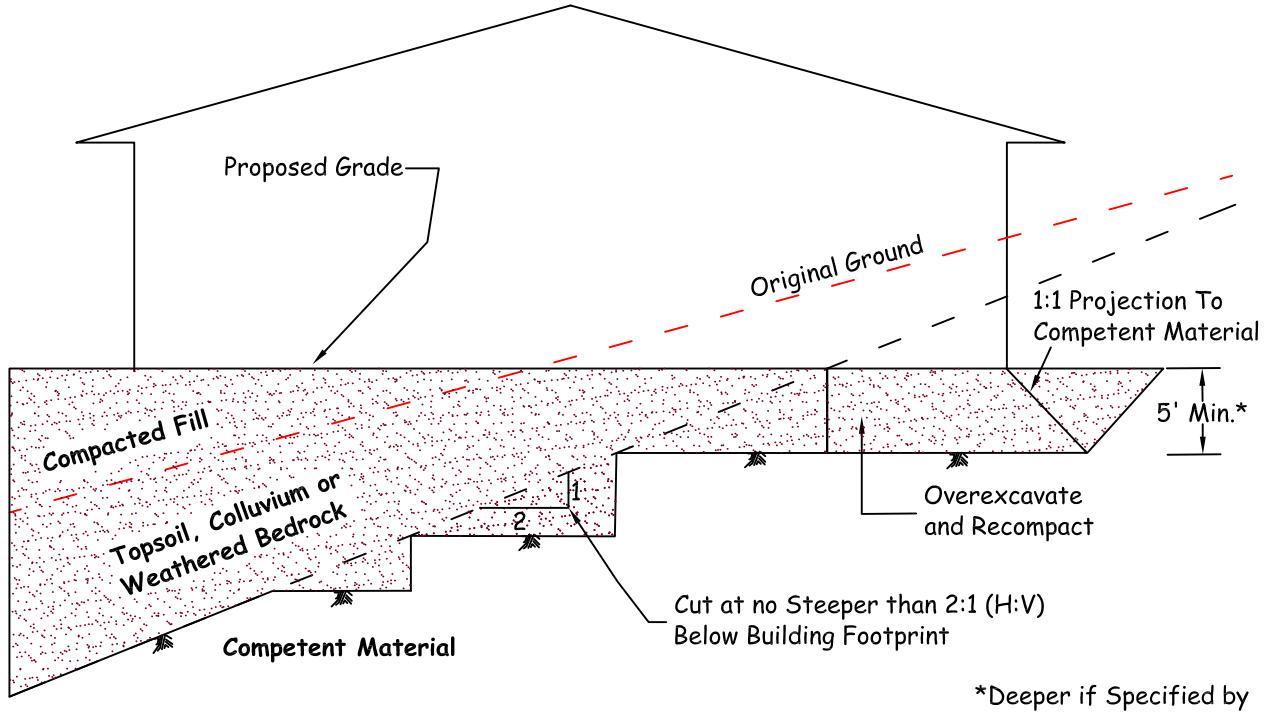
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

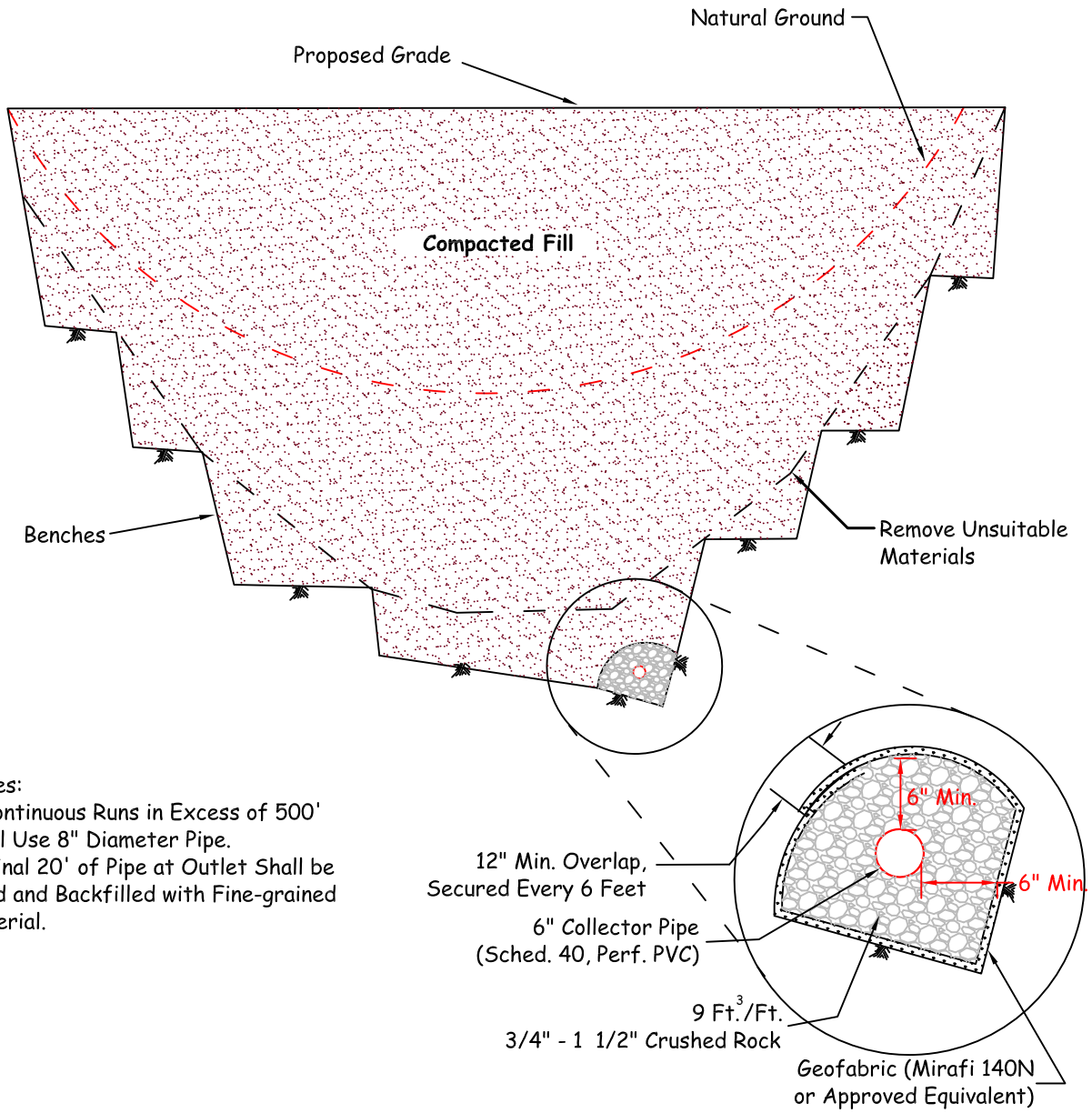
Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

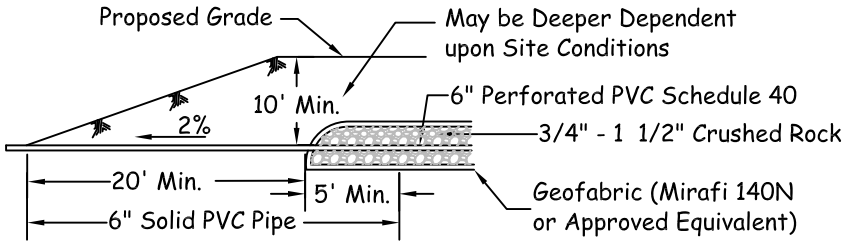
LGC Geotechnical, Inc.

CUT AND TRANSITION LOT OVEREXCAVATION DETAIL



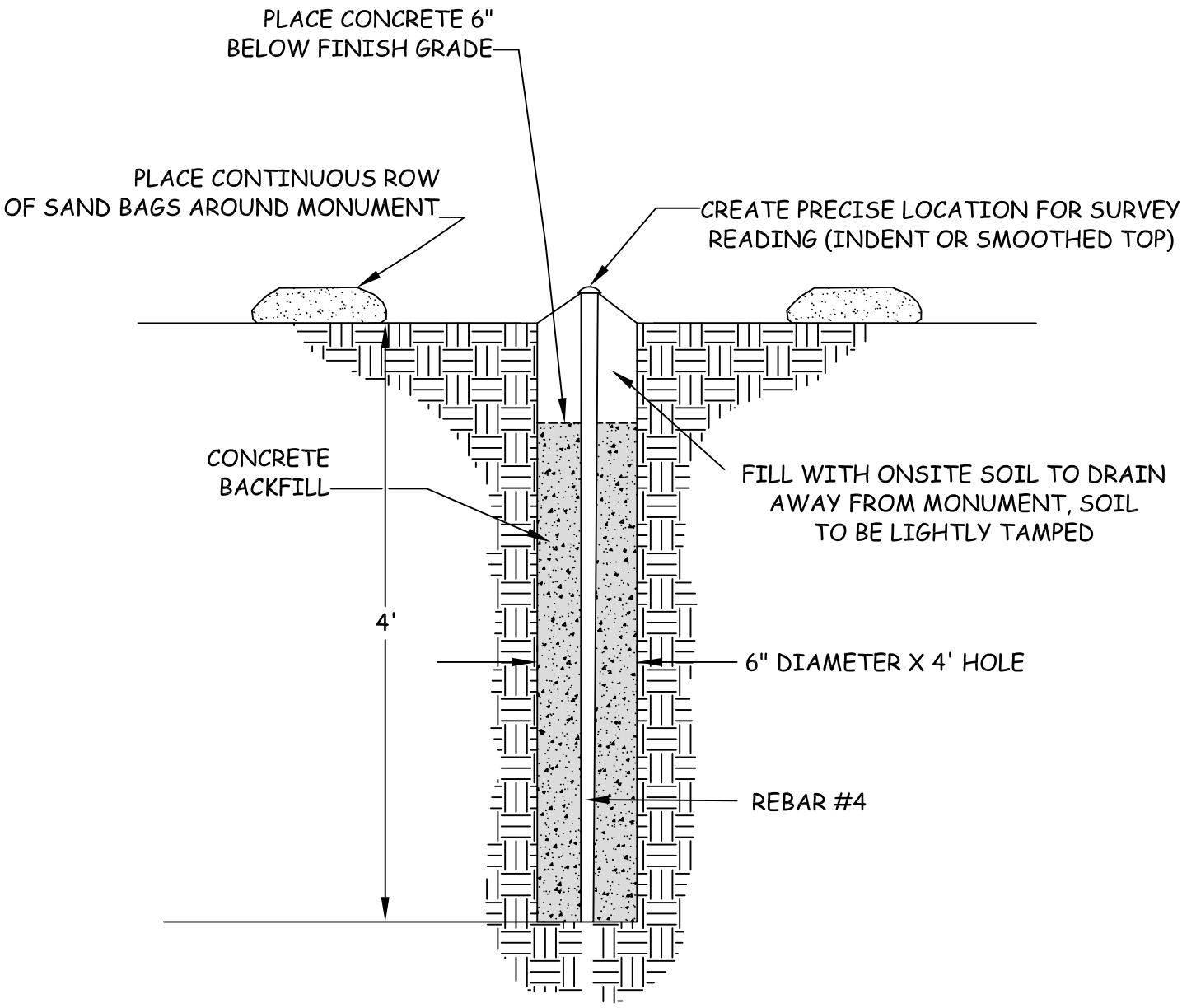
Notes:
1) Continuous Runs in Excess of 500' Shall Use 8" Diameter Pipe.
2) Final 20' of Pipe at Outlet Shall be Solid and Backfilled with Fine-grained Material.

Proposed Outlet Detail



LGC Geotechnical, Inc.

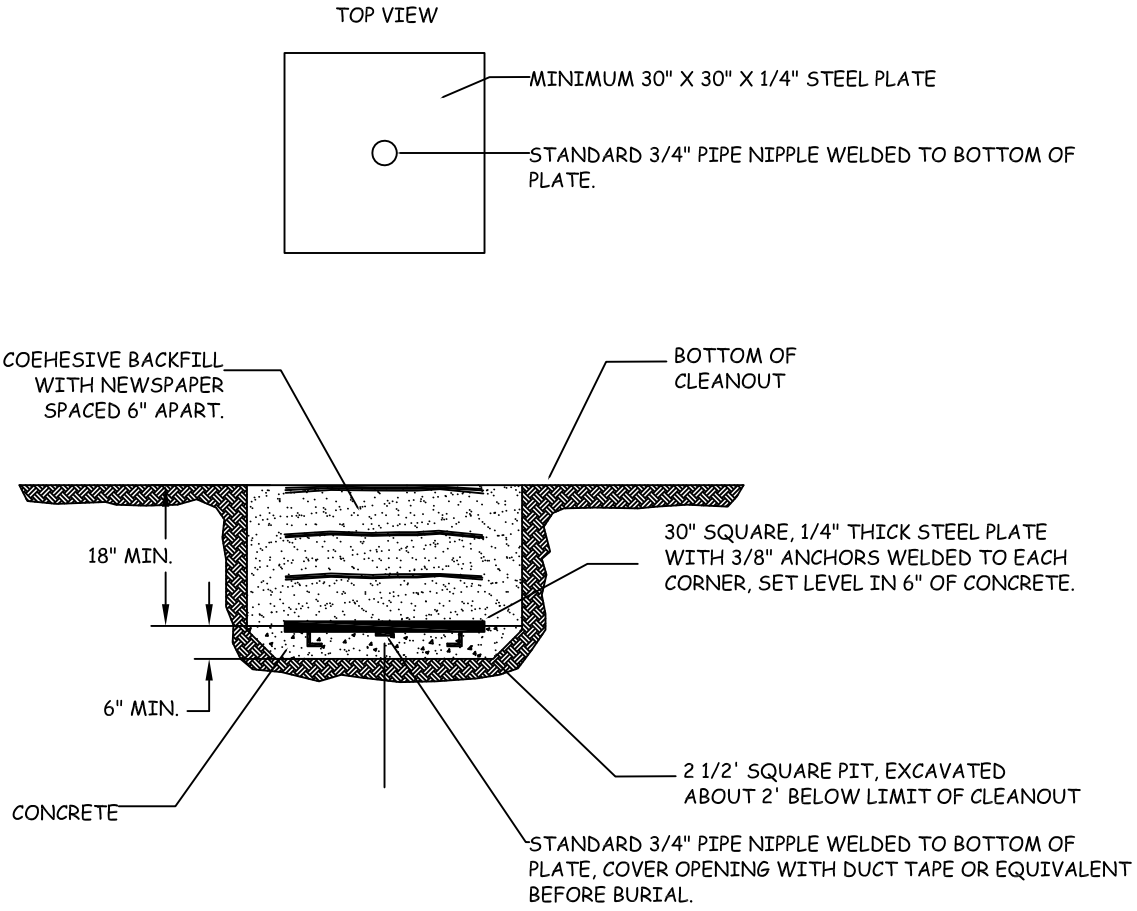
CANYON SUBDRAINS



NO CONSTRUCTION EQUIPMENT WITHIN 25 FEET
OF ANY INSTALLED SETTLEMENT MONUMENTS

LGC Geotechnical, Inc.

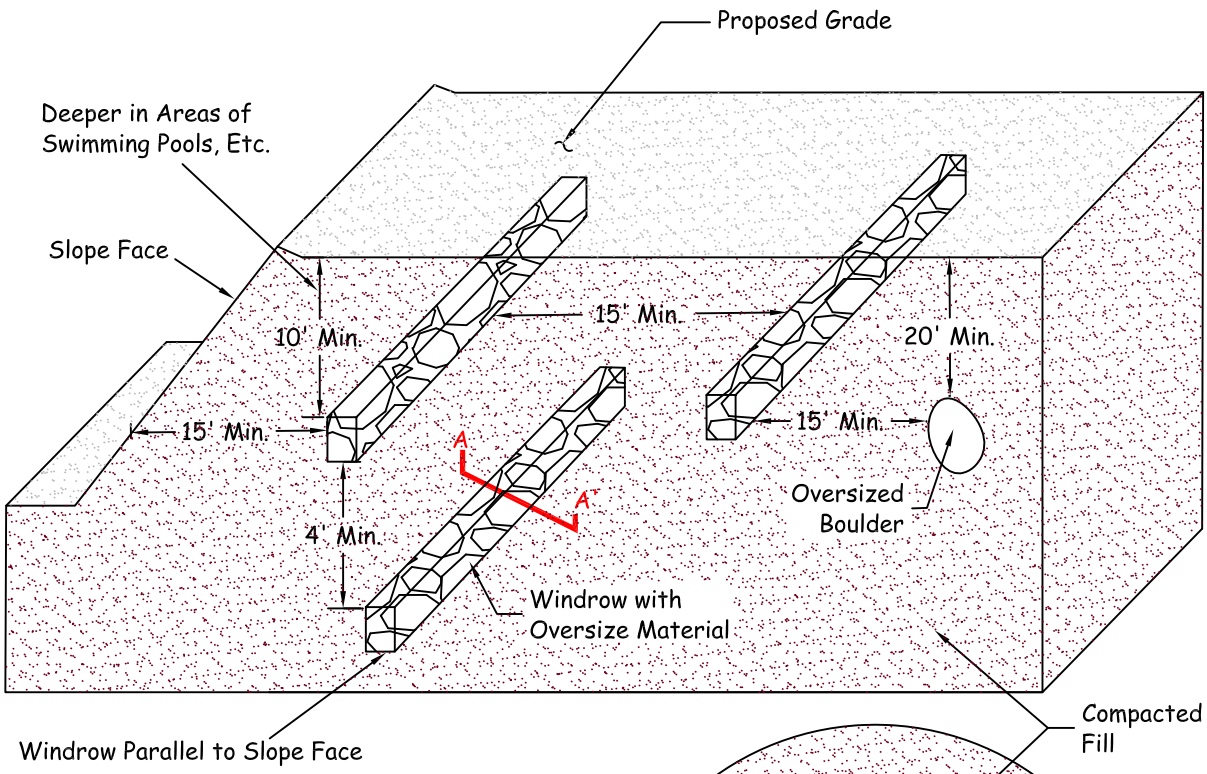
TYPICAL SURFACE SETTLEMENT MONUMENT

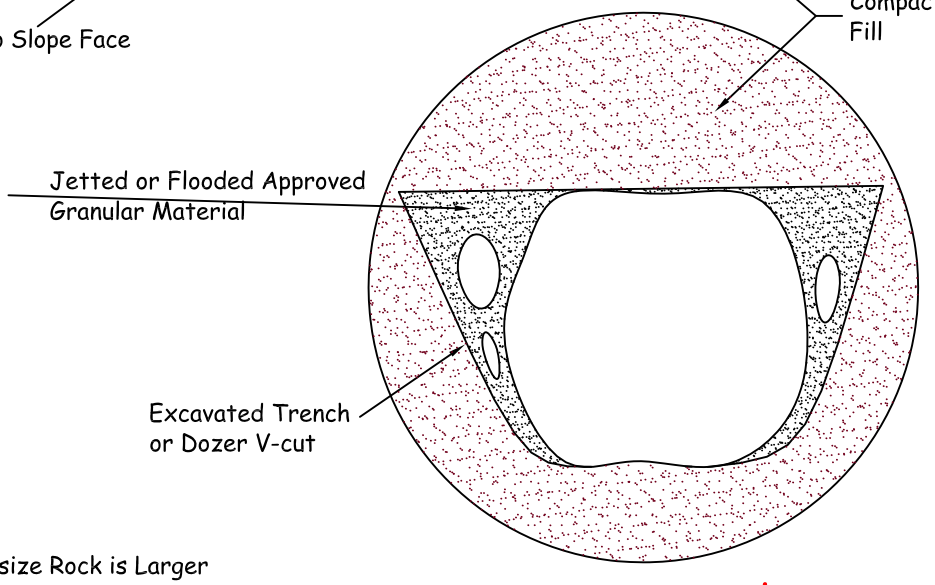


1. SURVEY FOR HORIZONTAL AND VERTICAL LOCATION TO NEAREST .01 INCH PRIOR TO BACKFILL USING KNOW LOCATIONS THAT WILL REMAIN INTACT DURING THE DURATION OF THE MONITORING PROGRAM. KNOW POINTS EXPLICITELY NOT ALLOWED ARE THOSE LOCATED ON FILL OR THAT WILL BE DESTROYED DURING GRADING.
2. IN THE EVENT OF DAMAGE TO SETTLEMENT PLATE DURING GRADING, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GEOTECHNICAL ENGINEER AND SHALL BE RESPONSIBLE FOR RESTORING THE SETTLEMENT PLATES TO WORKING ORDER.
3. DRILL TO RECOVER AND ATTACH RISER PIPE.

LGC Geotechnical, Inc.

TYPICAL SETTLEMENT PLATE AND RISER





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

APPENDIX 10

Philadelphia & Comstock Townhouse

GREENHOUSE GAS ANALYSIS

CITY OF WHITTIER

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SEPTEMBER 27, 2024

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LIST OF ABBREVIATED TERMS

%	percent
°F	degrees Fahrenheit
AB	Assembly Bill
AB 1881	California Water Conservation in Landscaping Act of 2006
AB 32	Global Warming Solutions Act of 2006
ACC	Advanced Clean Cars
C_2F_6	hexafluoroethane
C_2H_6	ethane
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CCR	California Code of Regulations
CDFA	Department of Food and Agriculture
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF_4	tetrafluoromethane
CFCs	Chlorofluorocarbons
CH_2FCF	1,1,1,2-tetrafluoroethane
CH_3CF_2	1,1-difluoroethane
CH_4	methane
CHF_3	fluoroform
CNRA	California Natural Resources Agency
CNRA 2009	2009 California Climate Adaptation Strategy
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
CPUC	California Public Utility Commission
EMFAC	EMissions FACtor model
EPA	U.S. Environmental Protection Agency

EV	electric vehicles
GCC	Global Climate Change
GHG	greenhouse gas
GHGA	Philadelphia & Comstock Townhouse Greenhouse Gas Analysis
GWP	global warming potential
HDT	heavy-duty trucks
HFCs	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Planning
LBNL	Lawrence Berkeley National Laboratory
lbs	pounds
LCA	life-cycle analysis
LCFS	Low Carbon Fuel Standard
MD	medium duty
MMT CO_2e	million metric tons of CO_2e
Mpg	miles per gallon
MT	metric tons
MT CO_2	metric tons of CO_2e
MT CO_2e/yr	MT CO_2e per year
/yr	per year
MW	megawatts
MWELO	Model Water Efficient Landscape Ordinance
MWh	MW-hour
MY	model year
N_2O	nitrous oxide
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
PFCs	perfluorocarbons
Ppb	parts per billion
Ppm	parts per million
Ppt	parts per trillion
Project	Philadelphia & Comstock Townhouse Project
SAFE Rule	*Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*
SB	Senate Bill
SB 1078	Renewable Portfolio Standards

SB 1368	Retail Provider Emissions Performance Standards
SB 32	California Global Warming Solutions Act of 2006
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SP	service population
U.S. Court	United States Supreme Court
VMT	vehicle miles traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZEV	zero-emission vehicles

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this Philadelphia & Comstock Townhouse Greenhouse Gas Analysis (GHGA) is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate direct or indirect GHG emission that would result in a significant impact on the environment?	3.7	*Less Than Significant*	*N/A*
GHG Impact #2: Would the Project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?	3.7	*Less Than Significant*	*N/A*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California and the South Coast Air Quality Management District (SCAQMD) aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include:

- Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill (SB) 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations (CCR)). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10% (percent) less by 2020 (7).
- California Water Conservation in Landscaping Act of 2006 (AB 1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010, to ensure efficient landscapes in new development and reduced water waste in existing landscapes (8).

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (9).
- Renewable Portfolio Standards (SB 1078 – also referred to as RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent (%) by 2010 and 33% by 2020 (10).
- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (11).

Promulgated regulations that will affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS, and therefore are accounted for in the Project's emission calculations.

1 INTRODUCTION

This report presents the results of the Greenhouse Gas Analysis (GHGA) prepared by Urban Crossroads, Inc., for the proposed Philadelphia & Comstock Townhouse Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the proposed Project.

1.1 SITE LOCATION

The proposed Philadelphia & Comstock Townhouse ("Project") is at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue in the City of Whittier. The Project's location in relation to the surrounding area is shown on Exhibit 1-A.

The Project site is generally surrounded by commercial, medical, and residential land uses, with the nearest residential land use is approximately 33 feet south of the Project site and the Whittier Hospital Women's Health Center is located 80 feet north of the Project site.

1.2 PROJECT DESCRIPTION

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP). The preliminary site plan is shown on Exhibit 1-B.

The site is currently occupied by a vacant 7,172 square foot office building. No credit has been taken for the existing office building for the purposes of this assessment.

EXHIBIT 1-A: LOCATION MAP

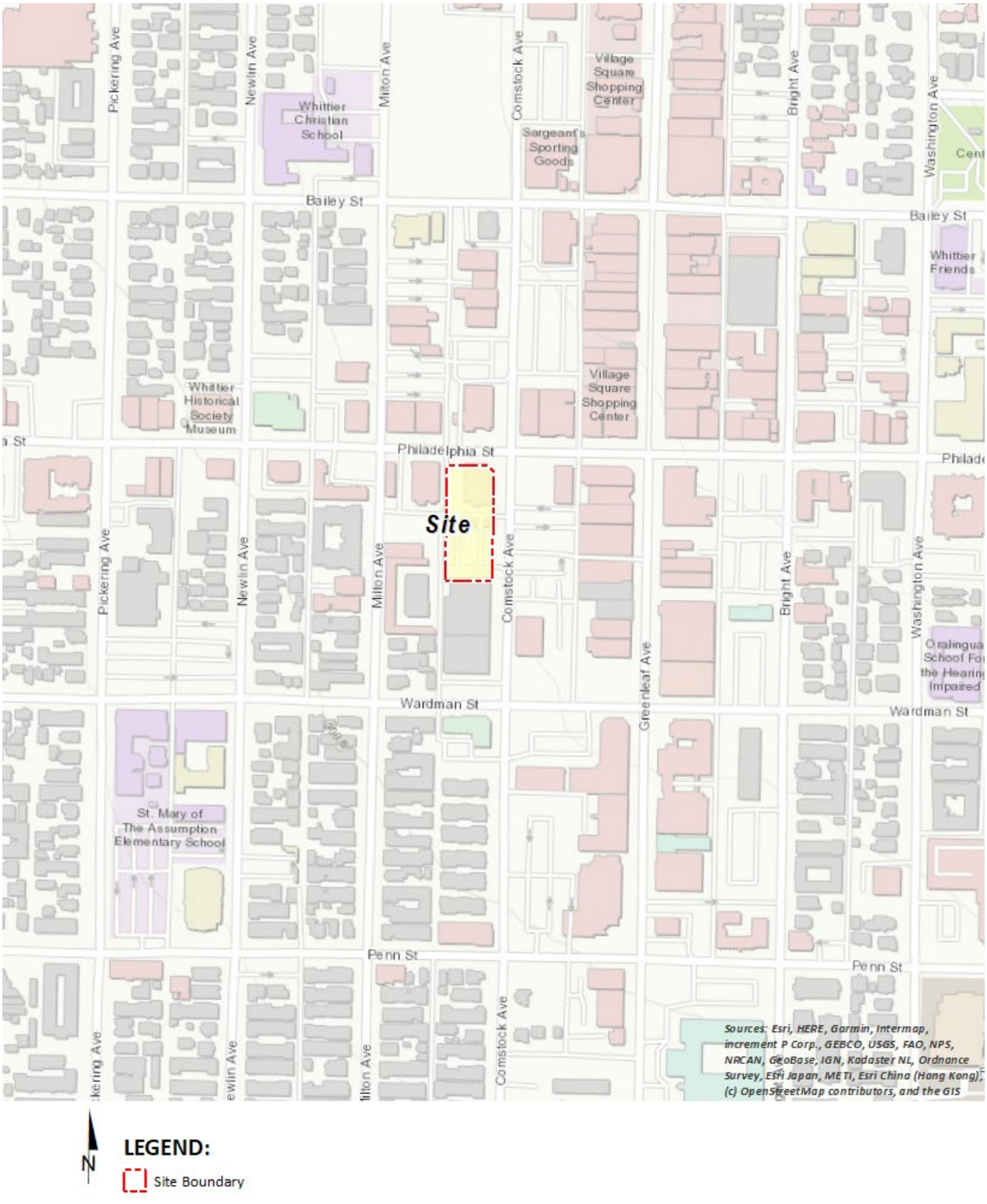
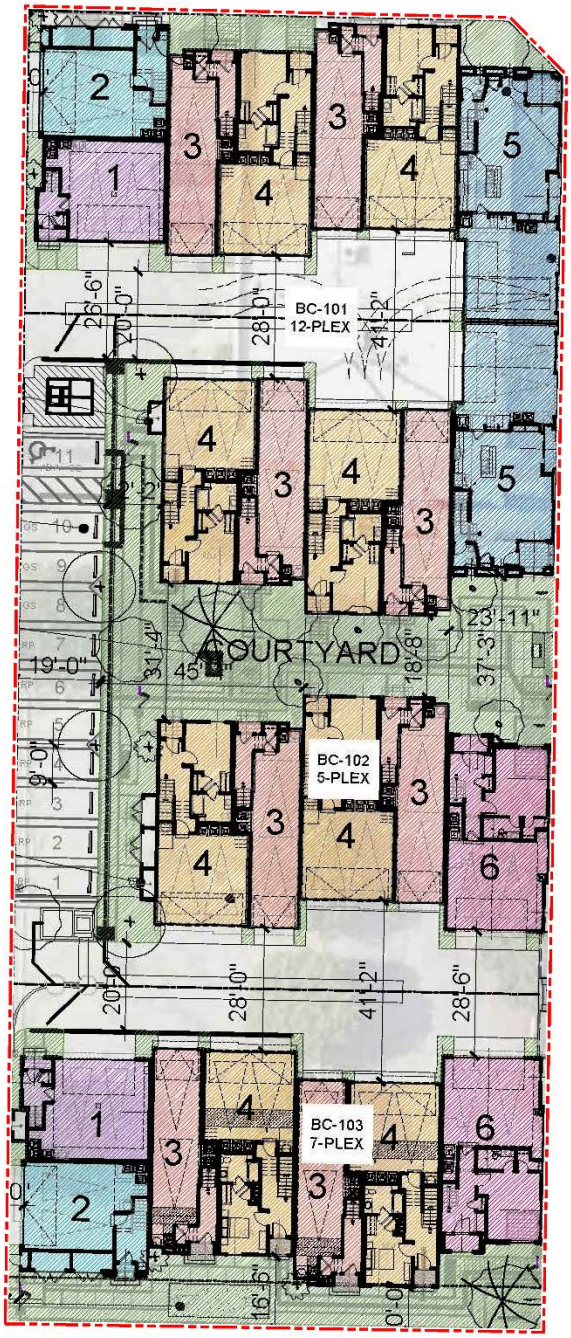


EXHIBIT 1-B: PRELIMINARY SITE PLAN



N

LEGEND:

Site Boundary

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2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the Project evaluated in this GHGA cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GREENHOUSE GASES

GREENHOUSE GASES AND HEALTH EFFECTS

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties and as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were

not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
	feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (12).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (13).	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (14).	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
			reference exposure levels of 30,000 ppm averaged over a 15 minute period (15).
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropocentric sources include fossil-fuel combustion and biomass burning (16).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions)	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (17).

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
		also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (17).	
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years (18).	In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

TABLE 2-1: GREENHOUSE GASES

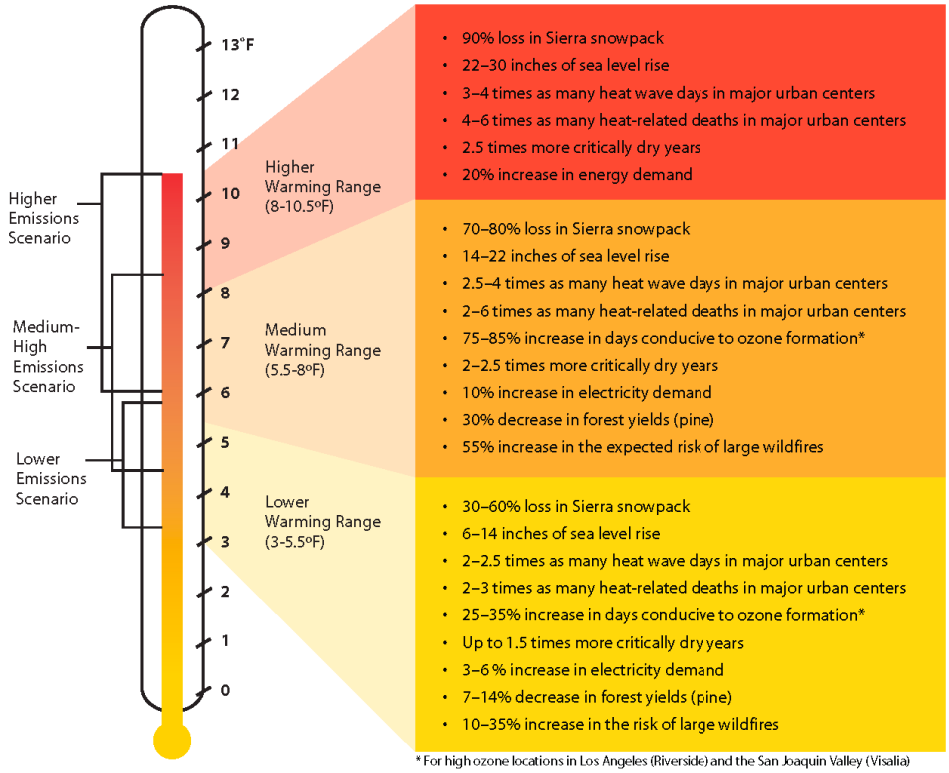
Greenhouse Gases	Description	Sources	Health Effects
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), fluoroform (CHF_3), 1,1,1,2-tetrafluoroethane (CH_2FCF), and 1,1-difluoroethane (CH_3CF_2). Prior to 1990, the only significant emissions were of CHF_3. CH_2FCF emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceedingly long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the atmosphere are over 70 parts per trillion (ppt).	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (19). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

TABLE 2-1: GREENHOUSE GASES

Greenhouse Gases	Description	Sources	Health Effects
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (20).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (21).

The potential health effects related directly to the emissions of CO2, CH4, and N2O as they relate to development projects such as the Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport those higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change would likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas (22). Exhibit 2-A presents the potential impacts of global warming (23).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the difference GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO_2 to 23,900 for SF_6 and GWP for the IPCC's 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (24).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2022

2.5 GREENHOUSE GAS EMISSIONS INVENTORIES

2.5.1 GLOBAL

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2020. Based on the latest available data, the sum of these emissions totaled approximately 28,026,643 gigagram (Gg) CO_2e[1] (25) (26) as summarized on Table 2-3.

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2020 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

2.5.2 UNITED STATES

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2020.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION [2]

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	5,981,354
European Union (27-member countries)	3,706,110
India	2,839,420
Russian Federation	2,051,437
Japan	1,148,122
Total	**28,026,643**

2.5.3 STATE OF CALIFORNIA

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total (27). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2022 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2020 GHG emissions period, California emitted an average 369.2 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 369,200 Gg CO_2e (6.17% of the total United States GHG emissions) (28).

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

PUBLIC HEALTH

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures

[2] Used http://unfccc.int data for Annex I countries. Consulted the CAIT Climate Data Explorer in https://www.climatewatchdata.org site to reference Non-Annex I countries of China and India.

remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

WATER RESOURCES

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

AGRICULTURE

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the

emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

FORESTS AND LANDSCAPES

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 REGULATORY SETTING

2.7.1 INTERNATIONAL

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

UNITED NATION'S FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

INTERNATIONAL CLIMATE CHANGE TREATIES

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;

- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (29).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

2.7.2 NATIONAL

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG ENDANGERMENT

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section

"Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (30).

CLEAN VEHICLES

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012. The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (31). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2

standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (32). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (33).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (34).

MANDATORY REPORTING OF GHGS

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

NEW SOURCE REVIEW

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the*

> *applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FOR NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO_2 standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

CAP-AND-TRADE

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and in 2020 has retained all participating states.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SMARTWAY PROGRAM

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (35):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions, and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.

- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel would eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

EXECUTIVE ORDER 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

2.7.3 CALIFORNIA

2.7.3.1 LEGISLATIVE ACTIONS TO REDUCE GHGS

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[3]). GHGs as defined under AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.

[3] Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 $MMTCO_2e$ (55). This is less than the 2020 emissions target of 431 $MMTCO_2e$.

2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - Pavley Fuel Efficiency Standards

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (11).

2017 CARB SCOPING PLAN

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (36).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH_4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e$/yr), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (37) (38).

2022 CARB SCOPING PLAN

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (39). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> "The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."
>
> "[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.

- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "…focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

CAP-AND-TRADE PROGRAM

The *2022 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (40).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (41)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (36). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2.7.3.2 EXECUTIVE ORDERS RELATED TO GHG EMISSIONS

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

EXECUTIVE ORDER S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

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

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

EXECUTIVE ORDER S-01-07 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (42).

EXECUTIVE ORDER S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* (*CNRA 2009*) was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

EXECUTIVE ORDER B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned

California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable as to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

EXECUTIVE ORDER B-55-18 AND SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 CALIFORNIA REGULATIONS AND BUILDING CODES

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

TITLE 20 CCR SECTIONS 1601 ET SEQ. – APPLIANCE EFFICIENCY REGULATIONS

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment (CEC 2012).

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (43). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (44):

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
    - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency, which includes all of the following, shall be placed in the building:

- Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
- Operations and maintenance instructions for the following:
  - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
  - Roof and yard drainage, including gutter and downspouts.
  - Space conditioning systems, including condensers and air filters.
  - Landscape irrigation systems.
  - Water reuse systems.
- Information from local utility, water and waste recovery providers on methods to further reduce future resource consumption, including recycling programs and locations.
- Public transportation and/or carpool options available in the area.
- Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods occupants may use to maintain the relative humidity level in that range.
- Information about water-conserving landscape and irrigation design and controllers which conserve water.
- Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
- Information about state solar energy and incentive programs available.
- A copy of all special inspection verifications required by the enforcing agency of this code.
- Information from CALFIRE on maintenance of defensible space around residential structures.

- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

CARB REFRIGERANT MANAGEMENT PROGRAM

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing

the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

TRACTOR-TRAILER GHG REGULATION

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the HD tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors MY 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

PHASE I AND 2 HEAVY-DUTY VEHICLE GHG STANDARDS

In September 2011, CARB has adopted a regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer GHG Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. The EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements began with MY 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the NHTSA on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later MY HDT vehicles, including trailers. The EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MDT and HDT vehicles may be pursued.

SB 97 AND THE CEQA GUIDELINES UPDATE

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects

associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (45).

2.7.4 REGIONAL

The project is within the SCAB, which is under the jurisdiction of the SCAQMD.

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency that has discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008 (46). The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
    - Residential and Commercial land use: 3,000 MT CO_2e/yr
    - Industrial land use: 10,000 MT CO_2e/yr
    - Based on land use type: residential: 3,500 MT CO_2e/yr; commercial: 1,400 MT CO_2e/yr; or mixed use: 3,000 MT CO_2e/yr
- Tier 4 has the following options:
    - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
    - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 MT CO_2e/SP/year for projects and 6.6 MT CO_2e/SP/year for plans;
    - Option 3, 2035 target: 3.0 MT CO_2e/SP/year for projects and 4.1 MT CO_2e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the Project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

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3 PROJECT GREENHOUSE GAS IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (47):

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3:** The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies

address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

3.2.1 DISCUSSION ON ESTABLISHMENT OF SIGNIFICANCE THRESHOLDS

The City of Whittier has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of Whittier and numerous cities in the South Coast Air Basin (SCAB) and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (48). As noted by the SCAQMD:

> *"…the…screening level for stationary sources is based on an emission capture rate of 90% for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than 1% of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."* (46)

Thus, and based on guidance from the SCAQMD, if a non-industrial project would emit GHGs less than 3,000 $MTCO_2e$/yr, the project is not considered a substantial GHG emitter and the GHG impact is less than significant, requiring no additional analysis and no mitigation. On the other hand, if a non-industrial project would emit GHGs in excess of 3,000 $MTCO_2e$/yr, then the project could be considered a substantial GHG emitter, requiring additional analysis and potential mitigation. As previously discussed, a screening threshold of 3,000 $MTCO_2e$/yr is an acceptable approach for small projects to determine if additional analysis is required and is therefore applied for this Project.

3.3 MODELS EMPLOYED TO ANALYZE GHGS

3.3.1 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)

In May 2022, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including the SCAQMD, released the latest version of CalEEMod, version 2022.1.1.21. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (49). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix 3.1. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water and refrigerants.

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (50). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate (51). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Project construction actvities would generate CO_2 and CH_4 emissions. The *Philadelphia & Comstock Townhouse Air Quality Impact Analysis Report* contains detailed information regarding Project construction activities (52). Construction related emissions are expected from the following activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 CONSTRUCTION DURATION

For purposes of analysis, construction of the Project is expected to commence in August 2024 and would last through January 2025. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent[4]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1). The duration of construction activities was based on Project specific data provided by the Project applicant, where available.

TABLE 3-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Demolition	8/1/2024	8/14/2024	10
Site Preparation	8/15/2024	8/15/2024	1
Grading	8/16/2024	8/19/2024	2
Building Construction	8/20/2024	1/6/2025	100
Paving	12/31/2024	1/6/2025	5
Architectural Coating	12/31/2024	1/6/2025	5

3.5.2 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-2 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Amount	Hours Per Day
Demolition	Tractors/Loaders/Backhoes	2	8
	Rubber Tired Dozers	1	8
	Concrete/Industrial Saws	1	8
Site Preparation	Graders	1	8
	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Crawler Tractors	1	8

[4] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Construction Activity	Equipment[1]	Amount	Hours Per Day
Building Construction	Cranes	1	8
	Forklifts	2	8
	Tractors/Loaders/Backhoes	2	8
Paving	Tractors/Loaders/Backhoes	1	8
	Cement and Mortar Mixers	4	8
	Pavers	1	8
	Rollers	1	8
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

3.5.3 CONSTRUCTION EMISSIONS SUMMARY

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (53). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[5]
2024	156.86	0.01	0.00	0.10	158.32
2025	12.25	0.00	0.00	0.01	12.36
Total GHG Emissions	169.11	0.01	0.00	0.12	170.68
Amortized Construction Emissions	**5.64**	**0.00**	**0.00**	**0.00**	**5.69**

Source: CalEEMod annual construction-source emissions are presented in Appendix 3.1.

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of CO_2, CH_4, N_2O and Refrigerants from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

[5] CalEEMod reports the most common GHGs emitted which include CO_2, CH_4, N_2O and Refrigerants. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

- Water Supply, Treatment, and Distribution
- Solid Waste
- Refrigerants

3.6.1 AREA SOURCE EMISSIONS

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.6.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting[6]. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity and natural gas usage associated with the Project were calculated by CalEEMod using default parameters.

3.6.3 MOBILE SOURCE EMISSIONS

The Project related GHG emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the *Philadelphia & Comstock Townhouse Trip Generation Assessment* were utilized in this analysis (54).

3.6.4 WATER SUPPLY, TREATMENT AND DISTRIBUTION

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

[6] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

3.6.5 SOLID WASTE

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.6.6 REFRIGERANTS

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

3.6.7 EMISSIONS SUMMARY

The estimated Project-related GHG emissions are summarized on Table 3-4. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-4, construction and operation of the Project would generate approximately 263.12 $MTCO_2e/yr$.

TABLE 3-4: PROJECT GHG EMISSIONS

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	5.64	0.00	0.00	0.00	5.69
Mobile Source	190.92	0.01	0.01	0.31	193.96
Area Source	6.14	0.00	0.00	0.00	6.15
Energy Source	49.19	0.00	0.00	0.00	49.38
Water Usage	1.42	0.03	0.00	0.00	2.36
Waste	1.58	0.16	0.00	0.00	5.54
Refrigerants	0.00	0.00	0.00	0.04	0.04
Total CO_2e (All Sources)	**263.12**				

Source: CalEEMod output, See Appendix 3.1 for detailed model outputs.

3.7 GREENHOUSE GAS EMISSIONS FINDINGS AND RECOMMENDATIONS

3.7.1 GHG IMPACT 1

Potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment.

The City of Whittier has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of Whittier and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (46).

The Project will result in approximately 263.12 $MTCO_2e$/yr as shown on Table 3-4. As such, the Project would not exceed the SCAQMD's recommended numeric threshold of 3,000 $MTCO_2e$/yr if it were applied. As such, project-related emissions would have a less than significant direct or indirect impact on GHG and climate change and no mitigation measures are required.

3.7.2 GHG IMPACT 2

Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (45). As such, the Project's consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the Project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary since both of these plans have been superseded by the 2022 Scoping Plan. For reasons outlined herein, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #1 and GHG Impact #2.

2022 SCOPING PLAN CONSISTENCY

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade

Program, and the Low Carbon Fuel Standard. As such, the Project would be consistent with the 2022 Scoping Plan.

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5 CERTIFICATIONS

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed Philadelphia & Comstock Townhouse Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

14480 - Whittier Residential Detailed Report

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2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

3.3. Site Preparation (2024) - Unmitigated

3.5. Grading (2024) - Unmitigated

3.7. Building Construction (2024) - Unmitigated

3.9. Building Construction (2025) - Unmitigated

3.11. Paving (2024) - Unmitigated

3.13. Paving (2025) - Unmitigated

3.15. Architectural Coating (2024) - Unmitigated

3.17. Architectural Coating (2025) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14480 - Whittier Residential
Construction Start Date	8/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	12826 Philadelphia St a, Whittier, CA 90601, USA
County	Los Angeles-South Coast
City	Whittier
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4809
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

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
Condo/Townhouse	24.0	Dwelling Unit	0.63	39,026	12,190	—	71.0	—

Parking Lot	72.0	Space	0.19	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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.61	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.11	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158

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

2024	2.68	2.18	19.8	21.7	0.04	0.89	3.61	4.51	0.82	1.31	2.14	—	5,645	5,645	0.26	0.41	9.56	5,784
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	52.5	52.1	16.1	32.2	0.03	0.65	3.16	3.81	0.60	0.74	1.34	—	6,322	6,322	0.27	0.16	0.35	6,375
2025	52.4	52.0	15.0	31.0	0.03	0.58	3.16	3.74	0.53	0.74	1.27	—	6,254	6,254	0.27	0.16	0.32	6,308
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.53	0.47	2.81	4.52	0.01	0.12	0.36	0.47	0.11	0.08	0.19	—	947	947	0.04	0.02	0.63	956
2025	0.62	0.61	0.18	0.37	< 0.005	0.01	0.04	0.04	0.01	0.01	0.01	—	74.0	74.0	< 0.005	< 0.005	0.06	74.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.51	0.83	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	157	157	0.01	< 0.005	0.10	158
2025	0.11	0.11	0.03	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.4

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Area	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.88	1.77	1.09	7.61	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,211	2,222	1.24	0.06	5.39	2,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Area	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.74	1.64	1.13	5.79	0.02	0.05	1.23	1.29	0.05	0.31	0.37	11.3	2,149	2,160	1.24	0.07	0.38	2,211
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.66	0.59	0.50	4.85	0.01	0.01	1.04	1.04	0.01	0.26	0.27	—	1,153	1,153	0.06	0.05	1.89	1,172
Area	0.99	0.99	0.04	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	37.1	37.1	< 0.005	< 0.005	—	37.2
Energy	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.03	< 0.005	—	298
Water	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Waste	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.67	1.59	0.68	5.85	0.01	0.02	1.04	1.06	0.02	0.26	0.28	11.3	1,494	1,506	1.22	0.06	2.14	1,555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
Area	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15
Energy	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.2	49.2	< 0.005	< 0.005	—	49.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Waste	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.30	0.29	0.12	1.07	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.87	247	249	0.20	0.01	0.35	257

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	14.4	14.1	0.02	0.62	—	0.62	0.57	—	0.57	—	2,203	2,203	0.09	0.02	—	2,211
Demolition	—	—	—	—	—	—	0.70	0.70	—	0.11	0.11	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	60.4	60.4	< 0.005	< 0.005	—	60.6
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.99	9.99	< 0.005	< 0.005	—	10.0
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.04	0.01	0.73	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	585	585	0.03	0.09	1.34	615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.8	29.8	< 0.005	< 0.005	0.05	30.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.93	4.93	< 0.005	< 0.005	0.01	5.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.79

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.72	6.24	6.16	0.01	0.40	—	0.40	0.37	—	0.37	—	916	916	0.04	0.01	—	919
Dust From Material Movement	—	—	—	—	—	—	0.28	0.28	—	0.03	0.03	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.51	2.51	< 0.005	< 0.005	—	2.52
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.42	0.42	< 0.005	< 0.005	—	0.42
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.98	2.98	< 0.005	< 0.005	0.01	3.02
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.50
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	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	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11	1.77	16.6	14.6	0.02	0.87	—	0.87	0.80	—	0.80	—	2,294	2,294	0.09	0.02	—	2,302
Dust From Material Movement	—	—	—	—	—	—	1.98	1.98	—	0.91	0.91	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.08	2.08	< 0.005	< 0.005	—	2.09
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
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	0.00	0.00
Hauling	0.17	0.05	2.78	1.07	0.01	0.03	0.58	0.61	0.03	0.16	0.19	—	2,221	2,221	0.12	0.36	5.10	2,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.95	5.95	< 0.005	< 0.005	0.01	6.04
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.12

3.7. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.99	9.08	0.02	0.36	—	0.36	0.33	—	0.33	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	2.10	2.38	< 0.005	0.09	—	0.09	0.09	—	0.09	—	492	492	0.02	< 0.005	—	494
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.5	81.5	< 0.005	< 0.005	—	81.7
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.38	6.03	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,130	1,130	0.05	0.04	4.46	1,146
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.22	86.5
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.8	82.8	< 0.005	0.01	0.01	86.3
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.12	1.41	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	285	285	0.01	0.01	0.50	289
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.7	21.7	< 0.005	< 0.005	0.03	22.6
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.08	47.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	< 0.005	3.75
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	0.00	0.00

3.9. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.75	7.34	9.02	0.02	0.31	—	0.31	0.29	—	0.29	—	1,876	1,876	0.08	0.02	—	1,883
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.65	3.65	< 0.005	< 0.005	—	3.66
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.4	81.4	< 0.005	0.01	0.01	84.9
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.00
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
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	0.00	0.00

3.11. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.63	5.41	6.27	0.01	0.25	—	0.25	0.23	—	0.23	—	973	973	0.04	0.01	—	976
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.90	1.90	< 0.005	< 0.005	—	1.91
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.13. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.24	6.25	0.01	0.23	—	0.23	0.21	—	0.21	—	973	973	0.04	0.01	—	977
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.89	1.89	< 0.005	< 0.005	—	1.90
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	0.00	0.00

3.15. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.45	5.10	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,071	1,071	0.05	0.04	0.12	1,084
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.13	2.13	< 0.005	< 0.005	< 0.005	2.16
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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	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	0.00	0.00

3.17. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179

Architectural Coating	49.3	49.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
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	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
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	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.07	2.07	< 0.005	< 0.005	< 0.005	2.10
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	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	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
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	0.00	0.00
Total	0.79	0.71	0.53	6.02	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,398	1,398	0.07	0.06	5.14	1,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
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	0.00	0.00
Total	0.78	0.70	0.58	5.55	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,339	1,339	0.07	0.06	0.13	1,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194
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	0.00	0.00
Total	0.12	0.11	0.09	0.88	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	191	191	0.01	0.01	0.31	194

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.00	7.00	< 0.005	< 0.005	—	7.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	112	112	0.01	< 0.005	—	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.16	1.16	< 0.005	< 0.005	—	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6	< 0.005	< 0.005	—	18.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
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
Total	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.02	< 0.005	—	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7
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
Total	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.6	30.6	< 0.005	< 0.005	—	30.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.12	0.01	1.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Total	1.08	1.05	0.41	1.53	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	509	509	0.01	< 0.005	—	510
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Consumer Products	0.84	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.95	0.93	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	505	505	0.01	< 0.005	—	506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.73	5.73	< 0.005	< 0.005	—	5.74
Consumer Products	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41
Total	0.18	0.18	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.14	6.14	< 0.005	< 0.005	—	6.15

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.71	6.88	8.59	0.18	< 0.005	—	14.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.28	1.14	1.42	0.03	< 0.005	—	2.36

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.56	0.00	9.56	0.96	0.00	—	33.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.58	0.00	1.58	0.16	0.00	—	5.54

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Demolition	Demolition	8/1/2024	8/14/2024	5.00	10.0	10
Site Preparation	Site Preparation	8/15/2024	8/15/2024	5.00	1.00	1
Grading	Grading	8/16/2024	8/19/2024	5.00	2.00	2
Building Construction	Building Construction	8/20/2024	1/6/2025	5.00	100	100
Paving	Paving	12/31/2024	1/6/2025	5.00	5.00	5
Architectural Coating	Architectural Coating	12/31/2024	1/6/2025	5.00	5.00	5

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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	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
Demolition	—	—	—	—
Demolition	Worker	80.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.30	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	80.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	80.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	31.5	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	80.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.57	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	80.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	80.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	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

Non-applicable. No control strategies activated by user.

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	79,028	26,343	0.00	0.00	502

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,172	—
Site Preparation	—	—	1.00	0.00	—
Grading	—	500	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.19

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	0.19	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005
2025	0.00	349	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
Condo/Townhouse	174	210	172	65,300	1,439	1,739	1,423	540,093
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	24
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

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)
79027.65	26,343	0.00	0.00	502

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Condo/Townhouse	110,212	349	0.0330	0.0040	576,729
Parking Lot	7,326	349	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)
Condo/Townhouse	894,571	208,951
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	17.7	—
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

Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.9	annual days of extreme heat
Extreme Precipitation	5.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.43	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	64.7
AQ-PM	75.7
AQ-DPM	41.6
Drinking Water	57.7
Lead Risk Housing	65.1
Pesticides	0.00
Toxic Releases	82.6
Traffic	30.5
Effect Indicators	—
CleanUp Sites	72.0
Groundwater	27.8
Haz Waste Facilities/Generators	54.6
Impaired Water Bodies	0.00
Solid Waste	24.8
Sensitive Population	—
Asthma	64.5
Cardio-vascular	75.5
Low Birth Weights	12.8

Socioeconomic Factor Indicators	—
Education	57.9
Housing	92.7
Linguistic	78.2
Poverty	84.3
Unemployment	7.14

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.36442962
Employed	56.3839343
Median HI	16.98960606
Education	—
Bachelor's or higher	32.33671243
High school enrollment	100
Preschool enrollment	72.66777878
Transportation	—
Auto Access	6.775311177
Active commuting	48.89002951
Social	—
2-parent households	13.78159887
Voting	70.21686129
Neighborhood	—
Alcohol availability	15.38560246
Park access	81.35506224
Retail density	62.60746824

Supermarket access	18.52944951
Tree canopy	81.67586295
Housing	—
Homeownership	7.096111895
Housing habitability	23.04632362
Low-inc homeowner severe housing cost burden	25.38175286
Low-inc renter severe housing cost burden	46.6957526
Uncrowded housing	39.26600796
Health Outcomes	—
Insured adults	47.91479533
Arthritis	19.5
Asthma ER Admissions	24.7
High Blood Pressure	18.2
Cancer (excluding skin)	29.3
Asthma	58.2
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	15.4
Life Expectancy at Birth	52.9
Cognitively Disabled	4.6
Physically Disabled	12.2
Heart Attack ER Admissions	8.5
Mental Health Not Good	39.8
Chronic Kidney Disease	7.4
Obesity	34.3
Pedestrian Injuries	19.6
Physical Health Not Good	23.8
Stroke	13.0

Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	49.4
No Leisure Time for Physical Activity	26.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	18.5
English Speaking	38.9
Foreign-born	38.0
Outdoor Workers	90.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.9
Traffic Density	26.7
Traffic Access	23.0
Other Indices	—
Hardship	65.9
Other Decision Support	—
2016 Voting	22.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	28.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Construction: Construction Phases	Taken from client data. Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis.
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days.
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Trip characteristics taken from information based on Trip Generation.
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Architectural Coatings	SCAQMD Rule 1113
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Construction: Trips and VMT	Based on the Project Applicant, there will be between 30 and 40 construction workers on site at any give time during construction.

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APPENDIX 11a

PIC ENVIRONMENTAL SERVICES
A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.
2619 Sierra Way, La Verne, CA 91750
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PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT

PREPARED FOR

MATT WAKEN
MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, SUITE D4-197
LADERA RANCH, CA 92694

CONCERNING COMMERCIAL PROPERTY AT

12826 – 12856 PHILADELPHIA STREET
WHITTIER, CA 90601

JANUARY 26, 2021

PIC ENVIRONMENTAL SERVICES
2619 SIERRA WAY
LA VERNE, CA 91750

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DISPLAYS

Figure 1: Site Location and Topographic Map
Figure 2: Site Map
Figure 3: Groundwater Contour Map
Figure 4: Oil and Gas Map
Figure 5: Asbestos Reference Display
Figure 6: Landfill Map
Figure 7: Aerial Photo – 2019

Appendix A: Title Information
Appendix B: Site Photos
Appendix C: City Building Department Records
Appendix D: Sanborn Fire Insurance Maps
Appendix E: Historic Topographic Maps
Appendix F: Historic Aerial Photographs
Appendix G: City Directory Report
Appendix H: EDR Report
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Appendix J: PIC Resumes

PIC ENVIRONMENTAL SERVICES

A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.

2619 Sierra Way, La Verne, CA 91750

909/593-2427 CELL: 909/450-1703

January 26, 2021

INTRODUCTION

PIC Environmental Services (PIC) was contracted by MW Investment Group, LLC to perform a Phase I Environmental Site Assessment (PESA) at commercial property located in Whittier, California (see Figure 1). The purpose of this investigation was to determine if environmental impairments existed at the site. This document represents the PESA report prepared in accordance with customary industry practices and current ASTM (2013) Standards. This document also intends to satisfy the "All Appropriate Inquiries" guidelines established by the Federal Environmental Protection Agency (EPA).

The following sources were used to prepare this report:

1. Site Inspection
2. California Regional Water Quality Control Board (RWQCB) records
3. California Department of Toxic Substances Control (DTSC), Site Mitigation Division records
4. United States Environmental Protection Agency (EPA) and Geological Society (USGS) records
5. California Department of Natural Resources (CDNR), Division of Oil, Gas, and Geothermal Resources (DOGGR) records (now CalGEM)
6. Los Angeles County Waste Discharge Systems records of active and inactive landfills
7. EDR collection of historic aerial photographs
8. City of Whittier permit records
9. Los Angeles Fire Department UST and Hazardous Materials Permit Records
10. Los Angeles County Title Records
11. Historic Telephone Directories
12. Sanborn Fire Insurance Maps
13. Review of a previous Phase I Assessment Report

SCOPE OF INVESTIGATION

The scope of this investigation included: site inspection, survey of adjacent properties, review of the above listed government records, review of historical aerial photographs, and geologic and hydrogeologic information search.

SITE INSPECTION

On January 14, 2021, PIC Project Manager, Ethan Hersch, conducted site inspections at the subject property and adjacent/nearby properties. Ryan Campbell (Realtor) and Drs. Shahenaz K. Ahmed and Aliya Ali (Tenants) assisted PIC with the inspections and provided historical information.

SITE DESCRIPTION

The subject property includes about 35,847 square feet of commercial property located south of Philadelphia Street and west of Comstock Avenue in Whittier, CA.

Historic addresses used at the property appear to include 12826 – 12856 Philadelphia Street and 7001 – 7025 S. Comstock Avenue in Whittier, CA 90601 (see Appendices D and G). The Los Angeles County Assessor Parcel Number is 8139-024-027. Additional title information is attached in Appendix A.

Property boundaries are indicated by public streets to the north and east, a public alley to the west, and adjoining commercial properties to the south (see Figures 2 and 7).

The subject property has been improved with one medical building in the northeast portion of the property. Exterior areas of the property are paved for vehicle parking (see Figures 2 and 7). The existing building was occupied by medical and dental tenants at the time of PIC's inspection. Telephone directory listings document the property was occupied historically by numerous medical and dental offices, a graphics printing business, and a bank (see Appendix G). Prior to 1952, when the existing building was constructed, historic fire insurance maps in Appendix D confirm the property contained a retail gasoline station, a furniture store, a residential apartment building, a residential boarding house, an undertaker, and a commercial laundry (see Appendix D). PIC observed no existing underground storage tanks, no industrial waste interceptors (clarifiers), and no significant surface staining. Figures 2 and 7 and Site Photos in Appendix B identify the existing onsite building and exterior areas.

The onsite building was constructed prior to 1980. As a result, asbestos containing construction materials (ACM) may be present. PIC observed no obvious ACM but testing for ACM in suspect building materials was not conducted. A reference diagram of common ACM in older commercial structures is illustrated on Figure 5. In 1994, ATC Environmental (ATC) conducted a Phase I Assessment that included testing of building materials for asbestos content (see Appendix I). Hazardous waste disposal records in Appendix H confirm that much of the asbestos containing construction materials were removed in 1996.

PIC's review of existing site conditions did not identify any Recognized Environmental Conditions (RECs).

SITE HISTORY

Based on a review of regulatory permit records, County title records, historic telephone directories, historic topographic maps, historic fire insurance maps, and historic aerial photos, it appears the subject property was initially used for commercial purposes as early as 1888 when a former commercial laundry was constructed in the west-central portion of the property (see Appendix D).

By 1900, a former residential boarding house was constructed in the northeast portion of the property. By 1907, the former laundry and boarding house had been demolished. A former mortuary/undertaker was present in the northwest portion of the property and a residential apartment building was present in the east-central portion of the property (see Appendix D). By 1912, a former gasoline station was constructed in the northeast corner of the property. By 1949, a furniture store had replaced the mortuary in the northwest portion of the property. By 1952, all the former buildings had been demolished and the existing building was constructed in the northeast portion of the property (see Appendix D). PIC has confirmed that no permit records for the pre-1952 structures exist at City or County offices.

Based on PIC's review of historic records summarized above, PIC discovered one Recognized Environmental Condition (REC). Historic use of the property as a former gasoline station could have caused subsurface contamination from the release of gasoline and other petroleum compounds. Accordingly, PIC concludes that a precautionary Subsurface Phase II Investigation is warranted in the northeast portion of the property. PIC does not recommend subsurface testing under the former laundry because it was demolished prior to the manufacture and use of tetrachloroethene aka perchloroethene, aka PCE as a dry-cleaning solvent.

SURVEY OF ADJACENT PROPERTIES

Commercial developments were observed on adjoining properties.

None of the adjacent properties exhibited obvious evidence of petroleum or hazardous materials contamination problems. However, the subject property is located within ½ mile of a Federal Superfund site (NPL) known as the Omega Chemical Site (see Appendix H). The Omega Chemical Site is known to have contaminated groundwater locally by the historic release of volatile organic compounds (VOCs) and other chemicals. PIC's research of local groundwater conditions indicates the Omega Chemical Site is located down-gradient of the subject property. As a result, there is no evidence, nor likelihood, that contaminated groundwater from the Omega Chemical Site has migrated under and/or impacted the subject property. Finally, PIC's review of Potentially Responsible Parties (PRPs) who may have contributed to the Omega Chemical Site contamination "plume" does not include occupants at the subject property. Accordingly, PIC concludes the Omega Chemical Site has not caused any significant environmental risk to the subject property.

Surface runoff at all surrounding properties appeared to be southwesterly.

No evidence of historic or improper waste disposal was observed by PIC in any storm drain at the site.

HISTORICAL AERIAL PHOTOGRAPH REVIEW

Historical aerial photographs provided by EDR were reviewed by PIC (see copies in Appendix F). Available photographs were dated 1928, 1938, 1947, 1954, 1963, 1972, 1977, 1981, 1989, 1994, 2002, 2005, 2009, 2012, 2016, and 2019.

The 1928, photo indicates the subject property contained a retail gasoline station in the northeast corner of the property, residential apartment buildings in the east-central portion of the property, and a commercial building in the northwest corner of the property. Philadelphia Street and Comstock Avenue had been constructed adjacent to the property. Similar features are observed in the 1938 and 1947 photos.

By 1954, the subject property contained the existing building as illustrated on the 1961 fire insurance map in Appendix D. All former buildings had been demolished.

Subsequent photos reveal similar features and no significant changes. A recent (2019) photo has been enlarged and reproduced as Figure 7 for reference.

Except for the former gasoline station, the aerial photo study indicates no obvious environmental

impairments on the subject property or from adjacent properties. The aerial photo search did not indicate any historic oil well drilling or landfill activity on the site.

GOVERNMENT RECORDS REVIEW

The following federal, state, and local public records and associated lists were searched to determine the potential for or existence of onsite and/or offsite unauthorized releases of hazardous materials (i.e., contamination) related to onsite and/or offsite aboveground or underground storage tanks, or any other potential sources:

FEDERAL SOURCES

NPL	National Priority List
PROPOSED NPL	Proposed National Priority List
DELISTED NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS (SEMS)	Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS – NFRAP (SEMS)	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA	Resource Conservation and Recovery Act Information
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfield Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide, and Rodenticide Control Act)
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
DEBRIS REGION 9	Illegal Dumping Sites Listing
MCS	Military Cleanup Sites
RADINFO	Radiation Information Database
MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
LUCIS	Land Use Control Information
ECHO	Environmental Compliance and History Information

STATE OF CALIFORNIA AND LOS ANGELES COUNTY SOURCES

RESPONSE	State DTSC Response Sites
AWP	Annual Work Plan Sites
CALSITES	Calsites Database
CA BOND EXP. PLAN	Bond Expenditure Plan
NFA	No Further Action Determination
NFE	Properties Needing Further Evaluation
REF	Unconfirmed Properties Referred to Another Agency
SCH	School Property Evaluation Program
TOXIC PITS	Toxic Pits Cleanup Act Sites
AO CONCERN	Areas of Concern with Groundwater Contamination
SWF/LF (SWIS)	Solid Waste Information System
CA WDS	Waste Discharge System
WMUDS/SWAT	Waste Management Unit Database
CORTESE	"Cortese" Hazardous Waste & Substances Sites List
SWRCY	Recycler Database
LUST	Leaking Underground Storage Tank Report
CA FID UST	Facility Inventory Database
SLIC	Statewide SLIC Cases
SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
UST	Active UST Facilities
HIST UST	Hazardous Substance Storage Container Database
AST	Aboveground Petroleum Storage Tank Facilities
SWEEPS UST	SWEEPS UST Listing
CHMIRS	California Hazardous Material Incident Report System
NOTIFY 65	Proposition 65 Records
DEED	Deed Restriction Listing
LIENS	Environmental Liens Listing
VCP	Voluntary Cleanup Program Properties
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
CDL	Clandestine Drug Labs
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
ENVIROSTOR	DTSC Database
HWTS	Hazardous Waste Tracking System
NPDES	NPDES Permits Listing
CERS	California Environmental Reporting System
HAZMAT	Los Angeles Hazardous Materials Permits

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

MANUFACTURED GAS PLANTS	EDR Proprietary Manufactured Gas Plants
EDR HISTORICAL AUTO STATIONS	Historic Gas Stations
EDR HISTORICAL CLEANERS	EDR Proprietary Historic Drycleaners

All of the above records were examined for up to a one-mile radius by EDR (see Appendix H). The subject property does appear on two of the lists. More specifically, the property appears on the following list:

1. HAZNET: Facility and Manifest Data – This state list includes sites which have historically obtained permits to legally dispose of hazardous wastes (e.g. waste oil, asbestos, etc). The site appears on the HAZNET list in response to the legal offsite disposal of medical/dental liquid wastes and asbestos containing materials between 1996 – 2016. Appearance on the HAZNET list does not indicate the presence of a subsurface contamination problem.

2. HWTS: Hazardous Waste Tracking System – This state list compiles hazardous waste disposal manifests for both solid and liquid wastes. Copies of historic waste tracking documents for the subject property are attached in Appendix H. Historic onsite hazardous waste generators included World Vision, Inc. (asbestos) and Whittier Family Dental Center (dental wastes). Appearance on the HWTS list does not indicate the presence of a subsurface contamination problem.

The EDR record search also revealed that 15 sites exist within a one-half mile radius of the subject property which have sustained soil and/or groundwater contamination as a result of an underground storage tank leak. Please refer to the Executive Summary in Appendix H for the Leaking Underground Storage Tanks (LUST) list. PIC has confirmed that only two of the LUST sites is located in close proximity (less than 1/4 mile) to the subject property. Both nearby LUST sites have received regulatory closure after completing required remedial actions. As a result, it is not likely the subject property has been impacted by contamination from offsite LUST sites.

Finally, the EDR record search revealed the following concerning properties located within a one-mile radius of the subject site:

GOVERNMENT RECORDS Federal	SEARCH RADIUS (miles)	NUMBER OF SITES
NPL	1	1
PROPOSED NPL	1	0
DELISTED NPL	1	0
NPL LIENS	SITE ONLY	0
CERCLIS (SEMS)	0.5	0
CERCLIS NFRAP (SEMS)	0.5	1
CORRACTS	1	1
RCRA – TSD	0.5	0
RCRA – Lg Gen	0.25	2
RCRA – Sm Gen	0.25	3
ERNS	SITE ONLY	0
HMIRS	SITE ONLY	0

GOVERNMENT RECORDS Federal	SEARCH RADIUS (miles)	NUMBER OF SITES
US ENG CONTROLS	0.5	0
US INST CONTROLS	0.5	0
DOD	1	0
FUDS	1	0
US BROWNFIELDS	0.5	0
CONSENT	1	0
ROD	1	1
UMTRA	0.5	0
ODI	0.5	0
DEBRIS REGION 9	0.5	0
MCS	SITE ONLY	0
TRIS	SITE ONLY	0
TSCA	SITE ONLY	0
FTTS	SITE ONLY	0
SSTS	SITE ONLY	0
ICIS	SITE ONLY	0
PADS	SITE ONLY	0
MLTS	SITE ONLY	0
MINES	0.25	0
FINDS	SITE ONLY	0
RAATS	SITE ONLY	0
RADINFO	SITE ONLY	0
LUCIS	0.5	0
ECHO	SITE ONLY	0

GOVERNMENT RECORDS State and Local	SEARCH RADIUS (miles)	NUMBER OF SITES
RESPONSE	1	1
AWP	1	0
CAL-SITES	1	2
BOND EXP	1	0
NFA	0.25	0
NFE	0.25	0
REF	0.25	0
SCH	0.25	0
TOXIC PITS	1	0
AO CONCERN	1	0
LANDFILLS	0.5	1
WDS	SITE ONLY	0
SWAT	0.5	0
CORTESE	0.5	12
SWRCY	0.5	1
LUST	0.5	15

GOVERNMENT RECORDS State and Local	SEARCH RADIUS (miles)	NUMBER OF SITES
UST	0.25	1
SLIC	0.5	2
UST	0.25	5
HIST UST	0.25	1
AST	0.25	0
SWEEPS UST	0.25	4
CHMIRS	SITE ONLY	0
NOTIFY 65	1	0
DEED	0.5	0
LIENS	SITE ONLY	0
VCP	0.5	2
DRYCLEANERS	0.25	3
WIP	0.25	0
CDL	SITE ONLY	0
HAZNET	SITE ONLY	2
EMI	SITE ONLY	0
NPDES	SITE ONLY	0
ENVIROSTOR	1	13
HWTS	SITE ONLY	2
CERS	0.25	3
HAZMAT	SITE ONLY	0

GOVERNMENT RECORDS Tribal	SEARCH RADIUS (miles)	NUMBER OF SITES
INDIAN RESERV	1	0
INDIAN LUST	0.5	0
INDIAN UST	0.25	0

GOVERNMENT RECORDS EDR	SEARCH RADIUS (miles)	NUMBER OF SITES
MAN. GAS PLANTS	1	1
HIST AUTO STATIONS	0.25	0
HIST CLEANERS	0.25	3

Historic Oil and Gas Drilling Activity

Based on a review of State Division of Oil, Gas, and Geothermal Resources (DOGGR) records (now CalGEM), it appears that no historic oil production or exploratory oil well drilling activity has ever occurred on or within 2000 feet of the subject site. Figure 4 illustrates a lack of historic oil well drilling activity on the subject property. PIC concludes the property has not been impacted by historic oil well drilling activity.

Solid Waste Disposal Sites

The Los Angeles County Solid Waste Management Department provides a public index of Solid Waste and Liquid Industrial Waste Disposal Sites (see Figure 6). The EDR Report in Appendix H also includes a review of listings concerning landfills. Los Angeles County records and the EDR report both indicate that no landfills have been located on or near the subject property.

It appears the subject property has not been impacted historically by landfill activity.

GEOLOGY AND HYDROGEOLOGY

The elevation of the site is approximately 324 feet above sea level. The surrounding topography generally slopes southwesterly away from the nearby Whittier Hills (see Figure 1: Topographic Map and Appendix E).

A regional groundwater contour map published by Los Angeles County indicates that depth to the first groundwater aquifer is about 150 feet below surface at an elevation of about 170 feet above sea level (see Figure 3). The local groundwater flow direction is southwesterly.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of this Phase I Environmental Assessment, PIC offers the following:

1. No documented, significant, historic occurrences of petroleum or hazardous materials contamination were discovered at the subject property.

2. One significant, historic, potential onsite source of petroleum and/or hazardous materials contamination may exist. More specifically, the subject property contained a retail gasoline station prior to 1950. The former gasoline station likely contained one or more underground gasoline storage tanks (USTs).

3. PIC concludes the site may contain significant environmental impairments (Recognized Environmental Conditions).

4. PIC recommends completion of an onsite Phase II Subsurface Soil Investigation for petroleum hydrocarbons and volatile organic compounds (VOCs).

This report is proprietary and confidential, to be delivered to, and intended for the exclusive use of, the above named client and the client's assignees only. PIC Environmental Services assumes neither responsibility nor liability for the reliance herein or use hereof by anyone other than the above named client or the client's assignees. In addition, the results of the government record search were prepared and provided by Environmental Data Resources, Inc. (EDR), who is responsible for the accuracy and completeness of the information provided.

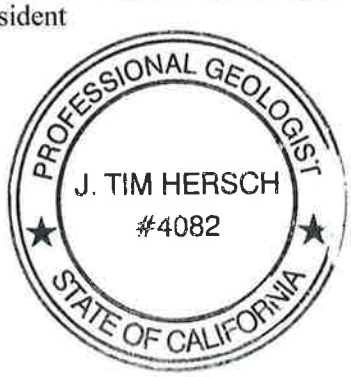
Accordingly, we, J. Tim Hersch and Ethan J. Hersch, declare to the best of our knowledge and belief, we meet the definition of Environmental Professional as defined by 40 C.F.R. Section 312.10 and we have the specific qualifications based upon education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Section 312.

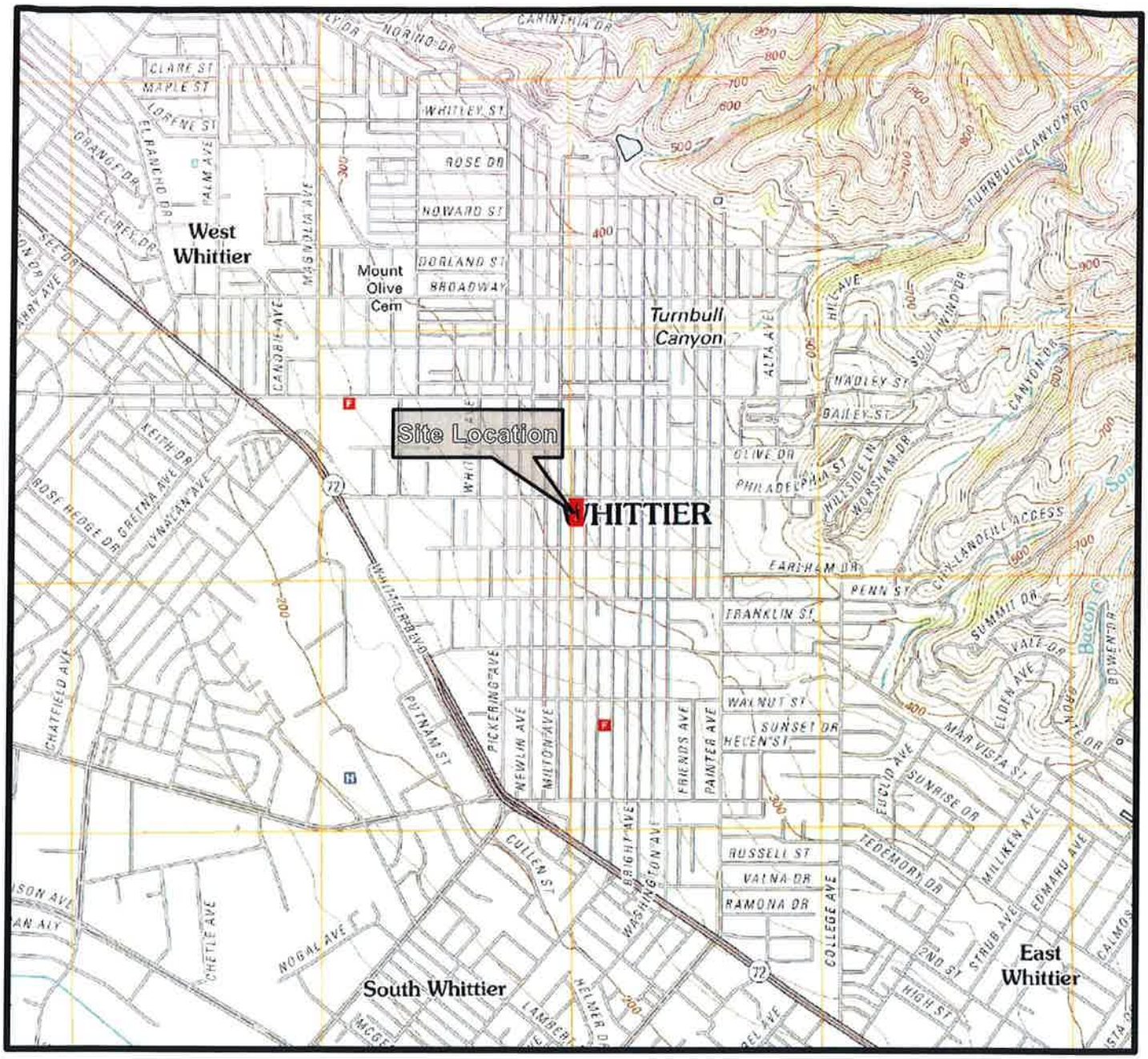
Should you have any questions or comments regarding the procedures outlined in this report, please do not hesitate to call us at 909/593-2427.

Respectfully submitted,

Ethan J. Hersch
Project Manager

J. Tim Hersch
California Professional Geologist #4082
President



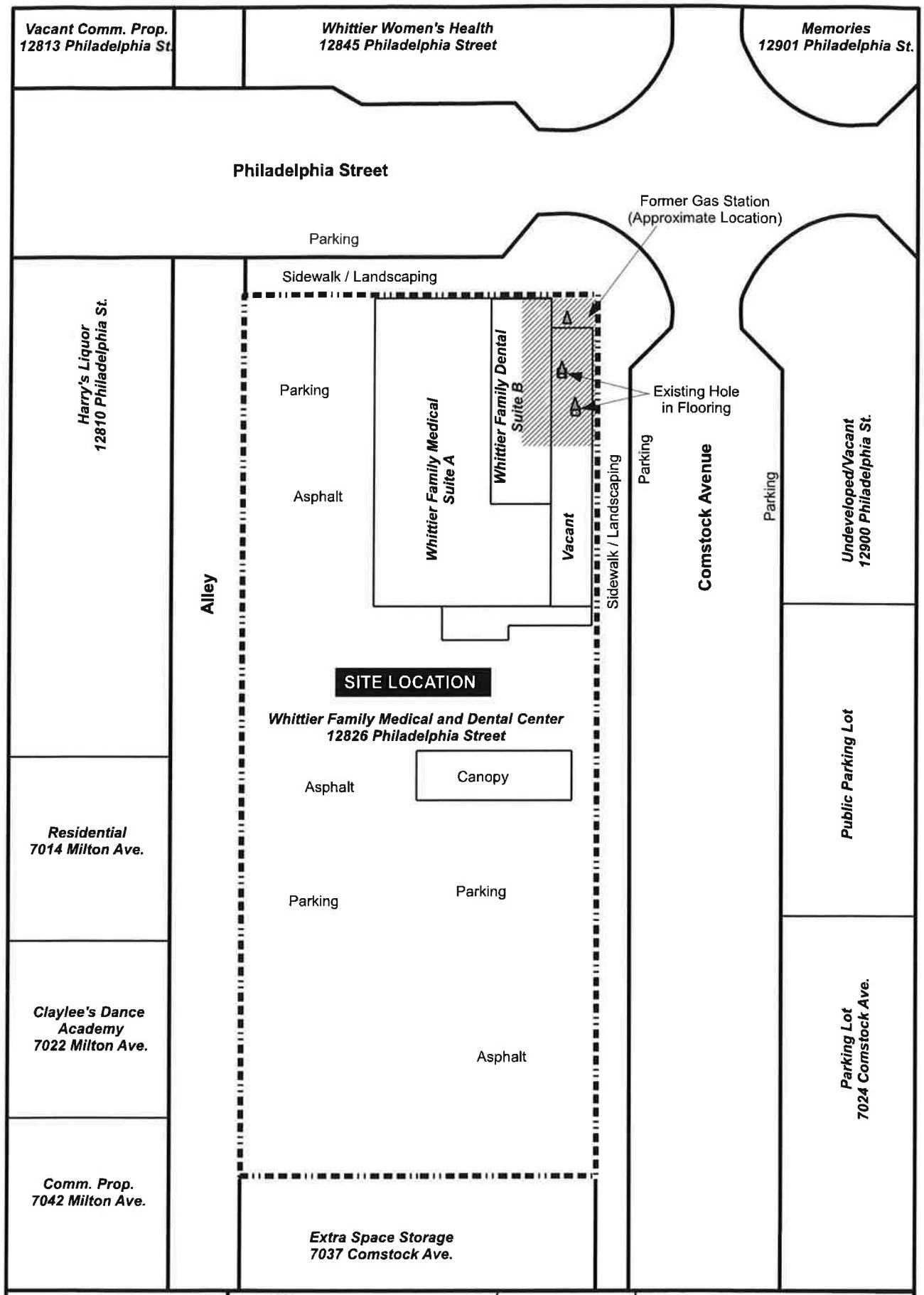


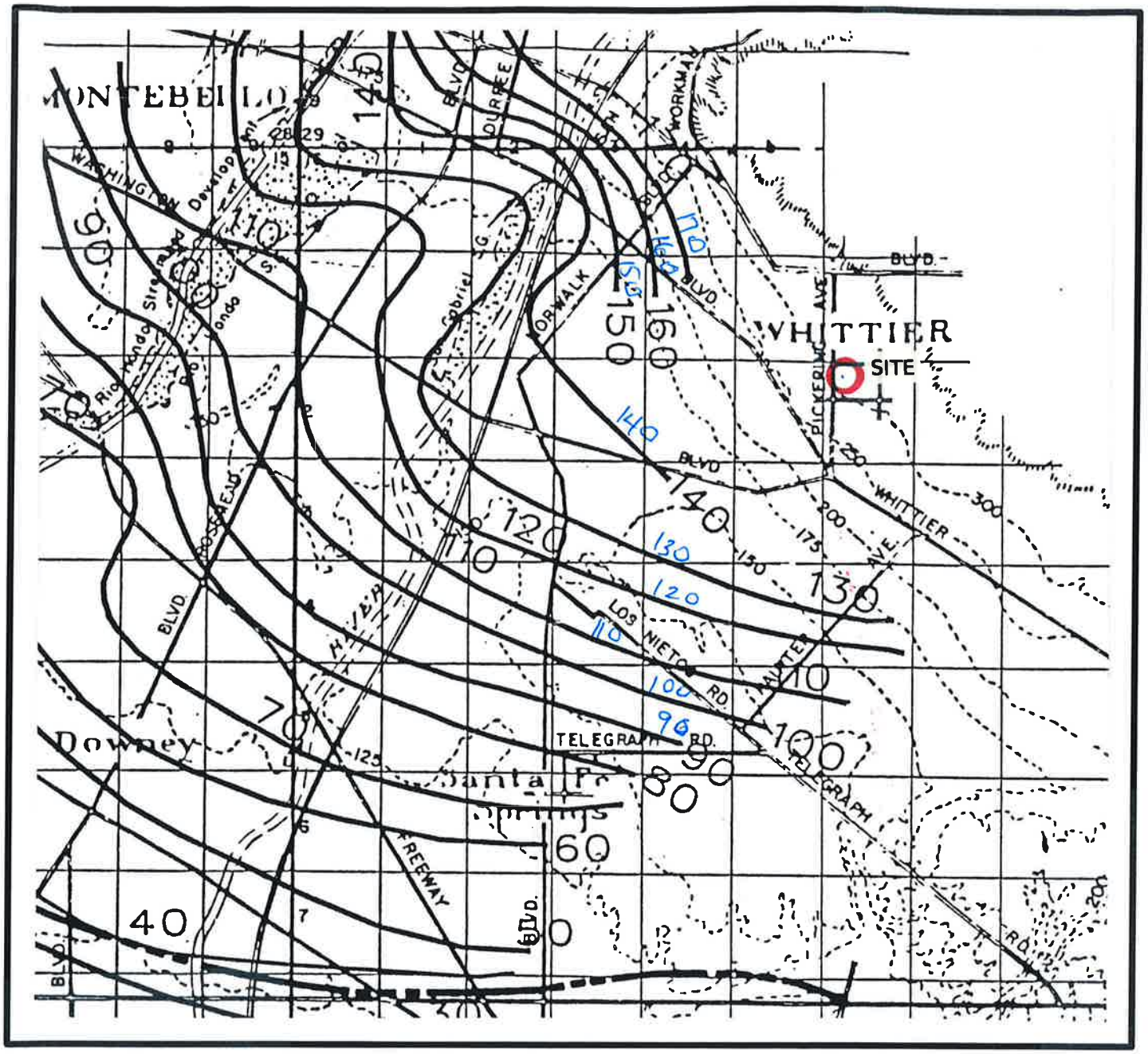
Site Latitude: N33.978859
Site Longitude: W118.038876
Site Elevation: 324 Feet
Source: USGS Topographical Quadrangle

North

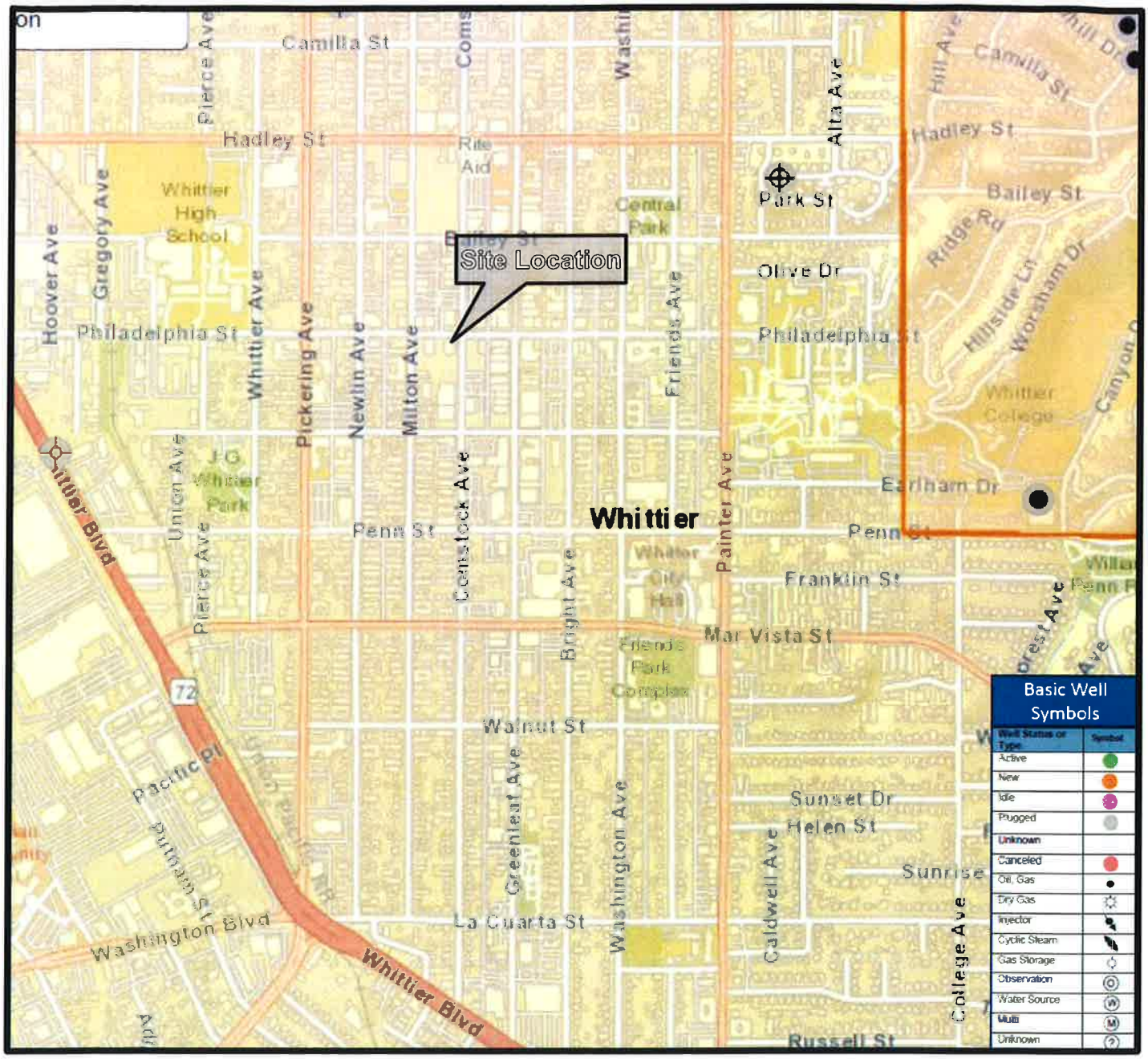
PIC Environmental Services	0 2000 Scale In Feet	**Site Location Map Topographic Map**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 1


Vacant Comm. Prop.
12813 Philadelphia St.
Whittier Women's Health
12845 Philadelphia Street
Memories
12901 Philadelphia St.
Philadelphia Street
Former Gas Station
(Approximate Location)
Parking
Sidewalk / Landscaping
Harry's Liquor
12810 Philadelphia St.
Parking
Asphalt
Whittier Family Medical
Suite A
Whittier Family Dental
Suite B
Vacant
Existing Hole
in Flooring
Parking
Comstock Avenue
Parking
Undeveloped/Vacant
12900 Philadelphia St.
Alley
Sidewalk / Landscaping
SITE LOCATION
Whittier Family Medical and Dental Center
12826 Philadelphia Street
Asphalt
Canopy
Public Parking Lot
Residential
7014 Milton Ave.
Parking
Parking
Claylee's Dance
Academy
7022 Milton Ave.
Asphalt
Parking Lot
7024 Comstock Ave.
Comm. Prop.
7042 Milton Ave.
Extra Space Storage
7037 Comstock Ave.
North
Proposed Boring Location
PIC
Environmental
Services
0
30
Scale In Feet
Site Map
Client:
Walbern Development
Drafted By:
EJH
Project Manger:
J. Tim Hersch
Project No:
E4364
Site Location:
12826 Philadelphia Street, Whittier, CA 90601
Date:
1 / 2021
Figure:
2



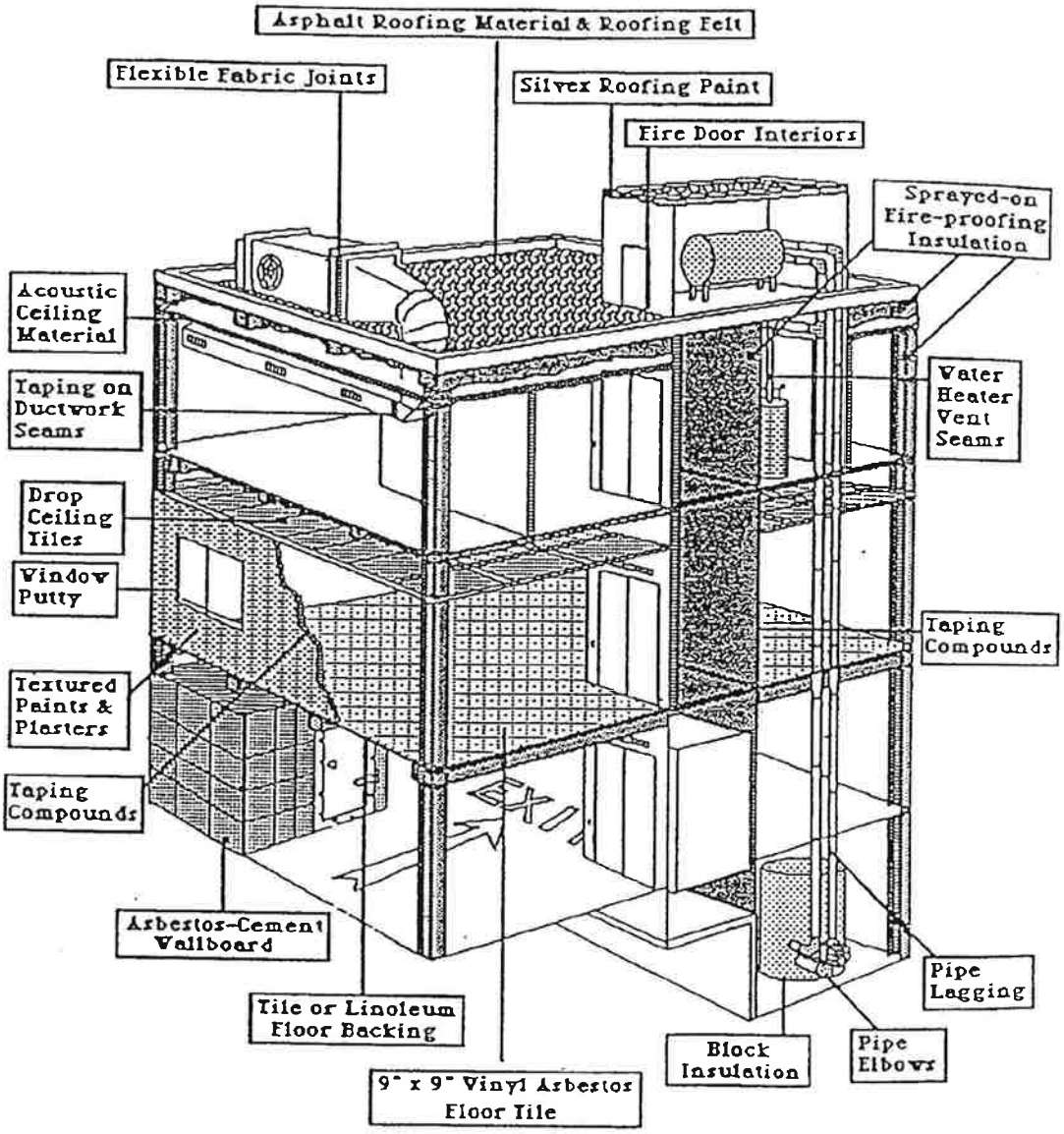
PIC Environmental Services	0 — 5280 Scale In Feet	**Groundwater Contour Map**	
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 3



PIC Environmental Services	0 1000 Scale In Feet	**Oil Well Map**

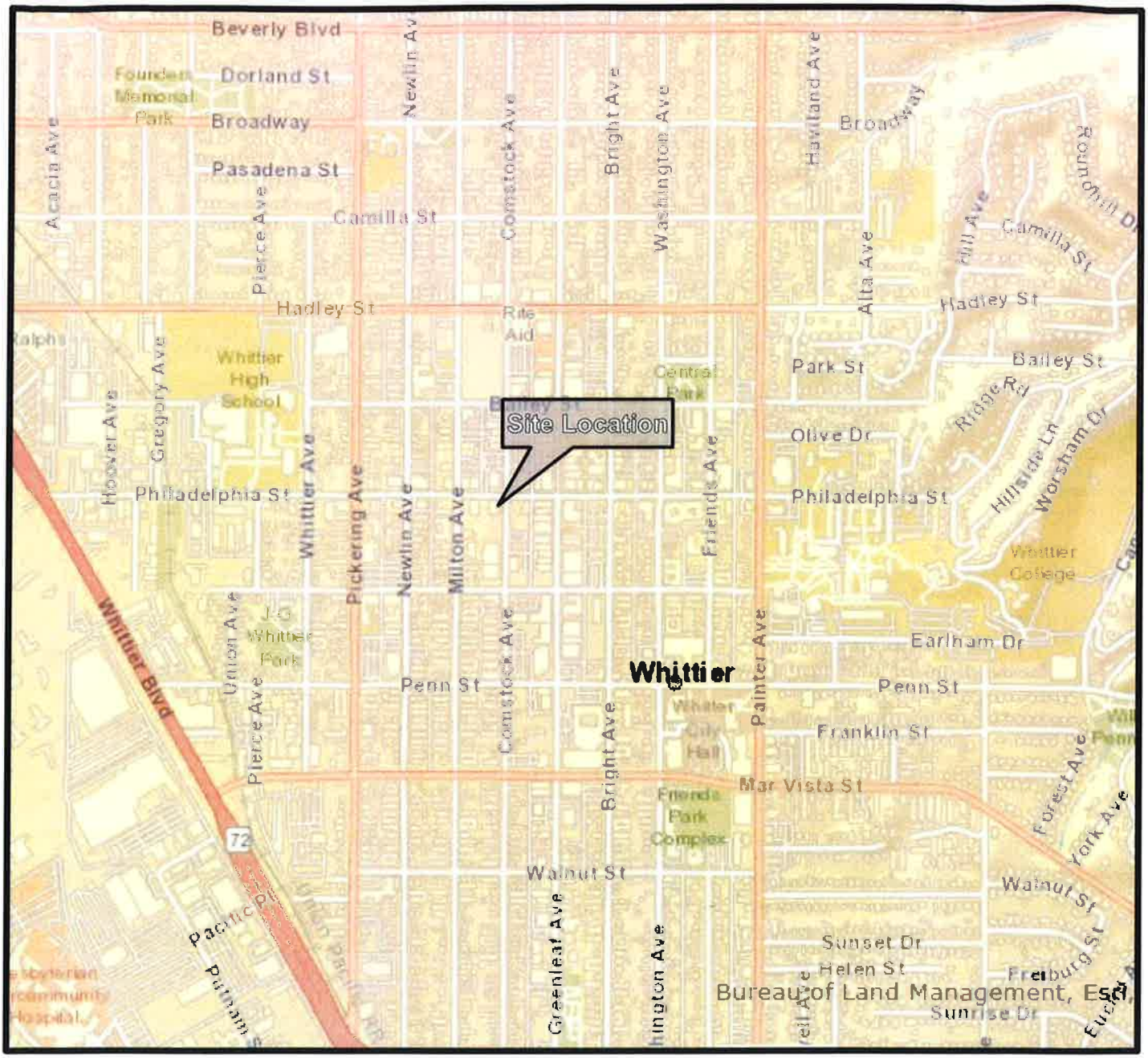
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 4

Asbestos Containing Materials in Buildings



PIC Environmental Services	Not to Scale	**Common Asbestos Containing Materials (ASM's)**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 5



PIC Environmental Services	0 1000 Scale In Feet	**Landfill Map**	
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 6



North

PIC Environmental Services	0 100 Scale In Feet	**Aerial Photo May 2019**	
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 7

APPENDIX A:

TITLE INFORMATION

NETROnline

PROPERTY DETAIL REPORT created **2021-01-16** Prepared exclusively for **Ethan Hersch**

A

TARGET PROPERTY

12826 PHILADELPHIA ST WHITTIER, CA 90601-4117 C006

Owner Information

Owner Name:	BEVERLY PROFESSIONAL CO LLC		
Mailing Address:	12826 PHILADELPHIA ST WHITTIER CA 90601-4117 C006		
Phone Number:		**Vesting Codes:**	
Owner Occupied Indicator:	Y	**Pending Record Indicator:**	
Corporate Owner:			

Location Information

Legal Description:	EX OF ST LOTS 3 THRU 6 WHITTIER AND EX OF STS LOT 8,ALL LOTS 9 TO 12 MR 31-81		
County:	LOS ANGELES	**APN:**	8139-024-027
Census Tract / Block:	5015.04	**Alternate APN:**	
Township-Range-Sect:		**Subdivision:**	NICHOLS
Legal Book - Page:		**Map Reference:**	677-C6 /
Legal Lot:	8	**Tract #:**	
Legal Block:	22	**School District:**	WHITTIER UN
Market Area:	W1	**Munic / Township:**	
Neighbor Code:			

Owner Transfer Information

Recording / Sale Date:		**Sale Price:**	
Document #:		**Deed Type:**	
Instrument #:		**1st Mtg Document #:**	
Book - Page:			

Last Market Sale Information

Recording / Sale Date:	03/26/1999 / 03/19/1999	**1st Mtg Amount / Type:**	$313,633.00 / CONV
Sale Price:		**1st Mtg Int. Rate / Type:**	/ ADJUSTABLE INT RATE LOAN
Sale Type:		**1st Mtg Term:**	
Document #:	510947	**1st Mtg Document #:**	000000510948
Instrument #:	000000510947	**1st Mtg Instrument #:**	000000510948
Book - Page:		**1st Mtg Book - Page:**	
Deed Type:	GRANT DEED	**2nd Mtg Amount / Type:**	/
Transfer Document #:		**2nd Mtg Int. Rate / Type:**	/
New Construction:		**2nd Mtg Term:**	
Multi / Split Sale:	MULTI	**Price per SqFt:**	
Cash Down Payment:		**Stamps Amount:**	
Title Company:	FIRST AMERICAN TITLE INSURANCE		
Lender:	BANK OF WHITTIER		
Seller Name:	AHMED MAJJIDA & SUHAIL S		

Prior Sale Information

Prior Rec / Sale Date:	05/08/1998 / 04/23/1998	**Prior Deed Type:**	GRANT DEED
Prior Sale Price:	$354,000.00	**Prior Lender:**	BANK OF WHITTIER
Prior Sale Type:	FULL	**Prior 1stMtg Amount/Type:**	$265,500.00 / CONV
Prior Doc #:	778471	**Prior 1stMtg Int. Rate/Type:**	/
Prior Instrument #:	000000778471	**Prior Stamps Amount:**	$389.40
Prior Book - Page:			

Site Information

Land Use:	MEDICAL BUILDING	**Acres:**	.8229	**County Use:**	MEDICAL/DENTAL BLDG
Flood Zone:		**Lot Area:**	35847	**State Use:**	
Flood Zone Map:		**Lot Width / Depth:**	/	**Site Influence:**	
Flood Panel Date:		**Usable Lot:**		**Sewer Type:**	
Res / Comm Units:		**Lot Shape:**		**Topography:**	
# of Buildings:	4	**Bldg Width / Depth:**	/	**Water Type:**	
Zoning:	WHC2UD-MUD*	**Building Class:**		**Water District:**	CENTRAL AND W BASIN

Tax Information

Total Value:	$1,035,957.00	**Assessed Year:**	2020	**Property Tax:**	$23,153.63
Land Value:	$443,844.00	**Improve %:**		**Tax Area:**	9636
Improvement Value:	$592,113.00	**Dist:**		**Tax Year:**	2019
Total Taxable Value:	$1,035,957.00	**Fire Dist:**	CONSOLIDATED CO	**Tax Exemption:**	
Market Value:		**Garbage Dist:**		**Equal Rate:**	
		Delinquent Date:		**Equal Year:**	

Property Characteristics

Gross Area:	25293	**Parking Type:**		**Construction:**	
Living Area:	25293	**Garage Area:**		**Heat Type:**	

Tot Adj Area:		**Garage 2 Area:**		**Heat Fuel:**	
Above Grade:		**Garage Capacity:**		**Parcel Fuel:**	
Ground Floor Area:		**Parking Spaces:**		**Exterior Wall:**	
Base / Main Area:	/	**Carport:**		**Interior Wall:**	
Upper Area:		**Basement Area:**		**Foundation:**	
2nd Floor Area:		**Finish Bsmnt Area:**		**Air Cond:**	NONE
3rd Floor Area:		**Basement Type:**		**Roof Type:**	
Rentable Area:		**Attic Type:**		**Roof Shape:**	
Additional Area:		**Porch Type:**		**Roof Frame:**	
Total Rooms:		**Porch 1 Area:**		**Roof Material:**	
Bedrooms:		**Porch 2 Area:**		**Floor Type:**	
Bath (F/H):	/	**Patio Type:**		**Floor Cover:**	
Total Baths / Fixtures:	/	**Patio 1 Area:**		**Style:**	
Year Built / Eff:	1952 /	**Pool:**		**Quality:**	
Fireplace:		**Pool Area:**		**Condition:**	
Fireplace Description:				**# of Stories:**	
Basement Description:				**Other Rooms:**	
Other Improvements:					
Bldg Comments:					
Parcel Comments:					

Extra Features

Description:	Unit:	Size / Qty:	Width:	Depth:	Year Built:	Improvement Value:

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8139	24 SHEET	P.A. 345-14	TRA 6845 9636	REVISED 880318-88 9801280200500l-11	89020405002001-11 01030804004001-11				SEARCH NO	MAP EXTENTS 4276829-4276474 4104161-4105050	OFFICE OF THE ASSE COUNTY OF LOS ANG COPYRIGHT © 19

2001



APN
8139-024-027

APPENDIX B:

SITE PHOTOS


FOR LEASE
Happy's Liquor
NEW OWNERSHIP!
LIQUOR

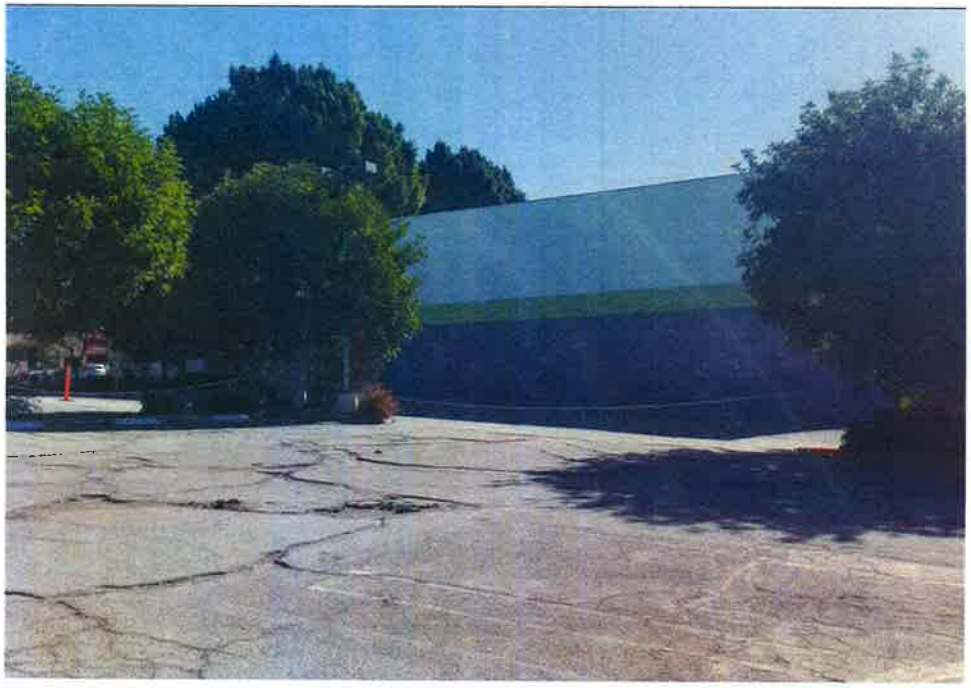



128
FOR LEASE




JOIN US FOR
CHURCH ONLINE!











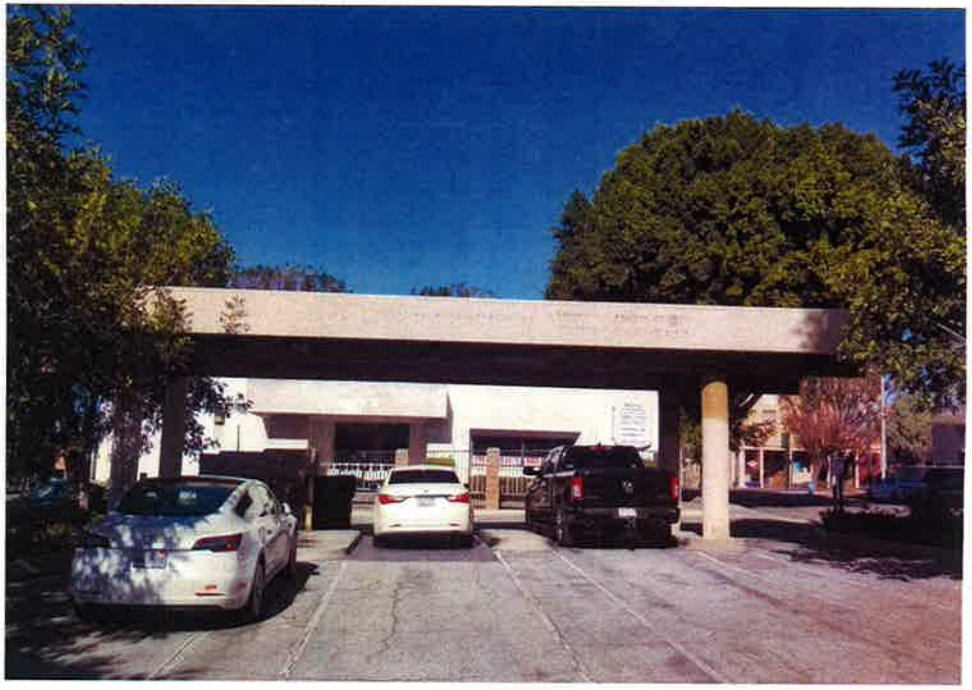

CAUTION
X-Ray
Radiation
CAUTION
X-RAY

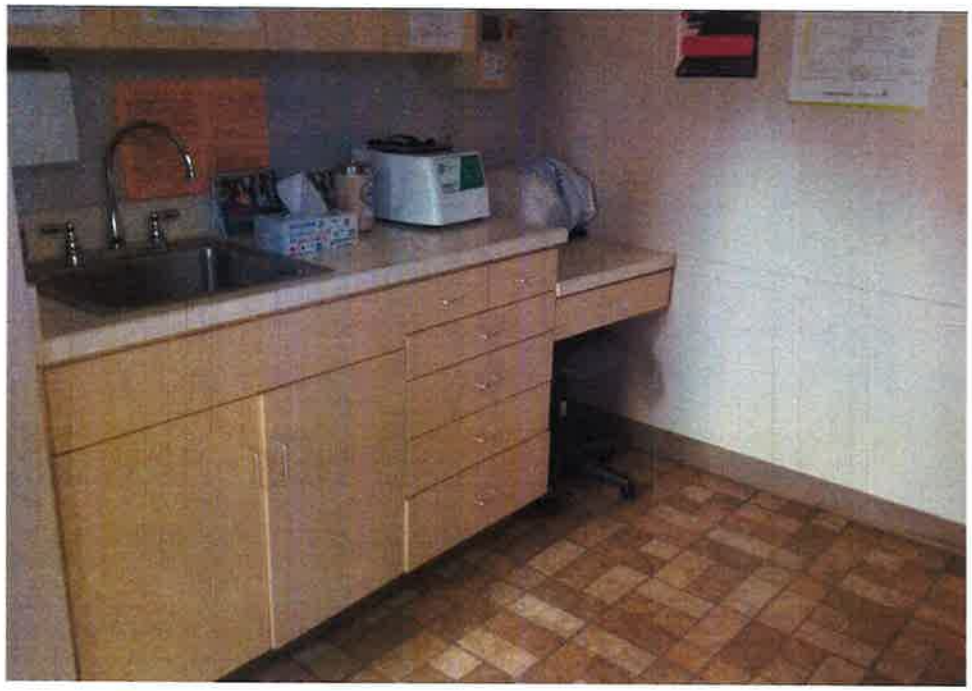








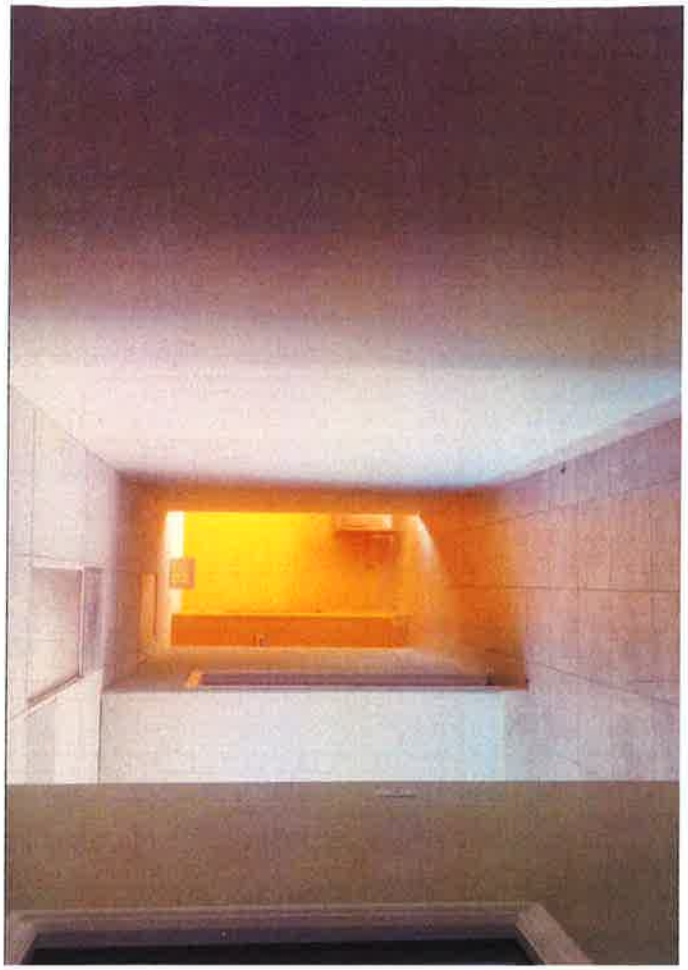


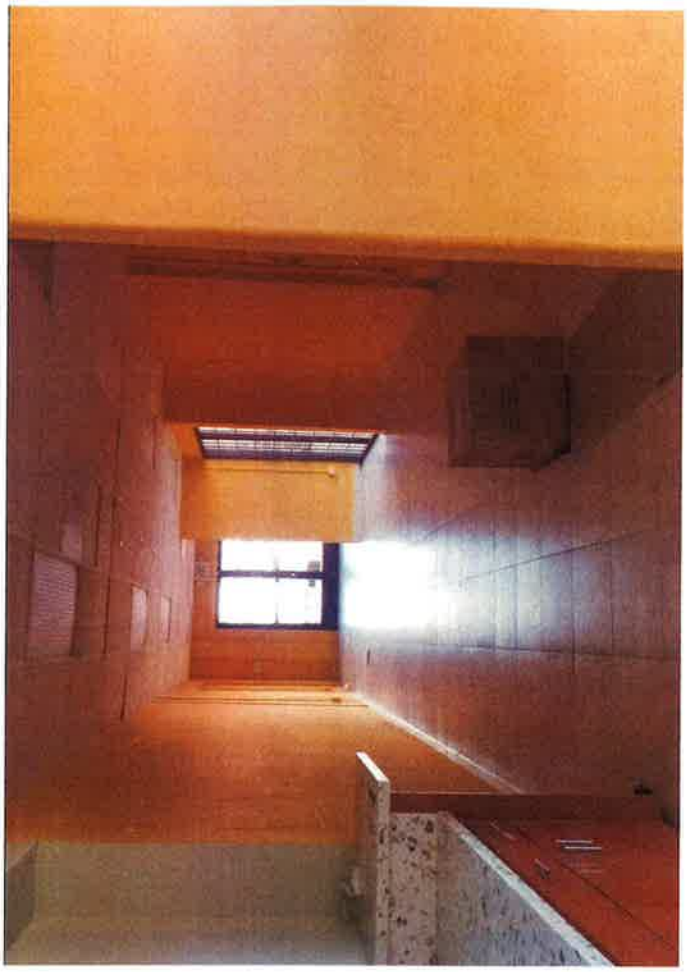


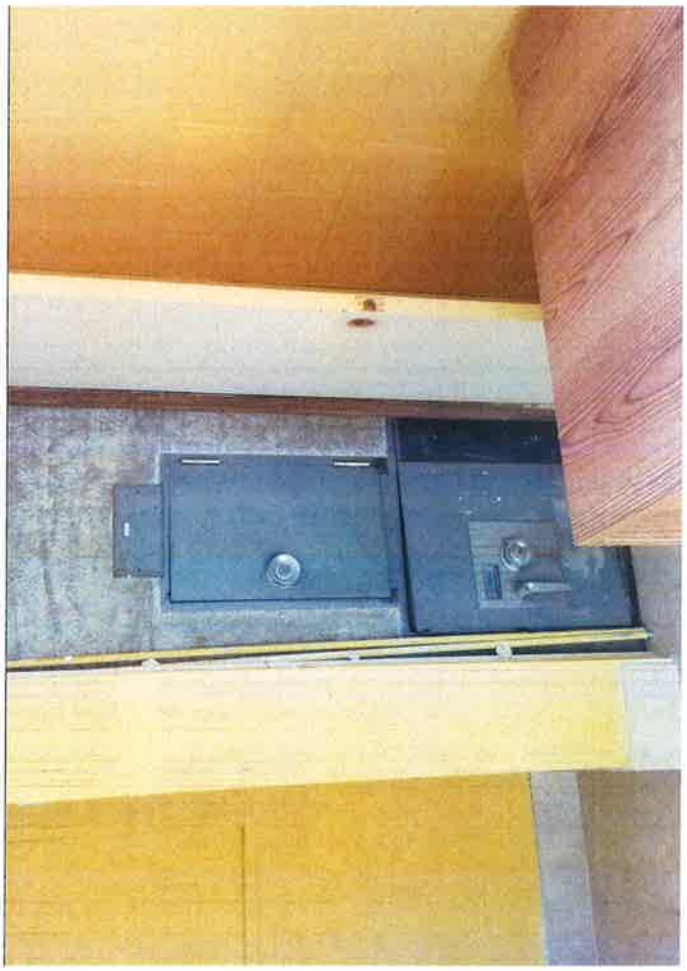

WE WILL
BEAT THIS
TOGETHER
COVID19




F P
T O Z
L P E D
EXIT

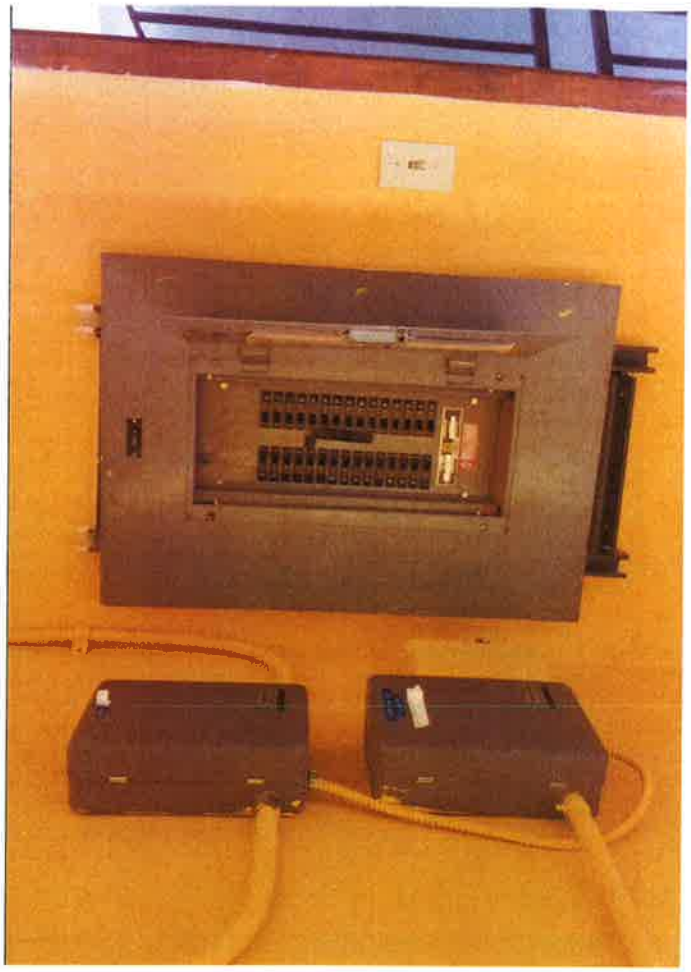


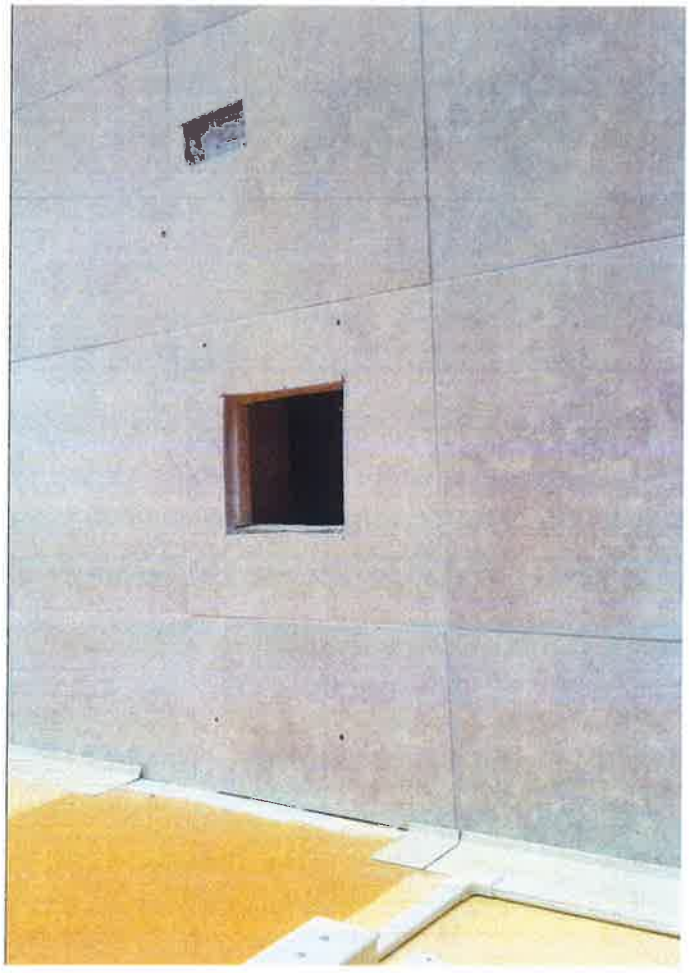




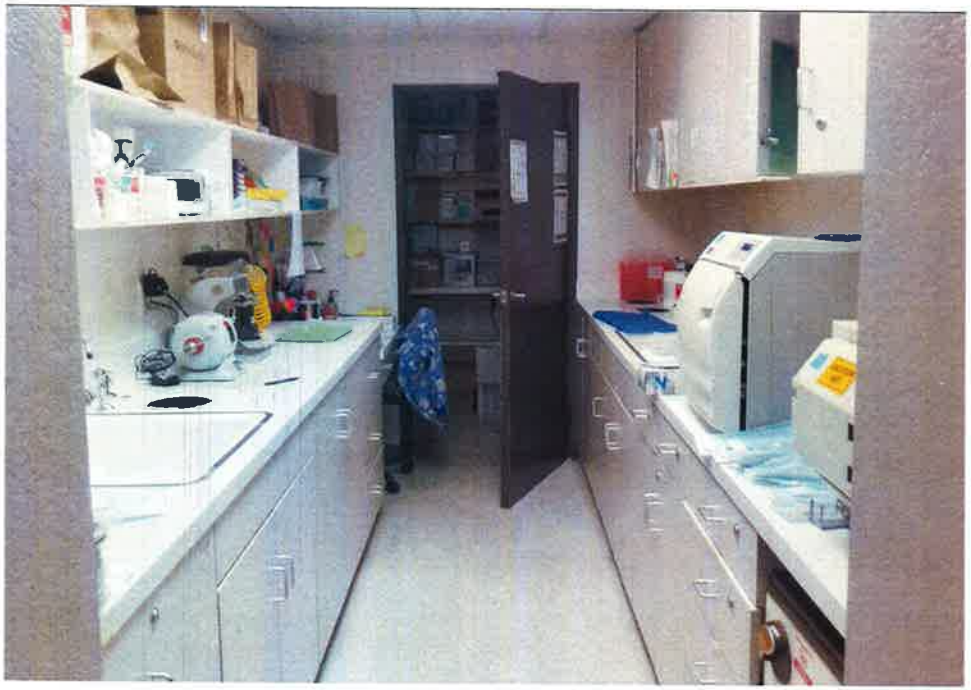


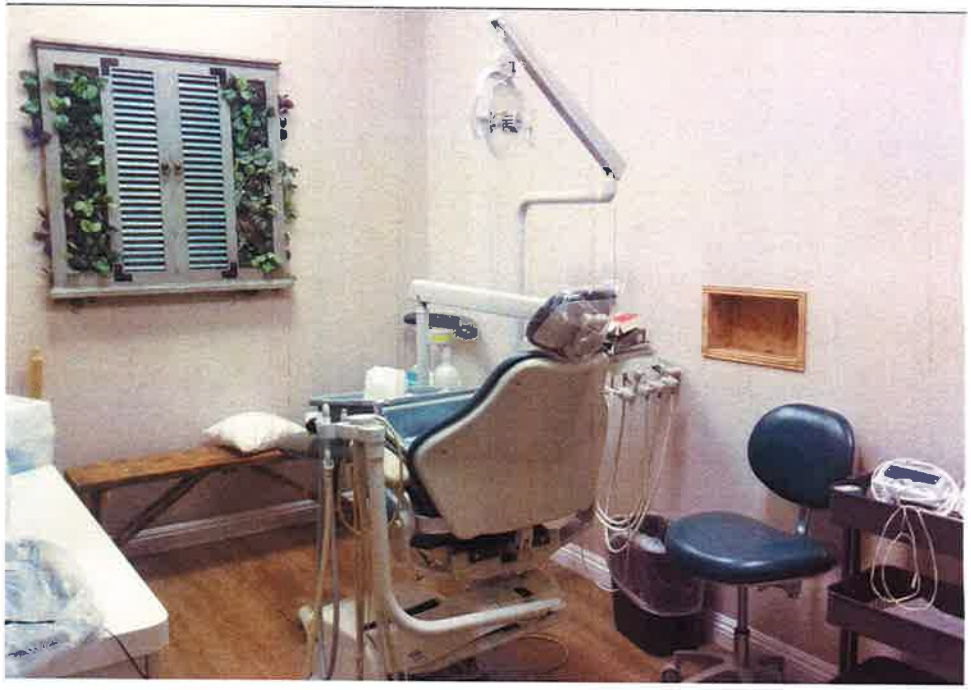







BIOHAZARD









APPENDIX C:

CITY BUILDING DEPARTMENT RECORDS

From: icasillas@cityofwhittier.org,
To: picenv@verizon.net,
Cc: rgarcia@cityofwhittier.org, jesquivel@cityofwhittier.org,
Subject: City of Whittier - Records Request
Date: Thu, Jan 21, 2021 9:30 am
Attachments: 12826 Philadelphia.pdf (2735K), Comstock - Planning.pdf (368K), image001.jpg (20K),

---

Good morning Ethan Hersh,

In response to your California Public Records Act (CPRA) request dated January 11, 2021 regarding records for APN 8139-024-027, the City Clerk Department has compiled the following response:

- Please see the attached building permits for 12826 Philadelphia Ave. and description of work for 7002 Comstock Ave., 7012 Comstock Ave, and 7024 Comstock Ave.

This concludes the City's response to your CPRA request. If you have any questions regarding this matter, please call the City Clerk Department at (562) 567-9850.

Sincerely,

Ifath Casillas | Office Specialist

City Clerk Department | 13230 Penn St. | Whittier, CA 90602

(562) 567 - 9850 | Email: icasillas@cityofwhittier.org | www.cityofwhittier.org

Go Green! Please consider the environment before printing this email.

This email and any information and/or files transmitted /attached with it may contain confidential information that is exempt from disclosure under applicable law, and is intended solely for the use of the individual or entity to whom they are addressed. No right to confidentiality is waived by this email transmission. If you are not the intended recipient, or responsible for delivering it to the intended recipient, you are hereby notified that any disclosure, copying, dissemination, distribution, or use of any of the information contained in or attached to this transmission is strictly prohibited. If you have received this email in error, please destroy the original transmission and its attachments without reading or saving them in any manner. Thank you.

1 Attached Images

OK 43966-

OWNER'S NAME Pacific Southwest Realty Co. THIS APPEARS TO BE A TYPE III-N for 4-8-74

LOCATION OF WORK ~~203 W. Philadelphia St~~ → 12826 Philadelphia St

LOT 7-8-9-10 BLOCK 22 TRACT Nicholas Subdivision

Lot 3 & No 15' of Lot 4 Original Town [redacted]

PERMIT NO.		CONTRACTOR	INSPECTIONS and REMARKS
D 7072	BUILDING FOOTING	Howard Hasting Inc. Bank Bldg. Security First Nat. Bk Contractor Hold Fig	See Footings & Steel on East ½ of Basement Footings only 3-31-52 See Footing & Steel 3-31-52 See Footing & Steel on West ½ of Basement Footings 4-2-52 See Basement Footings Poured Concrete - Watched Pound — — Watched Pour on Basement 4-2-52 Footings & walls up to Basement Floor See Footings & Steel on East center 4-2-52 Footing Walls only — See Steel & Footings on Front wall & West side 4-9-52
D 7100	PLUMBING Phoned in 10-9-52 Hold Fig Contractor	Howes Mfg 8 T - 6 L - 5 Slop sink. 3 Floor Drain. 1 Drinking Fountain. 1 WH - 1 Floor sink. 3 gas.	See Underground Plumbing in Basement only 6-18-52 See Underground Stack out of Bldg. in Basement 6-24-52 See Plumbing only 7-11-52 See Final on gas - 9-23-52 Final [redacted] 10-2-52 See Plbg Fix count OK. gas 13 Fix Plumber
D 7100	SEWER	Howes Mfg	See Concrete Box For Backwater Sewer valve 6-25-52 See 4" Cast Iron pipe on So. Side of Bldg. 7-2-52 For Sewer line to S.W. corner of Bldg. [redacted]
D 7168 7737 D 9364 26/10	ELECTRIC H 237 - Elevator Phoned in 10-10-52 Ext a Fix → 4 Signs	James Elect Co. 1 Pole For meter. 2 Plgs. To Mr Keys on Power Pole 100 amp - 30 SW - 50 Plgs - 100 Fix - 2 - 2P motors. 2 - 5 TP. motors Install - 1 Sign with a 1 Heater - 1 Fan - 15 TP - 1¼ TP - 15 Plgs - 11 SW - 11 Fix - 11 outlets	See Pole For Meter 2 Plgs 3-4-52 See Elect Wire - Conduit in Basement & Walls only 4-23-52 See Electric Conduit in Basement ceiling & 1st Floor area no Basement 5-1-52 See Elect Conduit in Walls & ceiling on 1st Floor Vaults 5-1-52 See Electric Conduit in Front Door 5-16-52 Panel to Roof. Entry Section only See Elect Conduit in Howes Brick wall on East Side of Bldg. 6-2-52
D 9266	PLASTER	H. M. Bell Lath & outside	See Lath in Basement Rooms 7-31-52 See Lath on Mezzanine Walls 7-31-52 See Lath in Rear Main Floor walls 8-4-52
D 9447	TILE	Biederman Tile Co.	1952
28247	MISCEL.	Air conditioning of So. Calif	Inst 7557

BUILDING AND PLANNING USE ONLY

Use Zone	Fire Zone	Total Req'd Parking	Req'd Yards Front	Rear	Sides
C2	I	EXEMPT	0	40'	E – W 0-10'

Type Const.	Group	Stories	Occ. Load	Ex. Use
II 1 HR	-2	2	133	F2

# Var. or P.P.	Valuation of Job	Plan No.
—	$240,000.00	7241-A

1,179 ft = 1st flr
371 ft = 2nd flr
1,010 ft = Canopy – DRIVE-UP
601 ft, 299 ft = Canopy – NORTH & SOUTH

SEE P.C. #76269

Remarks

1-30-75 rebar in ftg-trench. wm
2-25-75 rebar for grade beams wm
3-18-75 R.B. for (4) Col's at Canopy
60 studs attd. wk. & m
2-19-75 Repair in masonry to 8" wall
3-25-75 rebar for 2nd flr wm
4-11-75 sheathing wm
4-30-75 rebar island canopy wm
5-1-75 rebar rear entrance walkway wm
5-7-75 box lights, rear entrance soffit wm
6-13-75 rebar for floor slab at new addition wm

Rough	Final
6-27-75 wm	9-29-75 wm

Plan Check Fee	No.
183.25	74594

Permit Fee	No.
366.50	76269

Job Address: 12826 PHILADELPHIA ST

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot Blk. Tract

Description of Work: ALTERATION, REMODEL INTERIORS, ADD NEW 1 STORY 2ND FL. PORTIONS & DRIVE UP CANOPY, SITE WORK

Property Owner: [illegible]

Owner's Address: 211 SO. MAIN ST, L.A., 90013 Phone (Job) 628-0311

Lender: SECURITY PACIFIC NATL. BANK

Address

Architect: GRIFFIN & BANKS AIA

State Lic. No. Phone (714) 527-8000

Engineer: WHEELER & GRAY, S.E.

State Lic. No. Phone

Contractor: E & T. Constructors

Contractor's Address: 20605 Earl St

Torrance Phone 772-2547

City Lic. No. 36838 State Lic. No. 140686

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws. I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee: [signature]

$16.80 WHEN VALIDATED THIS IS YOUR PERMIT

JUN-18-74	Staff 102483	CK 74594	B – 1	183.25
OCT-24-74	732713	CK 76269	B – 2	366.50
OCT-24-74	732714	CK 1000 804	D 18	16.80

1975

DEPT. USE ONLY

Use Zone	Fire Zone	Type Const. Bldg.	Group	Plan No.

PERMIT FEES			No.	Each	Fee
Forced-air or Gravity-type Furnace incl. ducts and vents.		Up to 100,000 B.T.U.		$4.00	
		Over 100,000 B.T.U.	1	5.00	5.00
Floor Furnace				4.00	
Heater—suspended type				4.00	
Heater—recessed type				4.00	
Heater—floor mounted				4.00	
Appliance vent—only				2.00	
Boiler, Compressor, Absorption System	Up to 3 H.P.	Up to 100,000 B.T.U.		4.00	
	3 H.P. 15 HP.	100,001 to 500,000 B.T.U.	1	7.50	7.50
	15 H.P. 30 H.P.	500,001 to 1,000,000 B.T.U.		10.00	
	30 H.P. 50 H.P.	1,000,001 to 1,750,000 B.T.U.		15.00	
	Over 50 H.P.	Over 1,750,000 B.T.U.		25.00	
Air Handling Unit incl. ducts		Under 10,000 C.F.M.		3.00	
		Over 10,000 C.F.M.		5.00	
Evaporative cooler (non-portable)				3.00	
Vent fan/single duct			2	2.00	4.00
Mechanical exh. hood				3.00	
Comm./Indus. Incinerator				20.00	
Repair, alter, addition to each heating appl., refrig. unit, comfort cooling unit, or system incl. controls.			MX	4.00	4.00
Any equip regulated but not incl. above.				3.00	
FILING FEE					$3.00
TOTAL FEES					23.50

Plan	No.
Check Fee	
Permit Fee 23.50	Permit No. 77240

Street Address of Job: 12826 Philadelphia Street,

HEATING — AIR CONDITIONING REFRIGERATION — BOILERS

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Contractor: Russell Air Conditioning

Contractor's Address: 15007 Oxnard Street, Van Nuys, Calif. 91411

Contractor's Phone: 786-7200

Owner's Name: ~~Pacific Southwest Realty~~ (Security Pacific Nat'l.)

Contractor's State Lic. No. 168635

Bus. License City # 37080

REMARKS:

New Bldg. ☐ Existing ☒

Rough	Final
6-27-75 am	9-29-75 am

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws regarding same.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee: Manuel D Reis

WHEN VALIDATED THIS IS YOUR PERMIT

PD 9-29-75 757663 CK 77240 • D — 8 23.50

1975

PERMIT FEES	No.	Each	Fee
Residence 750 sq. ft. max.		$ 7.50	
Residence 1000 sq. ft. max.		$10.00	
Residence 1400 sq. ft. max.		$14.00	
Residence 1700 sq. ft. max.		$17.00	
Residence 2000 sq. ft. max.		$20.00	
Residence 2500 sq. ft. max.		$25.00	
Residence 3000 sq. ft. max.		$30.00	
Residence over 3000 sq. ft.		$35.00	
RANGE		$ 1.00	
OVEN		$ 1.00	
SPACE/WATER HTR.		$ 1.00	
CLOTHES DRYER		$ 1.00	
FIXTURES	129	$ .15	19.35
OUTLETS	165	$ .15	24.75
TEMPORARY POLE	1	$ 3.00	3.00
SERVICE	2	$ 3.00	6.00
SIGN (1 Transf.)		$ 3.00	
(Extra Transf./Ballasts)		$ 1.00	
TIME CLOCK		$ 1.00	
MOTORS:			
1 H.P. MAX.		$ 1.00	
10 H.P. MAX.	1	$ 3.00	3.00
50 H.P. MAX.		$ 5.00	
100 H.P. MAX.		$10.00	
500 HP. MAX.		$15.00	
OVER 500 H.P.		$20.00	
FILING FEE			$3.00
TOTAL FEES			59.10

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating electrical wiring.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California or that I am the legal owner of the above described property and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee James A. Fitzpatrick

PERMIT NO. 77238

STREET ADDRESS OF JOB 12826 E. Philadelphia St

ELECTRIC

DEPT. OF BLDG. WHITTIER, CALIF.

ELECTRICAL CONTRACTOR Downey Electric

CONTRACTOR'S ADDRESS 7462 Burns Ave

CONTRACTOR'S PHONE 7734611

CITY REG. NO.	STATE LICENSE NO.
72	233327

PROPERTY OWNER Security Pacific Bank

PURPOSE OF BLDG. Banking

FLOOR AREA	NO. OF METERS
	2

NEW BLDG. ☐ EXISTING BLDG. ☒

REMARKS: Remodel ←

5-13-75 underslab conduit is PVC; PVC also for PBX. wm

Re Elec 2ND FL 6-18-75 dm

ROUGH	FINAL
6-27-75 wm	9-29-75 wm

LIGHTS CLEARED TO UTILITY CO. 9-29-75 ma

POWER CLEARED TO UTILITY CO.

FEB 9 75 1655 CK 77238 • D — 4 5910

WHEN VALIDATED THIS IS YOUR PERMIT

1975

Number	PERMIT FEES			
1	Gas System, 1st 5 Outlets	$1.75	1	75
	Each Outlet Additional	.35		
1	Water Heaters or Vents	$1.75	1	75
1	Water Piping	$1.75	1	75
0	Water Treating Equipment or Softeners	$1.75		
2	Sink, Kitchen-Slop	$1.75	3	50
1	Garbage Disp.	$1.75	1	75
0	Bath Tub	$1.75		
2	Lavatories	$1.75	3	50
0	Shower Pans	$1.75		
5	Water Closets	$1.75	8	75
0	Laundry Trays	$1.75		
0	Wash. Mach. Stand Pipes	$1.75		
0	Dishwasher	$1.75		
0	Sink, Floor, Bar	$1.75		
1	Urinals	$1.75	1	75
1	Drink Fountains	$1.75	1	75
2	Floor Drains	$1.75	3	50
0	Traps, Sand, Grease	$1.75		
	Plumbing Piping Without Fixtures	Each $1.75		
0	Lawn Sprinklers	$3.00		
0	Back Flow Devices	$3.00		
0	Sewer(s)	Each $7.00		
0	Septic Tank & Cesspool	$12.00		
	Swim Pool Plumbing	$8.25		
	FILING FEE		$3	00
	TOTAL FEES		32	75

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State Laws regulating plumbing.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and State of California or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permitee: Abdel Chehade

Permit Fee: $32.75

No. 77218

Street Address of Job: 12826 Philadelphia St. Whittier, California

PLUMBING

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Plumbing Contractor: Murray Company

Contractor's Address: 15902 S. Broadway Gardena, Calif 90248

Contractor's Phone: 770-8812

Property Owner's Name: Pacific Southwest Realty Company (Security Bank)

Contractor's State Lic. No. 162382

Contractor's City Lic. No.

New Bldg.

Old Bldg.

FLOORS TO BE LEFT OPEN UNTIL PIPING IS INSTALLED AND INSPECTED

SEWER CHARGE -

REMARKS

GAS LINE REQUEST TEST AT METER, GAS LINE UNDER SIDEWALK, 6-16-75 BDG

R&R 2ND FLOOR 6-18-75 dm

BELOW FOR OFFICE USE ONLY

Groundwork

Rough 6-22-75 am

Gas 6-18-75 dm

Final 9-29-75 am

Sewer

Utility Clearance

When Validated This Is Your Permit

FEB-3-75 756835 CK 77218 • D — 3 32.75

1975

Number	PERMIT FEES			
	Gas System, 1st 5 Outlets Each Outlet Additional	$1.75 .35		
	Water Heaters or Vents	$1.75		
	Water Piping	$1.75		
	Water Treating Equipment or Softeners	$1.75		
	Sink, Kitchen-Slop	$1.75		
	Garbage Disp.	$1.75		
	Bath Tub	$1.75		
	Lavatories	$1.75		
	Shower Pans	$1.75		
	Water Closets	$1.75		
	Laundry Trays	$1.75		
	Wash. Mach. Stand Pipes	$1.75		
	Dishwasher	$1.75		
	Sink, Floor, Bar	$1.75		
	Urinals	$1.75		
	Drink Fountains	$1.75		
	Floor Drains	$1.75		
	Traps, Sand, Grease	$1.75		
	Plumbing Piping Without Fixtures	Each $1.75		
1	Lawn Sprinklers	$3.00	3	00
	Back Flow Devices	$3.00		
	Sewer(s)	Each $7.00		
	Septic Tank & Cesspool	$12.00		
	Swim Pool Plumbing	$8.25		
	FILING FEE		**$3**	**00**
	TOTAL FEES		6	00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State Laws regulating plumbing.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and State of California or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permitee: Henry Ullmann

Permit Fee: 6.00

No. 78736

Street Address of Job: 13826 E Philadelphia ST.

PLUMBING

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Plumbing Contractor: Vista Interscape Co

Contractor's Address: 1821 Workman Mill Rd Whittier

Contractor's Phone: OX 21736

Property Owner's Name: Security Pacific Bank

Contractor's State Lic. No. 233750

Contractor's City Lic. No. 36328

New Bldg.

Old Bldg.

FLOORS TO BE LEFT OPEN UNTIL PIPING IS INSTALLED AND INSPECTED

SEWER CHARGE -

REMARKS

BELOW FOR OFFICE USE ONLY

Groundwork 6-26-75 mm Rough

Gas Final 9-29-75 mm

Sewer

Utility Clearance

When Validated This Is Your Permit

790486 78736 • B — 3 6.00

1975

DECLARATIONS

e Declarations below are mandated by the State of California under Section 19825 of the Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and ofessions Code, and my license is in full force and effect.

ense Class B License No. 188560
te 6/11/81 Contractor W.C. Beggs, Contractor

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's License Law r the following reason (Sec. 7031.5, California Business and Pro- ssions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the eged exemption. Any violations of Sec. 7031.5 by any applicant r a permit subjects the applicant to a civil penalty of not more than e hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as eir sole compensation, will do the work, and the structure is not lended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his vn employees, provided that such improvements are not intended or fered for sale. If, however, the building or improvement is sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with ensed contractors to construct the project (Sec. 7044, B. & P. C.: e Contractor's License Law does not apply to an owner of contracts r such projects with a contractor(s) licensed pursuant to the Con- ictor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

te _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. 27050810 Company Workmen's

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Department of Building & Safety.

Date 6-11-81 Applicant Joseph E. Esparza

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name NONE

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Joseph E. Esparza 6-
Signature of Owner or Contractor ONLY Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the ont and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within **ONE HUNDRED EIGHTY (180) DAYS** from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	—	—	—		

Valuation of Job 2000 00 — Plan No. File.

APPROVED AS DEPICTED IN ATTACHED PHOTO
Maria J. Maleski

Energy Check Fee	No.	(5100 Fund) 61249
Plan Check Fee 21 13	No.	01552
Plan Check Fee	No.	
Permit Fee 32 50	No.	01553
+ State Tax .50		

Job Address: 14606 Philadelphia ST Whittier Cal.

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF

Lot Block Tract

Description of Work: Install New Ready Teller Machine

Property Owner Security Pacific Bank
Owner's Address 333 South Hope St LA
Owner's Phone 213-613783 City
Architect's Name Daniel Davidson
Address 6251 Universal Ave
Phone 213-9804540 Regist. No.
Engineer's Name Regist. No.
Contractor's Name W.C. Beggs Construction, Inc.
Address 765 Blake Ave Los Angeles
Phone 213-6667995
State Lic. No. B188560 City Lic. No. 11746

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK 9-2-81	Date

1981

DECLARATIONS

e Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

104-215

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 mmencing with Section 7000) of Division 3 of the Business and ofessions Code, and my license is in full force and effect.

ense Class C-45 License No. 414351

te 12/19/84 Contractor W. Heath & Co.

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's License Law the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the eged exemption. Any violations of Sec. 7031.5 by any applicant r a permit subjects the applicant to a civil penalty of not more than e hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as ir sole compensation, will do the work, and the structure is not ended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or fered for sale. If, however, the building or improvement is sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with ensed contractors to construct the project (Sec. 7044, B. & P. C.: e Contractor's License Law does not apply to an owner of contracts r such projects with a contractor(s) licensed pursuant to the Contctor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

te _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. TRUB-114T830-684 Company Travelers

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 12/19/84 Applicant Rebecca Young

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Rebecca Young 12/19/84
Signature of Owner or Contractor ONLY Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the ont and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides
V-84-17				

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2		wall signs			

Valuation of Job $8000.- Plan No. in file

1 new sign
2 relocated signs
all signs to be non-illuminated
INTERNAL

O.K. Chip Leslie 12-19-85
MUST O.K. LIGHT FIXTURES BEFORE INSTALLATION

		No.
Energy Check Fee		(5100 Fund) 61249
Plan Check Fee		
Plan Check Fee	44.53	5442
Permit Fee	68.50	5441
+ State Tax	.56	CL

Job Address 12826 Philadelphia St.

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot 7-17 Block Tract

Description of Work:
(1) single face non-illuminate wall sign 5'10" x 7'6"
Remove (1) roof sign
Relocate (2) wall signs
value $8,000.00

Property Owner Margot Chapman
Owner's Address Security Pacific Bank City
Owner's Phone 6134341
Architect's Name
Address
Phone Regist. No.
Engineer's Name Jerry Hajek Regist. No. C27912
Contractor's Name W. Heath & Co.
Address 3225 Lacy St. LA 900_
Phone 2234141
State Lic. No. 414351 City Lic. No. 26260

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date

1984

DECLARATIONS

e Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

ereby affirm that I am licensed under provisions of Chapter 9 mmencing with Section 7000) of Division 3 of the Business and fessions Code, and my license is in full force and effect.

ense Class C-45 License No. 414351

e 12/28/84 Contractor W. Heath & Co.

OWNER-BUILDER DECLARATION

ereby affirm that I am exempt from the Contractor's License Law the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the ged exemption. Any violations of Sec. 7031.5 by any applicant a permit subjects the applicant to a civil penalty of not more than hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as ir sole compensation, will do the work, and the structure is not ended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or ered for sale. If, however, the building or improvement is sold hin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with nsed contractors to construct the project (Sec. 7044, B. & P. C.: Contractor's License Law does not apply to an owner of contracts such projects with a contractor(s) licensed pursuant to the Contctor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

_____

le _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. TRUB-114T830-684 Company Travelers

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 12/28/84 Applicant Rebecca Young

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

_____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Rebecca Young 12/28/84

Signature of Owner or Contractor (Agent) Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the nt and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

PERMIT FEES	No.	Each	Fee
Residence 750 sq. ft. max.		$15.00	
Residence 1000 sq. ft. max.		$20.00	
Residence 1400 sq. ft. max.		$28.00	
Residence 1700 sq. ft. max		$34.00	
Residence 2000 sq. ft. max.		$40.00	
Residence 2500 sq. ft. max.		$50.00	
Residence 3000 sq. ft. max.		$60.00	
Residence over 3000 sq. ft.		$70.00	
POOL OR SPA		$20.00	
RANGE or OVEN (ea.)		$ 3.00	
CLOTHES DRYER		$ 3.00	
SPACE/WATER HTR. (ea.)		$ 3.00	
TIME CLOCK		$ 3.00	
FIXTURES		$ .40	
OUTLETS		$ .40	
TEMPORARY POLE		$10.00	
SERVICE (200 AMP. MAX.)		$10.00	
(OVER 200 AMP.)		$20.00	
SIGN (INC. TIME CLOCK)	1	$10.00	10.00
TEMP LIGHTING		$ 8.00	
MOTORS:			
5 H.P. MAX.		$ 3.00	
10 H.P. MAX.		$ 6.00	
50 H.P. MAX		$10.00	
100 H.P. MAX.		$18.00	
500 H.P. MAX.		$25.00	
OVER 500 H.P.		$35.00	
FILING FEE			$10.00
PLAN CHECK FEE (OVER 1200 A.)			
TOTAL FEES			20.00

ROUGH	FINAL
LIGHTS CLEARED TO UTILITY CO.	
POWER CLEARED TO UTILITY CO.	

PERMIT NO. 534

FEE 20.00

JOB ADDRESS 12826 Philadelphia

ELECTRIC

DEPT. OF BLDG. WHITTIER, CALIF.

ELECTRICAL CONTRACTOR W. Heath & Co.

CONTRACTOR'S ADDRESS 3225 Lacy St. LA 90031

CONTRACTOR'S PHONE 2234141 | CITY BUS. LIC. NO.

PROPERTY OWNER Margot Chapman

OWNER'S ADDRESS Security Pacific Bank

NEW BLDG. ☐ EXISTING BLDG. ☒ COM'L ☒ RES'L ☐

WHEN VALIDATED THIS IS YOUR PERMIT

1984

DECLARATIONS

ie Declarations below are mandated by the tate of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and ofessions Code, and my license is in full force and effect.

ense Class AB-1 License No. 86393

te 12/17/84 Contractor Jeff Poperich for Oltmans

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's license Law r the following reason (Sec. 7031.5, California Busines and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statment that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div.3 of the & P. C.) or that he is exempt therefrom and the basi for the eged exemption. Any violations of Sec. 7031.5 by any applicant r a permit subjects the applicant to a civil penalty of not rore than e hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with tages as eir sole compensation, will do the work, and the structun is not ended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or ered for sale. If, however, the building or improvement s sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

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☐ I am exempt under Sec._____, B. & P. C. for this reason:

te _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. IV-84-005967 Company FREMONT

☒ Certified copy is hereby furnished.

☐ Certified copy is filed with the Department of Building & Safety.

Date 12/17/84 Applicant Jeff Poperich for Oltmans

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Jeff Poperich for Oltmans 12/17/84

Signature of Owner or Contractor ONLY Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the nt and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

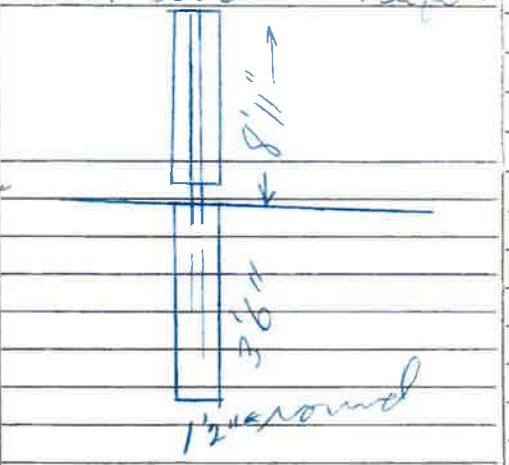
BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides
V 48-17				

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
V-84-17		Monument sign			

Valuation of Job: $3000. Plan No.: none

104-275 C-2



Energy Check Fee	No. (5100 Fund) 61249	
Plan Check Fee	No.	
Plan Check Fee 25.03	No.	
Permit Fee 38.50	No.	
+ State Tax .50		

CR

Job Address: 12826 Philadelphia

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot 7-12 Block Tract

Description of Work: REMOVE PLANTER, PLACE FOOTING IN, PLACE IN SIGN FROM HEATH COMPANY

Property Owner PACIFIC SOUTHWEST REALTY C/O SECURITY PACIFIC NATIONAL BANK

Owner's Address 600 WILSHIRE BLVD, SUITE 300

Owner's Phone 613-8778 ; PAUL EARLSON City L.A., CAL

Architect's Name

Address

Phone Regist. No.

Engineer's Name Regist. No.

Contractor's Name OLTMAN'S CONSTRUCTION CO

Address 516 MONTEREY PASS RD, MONT PARK,

Phone (818) 576 5479 ATTN: JIM RO

State Lic. No. 86393 City Lic. No. 24959

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date
		2/20/86	

1986

DECLARATIONS

1041-2

he Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

104.275

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and rofessions Code, and my license is in full force and effect.

ense Class B License No. 392783

ate 4/19/89 Contractor
EXP 8/31/90

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's License Law r the following reason (Sec. 7031.5, California Business and Pro- ssions Code: Any City which requires a permit to construct, alter, nprove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that e is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the . & P. C.) or that he is exempt therefrom and the basis for the leged exemption. Any violations of Sec. 7031.5 by any applicant r a permit subjects the applicant to a civil penalty of not more than ve hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as eir sole compensation, will do the work, and the structure is not tended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or nproves thereon, and who does such work himself or through his wn employees, provided that such improvements are not intended or fered for sale. If, however, the building or improvement is sold ithin one year of completion, the owner-builder will have the urden of proving that he did not build or improve for the purpose f sale.).

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☐ I am exempt under Sec. _____, B. & P. C. for this reason:

ate _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. 0168A59-88 Company STATE FUND

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 4/19/89 Applicant

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Signature of Owner or Contractor ONLY — Date 4/19/89

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the ont and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Use Zone	Fire Zone	Total Req'd Parking	Req'd Yards Front	Rear	E-W Sides
C-2	1	EXEMPT	0	40'	0-10'

Type Const.	Group	Stories	Occ. Load	Ex. Use
III - 1HR.	F-2	2	127	F-2

# Var. or P.P.	Valuation of Job	Plan No.
—	# 40,000.00	7241-A

EXISTING 1ST FL = 5628 #
" 2ND " = 1790 #
" CELLAR = 1856 #
NEW 1ST FL. AR = 1195 #
DRIVE-UP CANOPY = 808 #

CANOPY NORTH = 107 #
CANOPY SOUTH = 253 #

Remarks

Rough

Final 9-29-75 wm

Plan — No. 76537

Check Fee 102.05

Plan — No. —

Check Fee

Permit Fee

No.

Job Address: 12826 PHILADELPHIA

DEPT. OF BUILDING — BUILDING

Lot — Blk. — Tract

Description of Work REVISION OF PLAN #7241 PLAN CHECK FOR CHANGES (SEE PERMIT # 76269

Property Owner PACIFIC SO. WEST REALTY

Owner's Address 333 SO HOPE ST. LOS ANGELES Phone

Lender

Address

Architect GRIFFIN & BANKS

State Lic. No. Phone (714) 8

Engineer WHEELER & GRAY, S

State Lic. No. Phone

Contractor E & T CONSTRUCTOR

Contractor's Address 20605 EARL ST. TORRANCE Phone 772-7

City Lic. No. 36938 State Lic. No. 1406

I hereby acknowledge that I have read this application above is correct and agree to comply with all ordinances I hereby certify that I am properly registered and or licen by the City of Whittier and/or State of California, or that owner of the above described property, and I certify th formance of the work for which this permit is issued I sh any person in violation of the workmen's compensation law

Signature of Permittee

WHEN VALIDATED THIS IS YOUR PERMIT

+ [redacted] 759403 CK 76537 • B — 1

1989

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The

— APPLICANT —

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AI

OWNER: FILL IN DECLARATION 2, 4 AND

1. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class C-39 License No. 365357

Date 04/25/91 Contractor Louis Ablaca

11/30/92

2. OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec. 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

Date _____ Owner _____

3. WORKER'S CC

I hereby affirm that I hav
a certificate of worker's C
thereof. (Sec. 3800, Lab. C.

Policy No SXP0719

☑ Certified copy is her

☐ Certified copy is fi
Safety.

Date 04/25/91 Applic

CERTIFICATE OF
COMPEN

I certify that in the perfor
is issued, I shall not empl
become subject to the Wo

Date _____ Applic

NOTICE TO APPLICANT: If
tion, you should become su
the Labor Code, you must
this permit shall be deemed

4. CONSTRUCT

I hereby affirm that there
performance of the work fo
Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read th
information is correct. I agre
relating to the building co
sentatives of this City to en
for inspection purposes.

Louis Ab

Signature of Owner or Cont

— IMPORTANT —

Application is hereby made to the Superintendent of Building and Safety for a permit subject to the con
front and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request
under or pursuant to any permit issued as a result of this application agrees to and shall, i
Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not comr
(180) DAYS from date of issuance of such permit.

DEPT. USE ONLY

BUILDING & PLANNING

Use Zone	Total Req'd Parking	Req'd Yards Front	Rear	Sides
C-2				

Fire Zone	Type Const.	Group	No. of Stories	Occupant Load	Exist. Use
1					

# Variance or Precise Plan	Lot Int. ☐ Cor. ☐ Rev. Cor. ☐	Valuation of Job
		1200.00

Job Area —

Plan No. —

Remarks

11-13 Cy Job done.
No call for insp Amer

Rough

Final

Plan No.

Check Fee

Plan No.

Check Fee

Permit Fee 9.00

023177 mk

No.

Job Address: 12826 201 W. Philadelphia

BUILDING

DEPT. OF BUILDING WHITTIER, CALIF.

Lot Blk. Tract

Description of Work Reroof. 5-15 # Rock. Subject to Fld insp Fire retardant roof

Owner See First Nat Bank.

Owner's Address Los Angeles. Phone

Architect None.

State Lic. No. 131545 Phone La 54232.

Engineer None.

State Lic. No. 1 Phone

Contractor Service Roofing Co.

Contractor's Address P.O. Box. 133

Fullerton. Phone La 54232.

City Lic. No. 9941. State Lic. No. 315745

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws. I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee

WHEN VALIDATED THIS IS YOUR PERMIT

OCT--8-64 45433 CK 29177• E — 2 9.00

PHILADELPHIA
WHITTIER

DING WHITTIER, CALIF.

Tract Whittier

ROOF:
- BUILT-UP
E TRUMBULL
ELT OCF
S BASE
AD 92#
d NAILS CLASS A
HWEST REALTY
TERMINAL ANNEX
766 City LOS ANGELES CA-9005

Regist. No.

Regist. No.

ORGANIZATION
HON BLVD
0155

y Lic. No. 30732

S IS YOUR PERMIT OK

490134
1000-3 271.50
1000-204 5.82

oundation Date

al OK 11/25/91 Date

1991

DO NOT SEPARATE

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

– APPLICANT –

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5

OWNER: FILL IN DECLARATION 2, 4 AND 5

175000

1. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class C20 License No. 350935

Date 4/14/99 Contractor Dockstader

2. OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).)

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P.C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.)

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044 B & P. C.: The Contractors License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.)

☐ I am exempt under Sec. _____ B. & P.C. for this reason:

Date _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

___ I have and will maintain a certificate to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier Golden eagle

Policy Number NWC545172 05

(The following section need not be completed if permit valuation is $100 or less)

___ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 4/14/99 Applicant: _____

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

5. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

_____ 4/14/99

Signature of Applicant or Agent Date

IMPORTANT

Application is hereby made to the Director of Building and Safety for a permit subject to the conditions and restrictions hereon.

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY - (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	V-N	B	1	30	

Valuation of Job 175000.00 — Plan No. 6061

G.F.A = 5944 sq ft.

Exist point thru door (new) OTC (Dynamark existing) Const 4/14/99

Terry Smith (310) 652-8073

WILL THE APPLICANT OR FUTURE BUILDING OCCUPANT HANDLE A HAZARDOUS MATERIAL OR A MIXTURE CONTAINING A HAZARDOUS MATERIAL EQUAL TO OR GREATER THAN THE AMOUNTS SPECIFIED ON THE HAZARDOUS MATERIALS INFORMATION GUIDE

YES NO

WILL THE INTENDED USE OF THE BUILDING BY THE APPLICANT OR FUTURE BUILDING OCCUPANT REQUIRE A PERMIT FOR CONSTRUCTION OR MODIFICATION FROM THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) SEE PERMITTING CHECKLIST FOR GUIDELINES

YES NO

I HAVE READ THE HAZARDOUS MATERIALS INFORMATION GUIDE AND THE SCAQMD PERMITTING CHECKLIST. I UNDERSTAND MY REQUIREMENTS UNDER THE LOS ANGELES COUNTY CODE TITLE 2 CHAPTER 2.28 SECTIONS 2.20.100 THROUGH 2.20.140 CONCERNING HAZARDOUS MATERIALS REPORTING AND FOR OBTAINING A PERMIT FROM THE SCAQMD

OWNER OR AGENT

Energy Check Fee $ 80.00	No. 1000 - 453	
Plan Check $ 644.93	No.	
Plan Check Fee	No.	
Permit Fee $ 1007.20	No. 082400	
+ State Tax $ 36.75	I or II	
G. P. Update Fee 350.00	1000-341	

Job Address 1282 CEPHILADELPHIA

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot legal Block on file Tract

Description of Work: 5000 ± CONVERT EXIST'G BANK INTO MEDICAL OFFICES, NON-BEARING STL STUD PARTITIONS

Property Owner BEVERLY PROFFESSIONAL

Owner's Address 15624 MARVISTA

Owner's Phone 562-945-2816 City WHITTIER

Architect's Name ARCHEX INT'L

Address 1220 ROSECRANS STE 438

Phone 714-952-2233 Regist. No.

Engineer's Name FISCHER Regist No. 14501

Contractor's Name Dockstader

Address 6727 S Greenleaf

Phone 5626980241

State Lic. No. 350935 City Lic. No.

WHEN VALIDATED THIS IS YOUR PERMIT

04/14/99 9:43AM 000001#7382 **02
1000-453 $80.00
04/14/99 9:43AM 000001#7382 **02
1000-342 $1007.20
04/14/99 9:43AM 000001#7382 **03
1000-204 $36.75
04/14/99 9:43AM 000001#7382 **03
1000-341 $350.00

Set Backs	Date	Foundation	Date
Rough OK	**Date**	**Final OK**	**Date**
	6-22-99 CLA		10-12-99 CLA

1999

DO NOT SEPARATE

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

– APPLICANT –

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5

OWNER: FILL IN DECLARATION 2, 4 AND 5

1. **LICENSED CONTRACTOR'S DECLARATION**

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class B-GEN License No. 350935

Date 4-20-99 Contractor Dockstaders

2. 10-31-2000 **OWNER-BUILDER DECLARATION**

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec. 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).)

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P. C. The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.)

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B. & P. C. The Contractors License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.)

☐ I am exempt under Sec. _____, B. & P. C. for this reason

Date _____ Owner _____

3. **WORKER'S COMPENSATION DECLARATION**

I hereby affirm under penalty of perjury one of the following declarations:

___ I have and will maintain a certificate to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

✓ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier Golden Eagle

Policy Number 545170-05

(The following section need not be completed if permit valuation is $100 or less)

___ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 4-20-99 Applicant Melody Farwell

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

4. **CONSTRUCTION LENDING AGENCY**

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

5. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

Melody Farwell 4/20/99

Signature of Applicant or Agent Date

IMPORTANT

Application is hereby made to the Director of Building and Safety for a permit subject to the conditions and restrictions hereon.

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY - (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	Nroof				

Valuation of Job 11000 08 — Plan No.

70 squares

4-23-99 - North 2/3 of Roof Base sheet skid. Cla

4-23-99 - Base sheet skid. Cla

WILL THE APPLICANT OR FUTURE BUILDING OCCUPANT HANDLE A HAZARDOUS MATERIAL OR A MIXTURE CONTAINING A HAZARDOUS MATERIAL EQUAL TO OR GREATER THAN THE AMOUNTS SPECIFIED ON THE HAZARDOUS MATERIALS INFORMATION GUIDE

YES NO

WILL THE INTENDED USE OF THE BUILDING BY THE APPLICANT OR FUTURE BUILDING OCCUPANT REQUIRE A PERMIT FOR CONSTRUCTION OR MODIFICATION FROM THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) SEE PERMITTING CHECKLIST FOR GUIDELINES

YES NO

I HAVE READ THE HAZARDOUS MATERIALS INFORMATION GUIDE AND THE SCAQMD PERMITTING CHECKLIST. I UNDERSTAND MY REQUIREMENTS UNDER THE LOS ANGELES COUNTY CODE, TITLE 2, CHAPTER 2.28, SECTIONS 2.20.100 THROUGH 2.20.140 CONCERNING HAZARDOUS MATERIALS REPORTING AND FOR OBTAINING A PERMIT FROM THE SCAQMD.

OWNER OR AGENT

Energy Check Fee	No.	
Plan Check Fee	No.	
Plan Check Fee	No.	
Permit Fee $ 153 60	No. 082465	
+ State Tax $ 2 31	I or II	
G. P. Update Fee $ 92 00	1000-341	

Job Address 12826 Philadelphia

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot Block Tract

Description of Work:

Install Built up roof over one exist. Roof Min. Class A

#5510

Property Owner Beverly Professio

Owner's Address 15624 Marvista

Owner's Phone 562 945-2816 City Whitti

Architect's Name Archex INTL

Address 1220 Rosecrans #4

Phone 714-952-2233 Regist. No.

Engineer's Name Fischer Regist. No.

Contractor's Name Dockstaders

Address 6727 S. Greenleaf

Phone 562 698-0201 #5510

State Lic. No. 350935 City Lic. No.

WHEN VALIDATED THIS IS YOUR PERMIT

1000-342 $153.6

04/20/99 3:15PM 000001#7948 **0

1000-204 $2.3

04/20/99 3:15PM 000001#7948 **0

1000-341 $22.0

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date
		5-5-99	Cla

City of Whittier
Building & Safety Division

13230 Penn Street, Whittier, California 90602-1772
(562) 567-9339 (562) 567-9320 Fax (562)567-2872

Project No.

Permit valid for 180 days

PROJECT DATA

No.	NESW	Street	Suffix	Unit No.	Project Valuation
12826		Philadelphia	St		$ -

AIN	8139-024-027	LU Zone	Uptown Center	Use/Division	B
Lot		Case Ref	DRC14-022	Const. Type	VB
Tract		Case Ref		No. Stories	1
Crest Map		VHFHSZ		Sprinklered	No

DESCRIPTION

Alter/Remodel 8 EA Replace 8 Exterior Light Fixtures on Existing Circuits

PROPERTY OWNER

Company: BEVERLY PROFESSIONAL COMPANY LLC
Last Name: First Name:
No. 12826 NESW: Street: Philadelphia Suffix: St Unit No.:
PO Box: Phone: (562) 789-9908
City: Whittier Fax:
State: CA Zip: 90601 E-Mail:

ARCHITECT / ENGINEER / DESIGNER

Company: Lic No.:
Last Name: First Name:
No. NESW Street: Suffix: Unit No.:
PO Box: Phone:
City: Fax:
State: Zip: E-Mail:

AGENT / CONTACT

Company:
Last Name: First Name:
No. NESW Street: Suffix: Unit No.:
PO Box: Phone:
City: Fax:
State: Zip: E-Mail:

CONTRACTOR

Company: Lic No.: 918347
Last Name: Wang First Name: Andrew
No. 975 NESW Street: Saed Suffix: St Unit No.:
PO Box: Phone: (626) 376-3129
City: Pomona Fax:
State: CA Zip: 91768 E-Mail:

ELECTRICAL PERMIT

FEE CALCULATION

Qty	Description	$/Ea	Fee
New Residence			
-	To 750 SF	46.00	0.00
-	750 - 1,000 SF	61.50	0.00
-	1,001 - 1,400 SF	87.00	0.00
-	1,401 - 1,700 SF	illegible	0.00
-	1,701 - 2,000 SF	illegible	0.00
-	2,001 - 3,000 SF	illegible	0.00
-	3,001 - 4,000 SF	illegible	0.00
-	+4,000 SF/ ea 1,000 SF	49.50	0.00
-		0.00	0.00
Service, Panels, Circuits			
-	Temporary power pole	27.50	0.00
-	Serv Pnl to 200A	27.50	0.00
-	Serv Pnl 201A-1,000A	66.00	0.00
-	Serv Pnl +1,000A	illegible	0.00
-	Sub Panel	33.00	0.00
-	Circuit Protection	10.00	0.00
-	GFI Circuit Protectn	10.00	0.00
-	AFI Circuit Protectn	10.00	0.00
-	A/C Disconnect	7.50	0.00

Qty	Description	$/Ea	Fee
Devices			
-	120v Outlet	1.50	0.00
-	208v, 220v Outlet	9.00	0.00
-	Switches	1.50	0.00
8	Fixtures	1.50	12.00
-	Emergency light/sign	9.00	0.00
Motors, Transformers			
-	To 5 bhp	7.50	0.00
-	5.1 - 10 bhp	13.00	0.00
-	10.1 - 50 bhp	27.50	0.00
-	50.1 - 100 bhp	55.00	0.00
-	100.1 - 500 bhp	82.50	0.00
-	500+ bhp	93.50	0.00
Other			
-	Time Clock	9.00	0.00
-	Sign	27.50	0.00
-	Temp. Lighting	24.00	0.00
-	Pool / Spa Electrical	66.00	0.00
-	Appliance	9.00	0.00
-	Res Solar PV System	7.50	0.00

Added Plan Review Fees				
Added MEP Review	-	HR	$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
Credit / Prior Pmt	-	EA	$	-

Permit Fees				
Permit Fee			$	12.00
Filing Fee	1	EA	$	31.00
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
Credit / Prior Pmt	-	EA	$	-

Date Issued			January 9, 2014
Issued By			M. Connell
TOTAL PLAN REVIEW	BP1	$	-
			000000
Permit	EL	$	43.00
Technology Fee	TE	$	10.00
Document Imaging Fee		$	-
WRA Credits - EA	EL	$	-
TOTAL PERMIT, FEES		$	53.00
PERMIT NUMBER			145663

VALIDATION

Application not valid unless Validation stamp appears below

RCP DATE:01/09/14 RCP#CT000940594

DESCRIPTION	AMOUNT
ZONING&SUBDIVISION F	$43.00
ELECTRICAL PERMIT	$43.00
TECH FEE BLDG PERMIT	$10.00
TOTAL PAID	$96.00
CRED AMT:	$96.00

INSPECTION RECORD

Other
- Drywall Repair
- Stucco Repair

Electrical
- Undrfl/slab Elc
- R. Electrical
- Smoke Alarm
- Release Power
- F. Electrical

COMMENTS

EXPIRED

2014

DECLARATIONS

1. LICENSED CONTRACTOR DECLARATION:
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the California Business and Professions Code, and my license is in full force and effect.
License No. and Class 918347 Expiration 05/31/2015 Contractor's Signature [signature]

2. OWNER / BUILDER DECLARATION:
I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the check mark(s) I have placed next to the applicable items(s) [Business and Professions Code Section 7031.5: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).]:

( ) **I, as owner of the property, or my employees with wages as their sole compensation, will do (__) all or (_) portions of the work,** and the structure is not intended or offered for sale (Business and Professions Code Section 7044: The Contractor's State License Law does not apply to an owner of a property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

(__) **I, as owner of the property, am exclusively contracting with licensed contractors to construct the project** (Business and Professions Code Section 7044: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project(s) with a licensed contractor pursuant to the Contractors' State License Law.).

(__) **I certify that, in the performance of the work from licensure under the Contractors' State License Law for the following reason(s):** _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: http://www.leginfo.ca.gov/calaw.html.

Property Owner or Authorized Agent signature _____ Date: _____

3. WORKERS' COMPENSATION DECLARATION:

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITIOIN TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

(X) **I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations** as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Policy No. _____

(__) **I have and will maintain workers' compensation insurance,** as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier _____ Policy No. _____ Expiration Date _____

(X) **I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California,** and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

4. CONSTRUCTION LENDING AGENCY DECLARATION:
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Civil Code Section 3097).
Lender's Name _____ Address _____

5. HAZARDOUS MATERIALS DECLARATION:
Will the applicant or future building occupant handle a hazardous material or a mixture containing a hazardous material equal to or greater than the amounts specified on the hazardous materials guide? ☐ Yes ☒ No

Will the intended use of the building by the applicant or future building occupant require a permit for construction or modification from the South Coast Air Quality Management District (see SCAQMD permitting checklist for guidelines)? ☐ Yes ☒ No

I have read the hazardous materials information guide and the SCAQMD permitting checklist. I understand my requirements under the Los Angeles County Code Title 2, Chapter 2.28, Sections 2.20.100 through 2.20.140 concerning hazardous materials reporting and for obtaining a permit from the SCAQMD.

Andrew Wang
Print Owner or Agent Name

6. PERMIT APPLICANT DECLARATION:
By my signature below, I certify to each of the following:

(X) **I am a California licensed contractor, or**

(__) **I am the property owner, or**

(__) **I am authorized to act on behalf of the property owner***

Building Permit#	
Mechanical Permit#	
Electrical Permit#	145663
Plumbing Permit#	
Job Address	12826 PHILADELPHIA

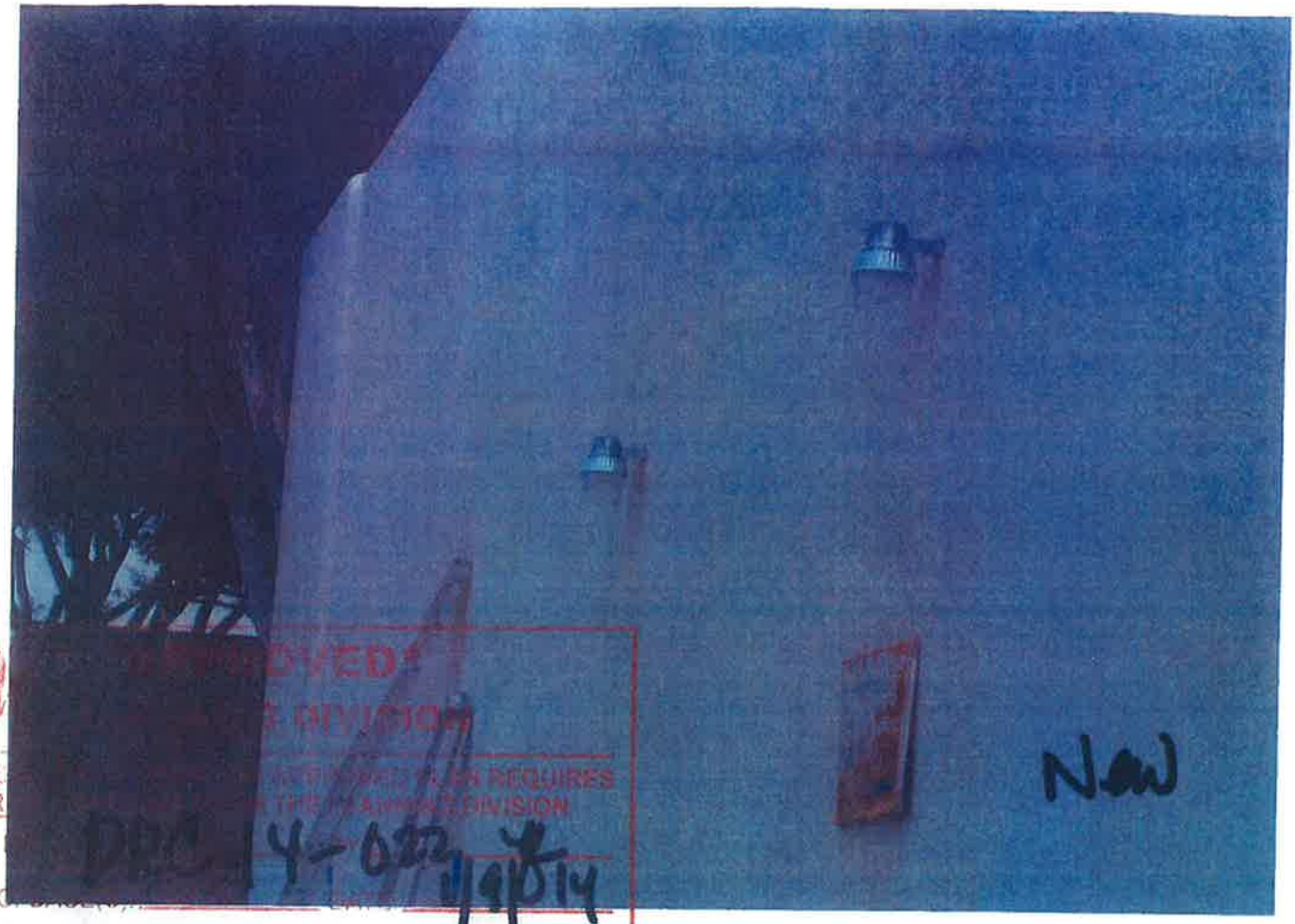
I have read this construction permit application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction and by my signature below further indicate that I understand said code requirements for the work to be performed. I authorize representatives of the City of Whittier to enter the property subject to this permit for inspection purposes. I understand that application to the Building Official for a permit is subject to the conditions and restriction hereon and including:

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within, or has become inactive for a period of, ONE HUNDRED EIGHTY (180) DAYS.
3. The issuance or granting of a permit or approval as a result of inspection shall not be construed to be an approval or a violation of the provisions of any state or local codes or ordinances. Plan review or inspection approvals presuming to give authority to violate or cancel the provisions of any state or local codes or ordinances shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

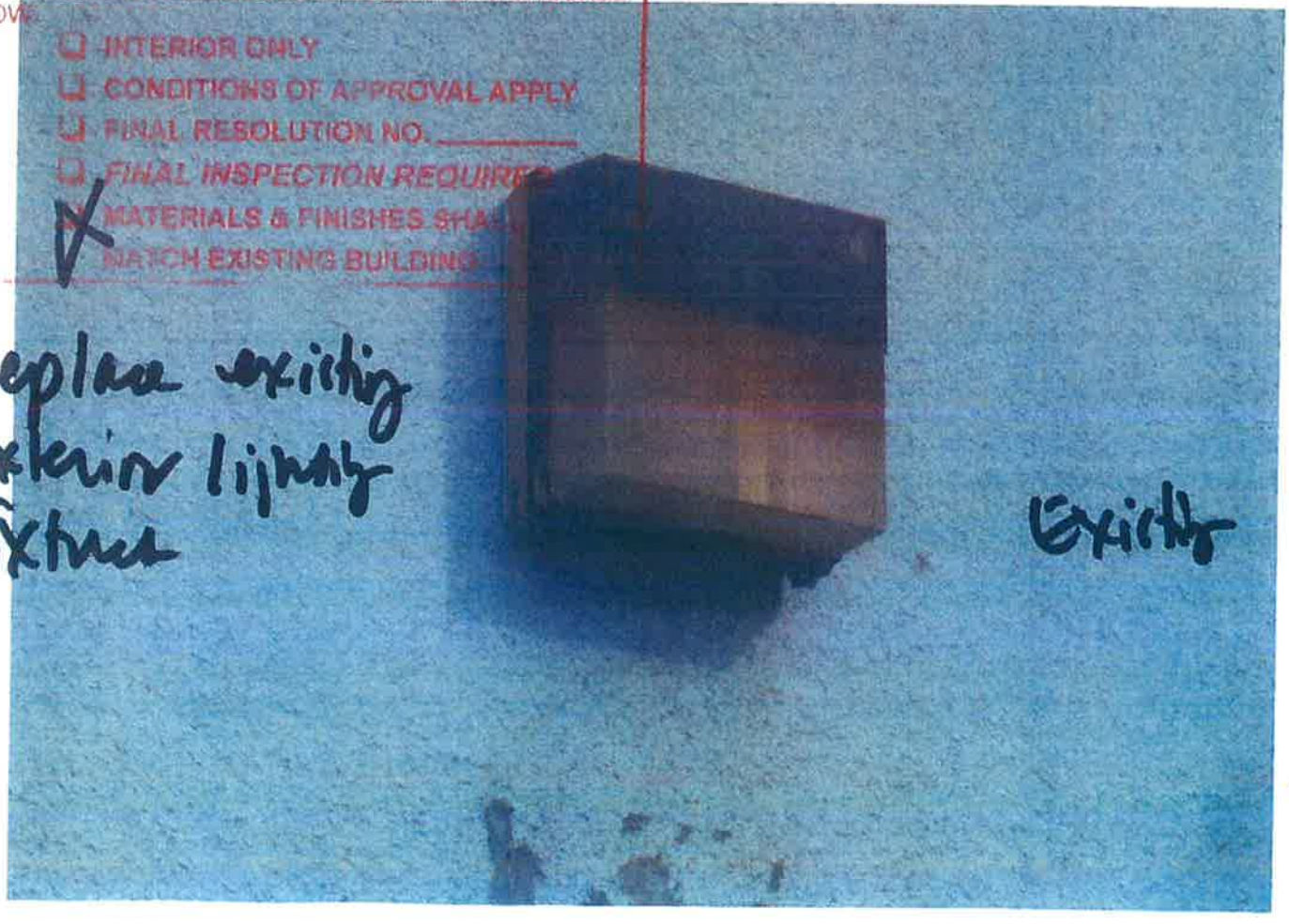
Print Name Andrew Wang
Signature [signature] Date 07/09/2014

*Requires separate authorization form

2014
(Rev 05/12)



APPROVED
DIVISION
ANY
PR
CASE
ASSOC
APPROVAL SUBJECT TO CONDITIONS & ITEMS CHECKED BELOW
INTERIOR ONLY
CONDITIONS OF APPROVAL APPLY
FINAL RESOLUTION NO. _____
FINAL INSPECTION REQUIRED
MATERIALS & FINISHES SHALL MATCH EXISTING BUILDING



PLANNING DIVISION CLEARANCE

THIS FORM SHALL BE SUBMITTED WITH PLANNING APPROVAL TO THE BUILDING DIVISION WHEN APPLYING FOR BUILDING PERMITS

PROJECT ADDRESS: 12826 Philadelphia St. CASE NO.: DRC 14022

APN: 8139-024-027 TRACT NO. _____ LOT NO. _____

PROJECT DESCRIPTION: Replacement lighting

ZONING PAGE MAP NO 104 -- 275 ZONE: Uptown Centu

DATE APPROVED: 1/9/14 APPEAL PERIOD ENDS: _____

REVIEWED BY:

- ☐ Don Dooley
- ☐ Jeff Adams
- ☐ Sonya Lui
- ☐ Luis G. Escobedo
- ☒ Ellen Fitzgerald
- ☐ Brooke Daley

BUILDING DIVISION:

☐ Please consult with planner prior to final.

☐ Please consult with planner prior to: _____ Foundation Pouring; _____ Exterior Covering

☒ No consultation needed prior to final. Please drop in Planning box

Building Date Final: _____

- ☐ Matt Winter
- ☐ Robert Horney
- ☐ Mike Moser
- ☐ Chris Diercks
- ☐ Michelle Harencame
- ☐ _____

PLANNING – ONCE PERMIT IS FINALLED

☐ Green sheet entered in database Date entered: _____ BY _____

File Clearance Sheet as Appropriate

2014

City of Whittier

Building & Safety Division

13230 Penn Street, Whittier, California 90602-1772
(562) 567-9339 (562) 567-9320 Fax (562)567-2872

Project No.
14PR416
Permit valid for 180 days

PROJECT DATA

No	NESW	Street	Suffix	Unit No.	Project Valuation
12826		Philadelphia	St	Suite C	$ 3,000

AIN	8139-024-027	LU Zone	USP	Use/Division	M
Lot	9	Case Ref	DRC-14-801	Const. Type	V-B
Tract		Case Ref		No. Stories	1
Crest Map	104-275	VHFHSZ		Sprinklered	No

DESCRIPTION

Alter/Remodel 1 EA New ADA Counter
EA
Must meet ADA requirements

PROPERTY OWNER

Company: Beverly Professionals Company LLC
Last Name: First Name:
No: NESW: Street: Suffix: Unit No:
12826 Philadelphia St Suite C
PO Box: 1188 Phone: (714) 826-8258
City: Whittier Fax:
State: CA Zip: 90601 E-Mail:

ARCHITECT / ENGINEER / DESIGNER

Company: TP Designs Lic No:
Last Name: Pham First Name: Tuan
No: NESW: Street: Suffix: Unit No:
9025 Warner Ave D
PO Box: Phone: (714) 264-4898
City: Fountain Valley Fax:
State: CA Zip: 92708 E-Mail:

AGENT / CONTACT

Company:
Last Name: Pham First Name: Tuan
No: NESW: Street: Suffix: Unit No:
PO Box: Phone: (714) 264-4898
City: Fax:
State: Zip: E-Mail:

CONTRACTOR

Company: Chris Do Lic No: 894391
Last Name: Do First Name: Chris
No: NESW: Street: Suffix: Unit No:
11742 Plamwod Dr
PO Box: Phone: (714) 422-4721
City: Garden Grove Fax:
State: CA Zip: 92840 E-Mail:

BUILDING PERMIT

INSPECTION RECORD

Prior to Concrete Pour
- Setbacks
- Undrfir/slab Mech
- Undrfir/slab Elect
- Undrfir/slab Plmb
- Footings / Steel
- Slab/Reinforcing

Prior to Rough Approval
- Floor Framing
- Underfloor Insul
- 1st Flr Framing
- 2nd Flr Framing
- Roof Sheathing
- Ext. Shear Pnl

Prior to Wall Cover
- Gas Test
- Plmb Top Out
- Smoke Chamber
- R. Mechanical
- R. Electrical
- R. Plumbing
- Planning Div
- R. Framing
- Smoke Detectors
- Carbon Monoxide

Prior to Cover of Fasteners
- Roof In Prog
- Roof Base Sht
- Ext. Lath
- Ext. Siding
- Insulation
- Int. Lath
- Drywall
- T-Bar

Prior to Cover w/ Soil
- Site Sewer
- Site Water
- Site Drainage
- Site Gas
- Site Elect

Prior to Building Used or Occupied
- F. Mechanical
- F. Electrical
- F. Plumbing
- Parks Dept.
- Fire Dept.
- Plng Final Required: No BD
- Planning Div
- PW Dept
- Final Building: 4-16-15 MM

COMMENTS

FEE CALCULATION

Valuation

Final / Adjusted Value		$	3,000.00

Added Plan Review Fees

Added MEP Review	-	HR	$	-
Added Plan Review	1		$	120.00
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
Credit / Prior Pmt	-	EA	$	-

Permit Fees

Permit Fee (based on Final Value)			$	155.08
Filing Fee	1	EA	$	31.00
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
	-		$	-
Credit / Prior Pmt	-	EA	$	-

Other Fees Paid

LA County Sanitation District	$	-
AIPP (In-Lieu) Fee	$	-
Parks (In-Lieu) Fee	$	-
Development Impact Fees	$	-
Other	$	-
	$	-
	$	-
	$	-
	$	-
	$	-

Date Issued			February 18, 2015
Issued By			C. Castillo
TOTAL PLAN REVIEW	BP1	$	120.00
			150584
Permit	BP2	$	186.08
CA SIMP Fee Class 2.8	BP3	$	0.84
CA Green Bldg Fee	BP3G	$	4.00
GP Update Fee	BP4	$	6.00
Technology Fee	TE	$	24.00
Document Imaging Fee		$	-
WRA Credits - EA	BP2	$	-
TOTAL PERMIT, FEES		$	220.92
PERMIT NUMBER			150585
TOTAL (PLAN CHECK/PERMIT)		$	340.92

VALIDATION

Application not valid unless Validation stamp appears below

DESCRIPTION	AMOUNT
ZONING&SUBDIVISION F	$104.00
PLAN CHECK FEE	$120.00
PERMIT FEE	$186.08
STATE TAX-STRONG MOT	$ .84
STATE TAX-GREEN BLDG	$4.00
GENERAL PLAN UPDATE	$6.00
TECH FEE BLDG PERMIT	$24.00
TOTAL PAID	$444.92
CASH PAID:	$444.92

2015

DECLARATIONS

1. LICENSED CONTRACTOR DECLARATION:
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the California Business and Professions Code, and my license is in full force and effect.
License No. and Class A B 894391 Expiration 04/30/2015 Contractor's Signature _____

2. OWNER / BUILDER DECLARATION:
I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the check mark(s) I have placed next to the applicable items(s) [Business and Professions Code Section 7031.5: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).]:

(__) **I, as owner of the property, or my employees with wages as their sole compensation, will do (__) all or (__) portions of the work,** and the structure is not intended or offered for sale (Business and Professions Code Section 7044: The Contractor's State License Law does not apply to an owner of a property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

(__) **I, as owner of the property, am exclusively contracting with licensed contractors to construct the project** (Business and Professions Code Section 7044: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project(s) with a licensed contractor pursuant to the Contractors' State License Law.).

(__) **I certify that, in the performance of the work from licensure under the Contractors' State License Law for the following reason(s):** _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: http://www.leginfo.ca.gov/calaw.html.

Property Owner or Authorized Agent signature _____ Date: _____

3. WORKERS' COMPENSATION DECLARATION:

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITIOIN TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

(__) **I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations** as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Policy No. _____

(__) **I have and will maintain workers' compensation insurance,** as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier _____ Policy No. _____ Expiration Date _____

(X) **I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California,** and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

4. CONSTRUCTION LENDING AGENCY DECLARATION:
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Civil Code Section 3097).

Lender's Name _____ Address _____

5. HAZARDOUS MATERIALS DECLARATION:
Will the applicant or future building occupant handle a hazardous material or a mixture containing a hazardous material equal to or greater than the amounts specified on the hazardous materials guide? ☐ Yes ☒ No

Will the intended use of the building by the applicant or future building occupant require a permit for construction or modification from the South Coast Air Quality Management District (see SCAQMD permitting checklist for guidelines)? ☐ Yes ☒ No

I have read the hazardous materials information guide and the SCAQMD permitting checklist. I understand my requirements under the Los Angeles County Code Title 2, Chapter 2.28, Sections 2.20.100 through 2.20.140 concerning hazardous materials reporting and for obtaining a permit from the SCAQMD.

CHRIS DO
Print Owner or Agent Name

Building Permit#	150588
Mechanical Permit#	—
Electrical Permit#	—
Plumbing Permit#	—
Job Address	12826 Philadelphia,

6. PERMIT APPLICANT DECLARATION:
By my signature below, I certify to each of the following:

(X) **I am a California licensed contractor, or**

(__) **I am the property owner, or**

(__) **I am authorized to act on behalf of the property owner***

I have read this construction permit application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction and by my signature below further indicate that I understand said code requirements for the work to be performed. I authorize representatives of the City of Whittier to enter the property subject to this permit for inspection purposes. I understand that application to the Building Official for a permit is subject to the conditions and restriction hereon and including:

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within, or has become inactive for a period of, ONE HUNDRED EIGHTY (180) DAYS.
3. The issuance or granting of a permit or approval as a result of inspection shall not be construed to be an approval or a violation of the provisions of any state or local codes or ordinances. Plan review or inspection approvals presuming to give authority to violate or cancel the provisions of any state or local codes or ordinances shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

Print Name CHRIS DO
Signature _____ Date 2/18/2015

2015

* Requires separate authorization form

(Rev 05/12)

APPENDIX D:

SANBORN FIRE INSURANCE MAPS

12826 PHILADELPHIA ST

12826 PHILADELPHIA ST

WHITTIER, CA 90602

Inquiry Number: 6324469.3

January 07, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

01/07/21

Site Name:	Client Name:
12826 PHILADELPHIA ST	PIC Environmental Services
12826 PHILADELPHIA ST	2619 Sierra Way
WHITTIER, CA 90602	La Verne, CA 91750
EDR Inquiry # 6324469.3	Contact: Tim Hersch

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by PIC Environmental Services were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 9D8B-4B2C-B355

PO # NA

Project E4364

Maps Provided:

1962	1891
1961	1888
1949	
1925	
1912	
1907	
1900	
1894	

Sanborn® Library search results

Certification #: 9D8B-4B2C-B355

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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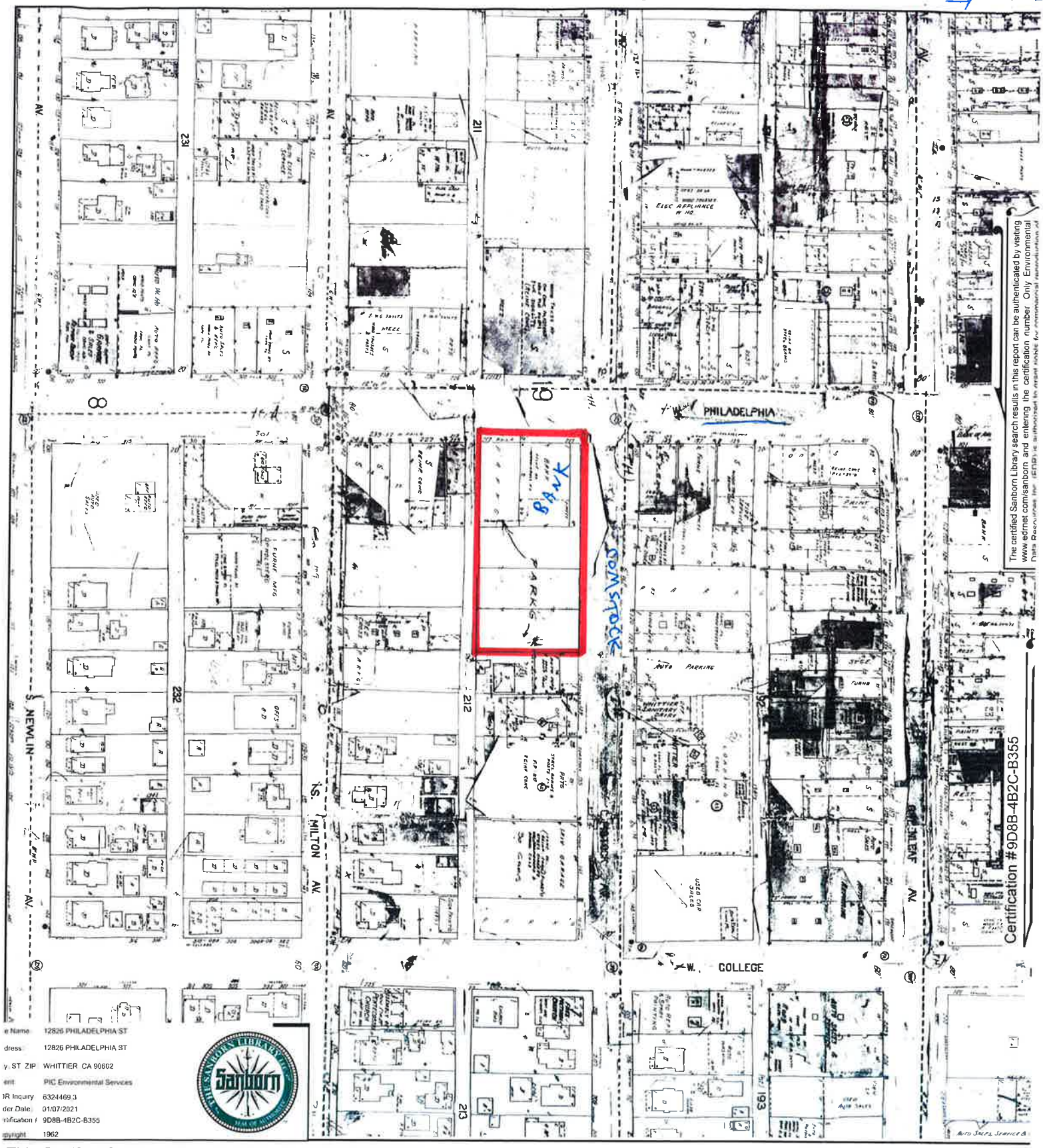
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Certified Sanborn® Map

1962



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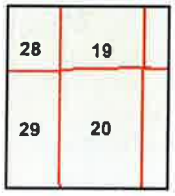
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dress: 12826 PHILADELPHIA ST
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ent: PIC Environmental Services
)R Inquiry: 6324469.3
der Date: 01/07/2021
rtification #: 9D8B-4B2C-B355
pyright: 1962

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Outlined areas indicate map sheets within the collection.

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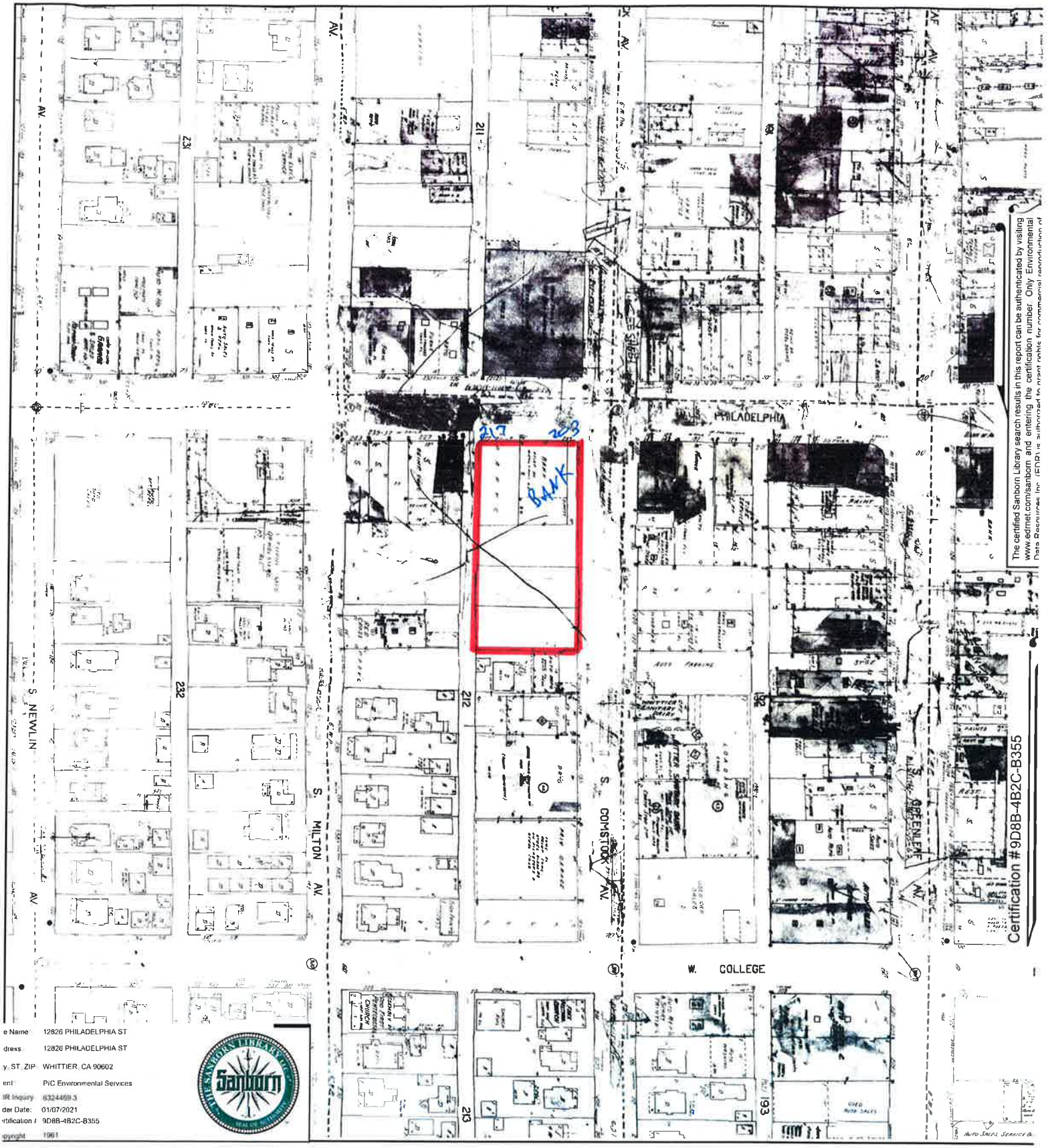


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Volume 1, Sheet 28
Volume 1, Sheet 20
Volume 1, Sheet 19

N

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→ 1961



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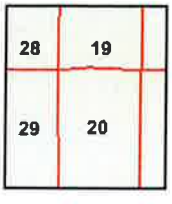
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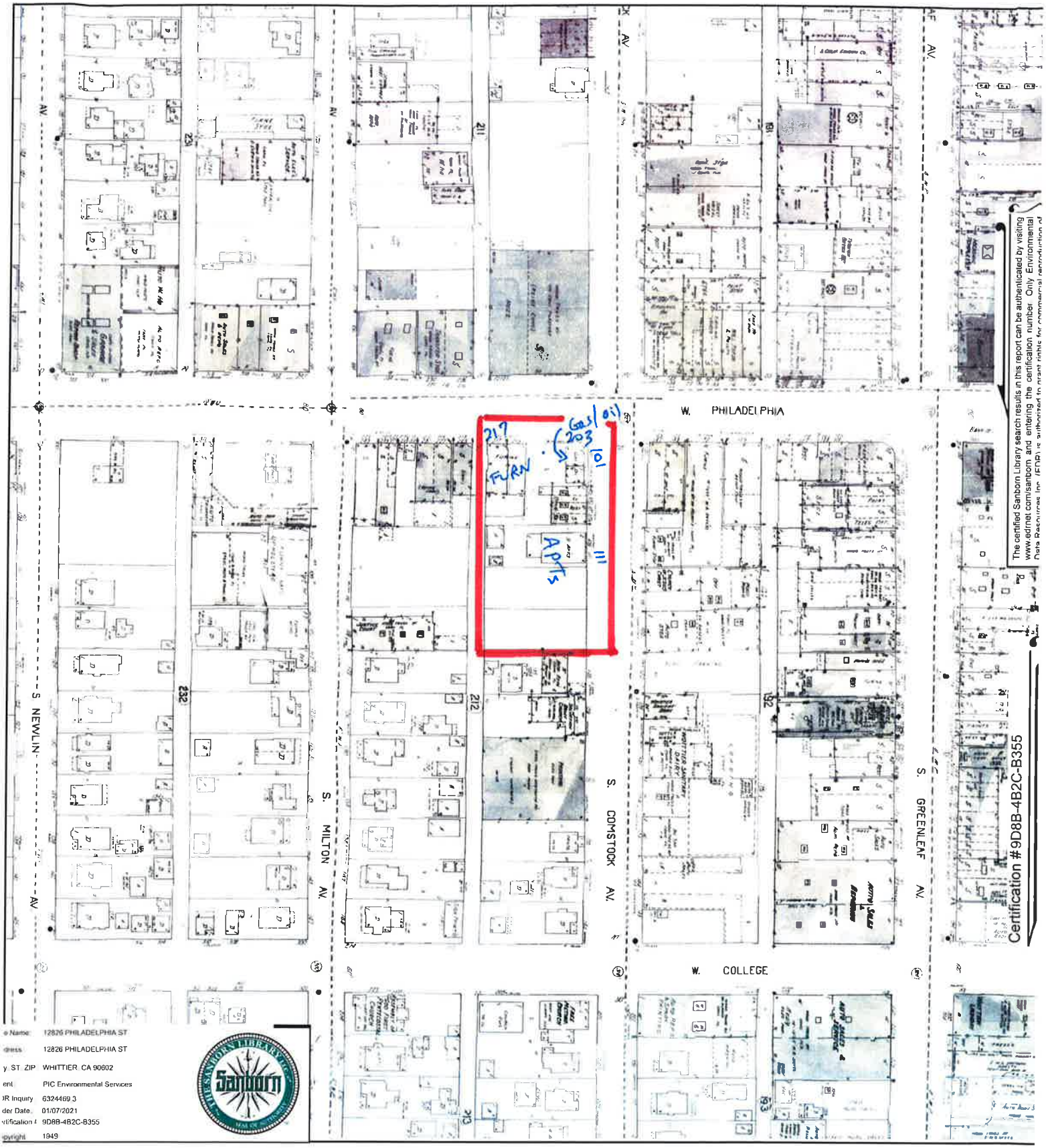
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Volume 1, Sheet 28
Volume 1, Sheet 20
Volume 1, Sheet 19

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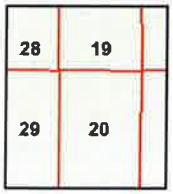
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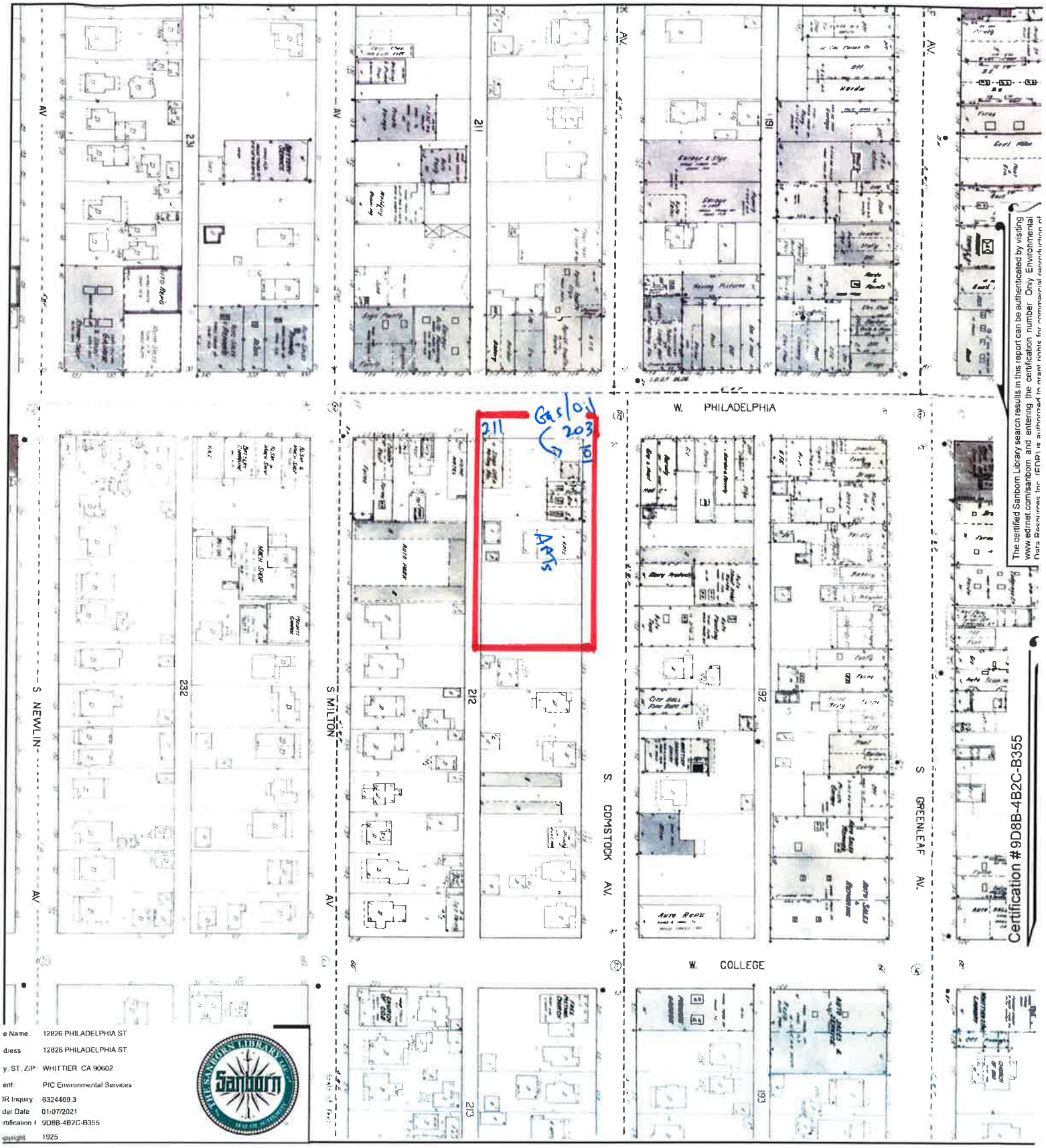




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Volume 1, Sheet 28
Volume 1, Sheet 20
Volume 1, Sheet 19

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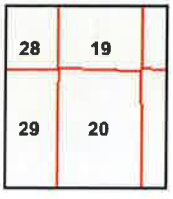
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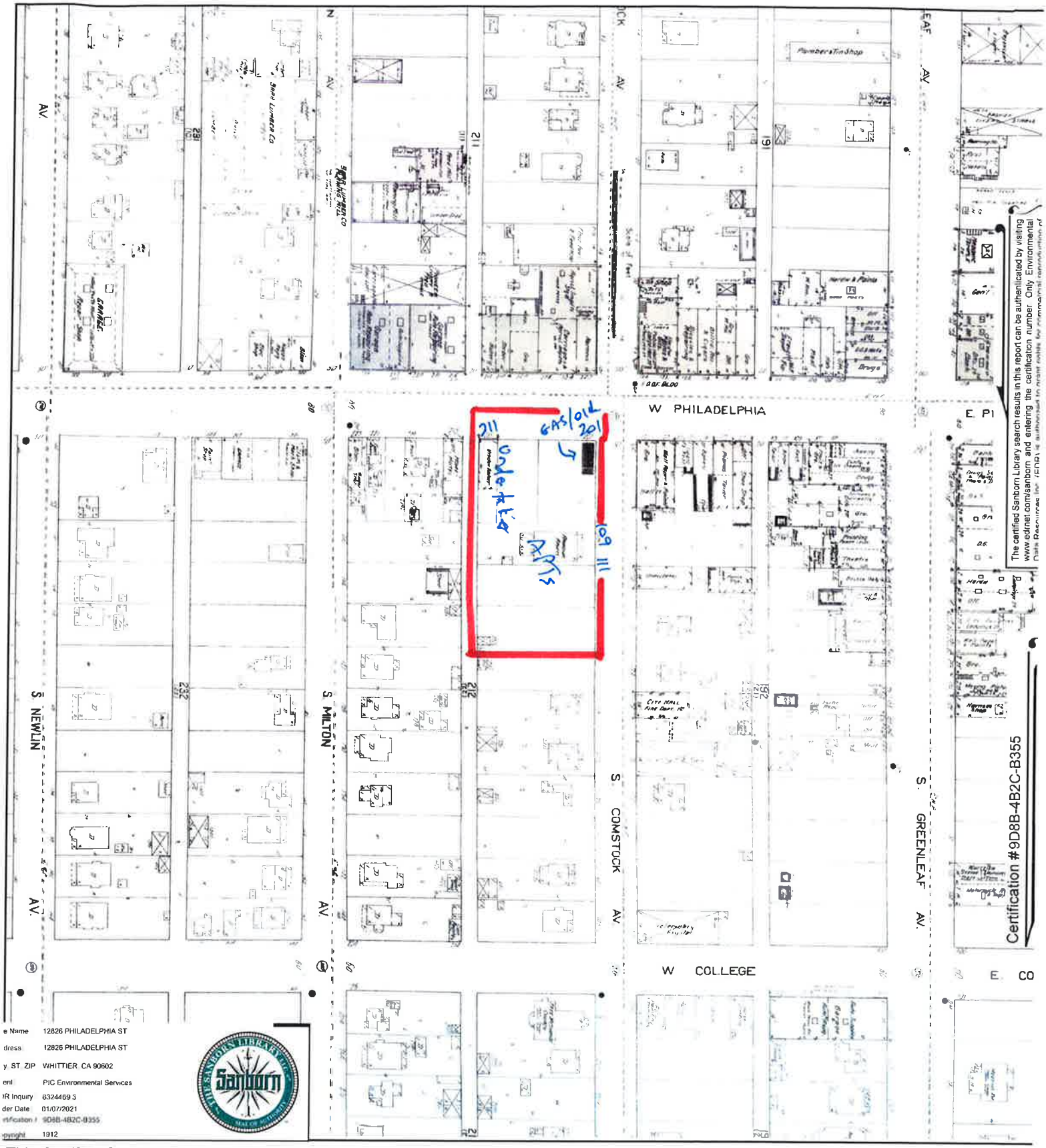
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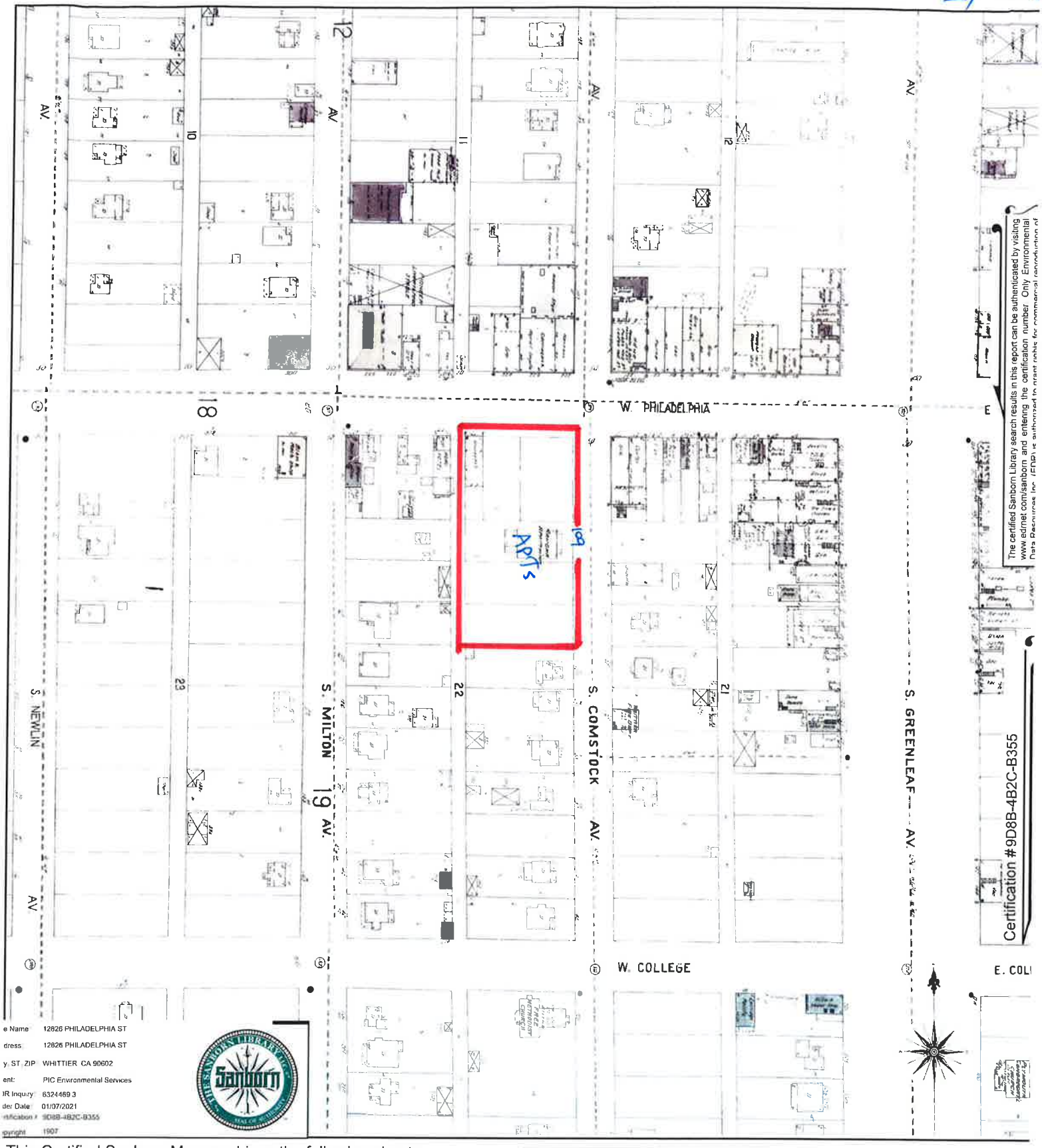


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Volume 1, Sheet 23
Volume 1, Sheet 17
Volume 1, Sheet 16

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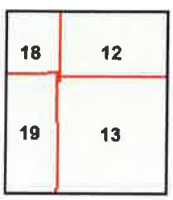
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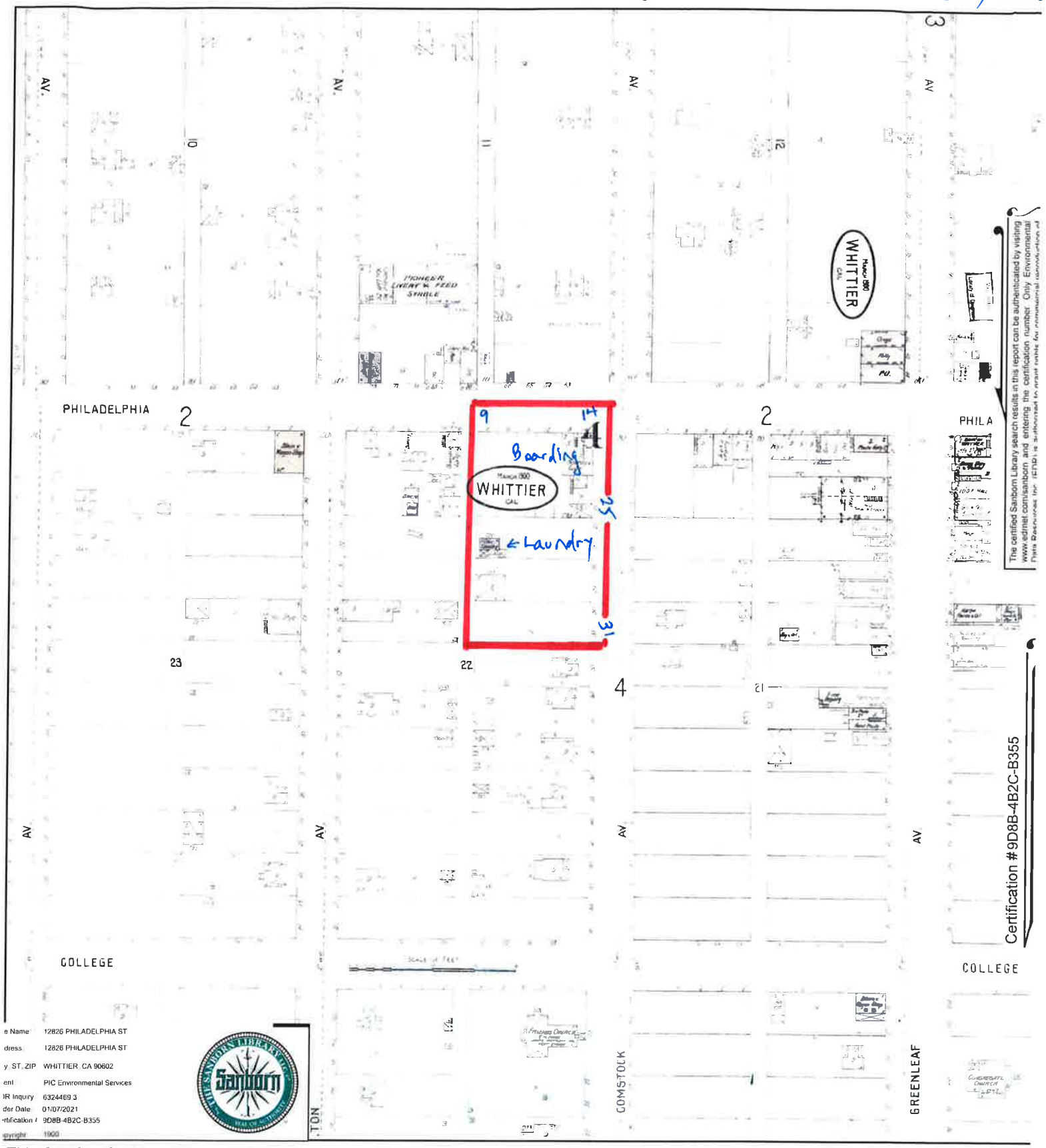
Volume 1, Sheet 19
Volume 1, Sheet 18
Volume 1, Sheet 13
Volume 1, Sheet 12

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Certified Sanborn® Map

1900



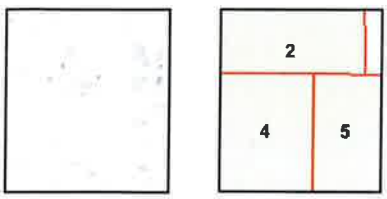
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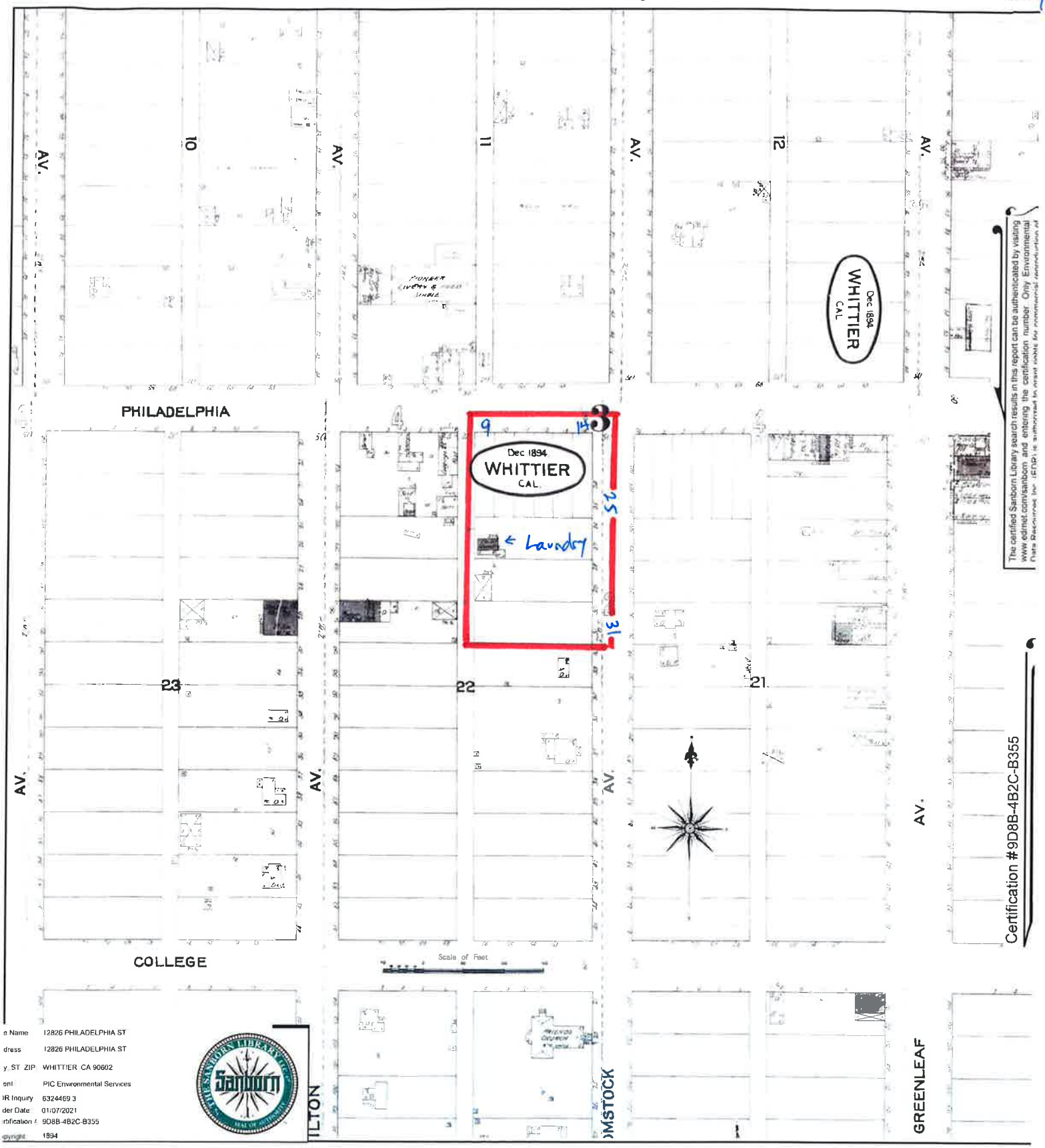
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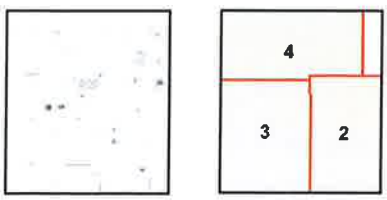
Volume 1, Sheet 5
Volume 1, Sheet 4
Volume 1, Sheet 2

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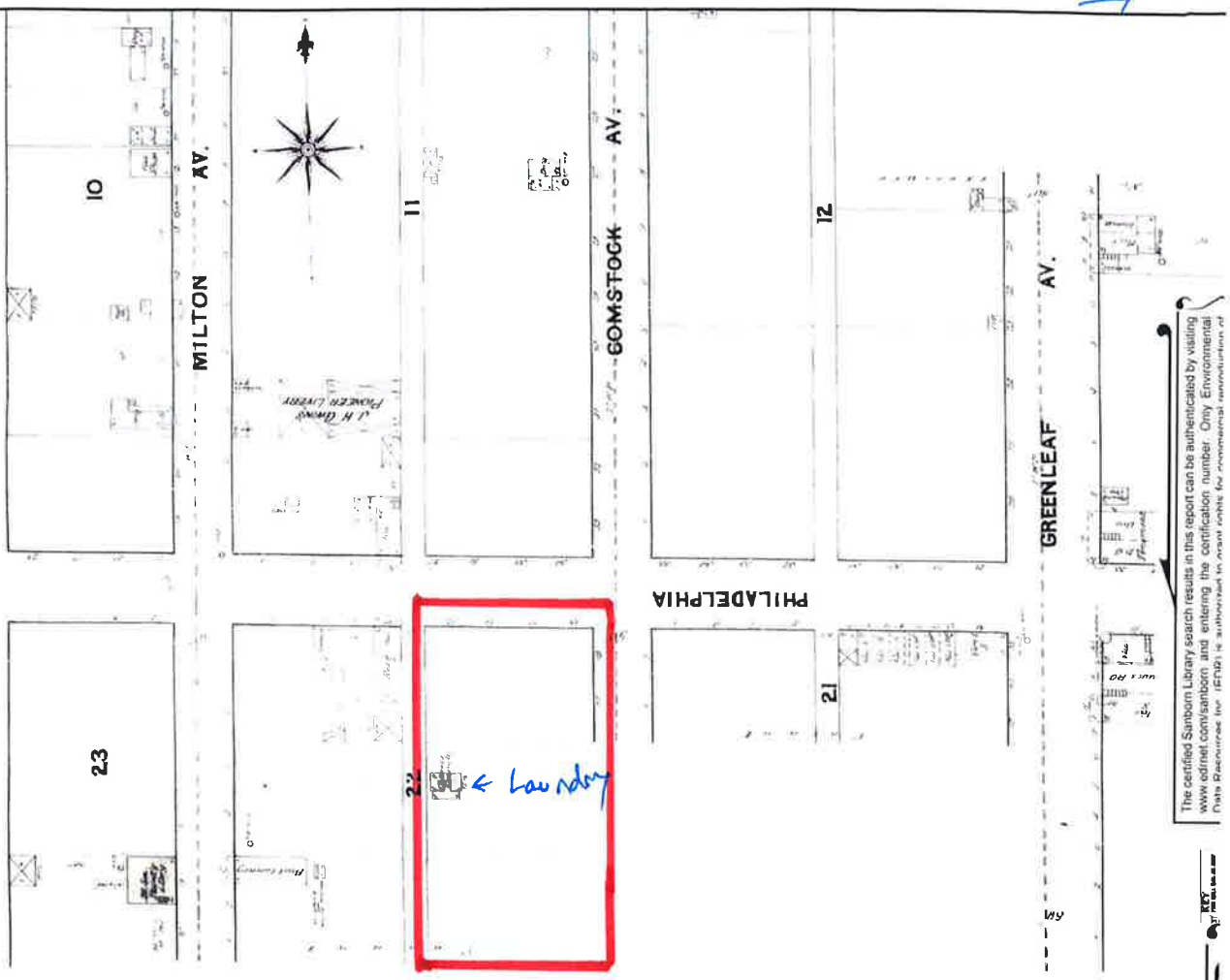
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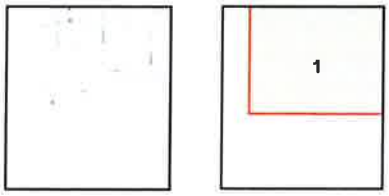


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rtification # 9D8B-4B2C-B355
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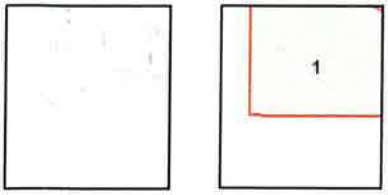


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ent: PIC Environmental Services
)R Inquiry: 6324469.3
der Date: 01/07/2021
rtification #: 9D8B-4B2C-B355
pyright: 1888

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Volume 1, Sheet 1

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APPENDIX E:

HISTORIC TOPOGRAPHIC MAPS

E

12826 PHILADELPHIA ST
12826 PHILADELPHIA ST
WHITTIER, CA 90602

Inquiry Number: 6324469.4
January 07, 2021

EDR Historical Topo Map Report
with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

01/07/21

Site Name:	Client Name:
12826 PHILADELPHIA ST	PIC Environmental Services
12826 PHILADELPHIA ST	2619 Sierra Way
WHITTIER, CA 90602	La Verne, CA 91750
EDR Inquiry # 6324469.4	Contact: Tim Hersch



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by PIC Environmental Services were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: E4364

Coordinates:

Latitude:	33.978569 33° 58' 43" North
Longitude:	-118.038933 -118° 2' 20" West
UTM Zone:	Zone 11 North
UTM X Meters:	404030.71
UTM Y Meters:	3760266.07
Elevation:	322.74' above sea level

Maps Provided:

2012	1942
1981	1925
1972	1923
1965	1902
1951	1899
1949	1896
1947	
1943	

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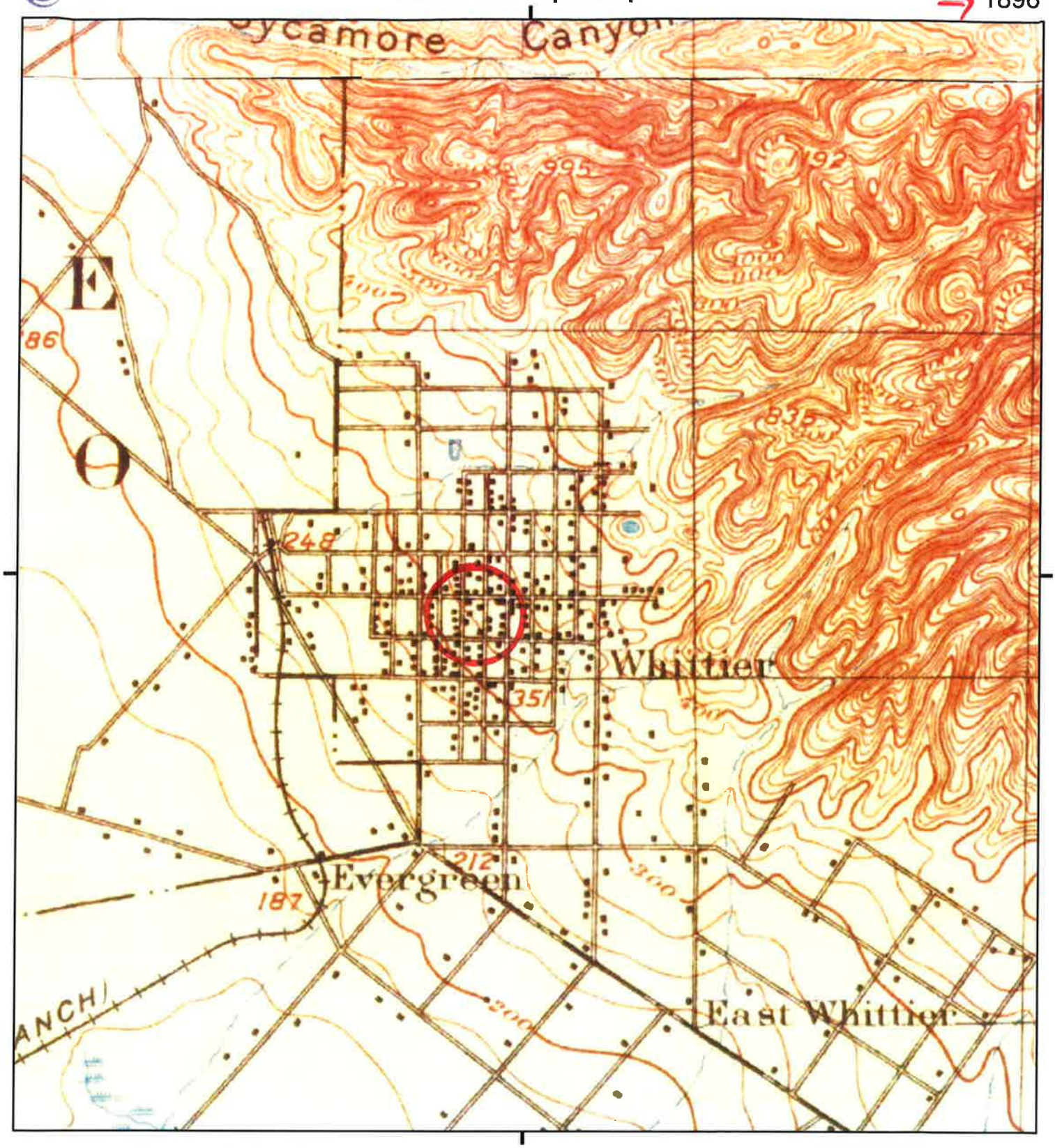
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Historical Topo Map

1896



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

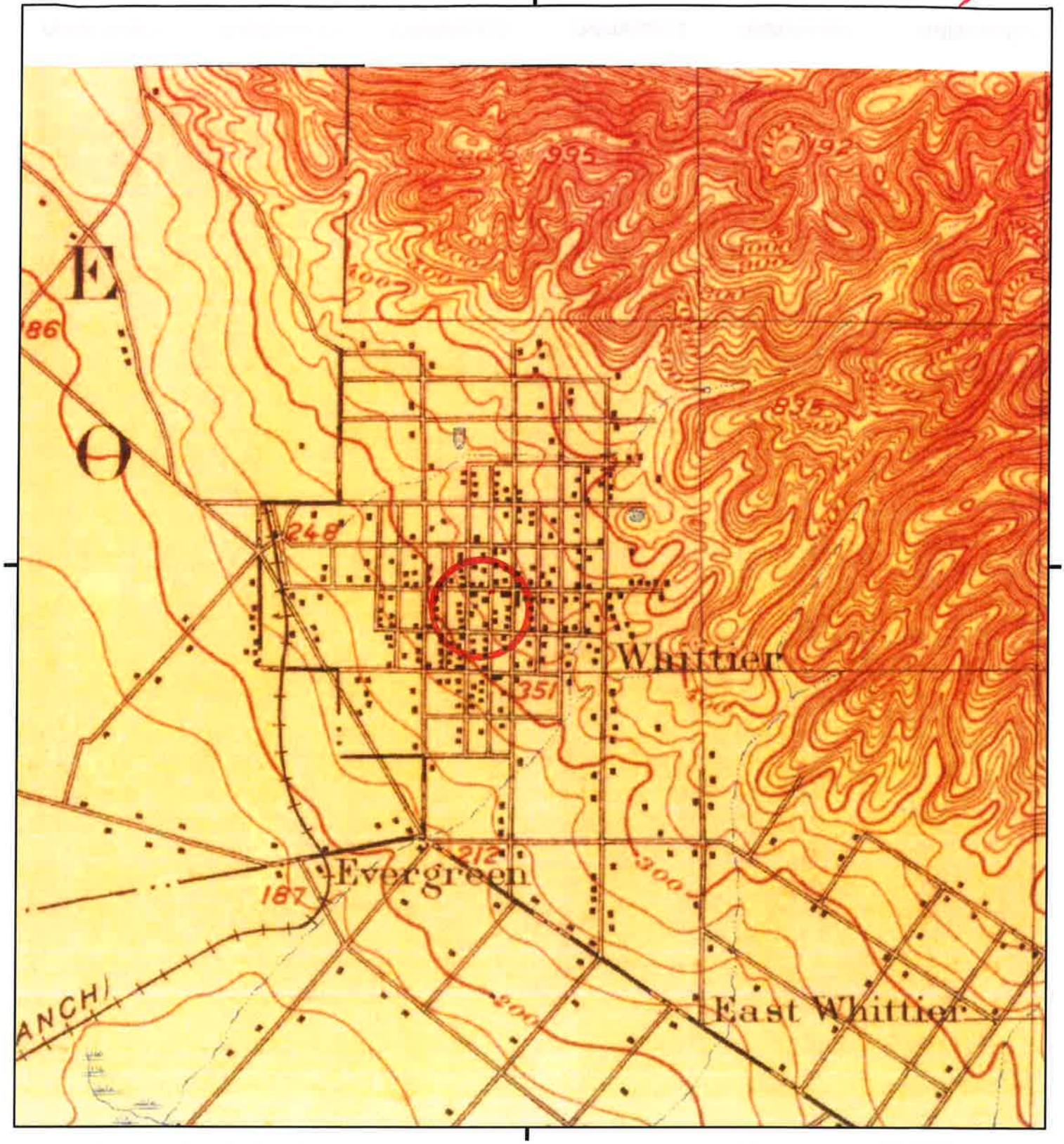
TP, Downey, 1896, 15-minute
NW, Pasadena, 1896, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1899



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

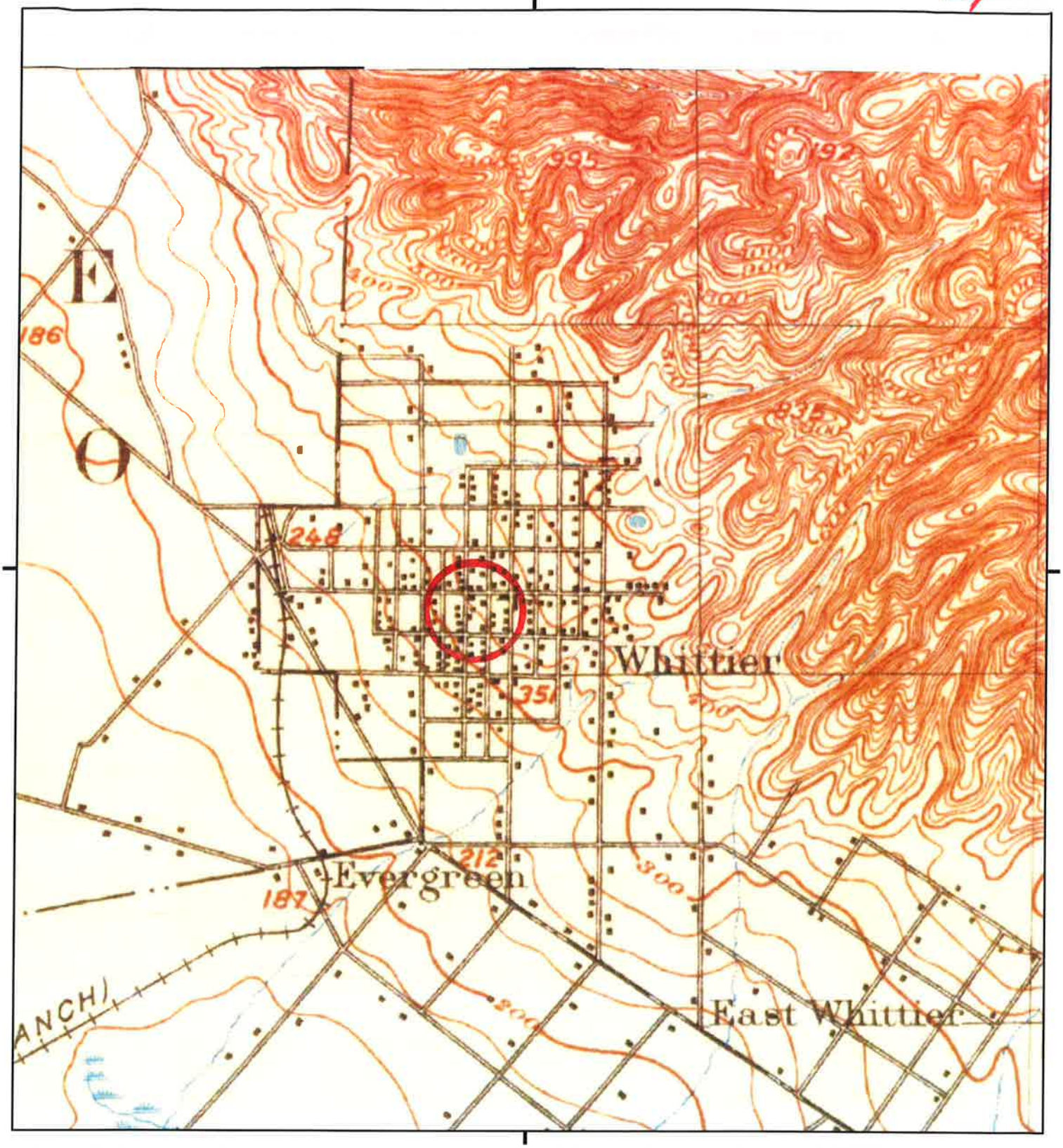
TP, Downey, 1899, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1902



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Downey, 1902, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1923



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

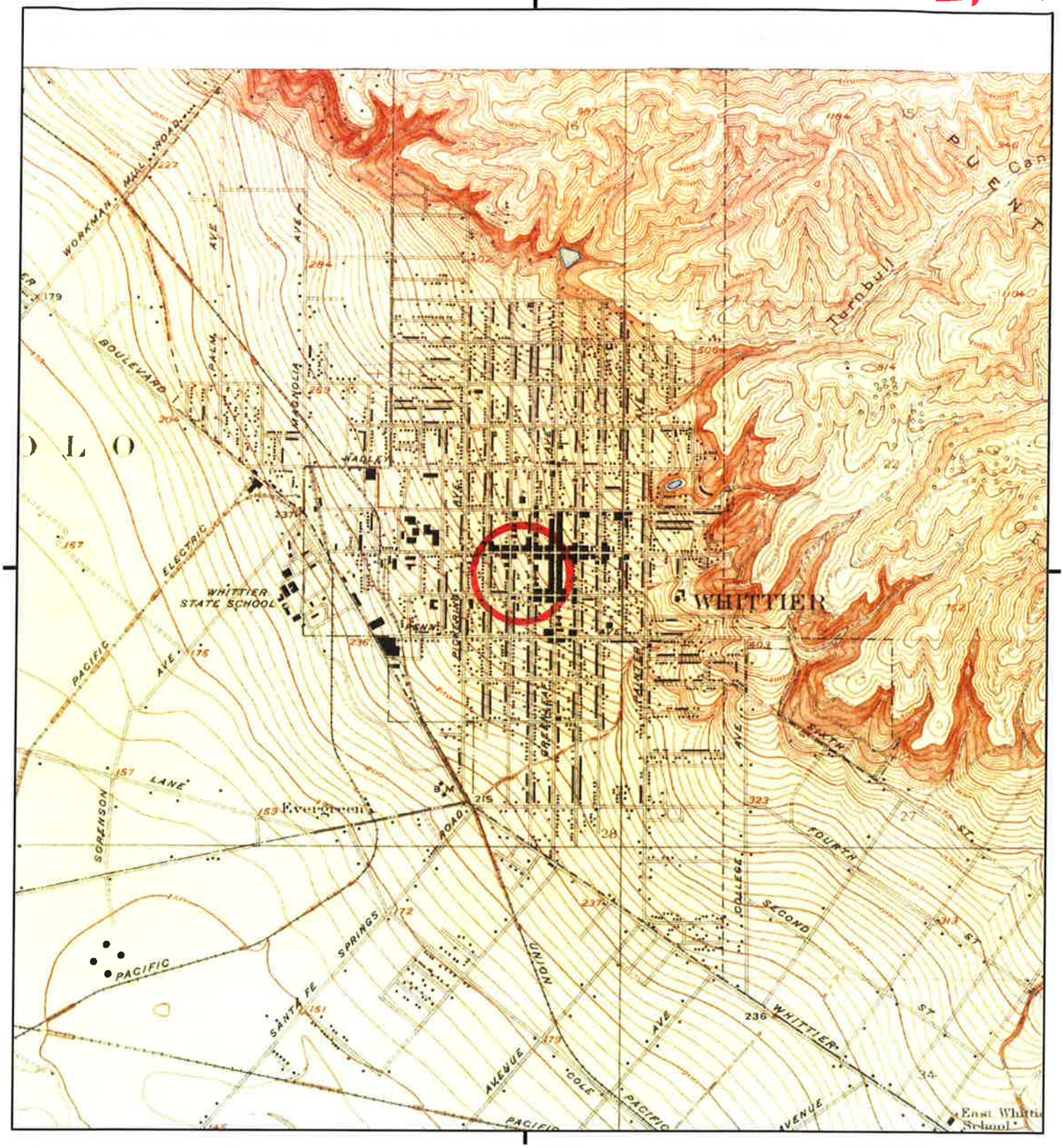
TP, Whittier, 1923, 7.5-minute
N, El Monte, 1923, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1925



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

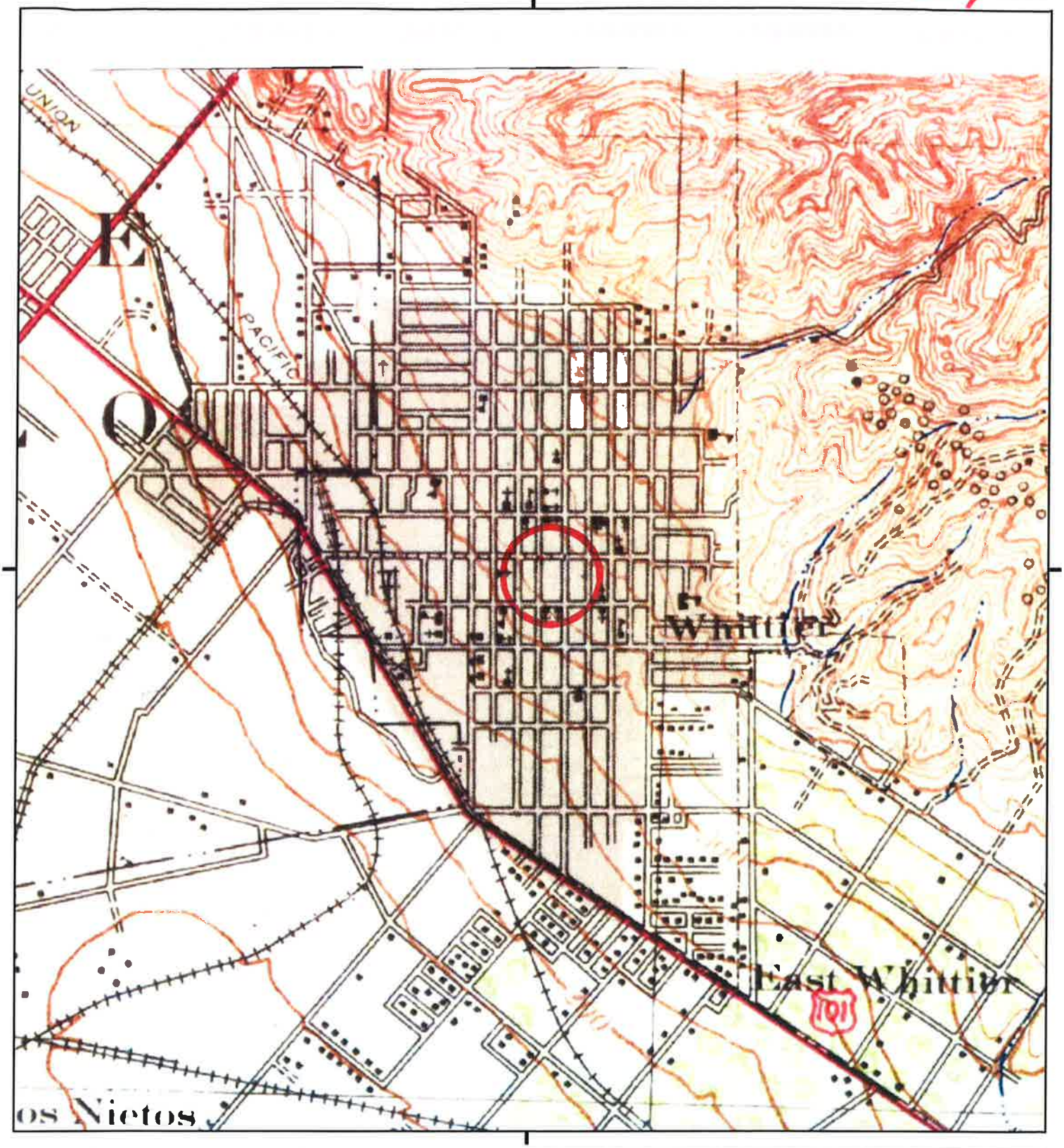
TP, Whittier, 1925, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1942



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

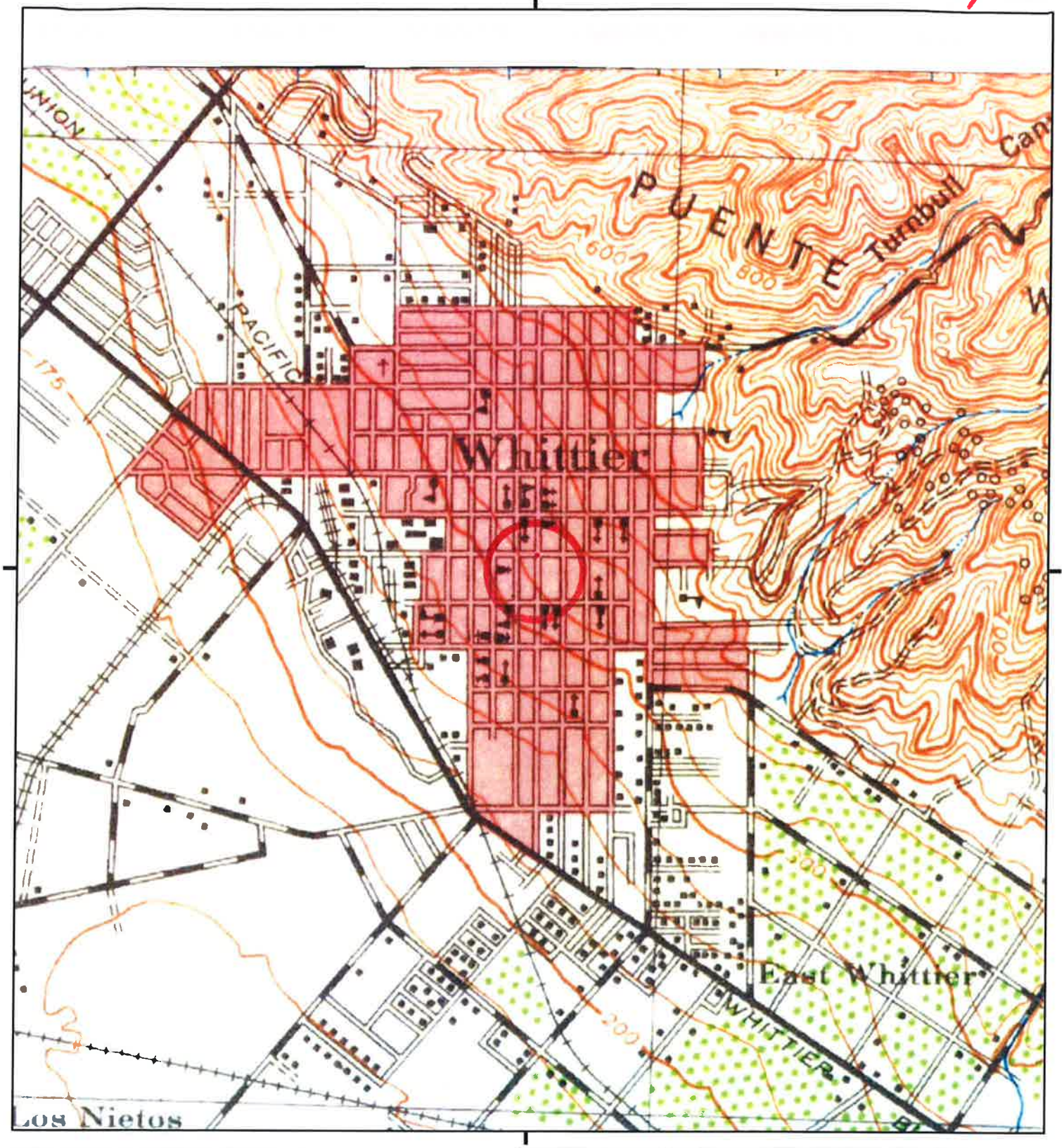
TP, Downey, 1942, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1943



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

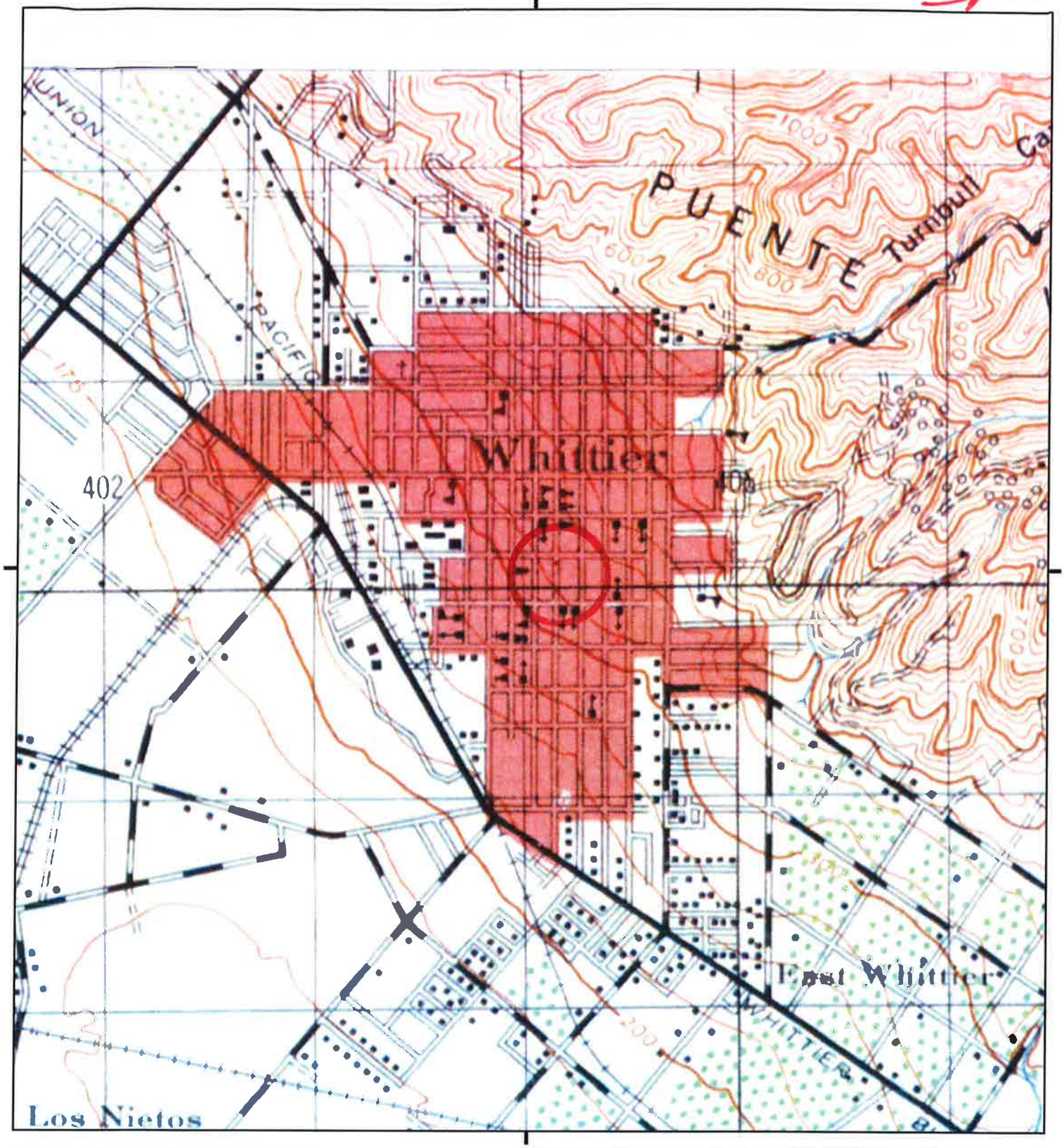
TP, Downey, 1943, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1947



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W E
SW S SE

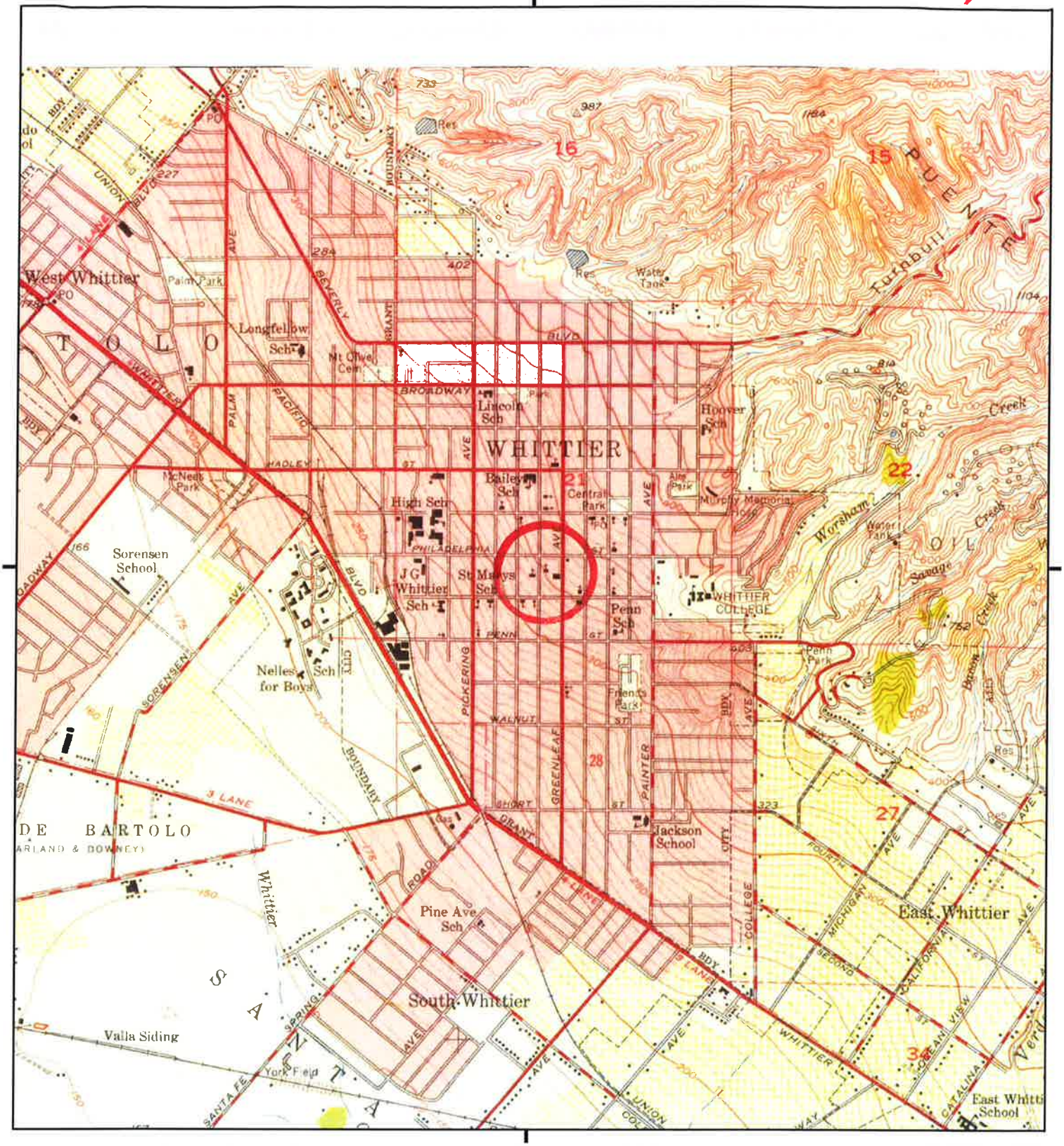
TP, DOWNEY, 1947, 15-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1949



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

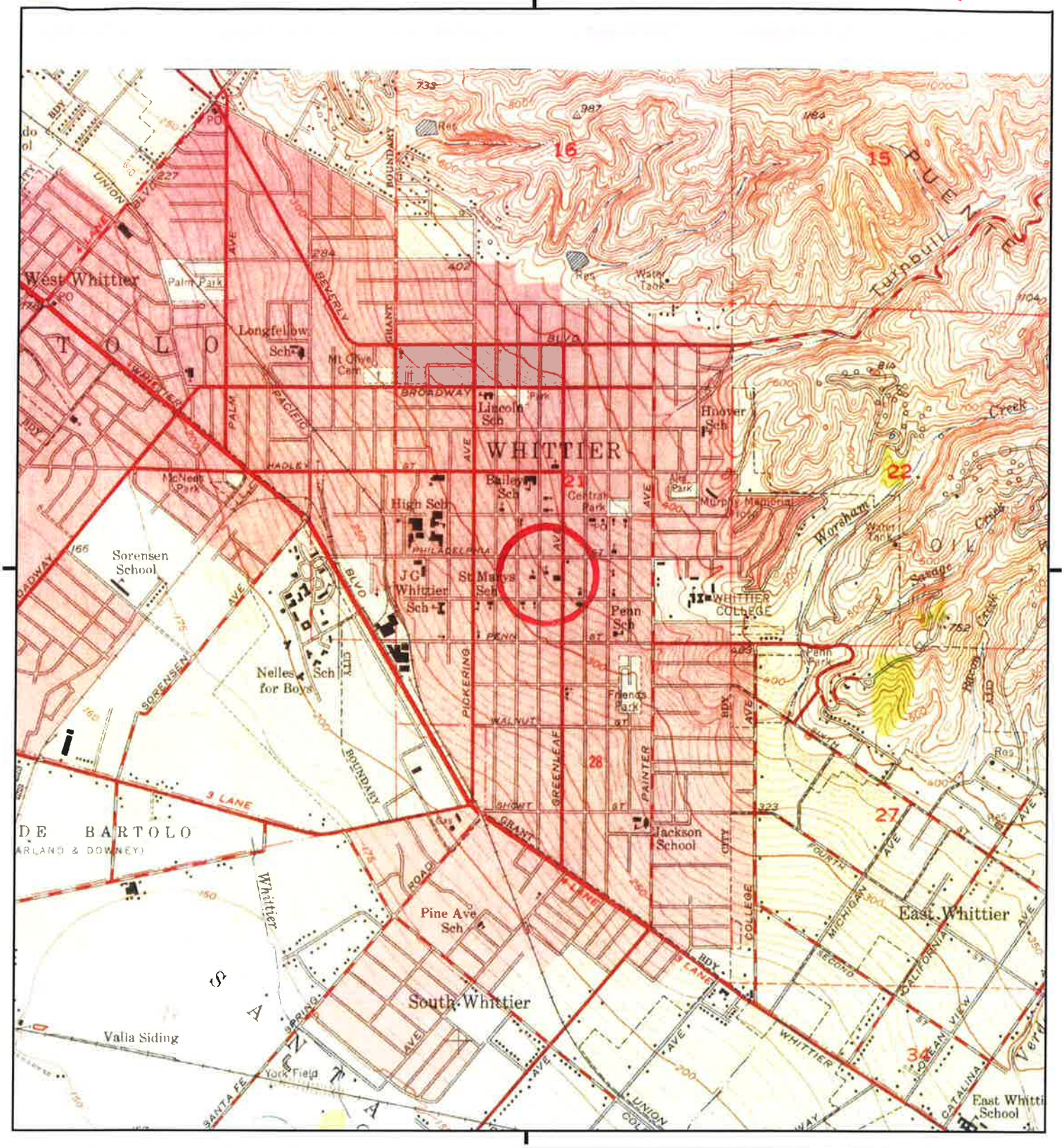
TP, Whittier, 1949, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1951



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Whittier, 1951, 7.5-minute

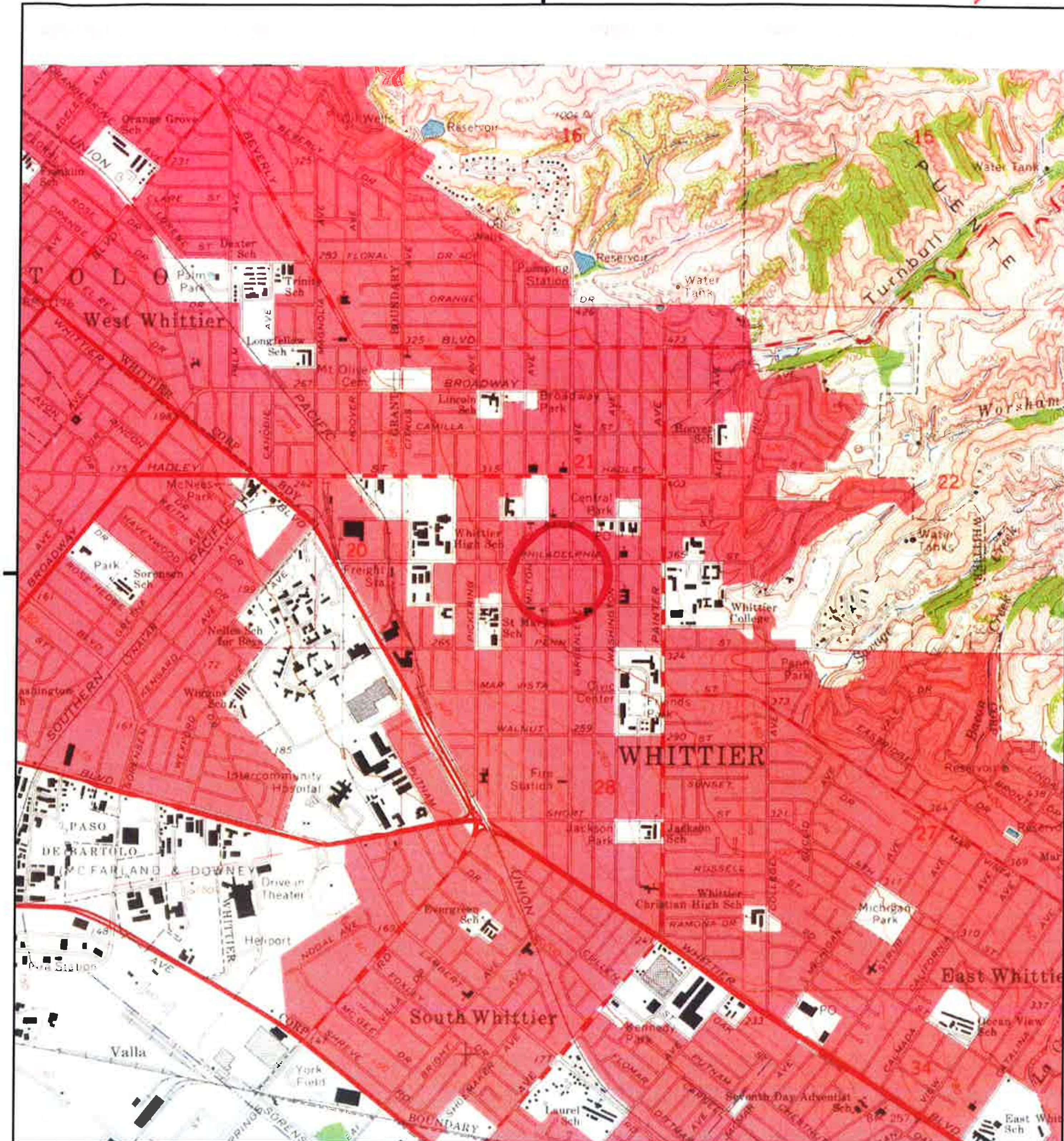
SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

EDR

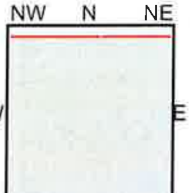
Historical Topo Map

1965



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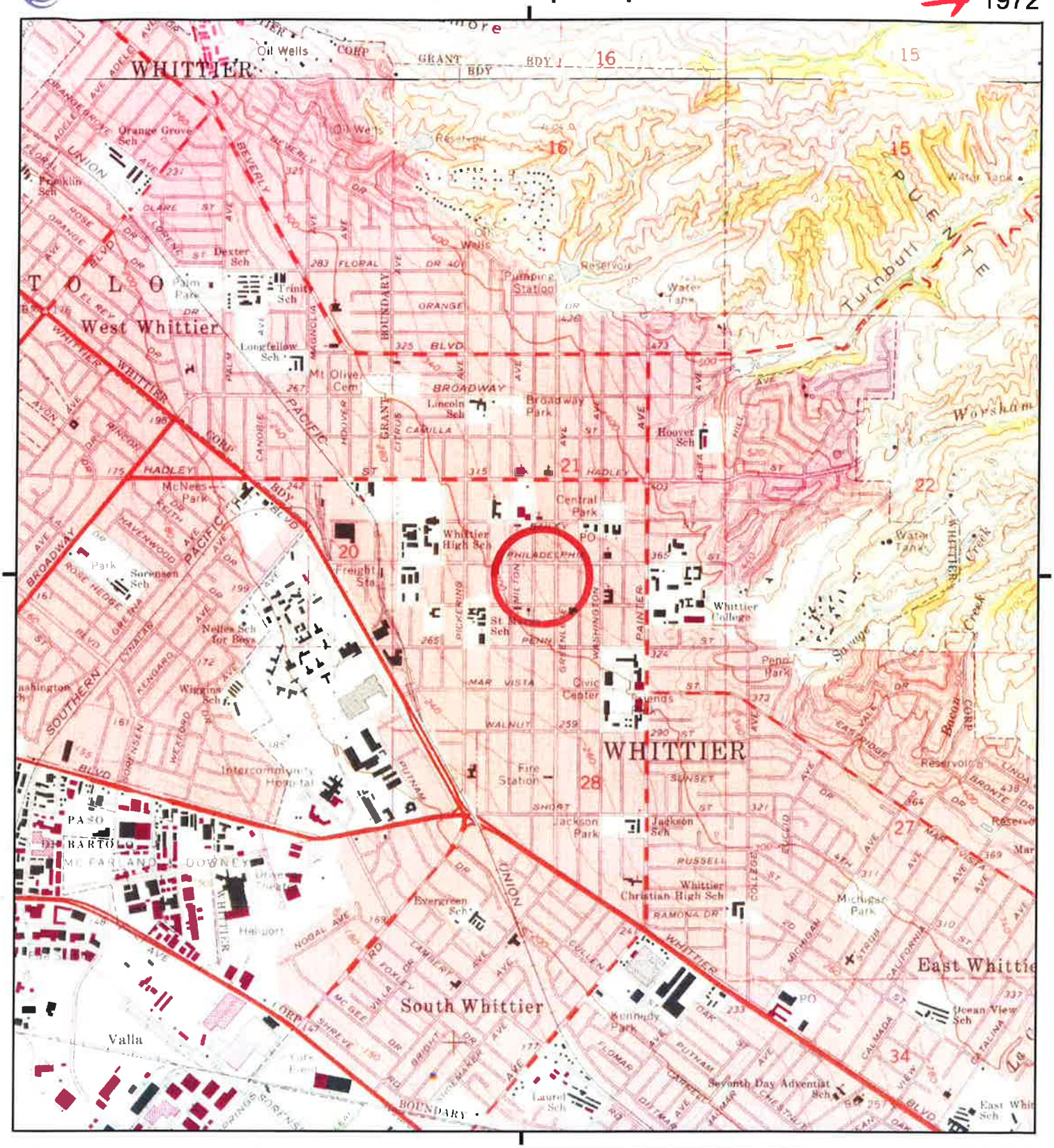
TP, Whittier, 1965, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

Historical Topo Map

1972



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

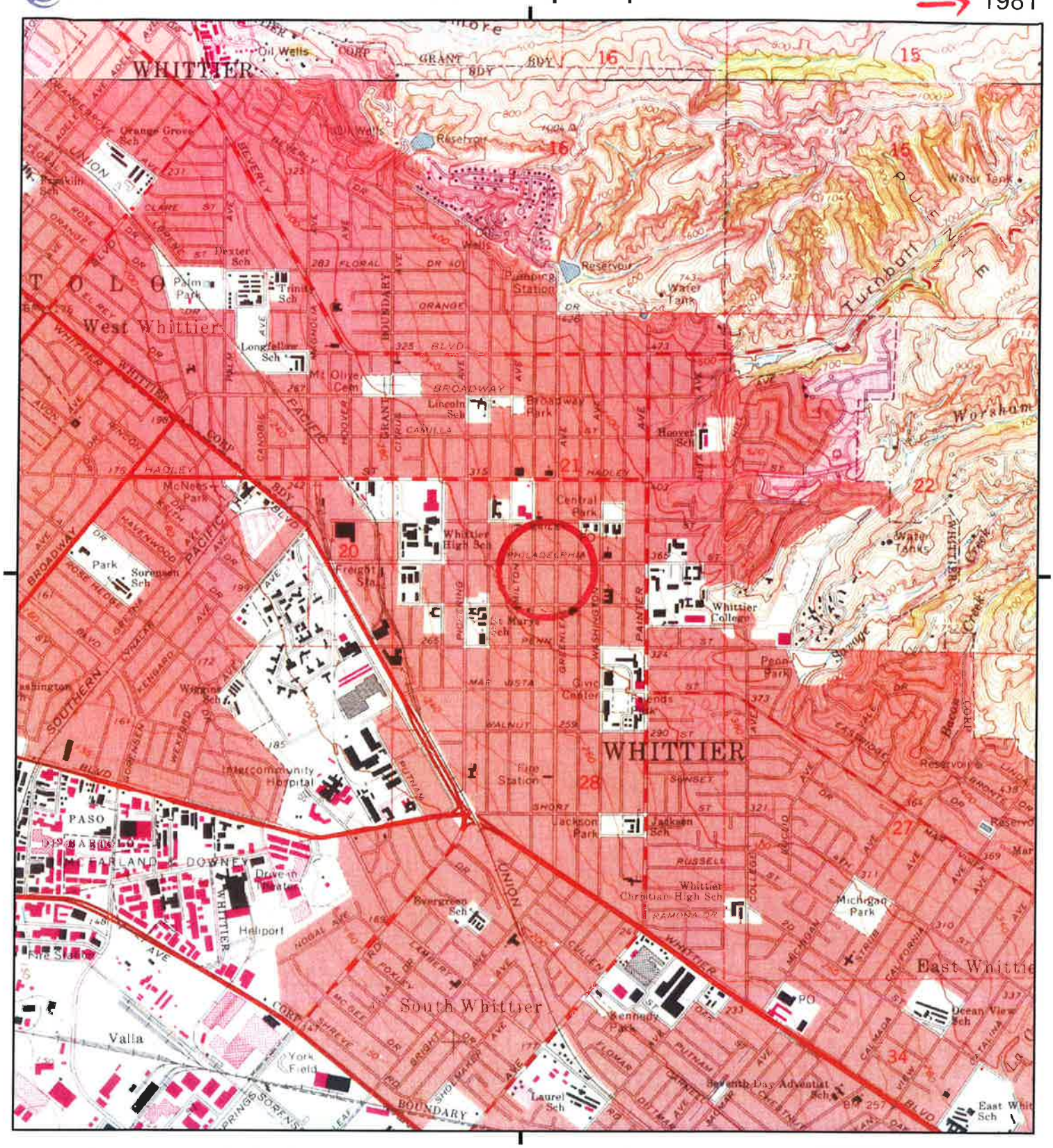
TP, Whittier, 1972, 7.5-minute
N, El Monte, 1972, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

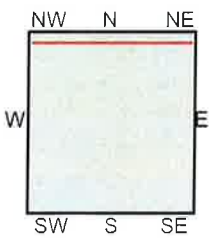
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Historical Topo Map

1981



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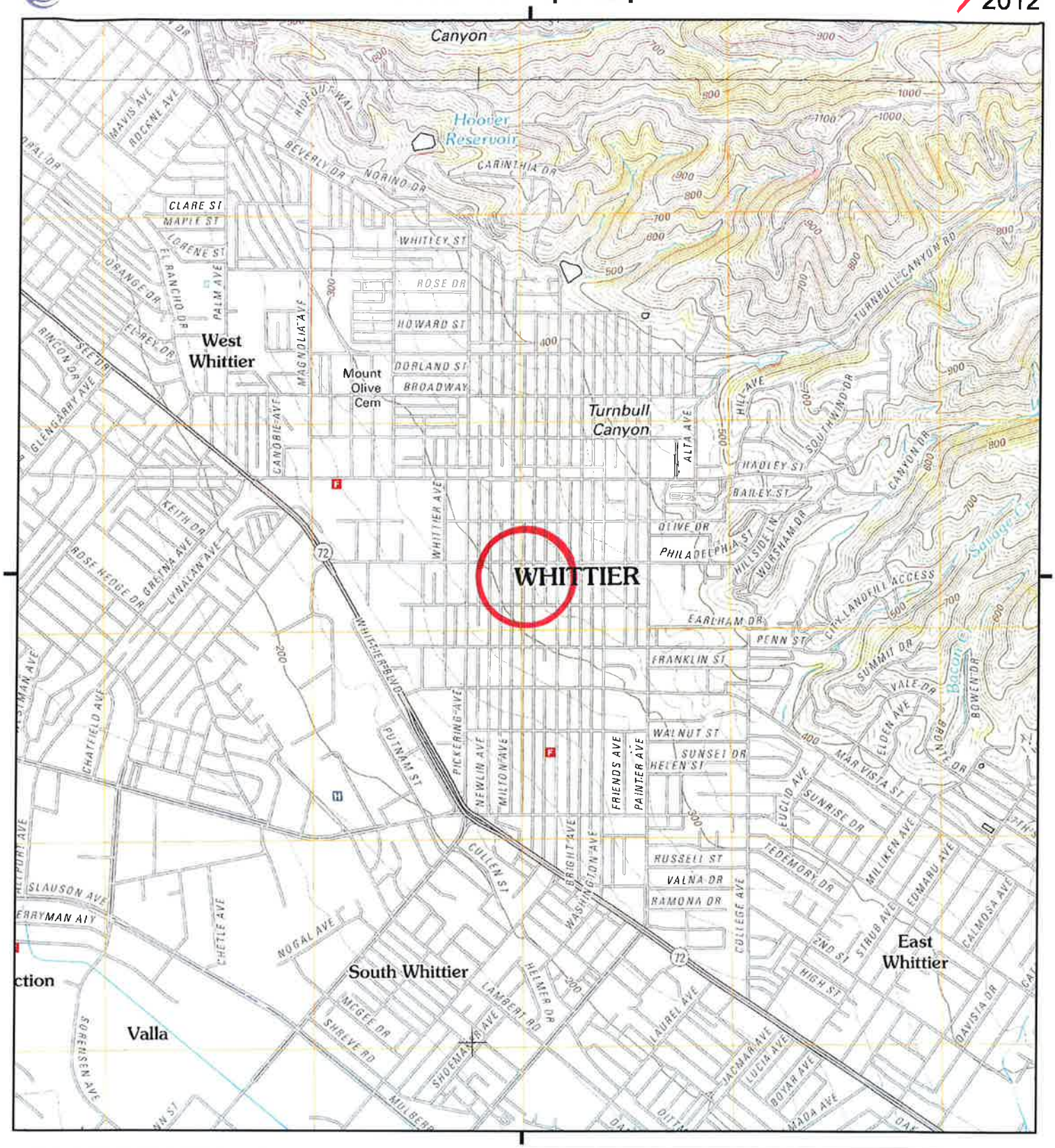
TP, Whittier, 1981, 7.5-minute
N, El Monte, 1981, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

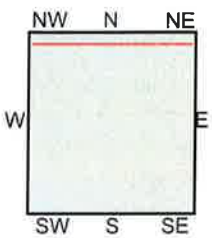
N

Historical Topo Map

2012



This report includes information from the following map sheet(s).



TP, Whittier, 2012, 7.5-minute
N, El Monte, 2012, 7.5-minute

SITE NAME: 12826 PHILADELPHIA ST
ADDRESS: 12826 PHILADELPHIA ST
WHITTIER, CA 90602
CLIENT: PIC Environmental Services

N

APPENDIX F:

HISTORIC AERIAL PHOTOGRAPHS

F

12826 PHILADELPHIA ST + 12856 Philadelphia St

12826 PHILADELPHIA ST

WHITTIER, CA 90602

+

7001 - 7025 S. Comstock Ave.

Inquiry Number: 6324469.8

January 07, 2021

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

01/07/21

Site Name:

12826 PHILADELPHIA ST
12826 PHILADELPHIA ST
WHITTIER, CA 90602
EDR Inquiry # 6324469.8

Client Name:

PIC Environmental Services
2619 Sierra Way
La Verne, CA 91750
Contact: Tim Hersch

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June 11, 2002	USDA
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 22, 1989	USDA
1981	1"=500'	Flight Date: February 21, 1981	EDR Proprietary Brewster Pacific
1977	1"=500'	Flight Date: May 29, 1977	EDR Proprietary Brewster Pacific
1972	1"=500'	Flight Date: November 24, 1972	EDR Proprietary Brewster Pacific
1963	1"=500'	Flight Date: February 28, 1963	USGS
1954	1"=500'	Flight Date: August 31, 1954	USDA
1947	1"=500'	Flight Date: June 22, 1947	FAIR
1938	1"=500'	Flight Date: May 22, 1938	USDA
1928	1"=500'	Flight Date: January 01, 1928	FAIR

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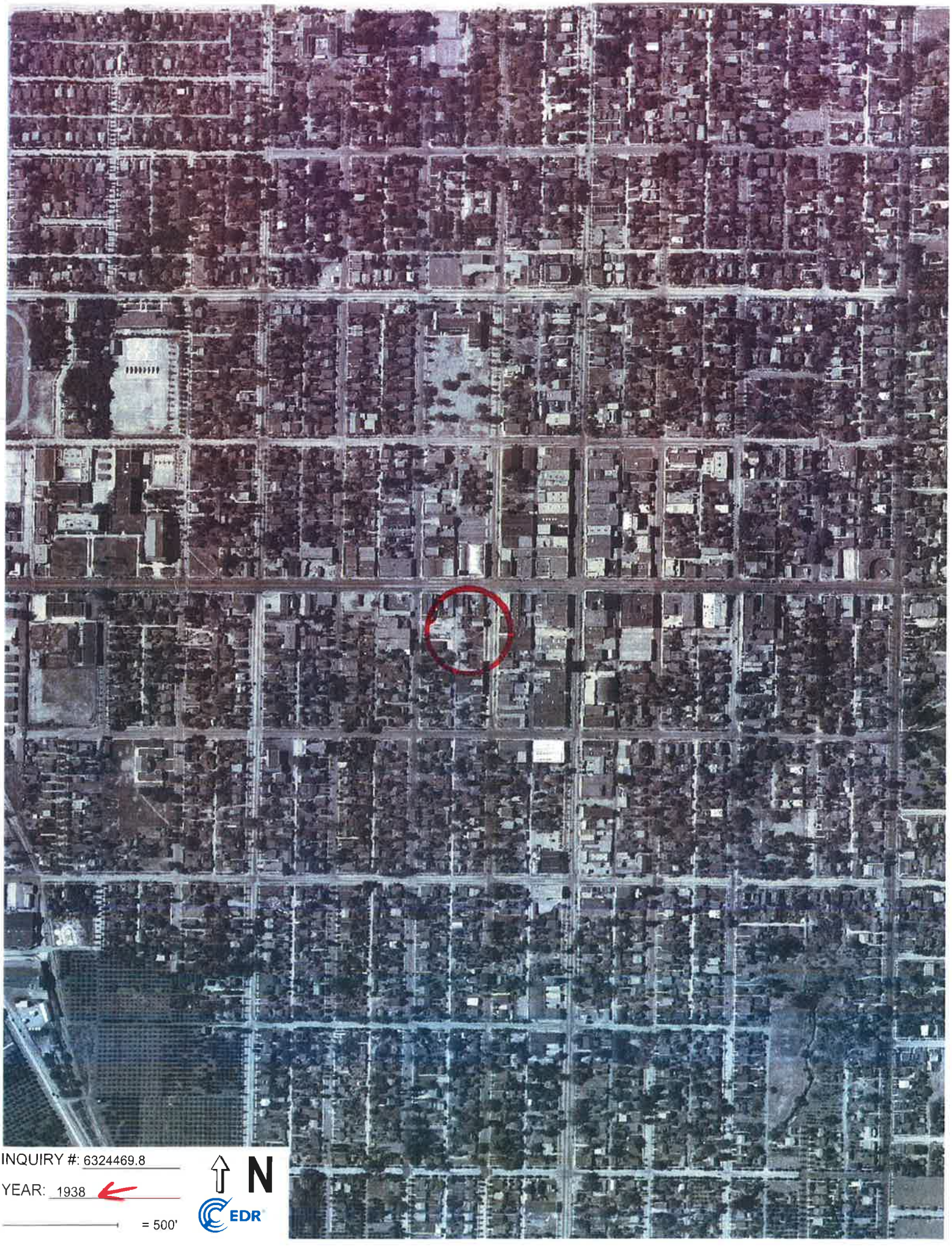
INQUIRY #: 6324469.8

YEAR: 1928

= 500'

N

EDR


INQUIRY #: 6324469.8
YEAR: 1938
= 500'
N
EDR



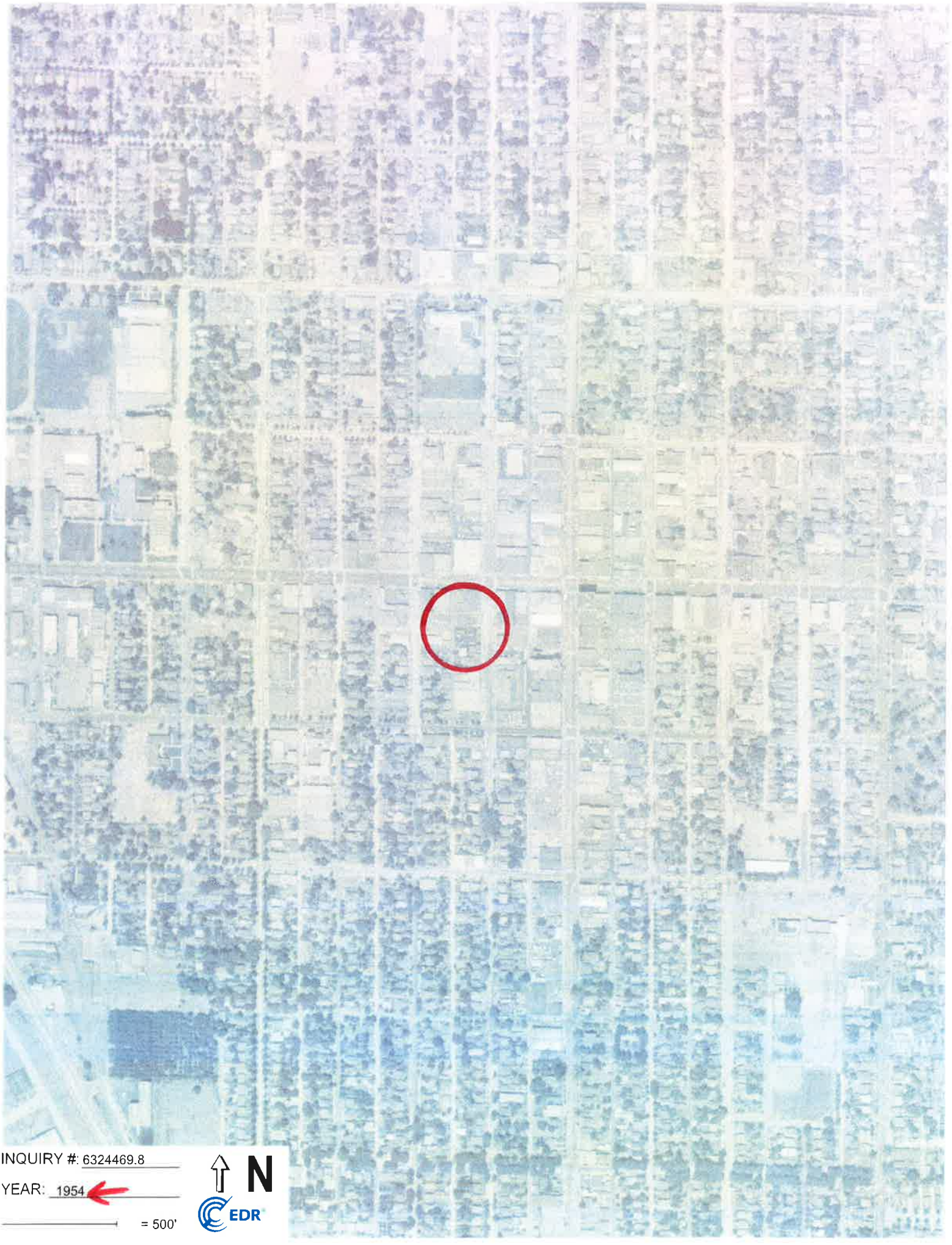
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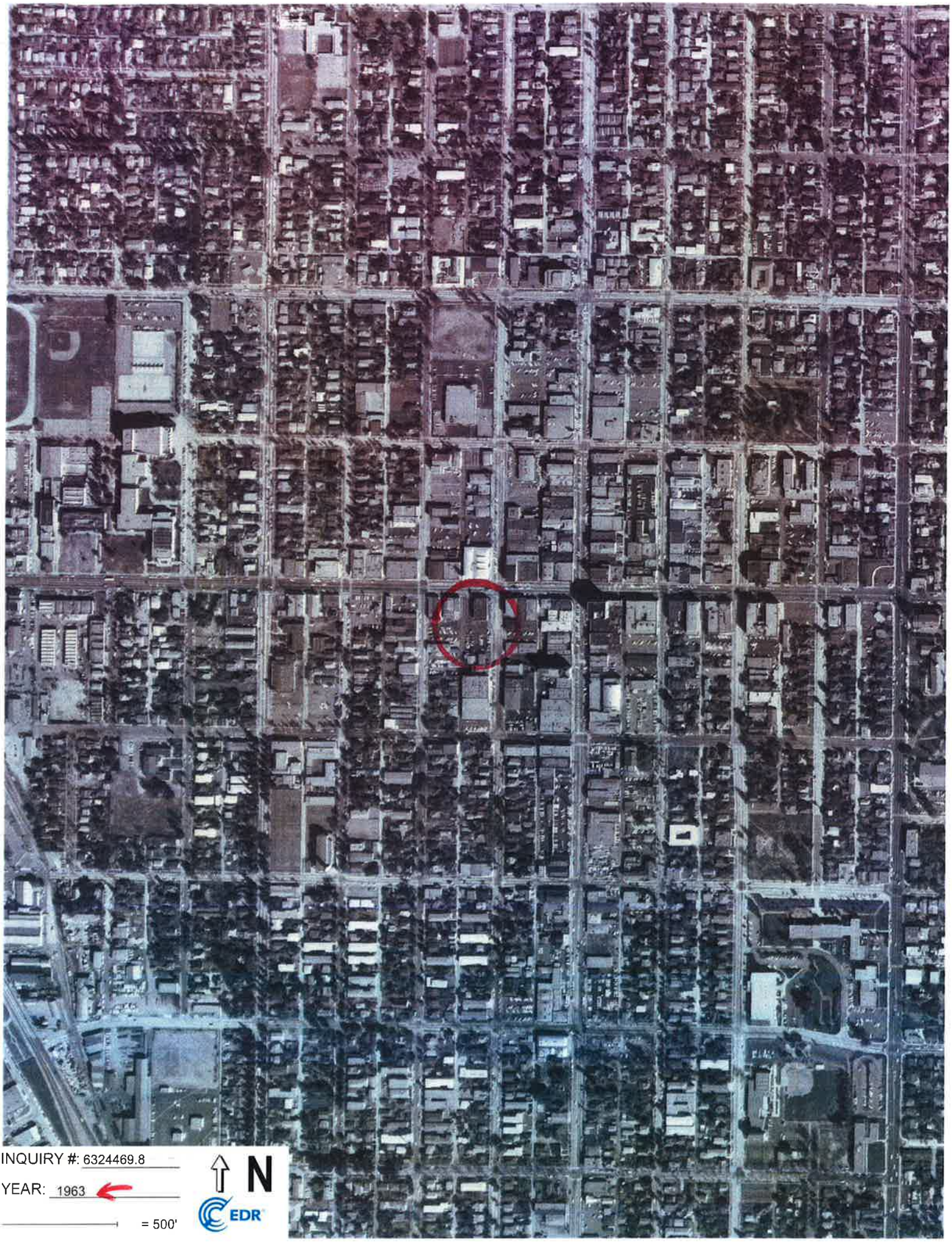
YEAR: 1947

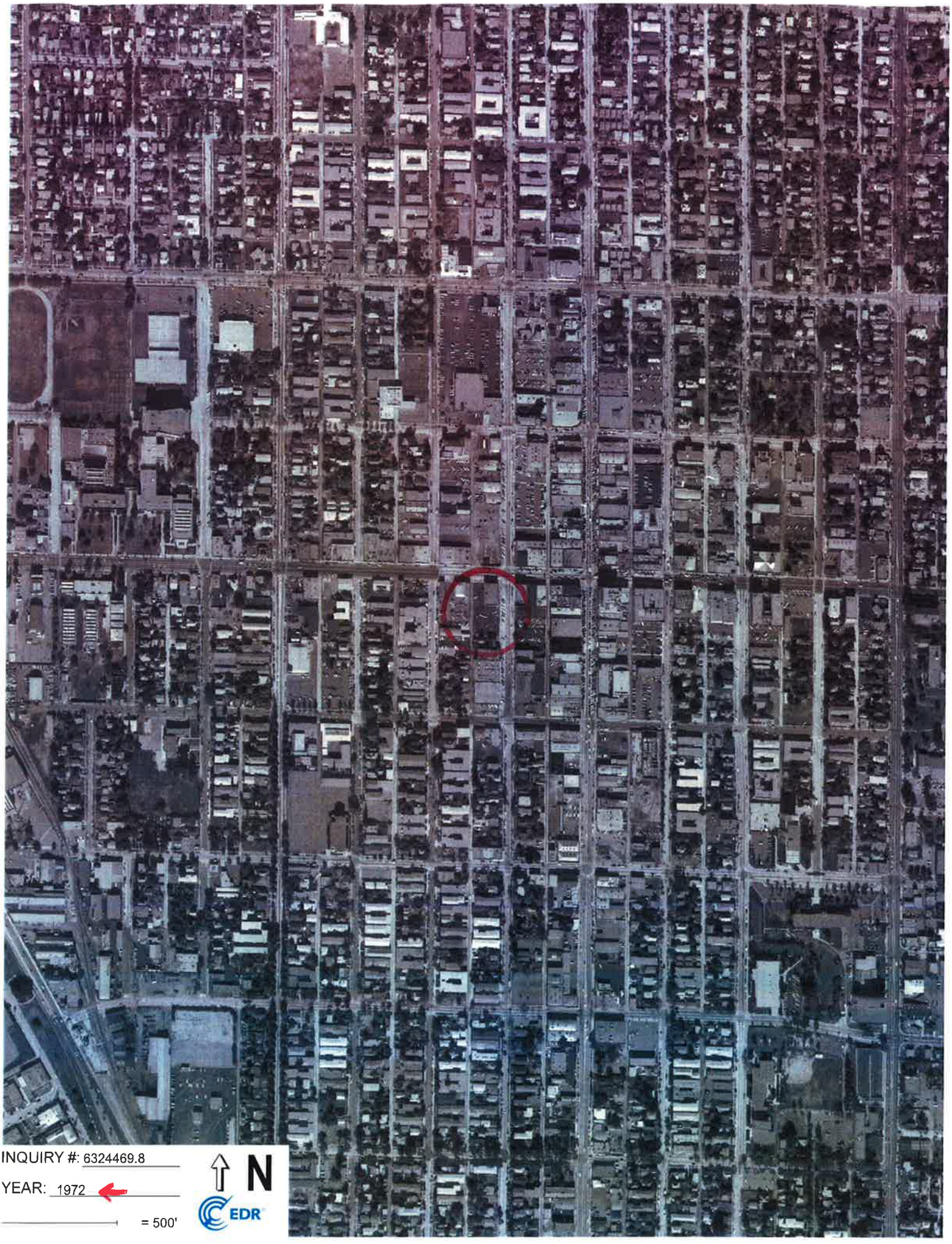
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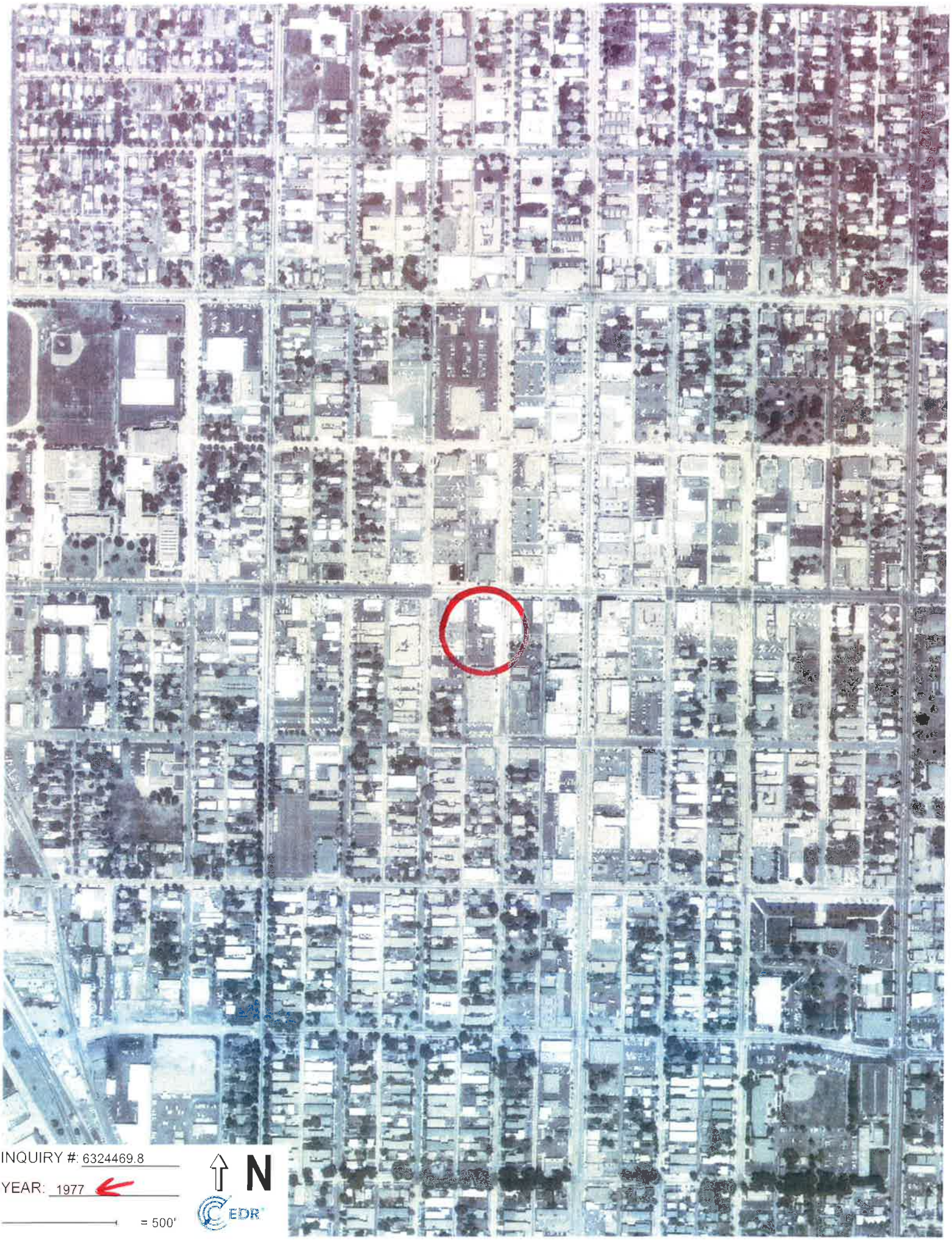
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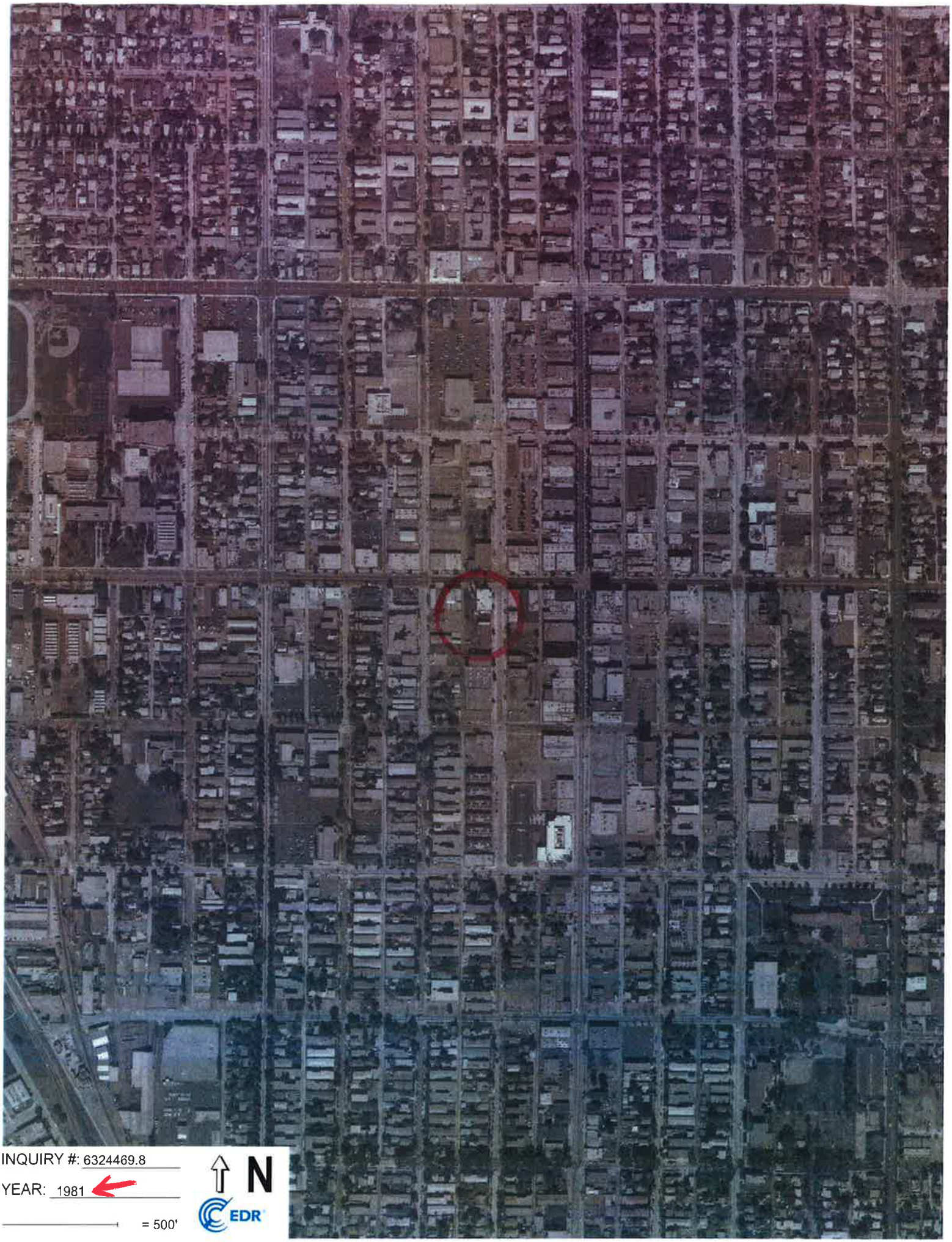
EDR

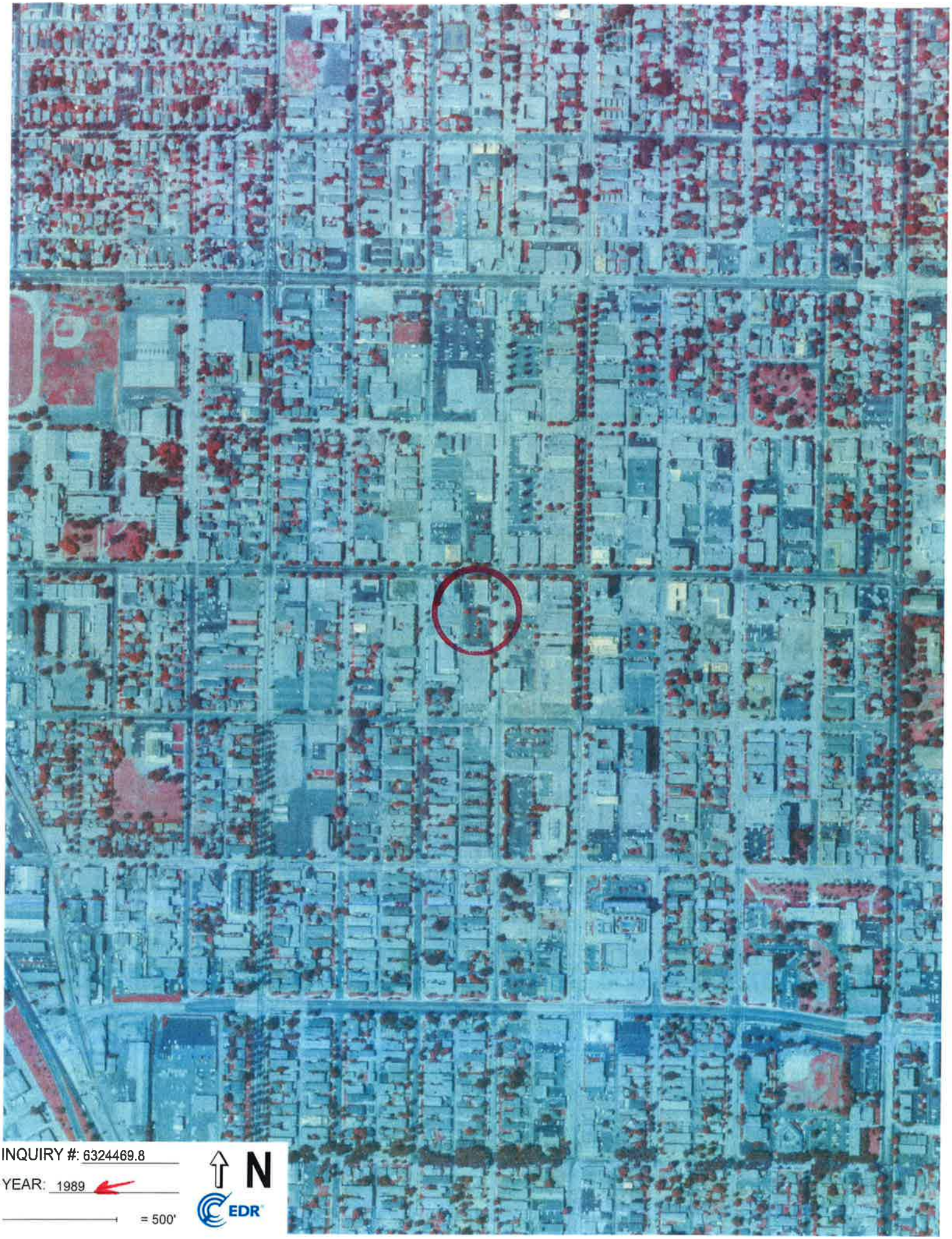

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EDR

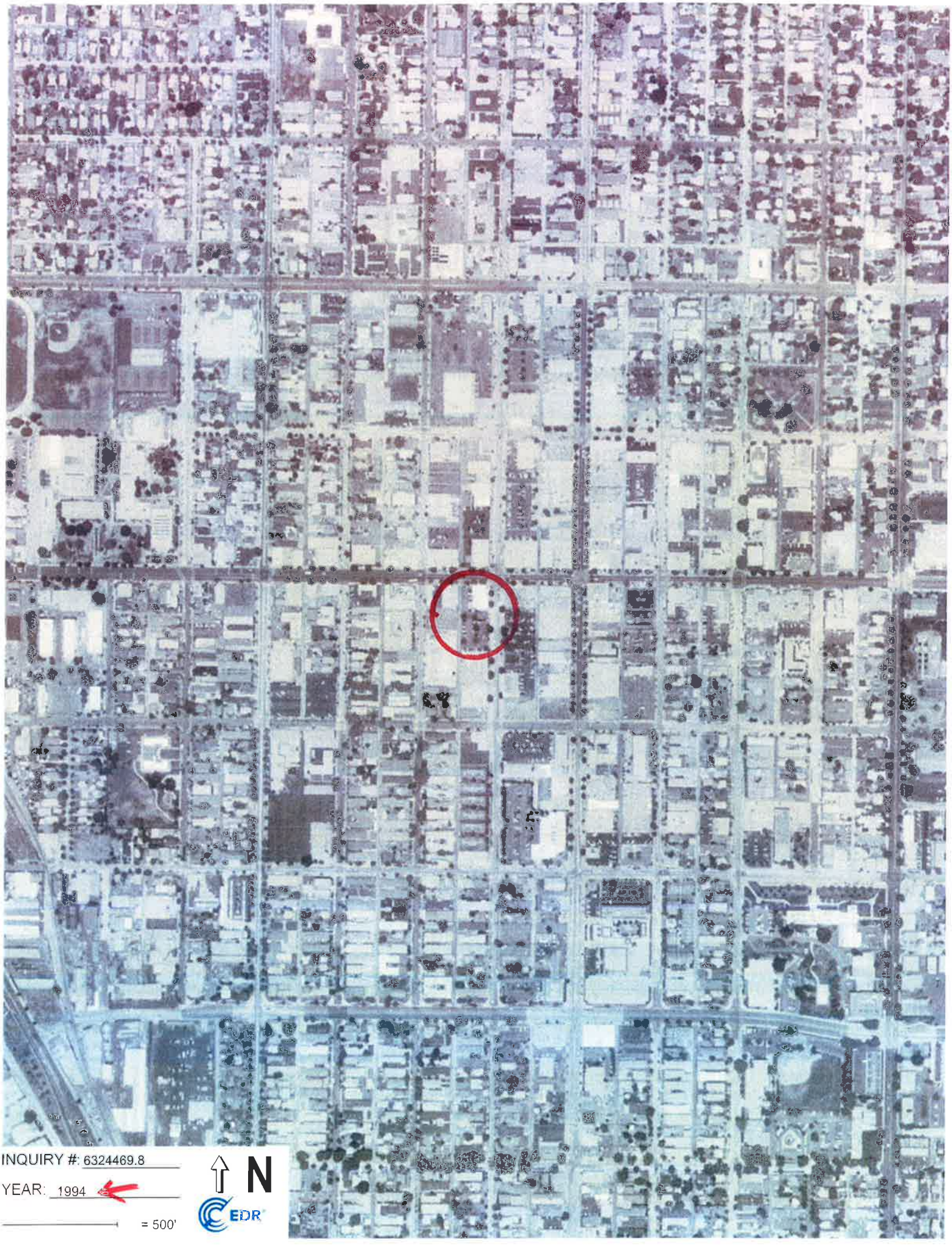

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EDR

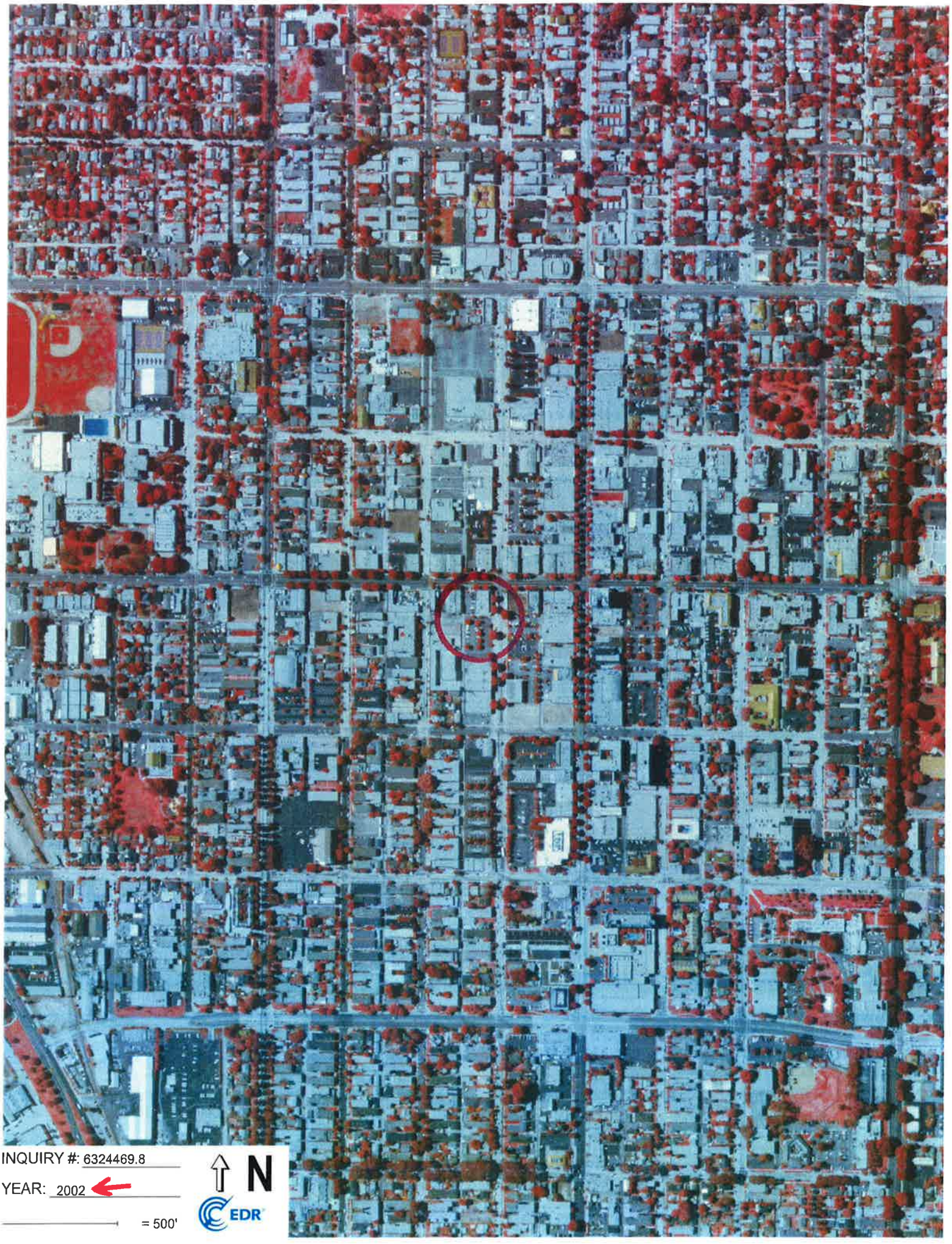

INQUIRY #: 6324469.8
YEAR: 1972
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EDR

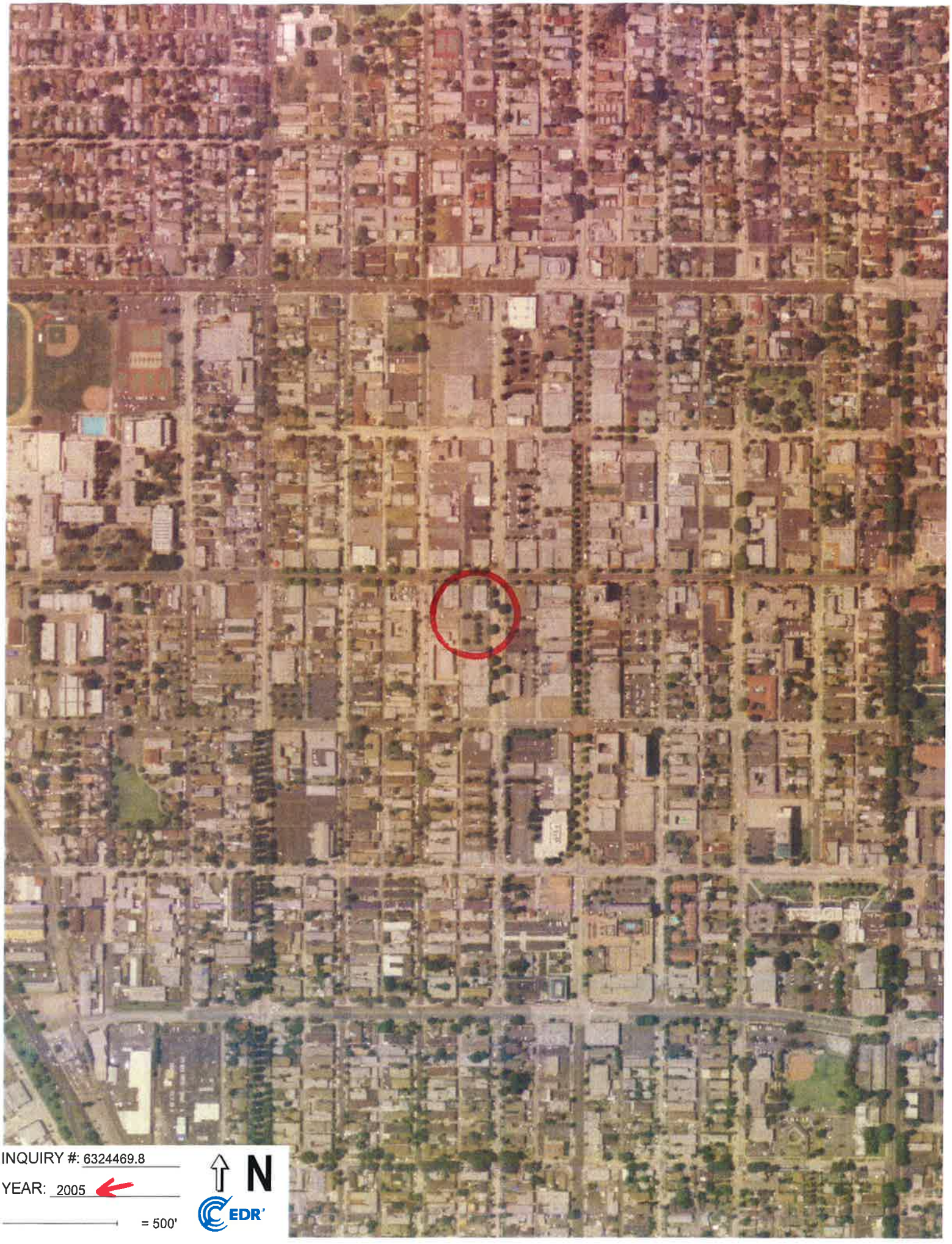

INQUIRY #: 6324469.8
YEAR: 1977
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N
EDR


INQUIRY #: 6324469.8
YEAR: 1981
= 500'
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EDR

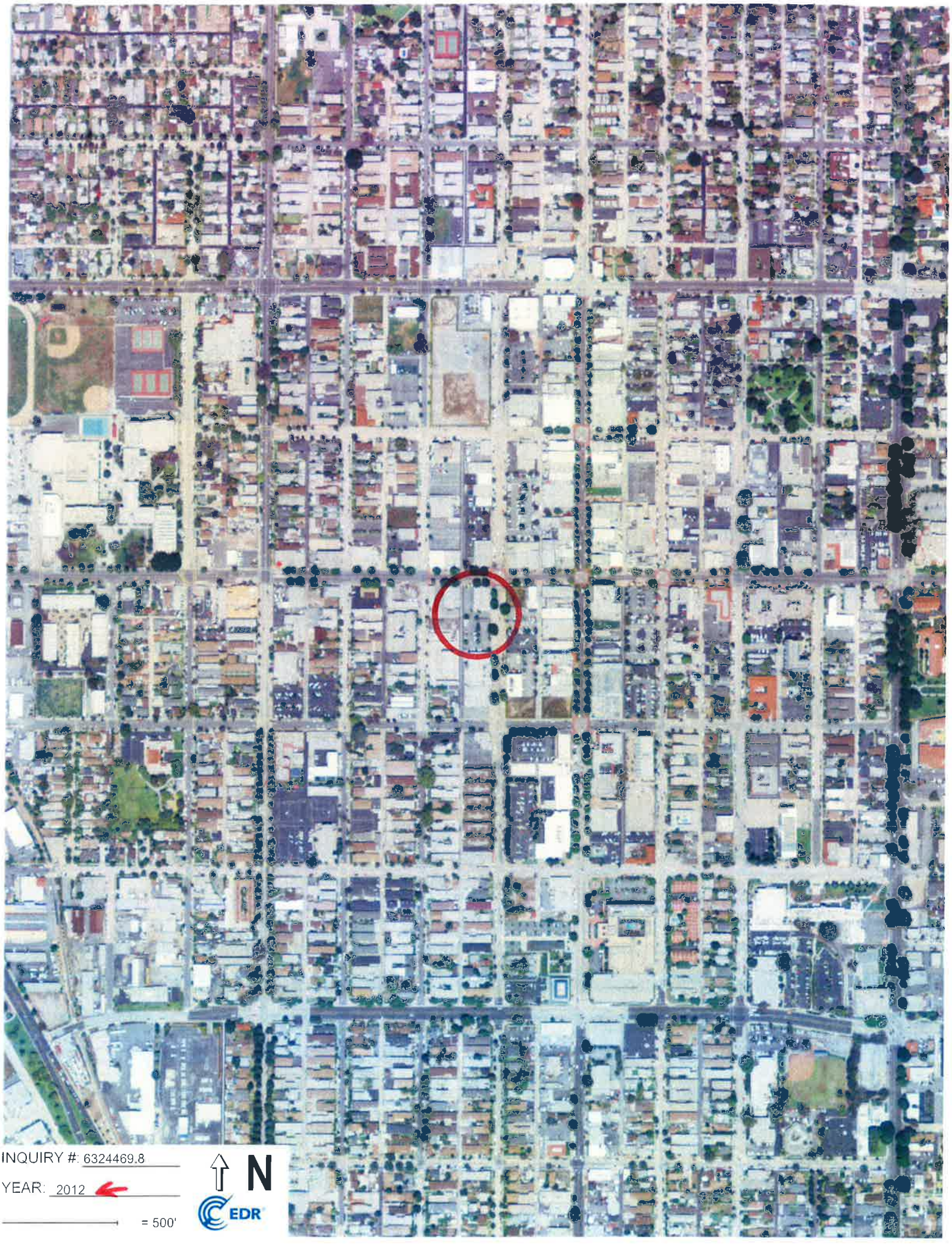

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YEAR: 1989
= 500'
N
EDR

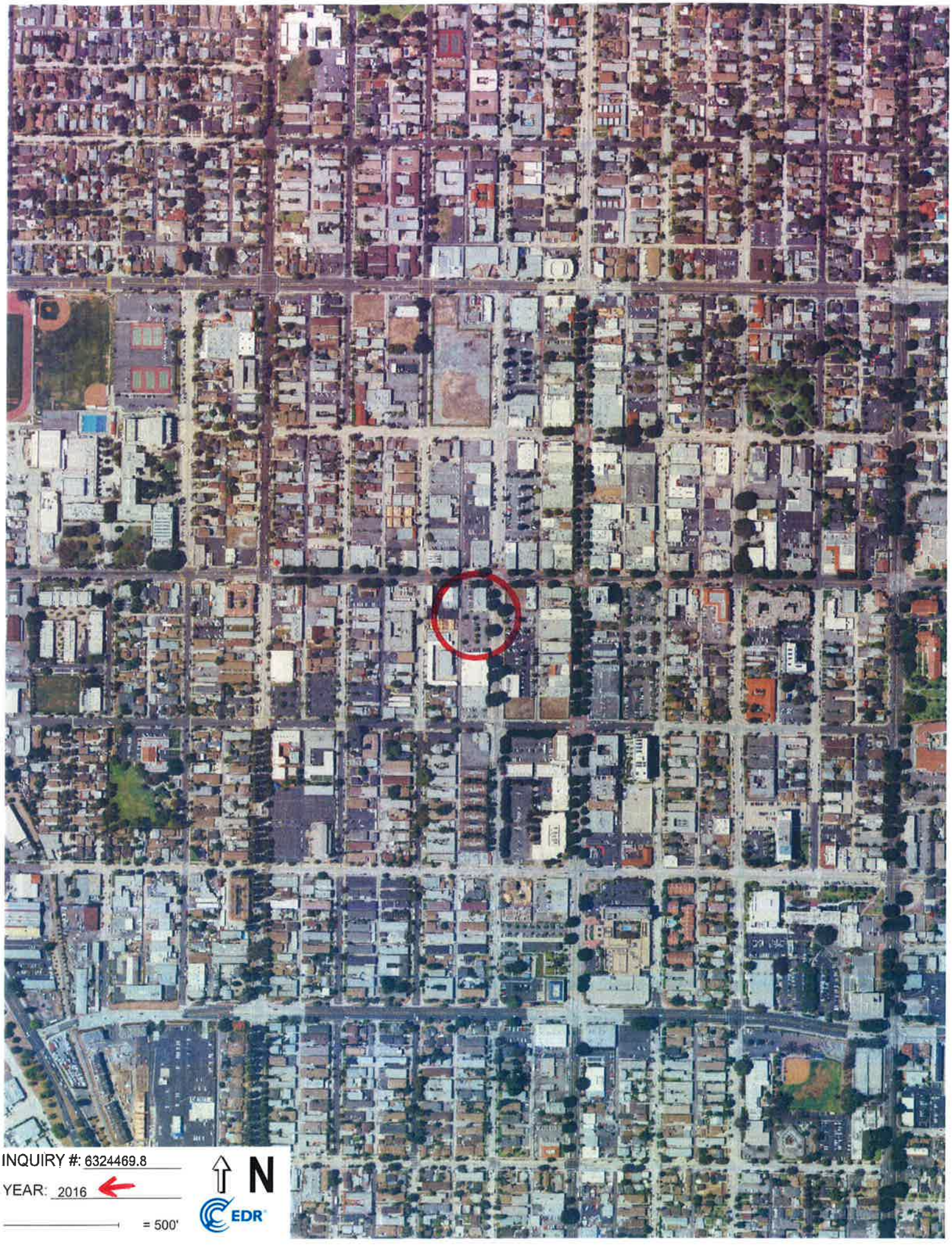

INQUIRY #: 6324469.8
YEAR: 1994
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EDR


INQUIRY #: 6324469.8
YEAR: 2002
= 500'
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EDR


INQUIRY #: 6324469.8
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 6324469.8
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 6324469.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6324469.8
YEAR: 2016
= 500'
N
EDR

APPENDIX G:

CITY DIRECTORY REPORT

6

12826 PHILADELPHIA ST + 12856 Philadelphia St
12826 PHILADELPHIA ST
WHITTIER, CA 90602
+
7001 – 7025 S. Comstock Ave.

Inquiry Number: 6324469.5
January 12, 2021

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by
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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1987	☑	☐	Haines Criss-Cross Directory
1982	☑	☐	Haines Criss-Cross Directory
1976	☑	☐	Haines Criss-Cross Directory
1971	☑	☐	Polk's City Directory
1967	☑	☐	Polk's City Directory
1962	☐	☐	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

12826 PHILADELPHIA ST
WHITTIER, CA 90602

Year	CD Image	Source	
PHILADELPHIA ST			
2014	pg A1	EDR Digital Archive	
2010	pg A2	EDR Digital Archive	
2005	pg A3	EDR Digital Archive	
2000	pg A4	EDR Digital Archive	
1995	pg A6	EDR Digital Archive	
1992	pg A7	EDR Digital Archive	
1987	pg A8	Haines Criss-Cross Directory	
1987	pg A9	Haines Criss-Cross Directory	
1982	pg A10	Haines Criss-Cross Directory	
1976	pg A11	Haines Criss-Cross Directory	
1971	pg A12	Polk's City Directory	
1971	pg A13	Polk's City Directory	
1967	pg A14	Polk's City Directory	
1967	pg A15	Polk's City Directory	
1962	-	Polk's City Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

PHILADELPHIA ST 2014

12703	FIESTA HALL
12706	BIZARRA CAPITAL MEXICAN RESTAURANT
12719	MENDEZ, DARIO
12727	ACADEMY MORTGAGE
	ALLIANCE INVESTMENT GROUP
	CALIFORNIA BROKERS CORP
	FARMERS INSURANCE CYNTHIA RODRIGUE
	REAL ESTATE HEAVEN
12800	CAMILAS PET SHOP
12801	LAW OFFICES STEVEN ESPINOZA
	MORENO LETICIA T LAW OFC OF
	OR CONCEPTS APPLIED
12809	CANO INCOME TAX
12810	BAKERS LIQUOR STORE
	CARMONAS MEAT
12825	BEAUTY PRODUCTS INC
	JAZZ ZBEAUTY
	JAZZZ BEAUTY PRODUCTS
12826	AHMED MAJJIDA
	AHMED SHAHENAZ K DDS
	MAJJIDA B AHMED
	WHITTIER FAMILY DENTAL CENTER
12901	MEMORIES DINNER & DANCING
12905	HOUSE OF FLORES
12909	SPITFIRE INTERIORS
12911	MARCO POLOS PIZZA
12912	UPTOWN GYM THE
12913	FIREHOUSE GRILL THE
12918	KUTTING EDGE SALON

PHILADELPHIA ST 2010

12703	FIESTA HALL
12706	EL SIETE MARES FAMILY RSTRNT
12719	MENDEZ, DARIO
12720	GUTIERREZ TIRES & WHEELS
12724	SMOG INSPECTION & AUTO REPAIR
	WHITTIER AUTO ELECTRIC
12727	CA BROKERS CORP
12800	HOUSE OF WINDSOR INTERIORS
	HUGOSS PET SHOP
12801	STEVEN ESPINOZA LAW OFFICE
12809	CANO INCOME TAX
	CONO INCOMETAX
12810	BAKERS LIQUOR STORE
	CARMONAS MEAT
12825	FAMILY NUTRITION CTR
	JAZZZBEAUTY
	WHITTIER HOSPITAL MEDICAL CTR
12826	MULTIIMAGE GRAPHICS PRINTING
	SAJID AHMED
	WHITTIER FAMILY DENTAL CTR
	WHITTIER FAMILY MEDICAL CTR
	WURZBACH ELKE L
12901	MEMORIES DINNER & DANCING
12905	MONKEYS TO GO
12909	SPITFIRE INTERIORS
12911	MARCO POLOS PIZZA
12912	NUTRITION CENTER
	UPTOWN GYM
12913	FIREHOUSE GRILL
12918	KUTTING EDGE
12920	SOLEGER

PHILADELPHIA ST 2005

12703	FIESTA HALL
12724	SMOG INSPECTION AND AUTO REPAIR
	SUROY INPECTION & AUTO REPAIR
	WHITTIER AUTO ELECTRIC
12727	B 2 B NETWORK INC
	CALIFORNIA BROKERS REAL ESTATE SERVI
	DEBBIES ESCROW SERVICE INC
	MEDINA ENTERPRISES LLC
12801	BEACON PRESS
12809	CANO INCOME TAX
12810	LEE KI CHUL
12825	EXECUTIVE CREATION
	FAMILY NUTRITION CENTER INC
	WESTERN STATES KIT CO
12826	AHMED SAJID MD
	AHMED SHAHENAZ K DDS
	ALPHA SCRIBE SYSTEMS
	MAJJIDA AHMED MD
	MULTI IMAGE GRAPHIC PRINTING
	WHITTIER FAMILY MEDICAL CENTER
12901	MEMORIES DINNER & DANCING
12907	A HENDERSON FLORIST BALLON SHOP
	A HENDERSON FLORIST SHOP
	SOPHIAS GARDEN
	SOPHIAS GARDEN A FLORAL STD
12909	SPITFIRE INTERIORS
12912	UPTOWN GYM
12918	THE KUTTING EDGE
12920	LOS ANDES PUBLISHING INC

PHILADELPHIA ST 2000 ←

12412	OCCUPANT UNKNOWN,
12418	OCCUPANT UNKNOWN,
12426	ICAZBALCETA, MARIA
	ROBERTSON, ROY
12515	7-ELEVEN FOOD STORES STORES (CONTD)
12809	CANO, JOHN G
12812	BAKER, WILBUR
	WALCHER, FAYE
→12826	OCCUPANT UNKNOWN,
13006	RUBIO, ELIEL
	TREADWAY-ABE, BARBARA
13104	REYES, MARY
13124	MURKIJANIN, SONIA
13225	ATKINSON, ROBERT E
	GOTTESMANN, DAVID
13250	ALEY, DOROTHY J
	BANE, V
	BANNON, P
	BAZIAK, ANNA H
	BESTENLEHNER, EVA J
	CASHMAN, RALPH L
	CHRISTENSEN, F
	COGBURN, G L
	COX, VERNON
	DEARDORF, H D
	DUARTE, PHYLLIS
	DYE, D
	FANTZ, E
	FELIS, P
	FLORES, INEZ M
	FORD, EUGENE
	FUNK, C A
	GERKEN, VIRGIL
	GRACEY, B
	HALL, HAROLD F
	HAMILTON, ALMA
	HANDSCHUCH, DORIS
	HART, H A
	HAWES, DORA
	HAZENBERG, H A
	HENRY, R
	HICKEY, EDITH L
	HOBBISIEFKEN, ANITA
	JENKINS, MILDRED
	JOHNSON, EDITH O
	KINNE, HELEN E
	KRONDAK, H B
	KURTH, G A
	LADVALA, ARVO E
	LEE, HUBERT

PHILADELPHIA ST 2000 (Cont'd)

13250	LEIBIG, DARRELL T
	LORENTZEN, V
	MCKENNA, L A
	MEDINA, MARY L
	MERRILL, NORA M
	MONTGOMERY, P E
	MOORE, K G
	MORGAN, GARMON
	MORRIS, JANE A
	NERHOOD, L
	PITTS, G B
	PRICE, KELLY
	RUCKER, T I
	SABELLA, CHARLES
	SANCHEZ, MICHAEL L
	SCHULTZ, VEDA
	SCHWEITZER, LEAH
	SISSON, JOHN
	SLONKA, FRANK
	SMITH, ALBERT W
	STROUSE, I E
	STROUT, JOHN N
	THOMPSON, K F
	TIMONEY, L I
	TOWRY, CAROL L
	TROP, JOSEPH E
	WALKER, SUEANN
	WEBB, CARL L
	WEISS, ROBERT T
	WESSON, IDA R
	WHISTLER, IONE R
	WHITE, A R
	YUHAS, LORAINE A
13303	FAY, TED N

PHILADELPHIA ST 1995

12703	LOYAL ORDER OF MOOSE
	WOTM
12706	SIZZLER
12720	BROTHERS AUTOMOTIVE
12722	WAKEFIELDS AUTO & BRAKE
12727	DAVID W PICKARD III
	DAVID W PICKARD JR
	PICKARD ARCHITECTS
	RICHARD CASTILLO
	SCOTT M JACKSON
12800	HOUSE OF WINDSOR INTERIOR
12801	BEACON PRESS INC
12809	CANO INCOME TAX
	CANO, JOHN G
	JOHN G CANO
12810	BAKERS LIQUOR STORE
12812	CONSERVATORS OF FINE FABRICS
	FAYE, WALCH
	WALCHER, FAYE
12813	DVI ENTERPRISES
12825	WELLS FARGO BANK
12907	LANY NAILS
12909	TRENDS
12911	NATURWAY NATURAL FOODS
12912	UPTOWN GYM
12919	VILLAGE NEEDLECRAFT
12923	DORIAN DRAPERY & INTERIOR
	NOEMI DRAPERIES

PHILADELPHIA ST 1992 ←

12703	LOYAL ORDR MSE
	W O T M
12706	SIZZLER RESTAURANTS
12720	BROTHERS AUTOMOTIVE
12722	WAKEFIELDS AUTO
12727	PICKARD ARCHITECTS
12800	HOUSE OF WINDSOR
12801	BEACON PRESS
12810	BAKER R A&SONS LQR
12812	FAYE WALCH
	FAYE, WALCH
	WALCHER, FAYE
12825	WELLS FRGO OFFICE
→12826	SECURITY PAC ← Bank
12905	VILLAGE BIKE SH INC
12907	AY, NAILS
	NGUYEN KIMCHI
	NGUYEN, KIMCHI
12909	TRENDS
12911	NATURWAY NTRL FOODS
12912	UPTOWN GYM THE
12919	VILLAGE NEEDLECRAFT

PHILADELPHIA ST 1987 ←

12703	*LOYAL ORDR MSE 0716	698-903B	2
	*W O T M	696-6232	2
12706	*SIZZLER RESTAURANTS	B96-2D14	3
12713	XXXX	00	
12718	*A A A STRIPES&MLDNG	693-3515	6
	*KARSTEN MOTORS	698-681D	
12722	*WAKEFIELDS AUTOMOTV	698-4182	
12724	*VILLAGE ATO BDY RPR	696-7066	4
12727	*CAMPION AGNES	696-3722	+7

. PHILADELPHIA E		90601 CONT..	
	★CENTURY 21 CORNRSTN	698-0346	
	★CORNERSTONE REALTY	598-0348	
12800	XXXX	00	
12801	★BEACON PRESS	696-0128	6
12810	★BAKER R A&SONS LOR	693-3272	
	★BAKERS LIQUOR STORE	693-3272	
12813	★FINISHING TOUCH THE	698-0049	+7
	★TAPTIM SIAM	693-0066	+7
	★VILLAGE CUTS	698-2827	+7
12825	★CROCKER NTL WHIT	945-2311	
→12826	XXXX ←	00	
12901	★WESTRN SHOP	696-4180	
	★WHITTR SOR DANCE SC	696-4180	
12903	★CLAYTONS FRAMING	693-1701	
	★JANETS ART SCHOOL	693-1701	
12905	★VILLAGE CYCLERY	898-9425	6
12906	★BASSETT BUSINS INTR	945-3972	3
	LOWERY Janice	945-6855	3
	ULVES Mark	693-0368	+7
12907	★QUAKERTWN GENL STR	698-7541	3
12909	★FREDERICHS BARBER	693-0237	
12911	★NATURWAY NTRL FOODS	696-4271	0
12912	★UPTOWN GYM THE	698-5198	2
12913	★DANNYS VLG BAKERY	696-7337	
12918	★LITTLE OLD BOOKSTR	698-1934	8
12920	★ELECTROLUX WHIT	698-2589	

PHILADELPHIA ST 1982

12703	LOYAL ORDR MSE 0716	698-9038	+2
	W O T M	696-6232	+2
12706	SIZZLER FMLY STEAK	696-2014	+2
12713	XXXX	00	
12719	KARSTEN MOTORS	696-6810	
12722	WAKEFIELDS AUTO&BRK	696-4182	
12724	EMILS AUTO BODY	693-0289	
12727	GREAT WSTRN HOBBIES	698-0721	1
12800	AMER RED CRSS BLOOD	945-6525	+2
12801	BEACON PRESS	698-0128	
12810	BAKER R&SONS LOR ST	883-3272	9
	BAKERS LIQUOR STORE	693-3272	
12913	THAILAND RESTAURANT	698-2725	+2
12825	CROCKER NTL WHIT	945-2311	
Bank → 12826	SECURITY PAS WHIT ←	688-0311	9
12901	JERRYS MENS STORE	696-1798	5
12903	CLAYTONS FRAMING	693-1701	5
	JANETS ART SCHOOL	693-1701	5
12905	KNIGHTS FLOWER SHOP	698-0747	
12906	BASSETT BUSNS INTRS	898-8261	
12907	NEWS STAND&SMOKE SH	698-1786	3
12909	FREDERICHS BRBR SHP	693-0237	
12911	NATURWAY NTRL FOODS	696-4271	0
12912	UPTOWN GYM THE	698-5196	+2
12913	DANNYS ITALIAN BKRY	696-7337	
12918	LITTLE OLD BOOKSTRE	698-1934	8
12920	ELECTROLUX WHIT	698-2589	

PHILADELPHIA ST 1976 ←

```
12703  XXXX                          00
12706*SIZZLER FMLY STK HS698-2014
12713*HENRYS AUTO REPAIR 698-3517
12719*KARSTEN MOTORS     698-6810
12722*WAKEFIELDS AUTO&BRK696-4162
12724*EMILS AUTO BODY    693-0269
12727*P T A CNCL THRFT SH696-4273+6
      *THRIFT SH OF WHIT  696-4273+6
12800  XXXX                          00
12801*BEACON PRESS       698-0128
12810*BAKER R A&SONS LQUR693-3272
      *BAKERS LIQUOR STORE693-3272
12813*ALAMO CENTER       693-7145  4
      *CONSUMR PROTCTN SVS698-0329+6
12825*CROCKER NATIONAL BK945-2311  4
12826*SECURITY PAC NTL BK698-0311 ←
12901*JERRYS MENS STORE  696-1798  5
12903*CLAYTONS FRAMNG&ART693-1701  5
      *JANETS ART SCHOOL  693-1701  5
12905*KNIGHTS FLOWER SHOP698-0747
12906*BASSETT OFC FURN CO698-8261
12907*NEWS STAND THE      698-1786  3
12909*FREDERICHS BRBR SHP693-0237
12911*NATURWAY NUTRTN CNT696-4271
      *TURNERS NATURAL FDS696-4271
12912*LEWIS LIGHTING     692-1430
12913*DELISOS BAKERY      696-7337
12918*STAR OF SIAM        696-4812  2
12920*ELECTROLUX CORP     698-2589  2
```

Bank →

696-4276

S NEWLIN AV INTERSECTS

12703 Whittier Automatic Cleaners self serv 696-4555

12706 Sizzler No 71 restr 698-2014

12713 Norge Customer's Parking

Henry's Auto Repair 698-3517

12719 Karsten Motors volkswagon repr 698-6810

12720 Whittier Power Tool hdw 696-2659

12722 Wakefield Automotive & Brake repr 696-4162

12724 Emil's Auto Body Shop repr 693-0269

12727 Vacant

900

MILTON AV INTERSECTS

12800 Twin-R Trophy & Lettering Co 693-6611

12801 Beacon Press 698-0128

12810 Baker R A & Sons Inc 693-3272

12812 Vacant

12813 Mac's Thrift Shop genl mdse used 696-5118

12825 Richardson A B & Co variety store 698-3019

Upton Arcade Coffee Shop 696-6616

E PHILADELPHIA ST—Contd

12826 Security Pacific National Bank
698-0311

S COMSTOCK AV INTERSECTS

12900 La Rue's Floor Covering Inc 698-9788
12901 Jerry's mens clo 696-1798
12903 Christensen News Stand 698-1786
12905 Knight's Flower Shop 698-0747
12906 Bassett Office Furniture Co 698-8261
12907 Vacant
12909 Frederich's Barber Shop 693-0237
12911 Turner's Natural Foods gro 696-4271
12912 Lewis Lighting lamps 692-1430
12913 D'Eliso's Bakery & Coffee Shop
696-7337
12918 Benevest Inc tax accts 698-7934

GREENLEAF AV INTERSECTS

4

S GREENLEAF AV INTERSECTS

13002 Bank Of America National Trust &
Savings Assn 698-0111

PHILADELPHIA ST 1967

---S NEWLIN AV INTERSECTS
12703 WHITTIER AUTOMATIC CLEANERS
SELF SERV 696-4555

12706 SIZZLER RESTR 698-2014
12713 HENRY'S AUTO REPAIR
678-3517
12719 VACANT
12720 WHITTIER POWER TOOL HDW
696-2659
12724 EMIL'S AUTO BODY REPR
693-0269
12726 VACANT 693-0269
12727 SANDERS DISCOUNT FURNITURE
696-8775

900

---MILTON AV INTERSECTS
12800 ROLLO GYM CO GYMNASIUM
693-1794
12801 VACANT

PHILADELPHIA ST E--CONTD

12810 BAKER R A & SONS INC
693-3272
BAKER RAYMOND A
12812 COSTUMERS SPECIALTY SHOP
COSTUME RENTALS 698-2685
12813 BEACON PRESS PRINTING
696-6787
12826 SECURITY FIRST NATIONAL
BANK 698-0311
---S COMSTOCK AV INTERSECTS
12900 WILSON J W CO CARPETS &
DRAPES 698-9788
12901 JERRY'S MENS CLO 696-1798
12903 CHRISTENSEN NEWS STAND
698-1786
12905 VACANT
12906 BASSETT OFFICE FURNITURE CO
698-8261
12907 KNIGHTS FLOWER SHOP Fflorist
698-0747
12909 FREDERICH'S BARBER SHOP
693-0237
12911 VACANT
12912 PRESTIGE BRANDS FURNITURE
698-6114
12913 D'ELISO'S BAKERY & COFFEE
SHOP 696-7337
12918 VACANT

4

---S GREENLEAF AV INTERSECTS
13002 BANK OF AMERICA 698-0111

APPENDIX H:

EDR REPORT

Hf

12826 PHILADELPHIA ST + 12856 Philadelphia St
12826 PHILADELPHIA ST
WHITTIER, CA 90602

+

Inquiry Number: 6324469.2s
January 08, 2021

7001 - 7005 S. Comstock Ave.

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Map Findings Summary	4
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Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

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Physical Setting Source Map	A-8
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

12826 PHILADELPHIA ST
WHITTIER, CA 90602

COORDINATES

Latitude (North):	33.9785690 - 33° 58' 42.84"
Longitude (West):	118.0389330 - 118° 2' 20.15"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	404028.6
UTM Y (Meters):	3760071.8
Elevation:	322 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140513
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
12826 PHILADELPHIA ST
WHITTIER, CA 90602

ick on Map ID to see full detail.

AP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi DIRECTION
	WHITTIER FAMILY DENT	12826 PHILADELPHIA S	HAZNET, HWTS ←		TP ←
9g	OMEGA CHEMICAL SITE	12504 - 12512 E. WHI	NPL, SEMS, CORRACTS, RCRA-LQG, US ENG CONTROLS, US	Same	2686, 0.509, S
2	WORLD VISION INC	12856 PHILADELPHIA S	HAZNET, HWTS ←	Higher	1 ft.
3	CONSERVATORS OF FINE	12812 PHILADELPHIA	DRYCLEANERS	Lower	66, 0.013, NW
4	HARRIS ORGANS INC	7047 S COMSTOCK AVE	RCRA NonGen / NLR	Lower	151, 0.029, So
5	GARY SMITH	7038 COMSTOCK AVE	SWEEPS UST	Lower	205, 0.039, SS
6	BROTHERS AUTOMOTIVE	12722 PHILIDELPHIA S	RCRA-SQG, FINDS, ECHO	Lower	274, 0.052, WN
7	TEN FOUR AUTO	12722 PHILADELPHIA S	CERS HAZ WASTE, LOS ANGELES CO. HMS, CERS	Lower	274, 0.052, WN
	OUR CLEANERS	6727 COMSTOCK AVE	EDR Hist Cleaner	Higher	406, 0.077, No
	MR CAL BELLINI	6733 MILTON AVE	SWEEPS UST	Higher	411, 0.078, NN
10	WHITTIER AUTOMATIC C	12703 E PHILADELPHIA	EDR Hist Cleaner	Lower	448, 0.085, WN
	MARCO DRY CLEANERS	12719 E WARDMAN ST	EDR Hist Cleaner	Lower	468, 0.089, SW
	TENNEQUE HOMES, INC	6727 GREENLEAF AVE	RCRA NonGen / NLR	Higher	524, 0.099, NE
	DAVID MANDEL	7201 GREENLEAF AVE	LUST, Cortese, LOS ANGELES CO. HMS, CERS	Higher	575, 0.109, SS
14	CLYDE WATT CLEANER	6747 S BRIGHT AVE	DRYCLEANERS	Higher	754, 0.143, EN
15	CLYDE WATTS CLEANERS	6747 S BRIGHT AVE	DRYCLEANERS	Higher	754, 0.143, EN
16	RELIABLE PRINTING SE	6743 BRIGHT ST	RCRA-SQG, FINDS, ECHO	Higher	767, 0.145, EN
17	BANK OF AMERICA	7255 S. GREENLEAF AV	RCRA NonGen / NLR	Lower	784, 0.148, SS
18	FRANK AGULTO	7255 GREENLEAF AVE	RCRA NonGen / NLR	Lower	784, 0.148, SS
9	UPTOWN GARAGE	12604 E PHILADELPHIA	CERS HAZ WASTE, CERS	Lower	820, 0.155, We
20	EDWARD ORTIZ	6732 BRIGHT AVE	RCRA NonGen / NLR	Higher	892, 0.169, EN
	SIR SPEEDY PRINTING	7240 GREENLEAF AVE	RCRA NonGen / NLR	Lower	897, 0.170, SS
22	WHITTIER TOWERS	7215 BRIGHT AVE	RCRA NonGen / NLR	Lower	921, 0.174, SE
23	WHITTIER	7215 BRIGHT AVE	RCRA NonGen / NLR	Lower	921, 0.174, SE
24	7-11 #17896	12515 PHILADELPHIA S	LUST, Cortese, HIST CORTESE, CERS	Lower	987, 0.187, WN
25	SOUTHLAND CORP SS 17	12515 PHILADELPHIA S	SWEEPS UST, CA FID UST, LOS ANGELES CO. HMS, CERS	Lower	987, 0.187, WN
26	7-ELEVEN STORE 17896	12515	HIST UST	Lower	987, 0.187, WN
	CITY OF WHITTIER PUB	12813 BAILEY ST	RCRA NonGen / NLR	Higher	993, 0.188, No
28	BOBS AUTOMOTIVE CENT	12510 PHILADELPHIA S	SWEEPS UST, LOS ANGELES CO. HMS	Lower	1099, 0.208, W
	BAILEY STATION	6709 WASHINGTON AVE	RCRA-SQG, FINDS, ECHO	Higher	1179, 0.223, El
	WHITTIER FIRST FRIEN	13205 PHILADELPHIA S	RCRA NonGen / NLR	Higher	1226, 0.232, El
31	RITE AID #6267	6512 COMSTOCK AVE	RCRA-LQG	Higher	1276, 0.242, N
32	RITE AID #6267	6512 COMSTOCK AVE	CERS HAZ WASTE, HAZNET, HWTS	Higher	1276, 0.242, N
33	RITE AID #6267	6512 COMSTOCK AVE	RCRA-LQG	Higher	1276, 0.242, N
	V & A RECYCLING CENT	7015 WHITTIER AVE	SWRCY	Lower	1278, 0.242, W
	EDWARD HARRIS	7311 NEWLIN AVE	RCRA NonGen / NLR	Lower	1288, 0.244, S
36	TOSCO - 76 STATION #	12823 HADLEY ST E	LUST, Cortese, CERS	Higher	1466, 0.278, N
37	76 PRODUCTS STATION	12823 HADLEY	HIST CORTESE	Higher	1466, 0.278, N
3	ANDY GARAGE	7339 GREENLEAF AVE	LUST, Cortese, LOS ANGELES CO. HMS	Lower	1471, 0.279, S

MAPPED SITES SUMMARY

Target Property Address:
12826 PHILADELPHIA ST
WHITTIER, CA 90602

ick on Map ID to see full detail.

AP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi DIRECTION
9	ANDY GARAGE	7339 GREENLEAF	LUST, HIST CORTESE, CERS	Lower	1471, 0.279, S
0	TEXACO #611060272	12608 HADLEY ST	LUST, SWEEPS UST, Cortese, CERS	Lower	1530, 0.290, N
	PENN STREET ELEMENTA	WHITTIER AVENUE/PENN	ENVIROSTOR, SCH	Lower	1568, 0.297, W
	WHITTIER CITY CS	13230 EAST PENN STRE	SWF/LF, ENF, LOS ANGELES CO. HMS, NPDES, PEST LIC,...	Lower	1727, 0.327, S
	CHEVRON #9-8623	7001 PAINTER AVE S	LUST, Cortese, HIST CORTESE, CERS	Higher	1727, 0.327, E
4	ARCO #5206	12525 HADLEY ST	LUST, SWEEPS UST, Cortese	Lower	1770, 0.335, N
5	ARCO #5206	12525 HADLEY	LUST, HIST CORTESE, CERS	Lower	1770, 0.335, N
6	MACMURRAY CLEANERS	6340 S PICKERING AVE	CPS-SLIC, DRYCLEANERS, CERS	Lower	1806, 0.342, N
7	MACMURRAY CLEANERS A	6340 PICKERING	CPS-SLIC	Lower	1806, 0.342, N
	WHITTIER HIGH SCHOOL	PHILADELPHIA STREET	ENVIROSTOR, SCH	Lower	1925, 0.365, W
9	PAQUETTE FAMILY TRUS	7336 PIERCE AVE	LUST, LOS ANGELES CO. HMS, CERS	Lower	2090, 0.396, S
0	PAQUETTE FAMILY TRUS	7336 PIERCE AVE	Cortese, HAZNET, HWTS	Lower	2090, 0.396, S
1	CITY OF WHITTIER POL	7315 PAINTER AVE S	LUST, SWEEPS UST, Cortese, HIST CORTESE, LOS...	Higher	2159, 0.409, S
2	UNOCAL #5287	7304 PAINTER AVE S	LUST, Cortese, HIST CORTESE, CERS	Higher	2208, 0.418, E
3	MAR VISTA MOULDING	7343 PIERCE AVE	LUST, Cortese, NPDES, WDS, CIWQS, CERS	Lower	2213, 0.419, S
4	WASHINGTON PLATING,	7060 ELMER AVENUE	HIST Cal-Sites	Lower	2373, 0.449, W
5	7060 ELMER AVENUE LL	7060 ELMER AVE	SEMS-ARCHIVE, RCRA-SQG, RESPONSE, ENVIROSTOR,...	Lower	2373, 0.449, W
6	SUNRISE PROPERTIES	12353 WHITTIER BOULE	ENVIROSTOR, VCP	Lower	2463, 0.466, S
7	12363 WHITTIER BOULE	12363 WHITTIER BOULE	ENVIROSTOR, VCP, HAZNET, HWTS	Lower	2486, 0.471, S
8	PRESTOH WEED CONTROL	12363 WHITTIER	LUST, HIST CORTESE	Lower	2486, 0.471, S
	MODINE MFG CO	12252 E WHITTIER BLV	SEMS-ARCHIVE, RCRA-SQG, ENVIROSTOR, CPS-SLIC, HIST	Lower	2921, 0.553, W
	OMEGA ENERGY CORP	ST RT 33 1/2 MI SO O	HWP, CERS, HWTS	Lower	3100, 0.587, S
1	OMEGA CHEMICAL SITE	12504 & 12512 E WHIT	HIST UST, HWP, CERS	Lower	3381, 0.640, S
2	OMEGA CHEMICAL CORPO	12504 WHITTIER BLVD	HIST Cal-Sites	Lower	3381, 0.640, S
3	OMEGA RECOVERY SERVI	12504 E WHITTIER BLV	RCRA-SQG, ENVIROSTOR, CPS-SLIC, FINDS, ECHO,...	Lower	3381, 0.640, S
	FORMER FRED C. NELLE	11850 WHITTIER BOULE	ENVIROSTOR, VCP, DEED	Lower	3393, 0.643, W
5	SO CAL GAS/WHITTIER	11815 HADLEY STREET	EDR MGP	Lower	3514, 0.666, W
6	SO CAL GAS/WHITTIER	11815 HADLEY STREET	ENVIROSTOR, VCP	Lower	3514, 0.666, W
	GUNLOCKE CORPORATION	12468 PUTNAM ST	ENVIROSTOR, LUST, VCP, SWEEPS UST, DEED, Cortese,...	Lower	3568, 0.676, S
	NEW ENGLAND LEAD COM	12511 EAST PUTNAM ST	ENVIROSTOR	Lower	3709, 0.702, S
	SLF-FIVE POINTS WHIT	8016 SANTA FE SPRING	ENVIROSTOR, VCP, HAZNET, NPDES, CIWQS, HWTS	Lower	4113, 0.779, S
	FRED RIPPY INC	12471 EAST WASHINGTO	ENVIROSTOR	Lower	4246, 0.804, S

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
WHITTIER FAMILY DENT 12826 PHILADELPHIA S WHITTIER, CA 90601	HAZNET GEPAID: CAL000190516 HWTS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 10/28/2020 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OMEGA CHEMICAL SITE Cerclis ID:: 903349 EPA Id: CAD042245001	***12504 - 12512 E. WHI***	***SW 1/2 - 1 (0.509 mi.)***	***0***	***9***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 10/28/2020 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
7060 ELMER AVENUE LL Site ID: 0901114 EPA Id: CAD008493322	***7060 ELMER AVE***	***W 1/4 - 1/2 (0.449 mi.)***	***M55***	***24***

EXECUTIVE SUMMARY

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/14/2020 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OMEGA CHEMICAL SITE EPA ID:: CAD042245001	***12504 - 12512 E. WHI***	***SW 1/2 - 1 (0.509 mi.)***	***0***	***9***

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 12/14/2020 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RITE AID #6267 EPA ID:: CAR000212563	6512 COMSTOCK AVE	N 1/8 - 1/4 (0.242 mi.)	H31	17
RITE AID #6267 EPA ID:: CAL000380299	6512 COMSTOCK AVE	N 1/8 - 1/4 (0.242 mi.)	H33	17

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/14/2020 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RELIABLE PRINTING SE EPA ID:: CAD981975469	***6743 BRIGHT ST***	***ENE 1/8 - 1/4 (0.145 mi.)***	***D16***	***13***
BAILEY STATION EPA ID:: CAR000075796	***6709 WASHINGTON AVE***	***ENE 1/8 - 1/4 (0.223 mi.)***	***29***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BROTHERS AUTOMOTIVE EPA ID:: CAD983596453	***12722 PHILIDELPHIA S***	***WNW 0 - 1/8 (0.052 mi.)***	***C6***	***11***

State- and tribal - equivalent NPL

RESPONSE: A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
7060 ELMER AVENUE LL Database: RESPONSE, Date of Government Version: 07/27/2020	***7060 ELMER AVE***	***W 1/4 - 1/2 (0.449 mi.)***	***M55***	***24***

Status: Refer: Local Agency
Facility Id: 19340728

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there are 13 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PENN STREET ELEMENTA Facility Id: 19010012 Status: No Action Required	***WHITTIER AVENUE/PENN***	***WSW 1/4 - 1/2 (0.297 mi.)***	***41***	***19***
WHITTIER HIGH SCHOOL Facility Id: 60000740 Status: No Action Required	***PHILADELPHIA STREET***	***W 1/4 - 1/2 (0.365 mi.)***	***48***	***22***
7060 ELMER AVENUE LL Facility Id: 19340728 Facility Id: 71002235 Facility Id: 70000170 Status: Refer: Local Agency Status: Refer: Other Agency Status: Refer: 1248 Local Agency	***7060 ELMER AVE***	***W 1/4 - 1/2 (0.449 mi.)***	***M55***	***24***
SUNRISE PROPERTIES Facility Id: 60002034 Status: Active	***12353 WHITTIER BOULE***	***SW 1/4 - 1/2 (0.466 mi.)***	***N56***	***25***
12363 WHITTIER BOULE Facility Id: 60002075 Status: Active	***12363 WHITTIER BOULE***	***SW 1/4 - 1/2 (0.471 mi.)***	***N57***	***25***
MODINE MFG CO Facility Id: 19200002 Status: Refer: RWQCB	***12252 E WHITTIER BLV***	***WSW 1/2 - 1 (0.553 mi.)***	***59***	***26***
OMEGA RECOVERY SERVI Facility Id: 19280436 Facility Id: 80001376 Status: Active Status: Inactive - Needs Evaluation	***12504 E WHITTIER BLV***	***SSW 1/2 - 1 (0.640 mi.)***	***O63***	***28***
FORMER FRED C. NELLE Facility Id: 60002050 Status: Active	***11850 WHITTIER BOULE***	***W 1/2 - 1 (0.643 mi.)***	***64***	***28***
SO CAL GAS/WHITTIER Facility Id: 19490220 Status: Certified	***11815 HADLEY STREET***	***WNW 1/2 - 1 (0.666 mi.)***	***P66***	***29***
GUNLOCKE CORPORATION Facility Id: 60001332 Status: Certified O&M - Land Use Restrictions Only	***12468 PUTNAM ST***	***SSW 1/2 - 1 (0.676 mi.)***	***67***	***29***
NEW ENGLAND LEAD COM Facility Id: 19340755	12511 EAST PUTNAM ST	SSW 1/2 - 1 (0.702 mi.)	68	30

Status: Inactive - Needs Evaluation

SLF-FIVE POINTS WHIT	***8016 SANTA FE SPRING***	***S 1/2 - 1 (0.779 mi.)***	***69***	***30***
Facility Id: 60002983				
Status: Active				
FRED RIPPY INC	12471 EAST WASHINGTO	SSW 1/2 - 1 (0.804 mi.)	70	31
Facility Id: 19330002				
Status: No Further Action				

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WHITTIER CITY CS	***13230 EAST PENN STRE***	***SE 1/4 - 1/2 (0.327 mi.)***	***42***	***20***

Database: LOS ANGELES CO. LF, Date of Government Version: 10/09/2020
Site ID: 272
Status: Active

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, has revealed that there are 15 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DAVID MANDEL	***7201 GREENLEAF AVE***	***SSE 0 - 1/8 (0.109 mi.)***	***13***	***12***

Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T0603773179

TOSCO - 76 STATION #	***12823 HADLEY ST E***	***N 1/4 - 1/2 (0.278 mi.)***	***H36***	***18***

Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020
Status: Open - Site Assessment
Facility Id: I-10998
Status: Pollution Characterization
Global Id: T0603703708
Global ID: T0603703708

CHEVRON #9-8623	***7001 PAINTER AVE S***	***E 1/4 - 1/2 (0.327 mi.)***	***43***	***20***

Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Facility Id: I-09898
Status: Case Closed
Global Id: T0603703515
Global ID: T0603703515

CITY OF WHITTIER POL	***7315 PAINTER AVE S***	***SE 1/4 - 1/2 (0.409 mi.)***	***L51***	***22***

Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020

Status: Completed - Case Closed
Facility Id: R-11892
Status: Case Closed
Global Id: T0603705078
Global ID: T0603705078

UNOCAL #5287 — ***7304 PAINTER AVE S*** — ***ESE 1/4 - 1/2 (0.418 mi.)*** — ***L52*** — ***23***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Facility Id: I-11045
Status: Case Closed
Global Id: T0603703720
Global ID: T0603703720

Lower Elevation	Address	Direction / Distance	Map ID	Page

7-11 #17896 — ***12515 PHILADELPHIA S*** — ***WNW 1/8 - 1/4 (0.187 mi.)*** — ***F24*** — ***15***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Facility Id: I-10086
Status: Case Closed
Global Id: T0603703573
Global ID: T0603703573

ANDY GARAGE — ***7339 GREENLEAF AVE*** — ***SSE 1/4 - 1/2 (0.279 mi.)*** — ***I38*** — ***18***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Facility Id: R-24395
Status: Case Closed
Global ID: T0603705449

ANDY GARAGE — ***7339 GREENLEAF*** — ***SSE 1/4 - 1/2 (0.279 mi.)*** — ***I39*** — ***19***
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T0603705449

TEXACO #611060272 — ***12608 HADLEY ST*** — ***NNW 1/4 - 1/2 (0.290 mi.)*** — ***J40*** — ***19***
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T10000005399

ARCO #5206 — ***12525 HADLEY ST*** — ***NNW 1/4 - 1/2 (0.335 mi.)*** — ***J44*** — ***20***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Facility Id: I-12079
Status: Case Closed
Global ID: T0603703919

ARCO #5206 — ***12525 HADLEY*** — ***NNW 1/4 - 1/2 (0.335 mi.)*** — ***J45*** — ***21***
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T0603703919

PAQUETTE FAMILY TRUS — ***7336 PIERCE AVE*** — ***SW 1/4 - 1/2 (0.396 mi.)*** — ***K49*** — ***22***
Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T10000002725

MAR VISTA MOULDING — ***7343 PIERCE AVE*** — ***SW 1/4 - 1/2 (0.419 mi.)*** — ***K53*** — ***23***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 09/08/2020

Status: Completed - Case Closed
Facility Id: R-36093
Status: Case Closed
Global Id: T0603791307
Global ID: T0603791307

7060 ELMER AVENUE LL	***7060 ELMER AVE***	***W 1/4 - 1/2 (0.449 mi.)***	***M55***	***24***

Database: LUST, Date of Government Version: 09/08/2020
Status: Completed - Case Closed
Global Id: T10000000574

PRESTOH WEED CONTROL	***12363 WHITTIER***	***SW 1/4 - 1/2 (0.471 mi.)***	***N58***	***26***

Database: LUST REG 4, Date of Government Version: 09/07/2004
Facility Id: 121389-08
Status: Remedial action (cleanup) Underway
Global ID: T0603700212

CPS-SLIC: A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 2 CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MACMURRAY CLEANERS	***6340 S PICKERING AVE***	***NNW 1/4 - 1/2 (0.342 mi.)***	***J46***	***21***

Database: CPS-SLIC, Date of Government Version: 09/08/2020
Facility Status: Completed - Case Closed
Global Id: SL0603740681

MACMURRAY CLEANERS A	6340 PICKERING	NNW 1/4 - 1/2 (0.342 mi.)	J47	21

Database: SLIC REG 4, Date of Government Version: 11/17/2004
Facility Status: No further action required

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 07/27/2020 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUNRISE PROPERTIES	***12353 WHITTIER BOULE***	***SW 1/4 - 1/2 (0.466 mi.)***	***N56***	***25***

Status: Active
Facility Id: 60002034

12363 WHITTIER BOULE	***12363 WHITTIER BOULE***	***SW 1/4 - 1/2 (0.471 mi.)***	***N57***	***25***

Status: Active
Facility Id: 60002075

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A review of the SWRCY list, as provided by EDR, and dated 09/08/2020 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
V & A RECYCLING CENT Cert Id: RC269952.001	7015 WHITTIER AVE	W 1/8 - 1/4 (0.242 mi.)	34	17

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WASHINGTON PLATING, OMEGA CHEMICAL CORPO	7060 ELMER AVENUE 12504 WHITTIER BLVD	W 1/4 - 1/2 (0.449 mi.) SSW 1/2 - 1 (0.640 mi.)	M54 O62	24 27

CERS HAZ WASTE: A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/19/2020 has revealed that there are 3 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RITE AID #6267	***6512 COMSTOCK AVE***	***N 1/8 - 1/4 (0.242 mi.)***	***H32***	***17***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TEN FOUR AUTO	***12722 PHILADELPHIA S***	***WNW 0 - 1/8 (0.052 mi.)***	***C7***	***11***
UPTOWN GARAGE	***12604 E PHILADELPHIA***	***W 1/8 - 1/4 (0.155 mi.)***	***F19***	***14***

Local Lists of Registered Storage Tanks

SWEEPS UST: A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MR CAL BELLINI Status: A Comp Number: 14273	6733 MILTON AVE	NNW 0 - 1/8 (0.078 mi.)	9	11
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
GARY SMITH	7038 COMSTOCK AVE	SSE 0 - 1/8 (0.039 mi.)	B5	10

Status: A Comp Number: 13366				
SOUTHLAND CORP SS 17 Status: A Tank Status: A Comp Number: 10086	***12515 PHILADELPHIA S***	***WNW 1/8 - 1/4 (0.187 mi.)***	***F25***	***15***
BOBS AUTOMOTIVE CENT Status: A Tank Status: A Comp Number: 14813	***12510 PHILADELPHIA S***	***W 1/8 - 1/4 (0.208 mi.)***	***F28***	***16***

HIST UST: A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-ELEVEN STORE 17896 Facility Id: 00000003807	12515	WNW 1/8 - 1/4 (0.187 mi.)	F26	15

CA FID UST: A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SOUTHLAND CORP SS 17 Facility Id: 19003582 Status: A	***12515 PHILADELPHIA S***	***WNW 1/8 - 1/4 (0.187 mi.)***	***F25***	***15***

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/14/2020 has revealed that there are 11 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TENNEQUE HOMES, INC EPA ID:: CAC003059258	6727 GREENLEAF AVE	NE 0 - 1/8 (0.099 mi.)	12	12
EDWARD ORTIZ EPA ID:: CAC003022011	6732 BRIGHT AVE	ENE 1/8 - 1/4 (0.169 mi.)	D20	14
CITY OF WHITTIER PUB	12813 BAILEY ST	N 1/8 - 1/4 (0.188 mi.)	27	16
WHITTIER FIRST FRIEN	13205 PHILADELPHIA S	ENE 1/8 - 1/4 (0.232 mi.)	30	16
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
HARRIS ORGANS INC	7047 S COMSTOCK AVE	S 0 - 1/8 (0.029 mi.)	B4	10

EPA ID:: CAL000044886				
BANK OF AMERICA EPA ID:: CAC002968961	7255 S. GREENLEAF AV	SSE 1/8 - 1/4 (0.148 mi.)	E17	13
FRANK AGULTO EPA ID:: CAC003055311	7255 GREENLEAF AVE	SSE 1/8 - 1/4 (0.148 mi.)	E18	13
SIR SPEEDY PRINTING EPA ID:: CAC003042719	7240 GREENLEAF AVE	SSE 1/8 - 1/4 (0.170 mi.)	21	14
WHITTIER TOWERS EPA ID:: CAC003044339	7215 BRIGHT AVE	SE 1/8 - 1/4 (0.174 mi.)	G22	14
WHITTIER	7215 BRIGHT AVE	SE 1/8 - 1/4 (0.174 mi.)	G23	14
EDWARD HARRIS EPA ID:: CAC003041859	7311 NEWLIN AVE	SSW 1/8 - 1/4 (0.244 mi.)	35	17

ROD: A review of the ROD list, as provided by EDR, and dated 10/28/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OMEGA CHEMICAL SITE EPA ID:: CAD042245001	***12504 - 12512 E. WHI***	***SW 1/2 - 1 (0.509 mi.)***	***0***	***9***

Cortese: A review of the Cortese list, as provided by EDR, and dated 06/22/2020 has revealed that there are 12 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DAVID MANDEL Cleanup Status: COMPLETED - CASE CLOSED	***7201 GREENLEAF AVE***	***SSE 0 - 1/8 (0.109 mi.)***	***13***	***12***
TOSCO - 76 STATION # Cleanup Status: OPEN - SITE ASSESSMENT	***12823 HADLEY ST E***	***N 1/4 - 1/2 (0.278 mi.)***	***H36***	***18***
CHEVRON #9-8623 Cleanup Status: COMPLETED - CASE CLOSED	***7001 PAINTER AVE S***	***E 1/4 - 1/2 (0.327 mi.)***	***43***	***20***
CITY OF WHITTIER POL Cleanup Status: COMPLETED - CASE CLOSED	***7315 PAINTER AVE S***	***SE 1/4 - 1/2 (0.409 mi.)***	***L51***	***22***
UNOCAL #5287 Cleanup Status: COMPLETED - CASE CLOSED	***7304 PAINTER AVE S***	***ESE 1/4 - 1/2 (0.418 mi.)***	***L52***	***23***

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-11 #17896 Cleanup Status: COMPLETED - CASE CLOSED	***12515 PHILADELPHIA S***	***WNW 1/8 - 1/4 (0.187 mi.)***	***F24***	***15***
ANDY GARAGE Cleanup Status: COMPLETED - CASE CLOSED	***7339 GREENLEAF AVE***	***SSE 1/4 - 1/2 (0.279 mi.)***	***I38***	***18***
TEXACO #611060272 Cleanup Status: COMPLETED - CASE CLOSED	***12608 HADLEY ST***	***NNW 1/4 - 1/2 (0.290 mi.)***	***J40***	***19***
ARCO #5206	***12525 HADLEY ST***	***NNW 1/4 - 1/2 (0.335 mi.)***	***J44***	***20***

Cleanup Status: COMPLETED - CASE CLOSED

PAQUETTE FAMILY TRUS	***7336 PIERCE AVE***	***SW 1/4 - 1/2 (0.396 mi.)***	***K50***	***22***
Cleanup Status: COMPLETED - CASE CLOSED				
MAR VISTA MOULDING	***7343 PIERCE AVE***	***SW 1/4 - 1/2 (0.419 mi.)***	***K53***	***23***
Cleanup Status: COMPLETED - CASE CLOSED				
7060 ELMER AVENUE LL	***7060 ELMER AVE***	***W 1/4 - 1/2 (0.449 mi.)***	***M55***	***24***
Cleanup Status: COMPLETED - CASE CLOSED				

DRYCLEANERS: A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CLYDE WATT CLEANER	6747 S BRIGHT AVE	ENE 1/8 - 1/4 (0.143 mi.)	D14	13
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 08/19/2020				
CLYDE WATTS CLEANERS	6747 S BRIGHT AVE	ENE 1/8 - 1/4 (0.143 mi.)	D15	13
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 08/19/2020				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONSERVATORS OF FINE	12812 PHILADELPHIA	NW 0 - 1/8 (0.013 mi.)	A3	10
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 08/19/2020				

HAZNET: A review of the HAZNET list, as provided by EDR, and dated 12/31/2019 has revealed that there is 1 HAZNET site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WORLD VISION INC	***12856 PHILADELPHIA S***	***0 - 1/8 (0.000 mi.)***	***A2***	***10***
GEPAID: CAC001158080				

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 8 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
76 PRODUCTS STATION	12823 HADLEY	N 1/4 - 1/2 (0.278 mi.)	H37	18
Reg Id: I-10998				
CHEVRON #9-8623	***7001 PAINTER AVE S***	***E 1/4 - 1/2 (0.327 mi.)***	***43***	***20***
Reg Id: I-09898				
CITY OF WHITTIER POL	***7315 PAINTER AVE S***	***SE 1/4 - 1/2 (0.409 mi.)***	***L51***	***22***
Reg Id: R-11892				
UNOCAL #5287	***7304 PAINTER AVE S***	***ESE 1/4 - 1/2 (0.418 mi.)***	***L52***	***23***
Reg Id: I-11045				

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-11 #17896	***12515 PHILADELPHIA S***	***WNW 1/8 - 1/4 (0.187 mi.)***	***F24***	***15***

Reg Id: I-10086				
ANDY GARAGE Reg Id: R-24395	***7339 GREENLEAF***	***SSE 1/4 - 1/2 (0.279 mi.)***	***I39***	***19***
ARCO #5206 Reg Id: I-12079	***12525 HADLEY***	***NNW 1/4 - 1/2 (0.335 mi.)***	***J45***	***21***
PRESTOH WEED CONTROL Reg Id: 121389-08	***12363 WHITTIER***	***SW 1/4 - 1/2 (0.471 mi.)***	***N58***	***26***

HWP: A review of the HWP list, as provided by EDR, and dated 08/17/2020 has revealed that there are 2 HWP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OMEGA ENERGY CORP EPA Id: CAD981577661 Cleanup Status: CLOSED	***ST RT 33 1/2 MI SO O***	***SSW 1/2 - 1 (0.587 mi.)***	***60***	***27***
OMEGA CHEMICAL SITE EPA Id: CAD042245001 Cleanup Status: UNDERGOING CLOSURE	***12504 & 12512 E WHIT***	***SSW 1/2 - 1 (0.640 mi.)***	***O61***	***27***

HWTS: A review of the HWTS list, as provided by EDR, and dated 10/13/2020 has revealed that there is 1 HWTS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WORLD VISION INC	***12856 PHILADELPHIA S***	***0 - 1/8 (0.000 mi.)***	***A2***	***10***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SO CAL GAS/WHITTIER	11815 HADLEY STREET	WNW 1/2 - 1 (0.666 mi.)	P65	29

EDR Hist Cleaner: A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 3 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

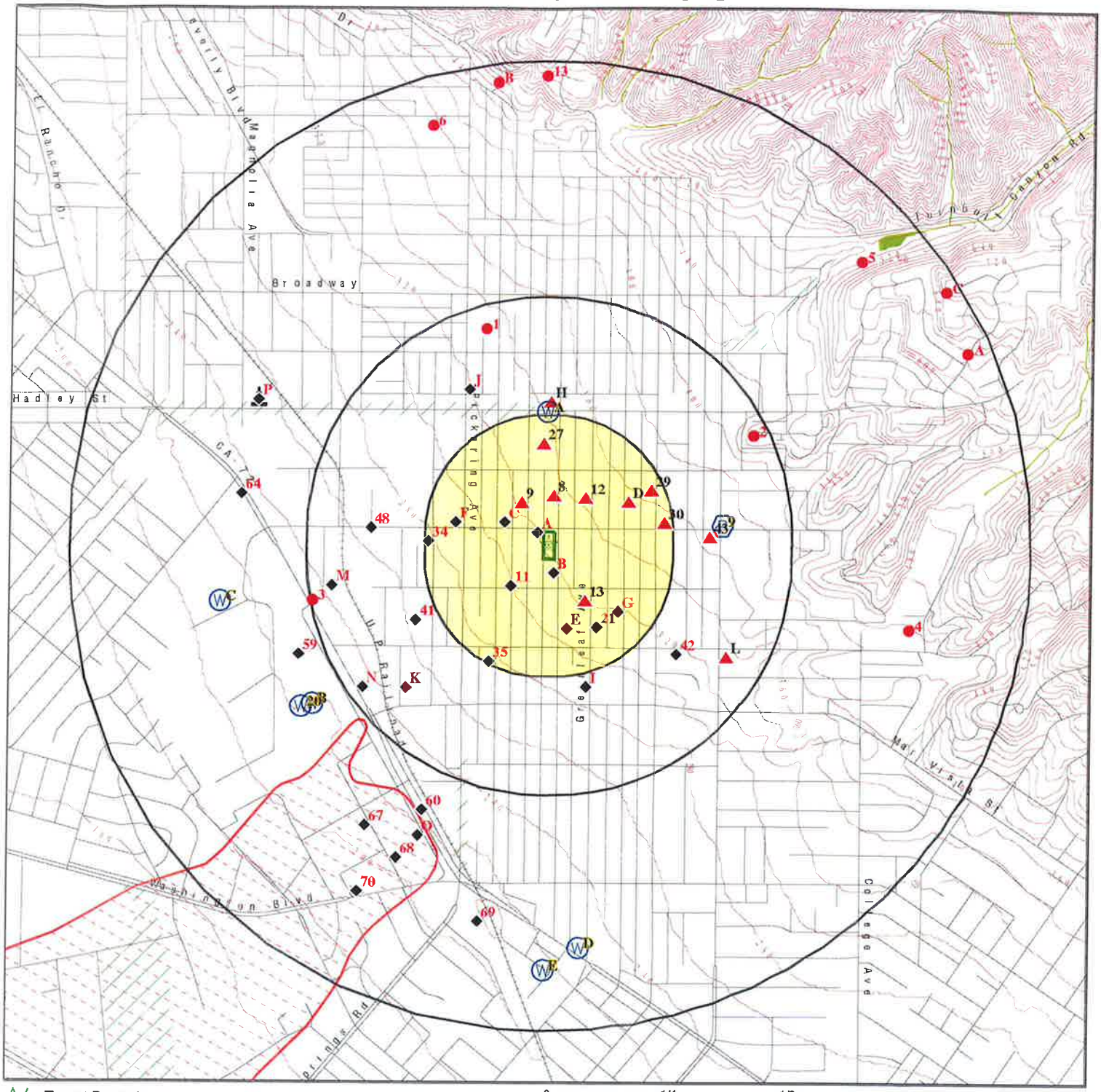
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OUR CLEANERS	6727 COMSTOCK AVE	N 0 - 1/8 (0.077 mi.)	8	11
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
WHITTIER AUTOMATIC C	12703 E PHILADELPHIA	WNW 0 - 1/8 (0.085 mi.)	C10	12

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WHITTIER	S103546970	CHEVRON - WHITTIER OIL FIELD	MAR VISTA	90602	CPS-SLIC
WHITTIER	S121700138	DRYCLEAN EXPRESS, EDWARD & ROSEMAR	9066 WHITTIER BLVD BLDG 2	90601	DRYCLEANERS

OVERVIEW MAP - 6324469.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

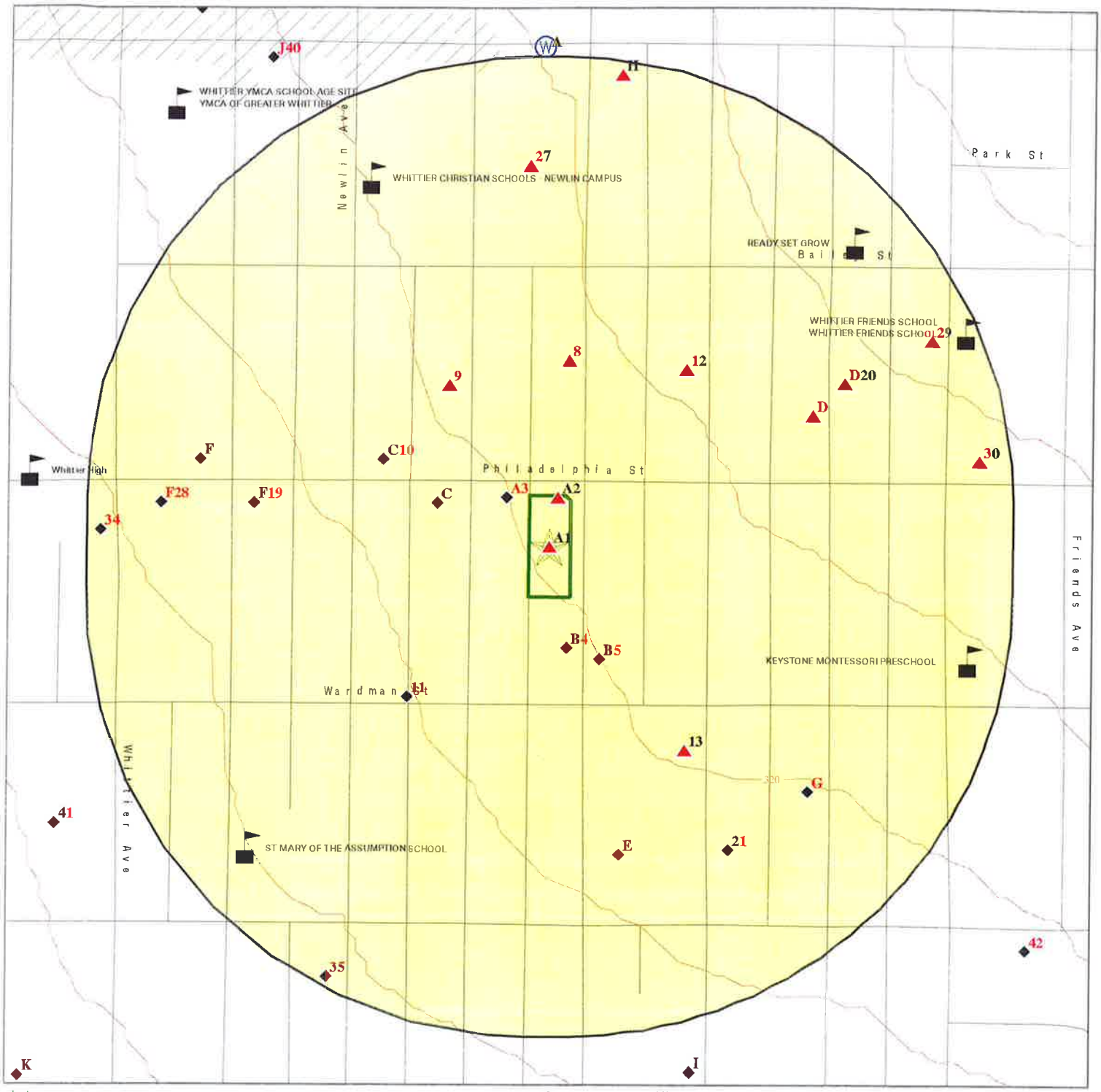
0 1/4 1/2 1 Miles

- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 12826 PHILADELPHIA ST ADDRESS: 12826 PHILADELPHIA ST WHITTIER CA 90602 LAT/LONG: 33.978569 / 118.038933	CLIENT: PIC Environmental Services CONTACT: Tim Hersch INQUIRY #: 6324469.2s DATE: January 08, 2021 8:52 am

DETAIL MAP - 6324469.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 12826 PHILADELPHIA ST ADDRESS: 12826 PHILADELPHIA ST WHITTIER CA 90602 LAT/LONG: 33.978569 / 118.038933	CLIENT: PIC Environmental Services CONTACT: Tim Hersch INQUIRY #: 6324469.2s DATE: January 08, 2021 8:53 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	2	NR	NR	NR	2
RCRA-SQG	0.250		1	2	NR	NR	NR	3
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	1	0	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	5	8	NR	13
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	1	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		1	1	13	NR	NR	15

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	2	NR	NR	2
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	2	NR	NR	2
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	1	0	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
AOCONCERN	1.000		0	0	0	0	NR	0
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	1	1	NR	2
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	2	NR	NR	NR	3
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	2	NR	NR	NR	4
HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	9	NR	NR	NR	11
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	1	NR	1
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	1	10	NR	NR	12
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		1	2	NR	NR	NR	3
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001	2	~~1~~	NR	NR	NR	NR	2
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	7	NR	NR	8
LOS ANGELES CO. HMS	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	2	NR	2
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	0.001	2	~~1~~	NR	NR	NR	NR	2
LOS ANGELES CO LF METHANE	0.500		0	0	0	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000	0	0	0	1	NR	1
EDR Hist Auto	0.125	0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125	3	NR	NR	NR	NR	3

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.001	0	NR	NR	NR	NR	0
RGA LUST	0.001	0	NR	NR	NR	NR	0

- Totals --	~~2~~ 4	14	25	43	15	0	99

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

12826 - 12856 Philadelphia St.

Database(s)

EDR ID Number
EPA ID Number

A1 Target Property
WHITTIER FAMILY DENTAL CENTER
12826 PHILADELPHIA ST STE B
WHITTIER, CA 90601

HAZNET S113099923
HWTS N/A

Actual: 322 ft.

Click here for full text details

HAZNET
GEPAID CAL000190516

NPL Region SW 1/2-1 2686 ft.
OMEGA CHEMICAL SITE PRP ORGANIZED GROUP
12504 - 12512 E. WHITTIER BLVD
WHITTIER, CA 90602

Click here for full text details

NPL 1000232419
SEMS CAD042245001
CORRACTS
RCRA-LQG
US ENG CONTROLS
US INST CONTROLS
SWEEPS UST
HIST UST
ROD
RAATS
PRP
EMI

NPL
Cerclis ID: 903349
EPA Id CAD042245001

SEMS
Site ID 0903349
EPA Id CAD042245001

CORRACTS
EPA ID: CAD042245001

RCRA-LQG
EPA Id CAD042245001

US ENG CONTROLS
EPA ID: CAD042245001
EPA ID: CAD042245001

US INST CONTROLS
EPA ID: CAD042245001

SWEEPS UST
Status A
Comp Number 13643

HIST UST
Facility Id 00000041598

ROD

OMEGA CHEMICAL SITE PRP ORGANIZED GROUP (Continued) **1000232419**

EPA ID: CAD042245001

RAATS
Status 02
Facility ID CAD042245001

EMI
Facility Id 8107

A2
< 1/8
1 ft.

WORLD VISION INC
12856 PHILADELPHIA ST
WHITTIER, CA 90601

HAZNET **S112870251**
HWTS **N/A**

Relative: Higher

Click here for full text details

HAZNET
GEPAID CAC001158080

A3
NW
< 1/8
0.013 mi.
66 ft.

CONSERVATORS OF FINE FABRICS, F WALCHER
12812 PHILADELPHIA
WHITTIER, CA 90601

DRYCLEANERS **S121698429**
N/A

Relative: Lower

Click here for full text details

B4
South
< 1/8
0.029 mi.
151 ft.

HARRIS ORGANS INC
7047 S COMSTOCK AVE
WHITTIER, CA 90602

RCRA NonGen / NLR **1025865718**
CAL000044886

Relative: Lower

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000044886

B5
SSE
< 1/8
0.039 mi.
205 ft.

GARY SMITH
7038 COMSTOCK AVE
WHITTIER, CA

SWEEPS UST **S106926563**
N/A

Relative: Lower

Click here for full text details

SWEEPS UST
Status A
Comp Number 13366

A1 Target Property **WHITTIER FAMILY DENTAL CENTER**
12826 PHILADELPHIA ST STE B
WHITTIER, CA 90601

HAZNET S113099923
HWTS N/A

Site 1 of 3 in cluster A

Actual: 322 ft.

HAZNET:

Name:	WHITTIER FAMILY DENTAL CENTER
Address:	12826 PHILADELPHIA ST STE B
Address 2:	Not reported
City,State,Zip:	WHITTIER, CA 906010000
Contact:	DR SHAHENAZ K AHMED
Telephone:	5627898515
Mailing Name:	Not reported
Mailing Address:	12826 PHILADELPHIA ST STE B
Year:	2014
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.005
Year:	2013
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.017
Year:	2011
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.005
Year:	2011
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.017
Year:	2009
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035
Year:	2003
Gepaid:	CAL000190516
TSD EPA ID:	CAD028409019

WHITTIER FAMILY DENTAL CENTER (Continued) **S113099923**

CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H01 - Transfer Station
Tons: 0.0102

Year: 2003
Gepaid: CAL000190516
TSD EPA ID: CAD028409019
CA Waste Code: 725 - Liquids with mercury >= 20 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.00104

Year: 2001
Gepaid: CAL000190516
TSD EPA ID: CAD028409019
CA Waste Code: 725 - Liquids with mercury >= 20 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.0011

Additional Info:
Year: 2014
Gen EPA ID: CAL000190516

Shipment Date: 20140715
Creation Date: 9/22/2014 22:15:02
Receipt Date: 20140718
Manifest ID: 002223554GBF
Trans EPA ID: CAR000020255
Trans Name: OSHA COMPLIANCE PARTNERS INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD028409019
Trans Name: CROSBY & OVERTON INC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 181 - Other inorganic solid waste Organics
RCRA Code: D011
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.005
Waste Quantity: 10
Quantity Unit: P
Additional Code 1: D009
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2003
Gen EPA ID: CAL000190516

Shipment Date: 20030129
Creation Date: 5/18/2003 14:30:16
Receipt Date: 20030131
Manifest ID: 98886149

WHITTIER FAMILY DENTAL CENTER (Continued) **S113099923**

Trans EPA ID:	CAR000020255
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD028409019
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0102
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20030129
Creation Date:	5/18/2003 14:30:16
Receipt Date:	20030131
Manifest ID:	21165706
Trans EPA ID:	CAR000020255
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD028409019
TSDF Alt Name:	Not reported
Waste Code Description:	725 - Liquids with mercury > 20 mg/l
RCRA Code:	D009
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.00104
Waste Quantity:	0.25
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2001
Gen EPA ID:	CAL000190516

Shipment Date:	20010625
Creation Date:	10/1/2001 0:00:00
Receipt Date:	20010629
Manifest ID:	98886202
Trans EPA ID:	CAR000020255
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019

WHITTIER FAMILY DENTAL CENTER (Continued) **S113099923**

Trans Name:	Not reported
TSDF Alt EPA ID:	CAD028409019
TSDF Alt Name:	Not reported
Waste Code Description:	725 - Liquids with mercury > 20 mg/l
RCRA Code:	D009
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0011
Waste Quantity:	1
Quantity Unit:	L
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2011
Gen EPA ID:	CAL000190516
Shipment Date:	20110107
Creation Date:	3/28/2011 18:30:20
Receipt Date:	20110114
Manifest ID:	000858605GBF
Trans EPA ID:	CAR000020255
Trans Name:	OSHA COMPLIANCE PARTNERS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.017
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110107
Creation Date:	3/28/2011 18:30:20
Receipt Date:	20110114
Manifest ID:	000858605GBF
Trans EPA ID:	CAR000020255
Trans Name:	OSHA COMPLIANCE PARTNERS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics

WHITTIER FAMILY DENTAL CENTER (Continued) **S113099923**

RCRA Code: D011
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.005
Waste Quantity: 10
Quantity Unit: P
Additional Code 1: D009
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2013
Gen EPA ID: CAL000190516

Shipment Date: 20130723
Creation Date: 9/16/2013 22:15:07
Receipt Date: 20130726
Manifest ID: 000329365GBF
Trans EPA ID: CAR000020255
Trans Name: OSHA COMPLIANCE PARTNERS INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD028409019
Trans Name: CROSBY & OVERTON INC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 343 - Unspecified organic liquid mixture
RCRA Code: D001
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.017
Waste Quantity: 5
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2009
Gen EPA ID: CAL000190516

Shipment Date: 20090113
Creation Date: 3/24/2009 18:30:20
Receipt Date: 20090116
Manifest ID: 000858098GBF
Trans EPA ID: CAR000020255
Trans Name: OSHA COMPLIANCE PARTNERS INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD028409019
Trans Name: CROSBY & OVERTON INC
TSDF Alt EPA ID: Not reported

WHITTIER FAMILY DENTAL CENTER (Continued) **S113099923**

TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D009
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	WHITTIER FAMILY DENTAL CENTER
Address:	12826 PHILADELPHIA ST STE B
Address 2:	Not reported
City,State,Zip:	WHITTIER, CA 906010000
EPA ID:	CAL000190516
Inactive Date:	06/30/2017
Create Date:	09/17/1999
Last Act Date:	11/18/2016
Mailing Name:	Not reported
Mailing Address:	12826 PHILADELPHIA ST STE B
Mailing Address 2:	Not reported
Mailing City,State,Zip:	WHITTIER, CA 906010000
Owner Name:	S K AHMED DDS A PROF CORP.
Owner Address:	12826 PHILADELPHIA ST STE B
Owner Address 2:	Not reported
Owner City,State,Zip:	WHITTIER, CA 906010000
Contact Name:	DR SHAHENAZ K AHMED
Contact Address:	12826 PHILADELPHIA ST STE B
Contact Address 2:	Not reported
City,State,Zip:	WHITTIER, CA 906010000

NPL
Region
SW
1/2-1
2686 ft.

OMEGA CHEMICAL SITE PRP ORGANIZED GROUP
12504 - 12512 E. WHITTIER BLVD
WHITTIER, CA 90602

NPL **1000232419**
SEMS **CAD042245001**
CORRACTS
RCRA-LQG
US ENG CONTROLS
US INST CONTROLS
SWEEPS UST
HIST UST
ROD
RAATS
PRP
EMI

NPL:

EPA Region:	9
EPA ID:	CAD042245001
Site ID:	903349
Name:	OMEGA CHEMICAL CORPORATION
Address:	12504 AND 12512 E. WHITTIER BOULEVARD
City,State,Zip:	WHITTIER, CA 90602
Federal:	N

OMEGA CHEMICAL SITE PRP ORGANIZED GROUP (Continued) **1000232419**

ARISTECH CHEMICAL CORPORATION
ARLON PRODUCTS
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARMOR ALL PRODUCTS CORPORATION

Click this hyperlink while viewing on your computer to access
796 additional PRP: record(s) in the EDR Site Report.

EMI:

Name:	OMEGA CHEMICAL CORP,OMEGA RECO
Address:	12504 E WHITTIER BLVD
City,State,Zip:	WHITTIER, CA
Year:	1995
County Code:	19
Air Basin:	SC
Facility ID:	8107
Air District Name:	SC
SIC Code:	2842
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

A2 **WORLD VISION INC** **HAZNET S112870251**
12856 PHILADELPHIA ST **HWTS N/A**
< 1/8 **WHITTIER, CA 90601**
1 ft.

Site 2 of 3 in cluster A

Relative: Higher
Actual: 325 ft.

HAZNET:

Name:	WORLD VISION INC
Address:	12856 PHILADELPHIA ST
Address 2:	Not reported
City,State,Zip:	WHITTIER, CA 906010000
Contact:	BOB OWEN/DIR CORP ASSEST
Telephone:	2068152236
Mailing Name:	Not reported
Mailing Address:	PO BOX 9716
Year:	1996
Gepaid:	CAC001158080
TSD EPA ID:	CAD009007626
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	D80 - Disposal, Land Fill
Tons:	1.4749

WORLD VISION INC (Continued) **S112870251**

Additional Info:

Year:	1996
Gen EPA ID:	CAC001158080
Shipment Date:	19960215
Creation Date:	10/10/1996 0:00:00
Receipt Date:	19960222
Manifest ID:	95198313
Trans EPA ID:	CAD981455520
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009007626
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	1.4749
Waste Quantity:	1.75
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	WORLD VISION INC
Address:	12856 PHILADELPHIA ST
Address 2:	Not reported
City,State,Zip:	WHITTIER, CA 906010000
EPA ID:	CAC001158080
Inactive Date:	10/25/2000
Create Date:	02/13/1996
Last Act Date:	10/25/2000
Mailing Name:	Not reported
Mailing Address:	PO BOX 9716
Mailing Address 2:	Not reported
Mailing City,State,Zip:	FEDERAL WAY, WA 980630000
Owner Name:	WORLD VISION INC
Owner Address:	PO BOX 9716
Owner Address 2:	Not reported
Owner City,State,Zip:	FEDERAL WAY, WA 980630000
Contact Name:	BOB OWEN/DIR CORP ASSEST
Contact Address:	PO BOX 9716
Contact Address 2:	Not reported
City,State,Zip:	FEDERAL WAY, WA 980630000

End Detail Pages

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

A3
NW
< 1/8
0.013 mi.
66 ft.

CONSERVATORS OF FINE FABRICS, F WALCHER
12812 PHILADELPHIA
WHITTIER, CA 90601

DRYCLEANERS **S121698429**
N/A

Site 3 of 3 in cluster A

Relative:
Lower

Actual:
320 ft.

DRYCLEAN SOUTH COAST:

Name:	CONSERVATORS OF FINE FABRICS, F WALCHER
Address:	12812 PHILADELPHIA
City,State,Zip:	WHITTIER, CA 90601
Facility ID:	54719
Application Number:	148886
Permit Number:	M55406
Status:	O
Representative Name:	F W WALCHER
Representative Telephone:	213 9452669
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
CCAT Number:	04
CCAT Description:	VAPOR RECOVERY UNIT COMPRESS & CONDENSE
UTM East:	404.1000061
UTM North:	3760.1000977

Name:	CONSERVATORS OF FINE FABRICS, F WALCHER
Address:	12812 PHILADELPHIA
City,State,Zip:	WHITTIER, CA 90601
Facility ID:	54719
Application Number:	237468
Permit Number:	D32938
Status:	O
Representative Name:	F W WALCHER
Representative Telephone:	213 9452669
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
CCAT Number:	04
CCAT Description:	VAPOR RECOVERY UNIT COMPRESS & CONDENSE
UTM East:	404.1000061
UTM North:	3760.1000977

B4
South
< 1/8
0.029 mi.
151 ft.

HARRIS ORGANS INC
7047 S COMSTOCK AVE
WHITTIER, CA 90602

RCRA NonGen / NLR **1025865718**
CAL000044886

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
317 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		1991-04-02 00:00:00.0
Handler Name:	HARRIS ORGANS INC	
Handler Address:		7047 S COMSTOCK AVE
Handler City,State,Zip:		WHITTIER, CA 90602-1399
EPA ID:		CAL000044886
Contact Name:		DAVID C HARRIS PRESIDENT
Contact Address:		7047 S COMSTOCK AVENUE
Contact City,State,Zip:		WHITTIER, CA 90602
Contact Telephone:		562-693-4534
Contact Fax:		562-693-9381
Contact Email:		B.JOHNSON@MSN.COM
Contact Title:		Not reported

CALIFORNIA WASTE CODES

121	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, c cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
122	Alkaline solution without metals (pH > 12.5)
123	Unspecified alkaline solution
131	Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)
132	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
133	Aqueous solution with 10% or more total organic residues
134	Aqueous solution with <10% total organic residues
135	Unspecified aqueous solution
141	Off-specification, aged, or surplus inorganics
151	Asbestos-containing waste
161	Fluid-cracking catalyst (FCC) waste
162	Other spent catalyst
171	Metal sludge (see 121)
172	Metal dust (see 121) and machining waste
181	Other inorganic solid waste
211	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
212	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
213	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
214	Unspecified solvent mixture
221	Waste oil and mixed oil
222	Oil/water separation sludge
223	Unspecified oil-containing waste
231	Pesticide rinse water
232	Pesticides and other waste associated with pesticide production
241	Tank bottom waste
251	Still bottoms with halogenated organics
252	Other still bottom waste
261	Polychlorinated biphenyls and material containing PCB's
271	Organic monomer waste (includes unreacted resins)
272	Polymeric resin waste
281	Adhesives
291	Latex waste
311	Pharmaceutical waste
321	Sewage sludge
322	Biological waste other than sewage sludge
331	Off-specification, aged, or surplus organics
341	Organic liquids (nonsolvents) with halogens
342	Organic liquids with metals (see 121)
343	Unspecified organic liquid mixture

CALIFORNIA WASTE CODES

351	Organic solids with halogens
352	Other organic solids
411	Alum and gypsum sludge
421	Lime sludge
431	Phosphate sludge
441	Sulfur sludge
451	Degreasing sludge
461	Paint sludge
471	Paper sludge/pulp
481	Tetraethyl lead sludge
491	Unspecified sludge waste
511	Empty pesticide containers 30 gallons or more
512	Other empty containers 30 gallons or more
513	Empty containers less than 30 gallons
521	Drilling mud
531	Chemical toilet waste
541	Photochemicals / photo processing waste
551	Laboratory waste chemicals
561	Detergent and soap
571	Fly ash, bottom ash, and retort ash
581	Gas scrubber waste
591	Baghouse waste
611	Contaminated soil from site clean-ups
512	Household waste
613	Auto shredder waste
614	Treated wood waste
711	Liquids with cyanides > 1000 mg/l
721	Liquids with arsenic > 500 mg/l
722	Liquids with cadmium > 100 mg/l
723	Liquids with chromium (VI) > 500 mg/l
724	Liquids with lead > 500 mg/l
725	Liquids with mercury > 20 mg/l
726	Liquids with nickel > 134 mg/l
727	Liquids with selenium > 100 mg/l
728	Liquids with thallium > 130 mg/l
731	Liquids with polychlorinated biphenyls > 50 mg/l
741	Liquids with halogenated organic compounds > 1000 mg/l
751	Solids or sludge with halogenated organic comp. > 1000 mg/kg
791	Liquids with pH < 2
792	Liquids with pH < 2 with metals
801	Waste potentially containing dioxins

Action Name:	PRP RV
SEQ:	1
Start Date:	1995-06-27 04:00:00
Finish Date:	9/24/2001 4:00:00 AM
Qual:	S
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0903349
EPA ID:	CAD042245001
Site Name:	OMEGA CHEMICAL CORPORATION
NPL:	F
FF:	N
OU:	01
Action Code:	BF
Action Name:	PRP RA
SEQ:	2
Start Date:	2013-10-30 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0903349
EPA ID:	CAD042245001
Site Name:	OMEGA CHEMICAL CORPORATION
NPL:	F
FF:	N
OU:	03
Action Code:	BB
Action Name:	PRP RV
SEQ:	4
Start Date:	2009-12-15 05:00:00
Finish Date:	Not reported
Qual:	S
Current Action Lead:	EPA Ovrsght

ROD:

Name:	OMEGA CHEMICAL CORPORATION
Address:	12504 AND 12512 E. WHITTIER BOULEVARD
City,State,Zip:	WHITTIER, CA 90602
EPA ID:	CAD042245001
RG:	9
Site ID:	903349
Action:	GOVT Decision Document (ROD)
Operable Unit Number:	DOWNGRADIENT GROUNDWATER
SEQ ID:	1
Action Completion:	2011-09-20 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported
Name:	OMEGA CHEMICAL CORPORATION
Address:	12504 AND 12512 E. WHITTIER BOULEVARD
City,State,Zip:	WHITTIER, CA 90602
EPA ID:	CAD042245001
RG:	9
Site ID:	903349
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	PHASE 1: OPOG CD WORK
SEQ ID:	2
Action Completion:	2008-09-30 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

Omega chemical

Potentially Responsible Parties

PRP:

PRP Name:

AAD DISTRIBUTION & DRY CLEANING
ABEX AEROSPACE DIVISION
ABEX AEROSPACE DIVISION
ABEX AEROSPACE DIVISION
ABEX AEROSPACE DIVISION
ACC CASTING COMPANY
ADVANCED CARDIOVASCULAR SYSTEMS, INC.
AEROSPACE CORPORATION
AIR CONDITIONING CO, INC
AIR PRODUCTS AND CHEMICALS, INC.
AIR PRODUCTS AND CHEMICALS, INC.
AIR PRODUCTS AND CHEMICALS, INC.
ALCOA ELECTRONIC PACKAGING, INC.
ALCOA ELECTRONIC PACKAGING, INC.
ALCOA INC.
ALCOA INC.

ALCOA INC.
ALL-STAR PRINT, INC.
ALLAN HANCOCK COLLEGE
ALLEN FOAM CORPORATION
ALLEN L. BENDER, INC.
ALLERGAN, INC.
ALLIED SIGNAL INC N/K/A HONEYWELL INTERNATIONAL INC.
ALLIED SIGNAL INC N/K/A HONEYWELL INTERNATIONAL INC.
ALLIED-SIGNAL, INC.
ALPHA THERAPUETIC
ALPHA THERAPUETIC
ALPHA THERAPUETIC
ALPHA THERAPUETIC
ALPHA THERAPUETIC
ALPS ELECTRIC (NORTH AMERICA), INC.
AMADA MFG AMERICA INC.
AMCAST AEROSPACE
AMCAST INDUSTRIAL CORPORATION
AMERICAN STANDARD
ANJA ENGINEERING CORPORATION
ANJA ENGINEERING CORPORATION
ANJA ENGINEERING CORPORATION
ANZCO (FORMERLY ANZCO CO.)
ANZON CO
APPLIED AIR ENGINEERING CORPORATION
APPLIED AIR ENGINEERING CORPORATION
APPLIED AIR ENGINEERING CORPORATION
APPLIED AIR ENGINEERING CORPORATION
APPLIED MAGNETICS CORPORATION
APPLIED MICRO CIRCUITS CORPORATION
APPLIED MICRO CIRCUITS CORPORATION
APPLIED MICRO CIRCUITS CORPORATION
APPLIED MICRO CIRCUITS CORPORATION
APPLIED MICRO CIRCUITS CORPORATION
APPROPRIATE TECHNOLOGIES II, INC.
APPROPRIATE TECHNOLOGIES II, INC.
APPROPRIATE TECHNOLOGIES II, INC.
ARISTECH CHEMICAL CORPORATION
ARLON PRODUCTS
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARLON, INC. ADHESIVES/FILM DIVISION
ARMOR ALL PRODUCTS CORPORATION
ARMOR ALL PRODUCTS CORPORATION
ARNOLD CONSTRUCTION CO.
ARROW ELECTRONICS, INC.
ARROWHEAD BRASS PRODUCTS, INC.
ARTESIA MANUFACTURING COMPANY
ARWOOD
ASHLAND CHEMICAL COMPANY
ASTRO ALUMINUM
ASTRO ALUMINUM
ASTRO ALUMINUM
ATLANTIC RICHFIELD CO.
ATLANTIC RICHFIELD CO.
AUTOMOTIVE CALIPER EXCHANGE INC.
AUTOMOTIVE CALIPER EXCHANGE INCORPORATED
AVERY DENNISON
AVERY DENNISON
AVX CORP
B. BRAUN MEDICAL INC.
BAE SYSTEMS INTEGRATED DEFENSE SOLUTIONS INC.
BAKER-BRADFORD HOLDINGS
BASF CORPORATION
BASF CORPORATION
BASF CORPORATION
BASF CORPORATION
BASF CORPORATION
BAXTER HEALTHCARE CORPORATION
BAXTER HEALTHCARE CORPORATION
BAXTER HEALTHCARE CORPORATION
BAXTER/BENTLEY LAB, INC.
BAXTER/BENTLEY LAB, INC.
BC LABORATORIES
BEAR MEDICAL
BECKMAN COULTER, INC. DBA BECKMAN INSTRUMENTS, INC.
BELL INDUSTRIES, INC.
BELL INDUSTRIES, INC.
BHP COATED STEEL CORP
BI TECHNOLOGIES CORPORATION
BIG THREE INDUSTRIES, INC.
BIO SCIENCE ENTERPRISES
BIO SCIENCE ENTERPRISES
BOEING COMPANY

BOEING COMPANY
BOEING COMPANY
BOEING COMPANY
BOEING SATELLITE SYSTEMS, INC.
BONANZA ALUMINUM CORPORATION
BONANZA ALUMINUM CORPORATION
BONNEVILLE PACIFIC CORPORATION
BOURNS, INC.
BOURNS, INC.
BOWEN PRINTING, INC.
BP AMERICA INC
BP AMERICA INC.
BP AMOCO CHEMICAL COMPANY
BP AMOCO CHEMICAL COMPANY
BRITISH ALCAN ALUMINUM PLC
BROADWAY
BROADWAY
BRUNTON ENTERPRISES, INC
BRYANT DIE CAST CO.
BUD'S OIL SERVICE
BUD'S OIL SERVICE
BUILDING MATERIALS CORPORATION OF AMERICA
BURR BROWN
BURR BROWN
BURR-BROWN CO.
BURR-BROWN CORPORATION
C & W PALLET ENTERPRISES, INC.
C & W PALLET ENTERPRISES, INC.
C RICHARD LLC
C.T.L PRINTING INDUSTRIES, INC.
C.T.L PRINTING INDUSTRIES, INC.
C.T.L PRINTING INDUSTRIES, INC.
C.T.L PRINTING INDUSTRIES, INC.
CABOT CORPORATION
CABRILLO BOAT
CAL ENERGY OPERATING CORPORATION
CAL-AIR, INC.
CALIFORNIA CHASSIS, INC.
CALIFORNIA HYDROFORMING CO., INC.
CALIFORNIA HYDROFORMING CO., INC.
CALIFORNIA HYDROFORMING CO., INC.
CALIFORNIA HYDROFORMING CO., INC.
CALIFORNIA MART
CALIFORNIA MART
CALIFORNIA STATE UNIVERSITY, LONG BEACH
CALIFORNIA STATE UNIVERSITY, LOS ANGELES
CALPAP VI, INC.
CALSONIC CLIMATE CONTROL INC
CALSONIC NORTH AMERICA
CARRIER CORPORATION
CARRIER CORPORATION
CATHOLIC HEALTHCARE WEST DBA ST. MARY MEDICAL CENTER
CBS BROADCASTING, INC.
CEDARS-SINAI MEDICAL CENTER
CELITE CORPORATION (LOMPOC PLANT)
CENTER LINE TOOL
CENTER LINE WHEEL CORPORATION
CENTER LINE WHEEL CORPORATION
CENTRAL COAST ANALYTICAL SERVICES
CENTRAL HEATING PLANT
CENTURY LAMINATORS
CERADYNE INC.
CERTANCE LLC
CHANNEL INDUSTRIES, INC.
CHATSWORTH PLATING COMPANY
CHEM WASTE MANAGEMENT
CHEM WASTE MANAGEMENT
CHEM WASTE MANAGEMENT
CHEM WASTE MANAGEMENT
CHEROKEE INTERNATIONAL
CHEROKEE INTERNATIONAL
CHESAPEAKE INDUSTRIES, INC.
CHILDRENS HOSPITAL LOS ANGELES
CINTAS CORPORATION
CINTAS CORPORATION
CITY OF CARLSBAD
CITY OF CARLSBAD
CITY OF COSTA MESA
CITY OF LONG BEACH, CALIFORNIA
CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES DEPT. OF AIRPORTS
CITY OF LOS ANGELES DEPT. OF AIRPORTS
CITY OF SANTA BARBARA
CITY OF SANTA MARIA
CITY OF SANTA MARIA

CITY OF SANTA MARIA
CLEATOR CORPORATION
CLOPAY CORPORATION
CNF INC.
COAST TO COAST ANALYTICAL SERVICE
COASTCAST CORPORATION
COATINGS RESOURCE CORPORATION
COATINGS RESOURCE CORPORATION
COATINGS RESOURCE CORPORATION
COATINGS RESOURCE CORPORATION
CODELINE CORPORATION
COGNIS CORPORATION
COLLEGE OF THE DESERT
COLUMBIA SHOWCASE & CABINET COMPANY
COLUMBIA SHOWCASE & CABINET COMPANY
COLUMBIA SHOWCASE & CABINET COMPANY
COLUMBIA SHOWCASE & CABINET COMPANY
COLUMBIA SHOWCASE & CABINET COMPANY
COLUMBIA VENTURES CORPORATION
COMBUSTION ENGINEERING, INC.
COMMAIR MECHANICAL SERVICES
COMMAIR MECHANICAL SERVICES
COMPETITIVE TRAILERS INC
COMPETITIVE TRAILERS INC
COMPUTER COATING COMPANY
CONOCO, INC.
CONSOLIDATED METCO, INC.
CONTINENTAL AIRLINES
CONTINENTAL HEAT TREATING, INC.
COOPER INDUSTRIES. LLC
CORAL CHEMICALS
CORAL INDUSTRIES, INC.
CORAL INDUSTRIES, INC.
CORAL INDUSTRIES, INC.
COSCO INDUSTRIES INC
COUNTY OF LOS ANGELES
COUNTY OF LOS ANGELES
COUNTY OF LOS ANGELES
COUNTY OF MOHAVE, ARIZONA
COUNTY OF ORANGE, CALIFORNIA
COUNTY OF SAN BERNARDINO
COUNTY OF SAN LUIS OBISPO
CRANE CO
CROSBY & OVERTON PLANT #1
CROSBY & OVERTON PLANT #1
CROSBY & OVERTON SHIP MAINTENANCE CO.
CROSBY & OVERTON, INC.
CROSBY & OVERTON, INC.
CROSBY & OVERTON, INC.
CROWN COACH, INC.
CTS CORP.
CUBIC COMMUNICATIONS, INC.
CURTIS TECHNOLOGY
CURTIS TECHNOLOGY
CYPRESS COLLEGE
CYTEC INDUSTRIES, INC.
DAICO INDUSTRIES, INC.
DATA LABEL PRODUCTS, INC.
DATATRONICS ROMOLAND, INC
DATATRONICS, INC.
DATATRONICS, INC.
DEL MAR ANALYTICAL, INC.
DEL MAR AVIONICS
DENSO SALES CALIFORNIA, INC.
DERBY HOLDINGS LTD.
DERINGER-NEY, INC.
DEUTSCH COMPANY ELECTRONIC COMPONENTS
DEUTSCH COMPANY ELECTRONIC COMPONENTS
DISCOVISION ASSOCIATES
DISNEYLAND CENTRAL PLANT
DIVERSITY WYANDOTTE CORPORATION
DIXCO DIVERSIFIED CHEMICAL SALES
DKC HOLDINGS, INC.
DOMESTIC LINEN
DOND-WELL ADHESIVES, INC.
DOW CHEMICAL COMPANY
DOW CHEMICAL COMPANY
DOW CHEMICAL COMPANY
DUDE, INC.
DUDE, INC.
DUDE, INC.
DUNN-EDWARDS CORPORATION
DURA PHARMACEUTICALS, INC.
DYNAIR, INC.
E.I. DUPONT DENEMOURS AND COMPANY

EAGLE MARINE SERVICES, LTD.
EARL SCHEIB PAINT & SUPPLY CO.
EASTMAN KODAK COMPANY
EATON CORPORATION
EATON CORPORATION
EATON CORPORATION
EL PASO ENERGY INTERNATIONAL CO
ENGARD COATING CORPORATION CORCHEM CORPORATION
ENGRAPH, INC.
ENGRAPH, INC.
ESSEF CORPORATION
ESSILOR OPTICAL, INC.
EUROTHERM CONTROLS, INC.
EXXONMOBIL
F. M. THOMAS AIR CONDITIONING, INC.
F. M. THOMAS AIR CONDITIONING, INC.
FEDERAL ENVELOPE COMPANY
FEDERAL MOGUL CORPORATION
FHL GROUP
FHL GROUP
FHL GROUP
FILM SALVAGE CO.
FILM SALVAGE CO.
FILM SALVAGE COMPANY
FISCHBACH, LLC/FBCO, INC. F/K/A NATKIN SERVICE COMPANY
FLEET AEROSPACE, INC.
FLEETWOOD MOTOR HOMES OF CALIFORNIA, INC.
FOAMEX L.P.
FORENCO INC
FORENCO INC
FORENCO INC
FORENCO INC
FOREST PRODUCTS
FORT KENT HOLDING, INC. ON BEHALF OF DUNHAM BUSH INC.
FRAWLEY CORPORATION
FRAZEE INDUSTRIES, INC.
FRESNO UNIFIED SCHOOL DISTRICT
FRESNO UNIFIED SCHOOL DISTRICT
FRICTION INC.
GAF CORPORATION
GAISER TOOL CO.
GALLAGHER-FERGUSON ENG. INC.
GAMBOA'S BODY AND FRAME INC.
GAMBRO INC
GAMBRO RENAL PRODUCTS, INC.
GAMMA F CORPORATION
GAMMA F CORPORATION
GATX TERMINALS CORPORATION
GATX TERMINALS CORPORATION
GATX TERMINALS CORPORATION
GENERAL ATOMICS
GENERAL DYNAMICS CORP
GENERAL DYNAMICS CORP
GENERAL DYNAMICS CORP.
GENERAL DYNAMICS CORP.
GENERAL RIBBON CORP.
GENKO, INC.
GEON COMPANY
GEORGE INDUSTRIES
GEORGE INDUSTRIES
GEORGES & SHAPIRO LITHOGRAPH, INC.
GILBERT INDUSTRIAL CORPORATION
GLENDALE ADVENTIST MEDICAL CENTER
GOLDEN WEST REFINING COMPANY
GOLDEN WEST REFINING COMPANY
GOLF PRODUCTS USA
GOLF PRODUCTS USA
GOOD-WEST RUBBER CORP.
GREAT WESTERN CHEMICAL
GREAT WESTERN CHEMICAL
GSF ENERGY, INC.
GSF ENERGY, LLC
GSF ENERGY, LLC
GTE COMMUNICATIONS SYSTEM CORPORATION
GULFSTREAM AEROSPACE CORPORATION
GULFSTREAM AEROSPACE CORPORATION
GULFSTREAM AEROSPACE CORPORATION
GULFSTREAM AEROSPACE CORPORATION
GULFSTREAM AEROSPACE CORPORATION
HAMBY CORPORATION
HAMILTON SUNDSTRAND CORP
HARMON INDUSTRIES, INC.
HARPERS
HARPERS
HARTWELL CORP

HARTWELL CORP
HERCULES INCORPORATED
HERCULES INCORPORATED
HERMETIC SEAL CORP
HEWLETT-PACKARD COMPANY
HEXCEL CORP.
HEXCEL CORPORATION
HEXCEL CORPORATION
HEXCEL CORPORATION
HEXFET AMERICA
HEXFET AMERICA
HIGH VOLTAGE TRANS SERVICES COMPANY
HITACHI CONSUMER PRODUCTS, INC.
HITACHI HOME ELECTRONICS, INC
HITACHI HOME ELECTRONICS, INC
HITCO MATERIALS
HOLCHEM, INC.
HOLLY SUGAR CORPORATION
HONEYWELL
HONEYWELL INTERNATIONAL INC.
HONEYWELL, INC.
HONEYWELL, INC.
HONEYWELL, INC.
HOWMET ALUMINUM CASTING, INC.
HOWMET CORP.
HUBBELL INCORPORATED
HUCK MFG. COMPANY
HUCK MFG. COMPANY
HUGHES MISSILE SYSTEM
HUGHES MISSILE SYSTEM
HUGHES NETWORK SYSTEMS
I & I DEBURRING
I COAT CO
ICN PHARMACEUTICALS, INC.
IDG USA, LLC
ILLINOIS TOOL WORKS
IMAGE TRANSFORM, INC.
IN-TERMINAL SERVICES CORPORATION
INDUSTRIAL PROPERTY MANAGEMENT
INNOVATIVE MICRO TECHNOLOGY, INC.
INTERNATIONAL BUSINESS MACHINES CORPORATION
INTERNATIONAL LABEL & TAPE CO.
INTERNATIONAL PAPER
INTERNATIONAL PAPER
INTERNATIONAL PAPER COMPANY
INTERNATIONAL PAPER COMPANY
INTERNATIONAL PAPER COMPANY
INTERNATIONAL RECTIFIER CORPORATION
J.C. PENNEY COMPANY INC.
JACUZZI WHIRLPOOL BATH, INC.
JAFRA COSMETICS INTERNATIONAL, INC.
JANS-KENS ENAMELING CO., INC.
JANS-KENS ENAMELING CO., INC.
JBL INCORPORATED
JET PROPULSION LAB; CHARLES L. BRUNI
JOHANSON DIELECTRICS INC.
JOHNS MANVILLE INTERNATIONAL, INC.
JOHNS MANVILLE INTERNATIONAL, INC.
JOHNSON DIELECTRONICS, INC.
K-TUBE CORPORATION
KAISER ELECTRO-OPTICS, INC.
KC PHOTO ENGRAVING
KC PHOTO ENGRAVING
KC PHOTO ENGRAVING
KC PHOTO ENGRAVING
KERN HIGH SCHOOL DISTRICT
KESTER SOLDER COMPANY
KESTER SOLDER COMPANY
KEY MECHANICAL SERVICE COMPANY
KIMBERLY CLARK WORLDWIDE INC
KIMBERLY CLARK WORLDWIDE INC
KIMBERLY-CLARK CORPORATION
KINDER MORGAN LIQUIDS TERMINALS LLC
KINDER MORGAN LIQUIDS TERMINALS LLC
KYOWA AMERICA CORPORATION
L-3 SERVICES, INC
L. A. SUPPLY COMPANY
LA HEALTH SERVICES
LADDER INDUSTRIES
LAMIRANDA PRODUCTS COMPANY, INC. / USG CORPORATION
LANSDALE SEMICONDUCTOR, INC
LE VAN SPECIALITY CO.
LE VAN SPECIALITY CO.
LEAR SIEGLER, INC.
LEAR SIEGLER, INC.

LEAR SIEGLER, INC.
LEFIELL MANUFACTURING CO
LITRONIC INDUSTRIES, INC.
LOCKHEED MARTIN CORPORATION
LOCKHEED MARTIN ELECTRO-OPTICAL SYSTEMS, INC.
LOCKHEED MARTIN LIBRASCOPE CORP
LOMA LINDA UNIVERSITY
LONG BEACH UNIFIED SCHOOL DISTRICT
LONZA, INC.
LOS ANGELES COUNTY METROPOLITAN TRANSIT AUTHORITY
LOS ANGELES COUNTY METROPOLITAN TRANSIT AUTHORITY
LOS ANGELES UNIFIED SCHOOL DISTRICT
LOYOLA MARYMOUNT UNIVERSITY
LUBRICATION COMPANY OF AMERICA
LUPPEN HOLDINGS, INC. & METAL PRODUCTS ENGINEERING
LUXFER USA LIMITED
LUXFER USA LIMITED
LUXFER USA LIMITED
M & M PRINTED BAG INC.
MACERICH PROPERTY MANAGEMENT COMPANY, LLC
MACY'S RETAIL HOLDINGS, INC.
MADISON INDUSTRIES INC
MADISON INDUSTRIES INC
MAJON, INC.
MAJON, INC.
MAJON, INC.
MANUFACTURING TECH., INC.
MARTEK POWER INC. FORMERLY MARTEK POWER ABBOTT, INC.
MARTINEZ MFG. COMPLEX
MARVIN ELECTRIC MFG. CO. INC.
MASCO BUILDING PRODUCTS CORP.
MASCO CORPORATION OF INDIANA (ELECTRA)
MATTEL INC.
MATTEL INC.
MATTHEWS INTERNATIONAL CORP.
MAXON INDUSTRIES, INC.
MAXWELL TECHNOLOGIES, INC.
MAXWELL TECHNOLOGIES, INC.
MAY COMPANY SERVICES CENTER
MAYONI ENTERPRISES
MAYONI ENTERPRISES
MCC POWERS
MCDONNELL DOUGLAS HELICOPTER CO.
MCDONNELL DOUGLAS HELICOPTER CO.
MCDONNELL DOUGLAS HELICOPTER CO.
MCDONNELL DOUGLAS HELICOPTER CO.
MCKESSON CORPORATION
MCP FOODS (BORDEN)
MCP FOODS (BORDEN)
MCP FOODS (FIRMENICH)
MCP FOODS (FIRMENICH)
MCP FOODS (FIRMENICH)
MD PHARMACEUTICAL, INC.
MD PHARMACEUTICAL, INC.
MELLES GRIOT, INC. / BARLOWORLD USA INC.
MERLE NORMAN COSMETICS, INC.
METROPOLITAN WATER DISTRICT
METROPOLITAN WATER DISTRICT
METROPOLITAN WATER DISTRICT
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
MICA CORPORATION
MICO WEST
MICO WEST
MICROPOLIS
MICTROELECTRONICS PACKAGING, INC.
MIGHTY MOVER TRAILERS, INC.
MILLENIUM HOLDINGS, LLC
MINNESOTA MINING & MFG CO.
MONTGOMERY TANK LINES
MONTGOMERY TANK LINES
MOORE WALLACE NORTH AMERICA, INC.
MTI ENGINEERING CORP
NATIONAL BROADCASTING CO.
NATIONAL BROADCASTING CO.
NATIONAL BROADCASTING CO.
NATIONAL STEEL AND SHIPBUILDING COMPANY
NAVCOM DEFENSE ELECTRONICS, INC.
NCR CORPORATION/ENG. & MFG
NCR CORPORATION/ENG. & MFG
NCR CORPORATION/ENG. & MFG
NI INDUSTRIES, INC.
NMB USA INC.
NOBEL BIOCARE USA, INC.
NORRIS INDUSTRIES
NORRIS INDUSTRIES

NORTHERN CALIFORNIA LABELS, INC.
NORTHROP GRUMMAN CORPORATION
NORTHROP GRUMMAN CORPORATION
NORTHROP GRUMMAN CORPORATION
NORTHSTAR ELECTRONICS, INC.
NORTHWESTERN, INC.
NOVACAP, INC
NOVACAP, INC
O'MEARA, DENNIS
OAKITE PRODUCTS, INC.
OHLINE, INC.
OHLINE, INC.
OHLINE, INC.
OHLINE, INC.
OMEGA CHEMCIAL CORPORATION
ONTARIO-MONTCLAIR SCHOOL DISTRICT
ONYX PACIFIC COMPANY, L.P.
OXNARD UNION HIGH SCHOOL DISTRICT
PACESETTERS SYSTEMS, INC.
PACIFIC BELL TELEPHONE & TELEGRAPH
PACIFIC BELL TELEPHONE & TELEGRAPH
PACIFIC BELL TELEPHONE & TELEGRAPH
PACIFIC BELL TELEPHONE & TELEGRAPH
PACIFIC BELL TELEPHONE & TELEGRAPH
PACIFIC GAS & ELECTRIC COMPANY
PACIFIC GAS & ELECTRIC COMPANY
PACIFIC PRECISION METALS
PACIFIC TELEPHONE & TELEGRAPH
PACIFIC TELEPHONE & TELEGRAPH
PALL FILTRATION AND SEPARATIONS GROUP INC.
PARA PLATE
PARA PLATE & PLASTICS CO., INC.
PARA PLATE & PLASTICS CO., INC.
PARA PLATE & PLASTICS CO., INC.
PARA PLATE - ARIZONA, INC.
PARADISE BEACON
PASMINCO INCORPORATED
PENSKE MOTOR GROUP, INC.
PENSKE TRUCK LEASING
PERFECTDATA CORPORATION
PERIGEE HOLDINGS, INC.
PERKINELMER, INC.
PERMALITE PLASTICS CORPORATION
PETRO LOCK INC.
PETROLEUM TESTING SERVICES, INC.
PETROLEUM TESTING SERVICES, INC.
PETROLEUM TESTING SERVICES, INC.
PFIZER INC
PHARMAVITE LLC
PHILIPS ELECTRONICS
PHOTO FABRICATORS, INC.
PILKINGTON PLC
PILKINGTON PLC
PLASTIC MATERIALS, INC.
PNEUDRAULICS, INC
PNEUMO ABEX CORPORATION
POCINO FOODS CO.
POLYMER INDUSTRIES, INC.
POLYONE CORPORATION
POPE & TALBOT
PORCELAIN METALS CORPORATION
PRECISION ANODIZING, INC.
PRECISION TAG & LABEL CORPORATION
PREMIER REFRACTORIES, INC.
PRIMUS GROUP, INC.
PRIMUS GROUP, INC.
PRINT SALES, INC.
PRINTED CIRCUITS UNLIMITED
PRINTED CIRCUITS UNLIMITED
PURITAN BENNETT CORPORATION
PUTZMEISTER INC
QUAD CHEMICAL CORP.
QUAD CHEMICAL CORP.
QUAKER CHEMICAL COMPANY
QUAKER CHEMICAL CORPORATION
QUAKER CITY PLATING LTD
QUALITY FABRICATIONS, INC.
QUALITY FABRICATIONS, INC.
QUALITY FABRICATIONS, INC.
QUEST DIAGNOSTICS CLINICAL LABORATORIES INC
QUEST DIAGNOSTICS CLINICAL LABORATORIES INC
QUEST DIAGNOSTICS CLINICAL LABORATORIES INC
RAND MCNALLY & COMPANY
RANTEC POWER SYSTEMS INC.
RAYTHEON CO.

RAYTHEON CO.
RAYTHEON CO.
RAYTHEON COMPANY (HUGHES)
RAYTHEON COMPANY (HUGHES)
RAYTHEON MAGNETIC SYSTEMS DIVISION
RAYTHEON MAGNETIC SYSTEMS DIVISION
REED & GRAHAM, INC.
REED & GRAHAM, INC.
REED & GRAHAM, INC.
REGENTS OF THE UNIVERSITY OF CALIFORNIA
REGENTS OF THE UNIVERSITY OF CALIFORNIA
REGENTS OF THE UNIVERSITY OF CALIFORNIA
REICHHOLD CHEMICALS, INC.
REICHHOLD CHEMICALS, INC.
REICHOLD CHEMICALS, INC.
REICHOLD CHEMICALS, INC.
RESINART CORPORATION
RESINART CORPORATION
RESINART CORPORATION
REXAM CORP
RICOH ELECTRONICS, INC.
RICOH PRINTING SYSTEM AMERICA, INC.
RIKER LAB, INC. (3M)
ROBERT MANUFACTURING CO
ROBERT MANUFACTURING CO
ROBINSON PREZIOSO, INC.
ROBINSON PREZIOSO, INC.
ROBINSON PREZIOSO, INC.
ROBINSON PREZIOSO, INC.
ROBINSON PREZIOSO, INC.
ROCKWELL COLLINS OPTRONICS, INC.
RODGERS CORP-SOLADYNE DIV.
RODGERS CORP-SOLADYNE DIV.
RODGERS CORP-SOLADYNE DIV.
RODGERS CORP-SOLADYNE DIV.
S & H CABINETS AND MANUFACTURING, INC.
S&R SWEEPS
S&R SWEEPS
SAFETY KLEEN CORP.
SAFETY KLEEN CORP.
SAFETY KLEEN CORP.
SAFETY-KLEEN SYSTEMS, INC.
SAN DIEGO UNIFIED SCHOOL DISTRICT
SAN JOAQUIN REFINING CO., INC.
SANTA MONICA HOTEL ASSOCIATES, LLC
SANTE FE BRAUN, INC.
SCHERING CORP.
SCHERING CORP.
SCHERING CORP.
SCHERING CORP.
SCRIPTO TOKAI CORPORATION
SCRIPTO TOKAI CORPORATION
SEMPRA ENERGY SOLUTIONS
SEMPRA ENERGY SOLUTIONS
SENIOR OPERATIONS, INC.
SERVIDYNE, INC.
SHAMROCK SCIENTIFIC SPECIALTY SYSTEMS INC
SHAMROCK SCIENTIFIC SPECIALTY SYSTEMS INC
SHARPE MANUFACTURING CO.
SHELL OIL COMPANY
SHELL OIL COMPANY
SHELL SOLAR INDUSTRIES, L.P.
SHERWIN WILLIAMS CO.
SHERWIN WILLIAMS CO.
SHERWIN WILLIAMS CO.
SHERWIN WILLIAMS CO.
SHERWIN-WILLIAMS CO.
SHIBUYA INTERNATIONAL, INC.
SHIELD PACKAGING OF CALIFORNIA, INC.
SHILEY INC
SHILEY INC
SHILEY INC
SHOP VAC CORPORATION
SIEMENS SOLAR INDUSTRIES INTL INC
SIERRACIN CORPORATION
SIERRACIN CORPORATION
SIERRACIN CORPORATION
SIGMA CASTING
SIGMA CASTING
SIGNET ARMORLITE, INC.
SIGNET ARMORLITE, INC.
SIGNET ARMORLITE, INC.
SIGNET ARMORLITE, INC.
SIGNET ARMORLITE, INC.
SIMPSON STRONG-TIE COMPANY INC.

SIX FLAGS THEME PARKS INC.
SKYPARK MANUFACTURING, LLC
SMCO, LP
SOCO WEST, INC
SOCO WEST, INC
SOCO WEST, INC
SOLECTRON CORPORATION
SONOCO PRODUCTS COMPANY
SOUTHERN CALIFORNIA EDISON
SOUTHERN CALIFORNIA EDISON
SOUTHERN CALIFORNIA EDISON
SOUTHERN CALIFORNIA RTD
SOUTHERN PACIFIC TRANSPORTATION COMPANY
SOUTHERN PACIFIC TRANSPORTATION COMPANY
SOUTHWESTERN INDUSTRIES, INC.
SPARTON TECHNOLOGY INC
SPARTON TECHNOLOGY INC
SPARTON TECHNOLOGY INC
SPARTON TECHNOLOGY INC
SPERRY AEROSPACE & MARINE GROUP
SQUARE D COMPANY
STATE OF CALIFORNIA, DEPT OF TRANSPORTATION
STATE OF CALIFORNIA, DEPT OF TRANSPORTATION
STEELSCOPE, FKA, BHP COATED STEEL
STREAMLOGIC CORPORATION
STRUCTURAL COMPOSITES INDUSTRIAL INC.
SUMMIT ENVIRONMENTAL CORP
SUPERIOR CONTROLS CO, INC
SUPRACOTE, INC.
SUPRACOTE, INC.
SWEDLOW, INC.
SYMMETRICOM INC
TDY INDUSTRIES, INC.
TEC COLOR CRAFT
TECH GRAPHIC, INC.
TELEDYNE, INC.
TELEDYNE, INC.
TERADYNE
TEXACO, INC.
TEXACO, INC.
TEXACO, INC.
TEXACO, INC.
TEXACO, INC.
TEXAS INSTRUMENTS INC
TEXAS INSTRUMENTS INC
TEXAS INSTRUMENTS INC
TEXAS INSTRUMENTS INC
TEXTRON INC.
THE A & T GROUP, INC. (AIR MECHANICAL INC.)
THE ALPHA CORPORATION OF TENNESSEE
THE CITY OF WHITTIER, CALIFORNIA
THE GLIDDEN COMPANY
THE HERTZ CORPORATION
THE HERTZ CORPORATION
THE OKONITE COMPANY
THE RINCHEM CO INC
THE RINCHEM COMPANY
THE SIGNS AND SERVICES COMPANY
THE TIMES MIRROR COMPANY
THE TRANE COMPANY
THOMAS CNC MACHINING
THUMS LONG BEACH COMPANY
TIMEMED LABELING SYSTEMS INC
TIMEMED LABELING SYSTEMS INC
TODD PACIFIC SHIPYARDS CORP.
TODD PACIFIC SHIPYARDS CORP.
TODD PACIFIC SHIPYARDS CORP.
TRANE USA, INC
TRANE USA, INC
TRANSAMERICA OCCIDENTAL LIFE INSURANCE COMPANY
TRANSAMERICAN PLASTICS CORP.
TRANSAMERICAN PLASTICS CORP.
TRANSAMERICAN PLASTICS CORP.
TREASURE CHEST ADVERTISING, INC.
TREASURE CHEST ADVERTISING, INC.
TREGEN CORP. INC.
TRIBUNE CO. ASIIT TIMES MIRROR PRESS
TRIMAS CORPORATION A WHOLLY-OWNED SUBSIDIARY OF ME
TRIPLE J. PACIFICATION FACILITY
TROY LIGHTING, INC.
TROY LIGHTING, INC.
TRW INC.
TRW TECHNAR INC.
TUBING SEAL & CAP
TUCSON VALLEY LIQUIDATING TRUST F/B/O CAL-MART

SECTION 1: FACILITY DETAIL REPORTS

...Continued...

TYCO HEALTHCARE GROUP LP
U.S. FOODSERVICE, INC.
UCB
UNICOR/FEDERAL PRISON INDUSTRIES
UNION OIL COMPANY OF CALIFORNIA
UNION OIL COMPANY OF CALIFORNIA
UNION OIL COMPANY OF CALIFORNIA
UNION OIL COMPANY OF CALIFORNIA
UNION OIL COMPANY OF CALIFORNIA
UNION PACIFIC RAILROAD COMPANY
UNISTRUT INTERNATIONAL CORPORATION
UNITED PARCEL SERVICE, INC.
UNITED PARCEL SERVICE, INC.
UNITED PARCEL SERVICE, INC.
UNITOG CO
UNIVAR CORP.
UNIVAR CORP.
UNIVAR CORP.
UNIVAR CORP.
UNIVERSAL CITY STUDIOS, INC.
UNIVERSAL CITY STUDIOS, INC.
UNIVERSAL CITY STUDIOS, INC.
UNIVERSAL CITY STUDIOS, INC.
UNIVERSITY OF CALIFORNIA-IRVINE
UNIVERSITY OF SOUTHERN CALIFORNIA
URETHANE INDUSTRIES
US AIR FORCE
US COAST GUARD
US DEPARTMENT OF THE ARMY
VALLEY PLATING WORKS, INC.
VALSPAR CORPORATION, THE
VAN PETTY MANUFACTURING INC
VAN WALTERS & ROGERS
VAN WALTERS & ROGERS
VELIE CIRCUITS, INC.
VELIE CIRCUITS, INC.
VENTURA REGIONAL SANITATION DISTRICT
VENTURA TOWNE HOUSE
VENTURA TOWNE HOUSE
VERTIS, INC.
VERTIS, INC.
VERTIS, INC.
VIRACON, INC.
VISTA FORD
W & B MARKETING-ALUMNIFRAME
W & B MARKETING-ALUMNIFRAME
W & B MARKETING-ALUMNIFRAME
WALT DISNEY CO.
WALT DISNEY CO.
WALT DISNEY CO.
WALT DISNEY CO.
WASTE DISPOSAL, INC.
WASTE MANAGEMENT INC.
WASTE MANAGEMENT RECYCLING & DISPOSAL SERVICES
WEBER AIRCRAFT
WEBER AIRCRAFT
WEBER AIRCRAFT
WEBER AIRCRAFT
WEBER AIRCRAFT
WELLS FARGO BANK
WESTERN METAL DECORATING COMPANY
WESTERN METAL DECORATING COMPANY
WESTERN METAL DECORATING COMPANY
WESTMONT COLLEGE
WHITTIER CITY YARD
WHITTIER CITY YARD
WILLIAMS FURNACE CO.
WM. J. MATSON COMPANY
XEROX CORP.
YELLOW TRANSPORATION, INC
YORK INTERNATIONAL CORP
YORK INTERNATIONAL CORP
YORT, INC
YORT, INC
ZIMMER DENTAL INC.

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number
C6 **WNW** **< 1/8** **0.052 mi.** **274 ft.** **Relative:** **Lower**	**BROTHERS AUTOMOTIVE** **12722 PHILIDELPHIA ST UNIT A** **WHITTIER, CA 90601** Click here for full text details **RCRA-SQG** EPA Id CAD983596453 **FINDS** Registry ID: 110002854055 **ECHO** Registry ID 110002854055	**RCRA-SQG** **FINDS** **ECHO**	**1000595693** **CAD983596453**
C7 **WNW** **< 1/8** **0.052 mi.** **274 ft.** **Relative:** **Lower**	**TEN FOUR AUTO** **12722 PHILADELPHIA ST** **WHITTIER, CA 90601** Click here for full text details **LOS ANGELES CO. HMS** Facility ID 014368-014949 Facility Status OPEN	**CERS HAZ WASTE** **LOS ANGELES CO. HMS** **CERS**	**S105792651** **N/A**
8 **North** **< 1/8** **0.077 mi.** **406 ft.** **Relative:** **Higher**	**OUR CLEANERS** **6727 COMSTOCK AVE** **WHITTIER, CA 90601** Click here for full text details	**EDR Hist Cleaner**	**1020056313** **N/A**
9 **NNW** **< 1/8** **0.078 mi.** **411 ft.** **Relative:** **Higher**	**MR CAL BELLINI** **6733 MILTON AVE** **WHITTIER, CA** Click here for full text details **SWEEPS UST** Status A Comp Number 14273	**SWEEPS UST**	**S106929668** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
C10 WNW < 1/8 0.085 mi. 448 ft. Relative: Lower	WHITTIER AUTOMATIC CLEANERS 12703 E PHILADELPHIA ST WHITTIER, CA 90601 Click here for full text details	EDR Hist Cleaner	1009127046 N/A
11 SW < 1/8 0.089 mi. 468 ft. Relative: Lower	MARCO DRY CLEANERS 12719 E WARDMAN ST WHITTIER, CA 90601 Click here for full text details	EDR Hist Cleaner	1009126808 N/A
12 NE < 1/8 0.099 mi. 524 ft. Relative: Higher	TENNEQUE HOMES, INC 6727 GREENLEAF AVE WHITTIER, CA 90601 Click here for full text details RCRA NonGen / NLR EPA Id CAC003059258	RCRA NonGen / NLR	1026052363 CAC003059258
13 SSE < 1/8 0.109 mi. 575 ft. Relative: Higher	DAVID MANDEL 7201 GREENLEAF AVE WHITTIER, CA 90602 Click here for full text details LUST Status Completed - Case Closed Global Id T0603773179 Cortese Cleanup Status COMPLETED - CASE CLOSED LOS ANGELES CO. HMS Facility ID 028620-040349 Facility Status Removed	LUST Cortese LOS ANGELES CO. HMS CERS	S106915365 N/A

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
D14 **ENE** **1/8-1/4** **0.143 mi.** **754 ft.** **Relative:** **Higher**	**CLYDE WATT CLEANER** **6747 S BRIGHT AVE** **WHITTIER, CA 90601** Click here for full text details	**DRYCLEANERS**	**S121697631** **N/A**
D15 **ENE** **1/8-1/4** **0.143 mi.** **754 ft.** **Relative:** **Higher**	**CLYDE WATTS CLEANERS** **6747 S BRIGHT AVE** **WHITTIER, CA 90601** Click here for full text details	**DRYCLEANERS**	**S121695455** **N/A**
D16 **ENE** **1/8-1/4** **0.145 mi.** **767 ft.** **Relative:** **Higher**	**RELIABLE PRINTING SERVICE** **6743 BRIGHT ST** **WHITTIER, CA 90601** Click here for full text details **RCRA-SQG** EPA Id CAD981975469 **FINDS** Registry ID: 110002761789 **ECHO** Registry ID 110002761789	**RCRA-SQG** **FINDS** **ECHO**	**1000245423** **CAD981975469**
E17 **SSE** **1/8-1/4** **0.148 mi.** **784 ft.** **Relative:** **Lower**	**BANK OF AMERICA** **7255 S. GREENLEAF AVE.** **WHITTIER, CA 90602** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC002968961	**RCRA NonGen / NLR**	**1024749175** **CAC002968961**
E18 **SSE** **1/8-1/4** **0.148 mi.** **784 ft.** **Relative:** **Lower**	**FRANK AGULTO** **7255 GREENLEAF AVE** **WHITTIER, CA 90602** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003055311	**RCRA NonGen / NLR**	**1026048644** **CAC003055311**

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number
F19 **West** **1/8-1/4** **0.155 mi.** **820 ft.** **Relative:** **Lower**	**UPTOWN GARAGE** **12604 E PHILADELPHIA ST** **WHITTIER, CA 90601** Click here for full text details	**CERS HAZ WASTE** **CERS**	**S123534651** **N/A**
D20 **ENE** **1/8-1/4** **0.169 mi.** **892 ft.** **Relative:** **Higher**	**EDWARD ORTIZ** **6732 BRIGHT AVE** **WHITTIER, CA 90601** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003022011	**RCRA NonGen / NLR**	**1025842401** **CAC003022011**
21 **SSE** **1/8-1/4** **0.170 mi.** **897 ft.** **Relative:** **Lower**	**SIR SPEEDY PRINTING** **7240 GREENLEAF AVE** **WHITTIER, CA 90602** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003042719	**RCRA NonGen / NLR**	**1025862021** **CAC003042719**
G22 **SE** **1/8-1/4** **0.174 mi.** **921 ft.** **Relative:** **Lower**	**WHITTIER TOWERS** **7215 BRIGHT AVE** **WHITTIER, CA 90602** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003044339	**RCRA NonGen / NLR**	**1025863562** **CAC003044339**
G23 **SE** **1/8-1/4** **0.174 mi.** **921 ft.** **Relative:** **Lower**	**WHITTIER** **7215 BRIGHT AVE** **WHITTIER, CA 90602** Click here for full text details	**RCRA NonGen / NLR**	**1026465805** **CAC003071063**

F24
WNW
1/8-1/4
0.187 mi.
987 ft.

Relative:
Lower

7-11 #17896
12515 PHILADELPHIA ST
WHITTIER, CA 90601

LUST
Cortese
HIST CORTESE
CERS

S104159769
N/A

Click here for full text details

LUST
Status Case Closed
Status Completed - Case Closed
Facility Id I-10086
Global Id T0603703573
Global ID T0603703573

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id I-10086

F25
WNW
1/8-1/4
0.187 mi.
987 ft.

Relative:
Lower

SOUTHLAND CORP SS 17896
12515 PHILADELPHIA ST
WHITTIER, CA 90601

SWEEPS UST
CA FID UST
LOS ANGELES CO. HMS
CERS

S101583387
N/A

Click here for full text details

SWEEPS UST
Status A
Tank Status A
Comp Number 10086

CA FID UST
Facility Id 19003582
Status A

LOS ANGELES CO. HMS
Facility ID 010210-010086
Facility Status Removed

F26
WNW
1/8-1/4
0.187 mi.
987 ft.

Relative:
Lower

7-ELEVEN STORE 17896 (2114)
12515
WHITTIER, CA 90601

HIST UST

U001564264
N/A

Click here for full text details

HIST UST
Facility Id 00000003807

27
North
1/8-1/4
0.188 mi.
993 ft.

Relative:
Higher

CITY OF WHITTIER PUBLIC PARKING LOT
12813 BAILEY ST
WHITTIER, CA 90601

Click here for full text details

RCRA NonGen / NLR

1026489348
CAH111001533

F28
West
1/8-1/4
0.208 mi.
1099 ft.

Relative:
Lower

BOBS AUTOMOTIVE CENTER INC
12510 PHILADELPHIA ST
WHITTIER, CA 90601

Click here for full text details

SWEEPS UST
Status A
Tank Status A
Comp Number 14813

LOS ANGELES CO. HMS
Facility ID 014275-014813
Facility Status Removed

SWEEPS UST
LOS ANGELES CO. HMS

1000373823
N/A

29
ENE
1/8-1/4
0.223 mi.
1179 ft.

Relative:
Higher

BAILEY STATION
6709 WASHINGTON AVE
WHITTIER, CA 90601

Click here for full text details

RCRA-SQG
EPA Id CAR000075796

FINDS
Registry ID: 110002938714

ECHO
Registry ID 110002938714

RCRA-SQG
FINDS
ECHO

1004675670
CAR000075796

30
ENE
1/8-1/4
0.232 mi.
1226 ft.

Relative:
Higher

WHITTIER FIRST FRIENDS CHURCH
13205 PHILADELPHIA ST
WHITTIER, CA 90601

Click here for full text details

RCRA NonGen / NLR

1026478022
CAC003083885

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number
H31 **North** **1/8-1/4** **0.242 mi.** **1276 ft.** **Relative:** **Higher**	**RITE AID #6267** **6512 COMSTOCK AVE** **WHITTIER, CA 90601** Click here for full text details **RCRA-LQG** EPA Id CAR000212563	**RCRA-LQG**	**1014387685** **CAR000212563**
H32 **North** **1/8-1/4** **0.242 mi.** **1276 ft.** **Relative:** **Higher**	**RITE AID #6267** **6512 COMSTOCK AVE** **WHITTIER, CA 90601** Click here for full text details **HAZNET** GEPAID CAR000212563	**CERS HAZ WASTE** **HAZNET** **HWTS**	**S113803546** **N/A**
H33 **North** **1/8-1/4** **0.242 mi.** **1276 ft.** **Relative:** **Higher**	**RITE AID #6267** **6512 COMSTOCK AVE** **WHITTIER, CA 90601** Click here for full text details **RCRA-LQG** EPA Id CAL000380299	**RCRA-LQG**	**1016954886** **CAL000380299**
34 **West** **1/8-1/4** **0.242 mi.** **1278 ft.** **Relative:** **Lower**	**V & A RECYCLING CENTER** **7015 WHITTIER AVE** **WHITTIER, CA 90602** Click here for full text details **SWRCY** Cert Id RC269952.001	**SWRCY**	**S117654817** **N/A**
35 **SSW** **1/8-1/4** **0.244 mi.** **1288 ft.** **Relative:** **Lower**	**EDWARD HARRIS** **7311 NEWLIN AVE** **WHITTIER, CA 90602** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003041859	**RCRA NonGen / NLR**	**1025861180** **CAC003041859**

H36
North
1/4-1/2
0.278 mi.
1466 ft.

Relative:
Higher

TOSCO - 76 STATION #3123 (FORMER)
12823 HADLEY ST E
WHITTIER, CA 90601

LUST
Cortese
CERS

S102590662
N/A

Click here for full text details

LUST
Status Pollution Characterization
Status Open - Site Assessment
Facility Id I-10998
Global Id T0603703708
Global ID T0603703708

Cortese
Cleanup Status OPEN - SITE ASSESSMENT

H37
North
1/4-1/2
0.278 mi.
1466 ft.

Relative:
Higher

76 PRODUCTS STATION #3123
12823 HADLEY
WHITTIER, CA 90601

HIST CORTESE

S104582590
N/A

Click here for full text details

HIST CORTESE
Reg Id I-10998

I38
SSE
1/4-1/2
0.279 mi.
1471 ft.

Relative:
Lower

ANDY GARAGE
7339 GREENLEAF AVE
WHITTIER, CA 90602

LUST
Cortese
LOS ANGELES CO. HMS

S102592816
N/A

Click here for full text details

LUST
Status Case Closed
Facility Id R-24395
Global ID T0603705449

Cortese
Cleanup Status COMPLETED - CASE CLOSED

LOS ANGELES CO. HMS
Facility ID 017758-024395
Facility Status Removed

I39
SSE
1/4-1/2
0.279 mi.
1471 ft.

Relative:
Lower

ANDY GARAGE
7339 GREENLEAF
WHITTIER, CA 90602

LUST **S103670814**
HIST CORTESE **N/A**
CERS

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0603705449

HIST CORTESE
Reg Id R-24395

J40
NNW
1/4-1/2
0.290 mi.
1530 ft.

Relative:
Lower

TEXACO #611060272
12608 HADLEY ST
WHITTIER, CA 90601

LUST **S106932879**
SWEEPS UST **N/A**
Cortese
CERS

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T10000005399

SWEEPS UST
Status A
Comp Number 9306

Cortese
Cleanup Status COMPLETED - CASE CLOSED

41
WSW
1/4-1/2
0.297 mi.
1568 ft.

Relative:
Lower

PENN STREET ELEMENTARY SCHOOL
WHITTIER AVENUE/PENN STREET
WHITTIER, CA 90602

ENVIROSTOR **S118756513**
SCH **N/A**

Click here for full text details

ENVIROSTOR
Facility Id 19010012
Status No Action Required

SCH
Facility Id 19010012
Status No Action Required

42
SE
1/4-1/2
0.327 mi.
1727 ft.

Relative:
Lower

WHITTIER CITY CS
13230 EAST PENN STREET
WHITTIER, CA 90602

Click here for full text details

SWF/LF
Status Active
Site ID 272

ENF
Status Active
Facility Id 631782
Status Historical

LOS ANGELES CO. HMS
Facility ID 017057-022885
Facility Status OPEN

NPDES
Facility Status Active

SWF/LF **S106671424**
ENF **N/A**
LOS ANGELES CO. HMS
NPDES
PEST LIC
CIWQS

43
East
1/4-1/2
0.327 mi.
1727 ft.

Relative:
Higher

CHEVRON #9-8623
7001 PAINTER AVE S
WHITTIER, CA 90602

Click here for full text details

LUST
Status Case Closed
Status Completed - Case Closed
Facility Id I-09898
Global Id T0603703515
Global ID T0603703515

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id I-09898

LUST **S102427403**
Cortese **N/A**
HIST CORTESE
CERS

J44
NNW
1/4-1/2
0.335 mi.
1770 ft.

Relative:
Lower

ARCO #5206
12525 HADLEY ST
WHITTIER, CA 90601

Click here for full text details

LUST
Status Case Closed

LUST **S101298444**
SWEEPS UST **N/A**
Cortese

ARCO #5206 (Continued) **S101298444**

Facility Id I-12079
Global ID T0603703919

SWEEPS UST
Status A
Tank Status A
Comp Number 12079

Cortese
Cleanup Status COMPLETED - CASE CLOSED

J45
NNW
1/4-1/2
0.335 mi.
1770 ft.

Relative:
Lower

ARCO #5206 **LUST** **S103626828**
12525 HADLEY **HIST CORTESE** **N/A**
WHITTIER, CA 90601 **CERS**

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0603703919

HIST CORTESE
Reg Id I-12079

J46
NNW
1/4-1/2
0.342 mi.
1806 ft.

Relative:
Lower

MACMURRAY CLEANERS **CPS-SLIC** **S103975866**
6340 S PICKERING AVE **DRYCLEANERS** **N/A**
WHITTIER, CA 90601 **CERS**

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id SL0603740681

Click here to access the California GeoTracker records for this facility

DRYCLEANERS
EPA Id CAL000174485

J47
NNW
1/4-1/2
0.342 mi.
1806 ft.

Relative:
Lower

MACMURRAY CLEANERS AND UNIFORMS **CPS-SLIC** **S106387224**
6340 PICKERING **N/A**
WHITTIER, CA 90601

Click here for full text details

CPS-SLIC
Facility Status No further action required

48
West
1/4-1/2
0.365 mi.
1925 ft.

Relative:
Lower

WHITTIER HIGH SCHOOL - MULTIPURPOSE ROOM & CLASSRO
PHILADELPHIA STREET AND LINDLEY AVENUE
WHITTIER, CA 90601

Database(s): **ENVIROSTOR, SCH**
EDR ID Number: **S118757158**
EPA ID Number: **N/A**

Click here for full text details

ENVIROSTOR
Facility Id 60000740
Status No Action Required

SCH
Facility Id 60000740
Status No Action Required

K49
SW
1/4-1/2
0.396 mi.
2090 ft.

Relative:
Lower

PAQUETTE FAMILY TRUST
7336 PIERCE AVE
WHITTIER, CA 90602

Database(s): **LUST, LOS ANGELES CO. HMS, CERS**
EDR ID Number: **S110653381**
EPA ID Number: **N/A**

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T10000002725

LOS ANGELES CO. HMS
Facility ID 033163-055099
Facility Status Removed

K50
SW
1/4-1/2
0.396 mi.
2090 ft.

Relative:
Lower

PAQUETTE FAMILY TRUST
7336 PIERCE AVE
WHITTIER, CA 90602

Database(s): **Cortese, HAZNET, HWTS**
EDR ID Number: **S113463629**
EPA ID Number: **N/A**

Click here for full text details

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HAZNET
GEPAID CAC002659087

L51
SE
1/4-1/2
0.409 mi.
2159 ft.

Relative:
Higher

CITY OF WHITTIER POLICE
7315 PAINTER AVE S
WHITTIER, CA 90602

Database(s): **LUST, SWEEPS UST, Cortese, HIST CORTESE, LOS ANGELES CO. HMS, CERS**
EDR ID Number: **S102060773**
EPA ID Number: **N/A**

Click here for full text details

LUST
Status Case Closed
Status Completed - Case Closed

CITY OF WHITTIER POLICE (Continued) **S102060773**

Facility Id R-11892
Global Id T0603705078
Global ID T0603705078

SWEEPS UST
Status A
Tank Status A
Comp Number 11892

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id R-11892

LOS ANGELES CO. HMS
Facility ID 011825-011892
Facility Status Removed

L52
ESE
1/4-1/2
0.418 mi.
2208 ft.

Relative: Higher

UNOCAL #5287
7304 PAINTER AVE S
WHITTIER, CA 90606

LUST **S102440021**
Cortese **N/A**
HIST CORTESE
CERS

Click here for full text details

LUST
Status Case Closed
Status Completed - Case Closed
Facility Id I-11045
Global Id T0603703720
Global ID T0603703720

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id I-11045

K53
SW
1/4-1/2
0.419 mi.
2213 ft.

Relative: Lower

MAR VISTA MOULDING
7343 PIERCE AVE
WHITTIER, CA 90602

LUST **S105036607**
Cortese **N/A**
NPDES
WDS
CIWQS
CERS

Click here for full text details

LUST
Status Case Closed
Status Completed - Case Closed

MAR VISTA MOULDING (Continued) **S105036607**

Facility Id R-36093
Global Id T0603791307
Global ID T0603791307

Cortese
Cleanup Status COMPLETED - CASE CLOSED

WDS
Facility Id 4 19I016905
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

M54
West
1/4-1/2
0.449 mi.
2373 ft.

Relative:
Lower

WASHINGTON PLATING, INC **HIST Cal-Sites** **S101480820**
7060 ELMER AVENUE **N/A**
WHITTIER, CA 90602

Click here for full text details

M55
West
1/4-1/2
0.449 mi.
2373 ft.

Relative:
Lower

7060 ELMER AVENUE LLC **SEMS-ARCHIVE** **1000241831**
7060 ELMER AVE **RCRA-SQG** **CAD008493322**
WHITTIER, CA 90602 **RESPONSE**
ENVIROSTOR
LUST
HIST UST
Cortese
LA Co. Site Mitigation
CERS

Click here for full text details

SEMS-ARCHIVE
Site ID 0901114
EPA Id CAD008493322

RCRA-SQG
EPA Id CAD008493322

RESPONSE
Status Refer: Local Agency
Facility Id 19340728

ENVIROSTOR
Facility Id 19340728
Facility Id 71002235
Facility Id 70000170
Status Refer: Local Agency
Status Refer: Other Agency
Status Refer: 1248 Local Agency

LUST

7060 ELMER AVENUE LLC (Continued) **1000241831**

Status Completed - Case Closed
Global Id T10000000574

HIST UST
Facility Id 00000041103

Cortese
Cleanup Status COMPLETED - CASE CLOSED

LA Co. Site Mitigation
Facility Id FA0009786
Site ID SD0000018
Case ID RO0000033

N56
SW
1/4-1/2
0.466 mi.
2463 ft.

Relative:
Lower

SUNRISE PROPERTIES **ENVIROSTOR** **S117038680**
12353 WHITTIER BOULEVARD **VCP** **N/A**
WHITTIER, CA 90602

Click here for full text details

ENVIROSTOR
Facility Id 60002034
Status Active

VCP
Facility Id 60002034
Status Active

N57
SW
1/4-1/2
0.471 mi.
2486 ft.

Relative:
Lower

12363 WHITTIER BOULEVARD PROPERTY **ENVIROSTOR** **S123722109**
12363 WHITTIER BOULEVARD **VCP** **N/A**
WHITTIER, CA 90602 **HAZNET**
HWTS

Click here for full text details

ENVIROSTOR
Facility Id 60002075
Status Active

VCP
Facility Id 60002075
Status Active

HAZNET
GEPAID CAC000226881

N58
SW
1/4-1/2
0.471 mi.
2486 ft.

Relative:
Lower

PRESTOH WEED CONTROL
12363 WHITTIER
WHITTIER, CA 90602

LUST **S101298481**
HIST CORTESE **N/A**

Click here for full text details

LUST
Status Remedial action (cleanup) Underway
Facility Id 121389-08
Global ID T0603700212

HIST CORTESE
Reg Id 121389-08

59
WSW
1/2-1
0.553 mi.
2921 ft.

Relative:
Lower

MODINE MFG CO
12252 E WHITTIER BLVD
WHITTIER, CA 90602

SEMS-ARCHIVE **1000256316**
RCRA-SQG **CAD008323164**
ENVIROSTOR
CPS-SLIC
HIST UST
ICIS
FINDS
ECHO
HAZNET
LA Co. Site Mitigation
CERS
HWTS

Click here for full text details

SEMS-ARCHIVE
Site ID 0901049
EPA Id CAD008323164

RCRA-SQG
EPA Id CAD008323164

ENVIROSTOR
Facility Id 19200002
Status Refer: RWQCB

CPS-SLIC
Facility Status Completed - Case Closed
Facility Status No further action required
Global Id SLT4306967

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HIST UST
Facility Id 00000007963

ICIS
FRS ID: 110002632456

FINDS

MODINE MFG CO (Continued) **1000256316**

Registry ID: 110002632456

ECHO
Registry ID 110002632456

HAZNET
GEPAID CAD008323164

LA Co. Site Mitigation
Site ID SD0010108
Site ID SD0000134
Case ID RO0000484
Case ID RO0000140

60
SSW
1/2-1
0.587 mi.
3100 ft.

Relative:
Lower

OMEGA ENERGY CORP **HWP** **S109467275**
ST RT 33 1/2 MI SO OF MARICOPA **CERS** **N/A**
MARICOPA, CA 93252 **HWTS**

Click here for full text details

HWP
EPA Id CAD981577661
Cleanup Status CLOSED

O61
SSW
1/2-1
0.640 mi.
3381 ft.

Relative:
Lower

OMEGA CHEMICAL SITE PRP ORGANIZED GROUP **HIST UST** **S107144589**
12504 & 12512 E WHITTIER BLVD **HWP** **N/A**
WHITTIER, CA 90602 **CERS**

Click here for full text details

HWP
EPA Id CAD042245001
Cleanup Status UNDERGOING CLOSURE

O62
SSW
1/2-1
0.640 mi.
3381 ft.

Relative:
Lower

OMEGA CHEMICAL CORPORATION **HIST Cal-Sites** **S105689599**
12504 WHITTIER BLVD **N/A**
WHITTIER, CA 90602

Click here for full text details

O63
SSW
1/2-1
0.640 mi.
3381 ft.

Relative: Lower

OMEGA RECOVERY SERVICES CORP
12504 E WHITTIER BLVD
MARICOPA, CA 93252

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Database(s): RCRA-SQG, ENVIROSTOR, CPS-SLIC, FINDS, ECHO, Cortese, CERS

EDR ID Number: 1000455490
EPA ID Number: CAD981577661

RCRA-SQG
EPA Id CAD981577661

ENVIROSTOR
Facility Id 19280436
Facility Id 80001376
Status Active
Status Inactive - Needs Evaluation

CPS-SLIC
Facility Status Open - Inactive
Facility Status No further action required
Global Id SLT43228226

Click here to access the California GeoTracker records for this facility

FINDS
Registry ID: 110063900435

ECHO
Registry ID 110063900435

Cortese
Envirostor Id 19280436
Cleanup Status ACTIVE

64
West
1/2-1
0.643 mi.
3393 ft.

Relative: Lower

FORMER FRED C. NELLES YOUTH CORRECTIONAL FACILITY
11850 WHITTIER BOULEVARD
WHITTIER, CA 90606

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Database(s): ENVIROSTOR, VCP, DEED

EDR ID Number: S117038692
EPA ID Number: N/A

ENVIROSTOR
Facility Id 60002050
Status Active

VCP
Facility Id 60002050
Status Active

DEED
Envirostor ID 60002050

FORMER FRED C. NELLES YOUTH CORRECTIONAL FACILITY (Continued) **S117038692**

Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

P65
WNW
1/2-1
0.666 mi.
3514 ft.

Relative:
Lower

SO CAL GAS/WHITTIER MGP
11815 HADLEY STREET
WHITTIER, CA 90601

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EDR MGP **1008407791**
N/A

P66
WNW
1/2-1
0.666 mi.
3514 ft.

Relative:
Lower

SO CAL GAS/WHITTIER MGP
11815 HADLEY STREET
WHITTIER, CA 90601

Click here for full text details

ENVIROSTOR **S102564455**
VCP **N/A**

ENVIROSTOR
Facility Id 19490220
Status Certified

VCP
Facility Id 19490220
Status Certified

67
SSW
1/2-1
0.676 mi.
3568 ft.

Relative:
Lower

GUNLOCKE CORPORATION
12468 PUTNAM ST
WHITTIER, CA 90602

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ENVIROSTOR **S102062399**
LUST **N/A**
VCP
SWEEPS UST
DEED
Cortese
HIST CORTESE
LOS ANGELES CO. HMS
NPDES
CIWQS
CERS

ENVIROSTOR
Facility Id 60001332
Status Certified O&M - Land Use Restrictions Only

LUST
Status Pollution Characterization
Status Completed - Case Closed
Facility Id I-10113
Global Id T0603792924
Global ID T0603792924

VCP
Facility Id 60001332

GUNLOCKE CORPORATION (Continued) **S102062399**

Status Certified O&M - Land Use Restrictions Only

SWEEPS UST
Status A
Comp Number 10113

DEED
Envirostor ID 60001332
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id 000265

LOS ANGELES CO. HMS
Facility ID 010234-010113
Facility Status Removed

68
SSW
1/2-1
0.702 mi.
3709 ft.

Relative:
Lower

NEW ENGLAND LEAD COMPANY **ENVIROSTOR** **S102860879**
12511 EAST PUTNAM STREET **N/A**
WHITTIER, CA 90602

Click here for full text details

ENVIROSTOR
Facility Id 19340755
Status Inactive - Needs Evaluation

69
South
1/2-1
0.779 mi.
4113 ft.

Relative:
Lower

SLF-FIVE POINTS WHITTIER **ENVIROSTOR** **S113040733**
8016 SANTA FE SPRINGS ROAD **VCP** **N/A**
WHITTIER, CA 90606 **HAZNET**
NPDES
CIWQS
HWTS

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ENVIROSTOR
Facility Id 60002983
Status Active

VCP
Facility Id 60002983
Status Active

HAZNET
GEPAID CAL000046841

SLF-FIVE POINTS WHITTIER (Continued) **S113040733**

NPDES
Facility Status Terminated
Facility Status Active

70
SSW
1/2-1
0.804 mi.
4246 ft.

Relative:
Lower

FRED RIPPY INC **ENVIROSTOR** **S102860869**
12471 EAST WASHINGTON BOULEVARD **N/A**
WHITTIER, CA 90602

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ENVIROSTOR
Facility Id 19330002
Status No Further Action

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	09/21/2020	09/22/2020	12/11/2020
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2019	05/28/2020	08/12/2020
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	10/19/2020	10/19/2020	01/07/2021
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	10/19/2020	10/19/2020	01/07/2021
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	10/19/2020	10/19/2020	01/07/2021
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	09/30/2020	10/19/2020	01/07/2021
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	08/31/2020	08/31/2020	11/20/2020
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	06/22/2020	06/22/2020	09/04/2020
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	08/31/2020	08/31/2020	11/20/2020
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	08/25/2020	08/26/2020	11/13/2020
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	08/19/2020	08/21/2020	09/04/2020
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	08/06/2020	08/28/2020	11/17/2020
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2018	06/16/2020	08/28/2020
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	10/16/2020	10/19/2020	01/07/2021
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	10/13/2020	10/14/2020	01/04/2021
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/05/2020	08/05/2020	10/23/2020
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	05/28/2020	05/29/2020	08/12/2020
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	08/17/2020	08/17/2020	11/05/2020
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	10/05/2020	10/06/2020	12/23/2020
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	10/13/2020	10/14/2020	11/03/2020
CA	ICE	ICE	Department of Toxic Subsances Control	08/17/2020	08/17/2020	11/05/2020
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	09/08/2020	09/08/2020	11/30/2020
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	08/26/2020	08/28/2020	11/17/2020
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MINES	Mines Site Location Listing	Department of Conservation	09/08/2020	09/08/2020	11/30/2020
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	08/31/2020	08/31/2020	11/20/2020
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	12/07/2020	12/09/2020	12/10/2020
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	08/10/2020	08/10/2020	10/29/2020
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	08/31/2020	08/31/2020	11/20/2020
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	09/08/2020	09/08/2020	12/01/2020
CA	PROC	Certified Processors Database	Department of Conservation	09/08/2020	09/08/2020	12/01/2020
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/03/2020	08/05/2020	10/22/2020
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	05/11/2020	05/12/2020	07/27/2020
CA	SWRCY	Recycler Database	Department of Conservation	09/08/2020	09/08/2020	11/30/2020
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	09/08/2020	09/08/2020	12/01/2020
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	09/08/2020	09/08/2020	11/30/2020
CA	UST	Active UST Facilities	SWRCB	09/08/2020	09/08/2020	11/30/2020
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	09/03/2020	09/08/2020	12/03/2020
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	05/20/2020	05/20/2020	08/06/2020
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	11/19/2019	01/07/2020	03/09/2020
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	09/08/2020	09/08/2020	12/01/2020
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	09/08/2020	09/08/2020	11/30/2020
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/16/2020	09/17/2020	12/10/2020
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2017	06/22/2020	11/20/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2018	12/04/2019	01/15/2020
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2020	10/08/2020	01/04/2021
US	CORRACTS	Corrective Action Report	EPA	12/14/2020	12/17/2020	12/22/2020
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	Delisted NPL	National Priority List Deletions	EPA	10/28/2020	11/05/2020	11/25/2020
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	10/03/2020	10/06/2020	01/04/2021
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	12/14/2020	12/15/2020	12/22/2020
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	04/03/2019	04/05/2019	05/14/2019
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	07/21/2020	09/03/2020	11/25/2020
US	FINDS	Facility Index System/Facility Registry System	EPA	09/04/2020	09/15/2020	11/20/2020
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	08/05/2020	08/13/2020	10/21/2020
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/17/2020	08/17/2020	10/21/2020
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/20/2020	09/22/2020	12/14/2020
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/15/2020	05/20/2020	08/12/2020
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2020	05/20/2020	08/12/2020
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/03/2020	05/20/2020	08/12/2020
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/13/2020
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2020	05/20/2020	08/12/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	10/28/2020	11/05/2020	11/25/2020
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	10/28/2020	11/05/2020	11/25/2020
US	LUCIS	Land Use Control Information System	Department of the Navy	08/06/2020	08/21/2020	11/11/2020
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	09/10/2020	09/15/2020	11/20/2020
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/05/2020	08/10/2020	10/08/2020
US	NPL	National Priority List	EPA	10/28/2020	11/05/2020	11/25/2020
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	10/09/2019	10/11/2019	12/20/2019
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	07/14/2011	08/05/2011	09/29/2011
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PCS INACTIVE	Listing of Inactive PCS Permits	EPA	11/05/2014	01/06/2015	05/06/2015
US	PRP	Potentially Responsible Parties	EPA	04/27/2020	05/06/2020	06/09/2020
US	Proposed NPL	Proposed National Priority List Sites	EPA	10/28/2020	11/05/2020	11/25/2020
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	12/14/2020	12/17/2020	12/22/2020
US	RMP	Risk Management Plans	Environmental Protection Agency	07/24/2020	08/03/2020	10/21/2020
US	ROD	Records Of Decision	EPA	10/28/2020	11/05/2020	11/25/2020
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	10/28/2020	11/05/2020	11/25/2020
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	10/28/2020	11/05/2020	11/25/2020
US	SSTS	Section 7 Tracking Systems	EPA	10/19/2020	10/19/2020	01/04/2021
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/14/2020	09/15/2020	12/10/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	10/28/2020	11/05/2020	11/18/2020
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/21/2020	09/22/2020	12/14/2020
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	10/28/2020	11/05/2020	11/18/2020
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/04/2020	08/25/2020	11/18/2020
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	08/10/2020	10/20/2020	11/02/2020
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	04/29/2020	07/10/2020
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2018	10/02/2019	12/10/2019
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

12826 PHILADELPHIA ST
12826 PHILADELPHIA ST
WHITTIER, CA 90602

TARGET PROPERTY COORDINATES

Latitude (North):	33.978569 - 33° 58' 42.85"
Longitude (West):	118.038933 - 118° 2' 20.16"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	404028.6
UTM Y (Meters):	3760071.8
Elevation:	322 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5633777 WHITTIER, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

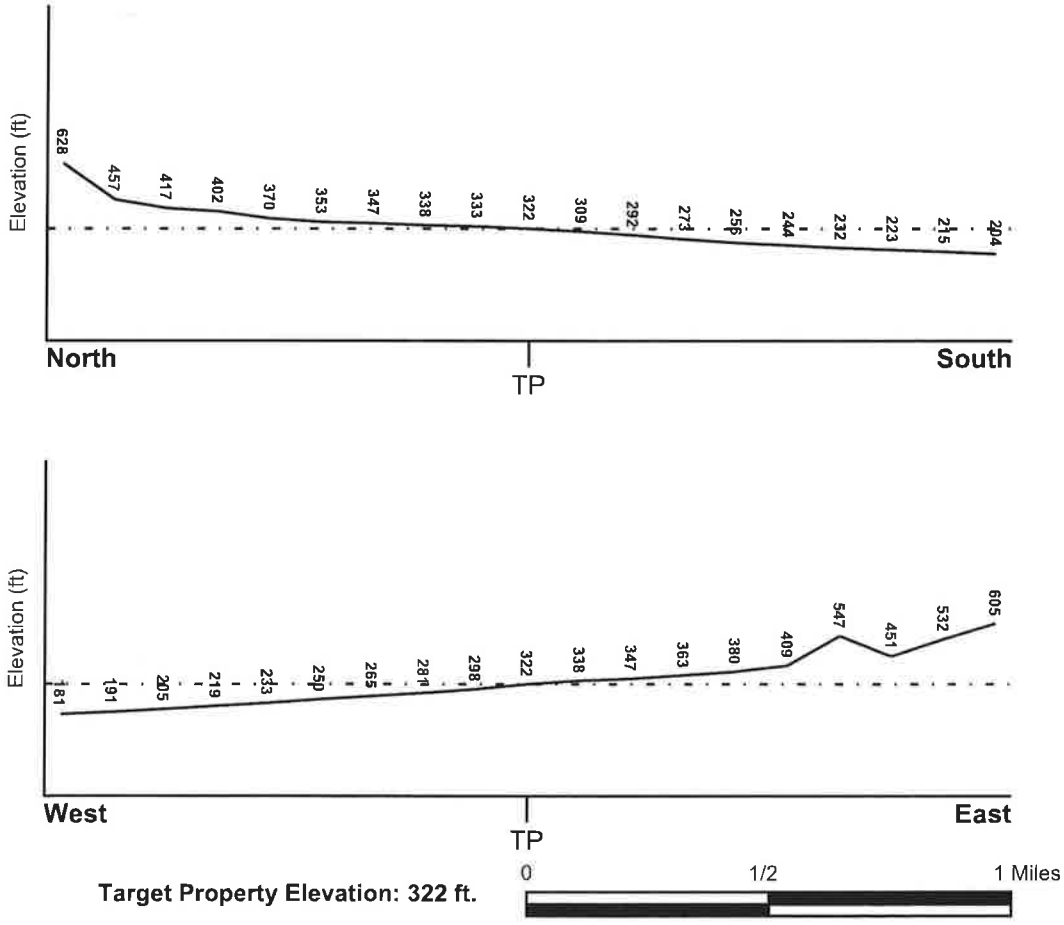
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06037C1835F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WHITTIER	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	URBAN LAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 10 inches
Depth to Bedrock Max:	> 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
9	CA1900107	1/4 - 1/2 Mile East

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAEDF0000082915	1/4 - 1/2 Mile North
A2	CAEDF0000127383	1/4 - 1/2 Mile North
A3	CAEDF0000075715	1/4 - 1/2 Mile North
A4	CAEDF0000097592	1/4 - 1/2 Mile North
A5	CAEDF0000052445	1/4 - 1/2 Mile North
A6	CAEDF0000130527	1/4 - 1/2 Mile North
A7	CAEDF0000041015	1/4 - 1/2 Mile North
A8	CAEDF0000091995	1/4 - 1/2 Mile North
B10	CAEDF0000051868	1/2 - 1 Mile WSW
B11	CAEDF0000133387	1/2 - 1 Mile SW
B12	CAEDF0000135861	1/2 - 1 Mile WSW
B13	CAEDF0000009080	1/2 - 1 Mile SW
B14	CAEDF0000039488	1/2 - 1 Mile WSW
B15	CAEDF0000043509	1/2 - 1 Mile WSW
B16	CAEDF0000136271	1/2 - 1 Mile SW
B17	CAEDF0000031932	1/2 - 1 Mile WSW
B18	CAEDF0000074590	1/2 - 1 Mile SW
B19	CAEDF0000106411	1/2 - 1 Mile SW
20	CAEDF0000135858	1/2 - 1 Mile WSW
C21	CAEDF0000068697	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

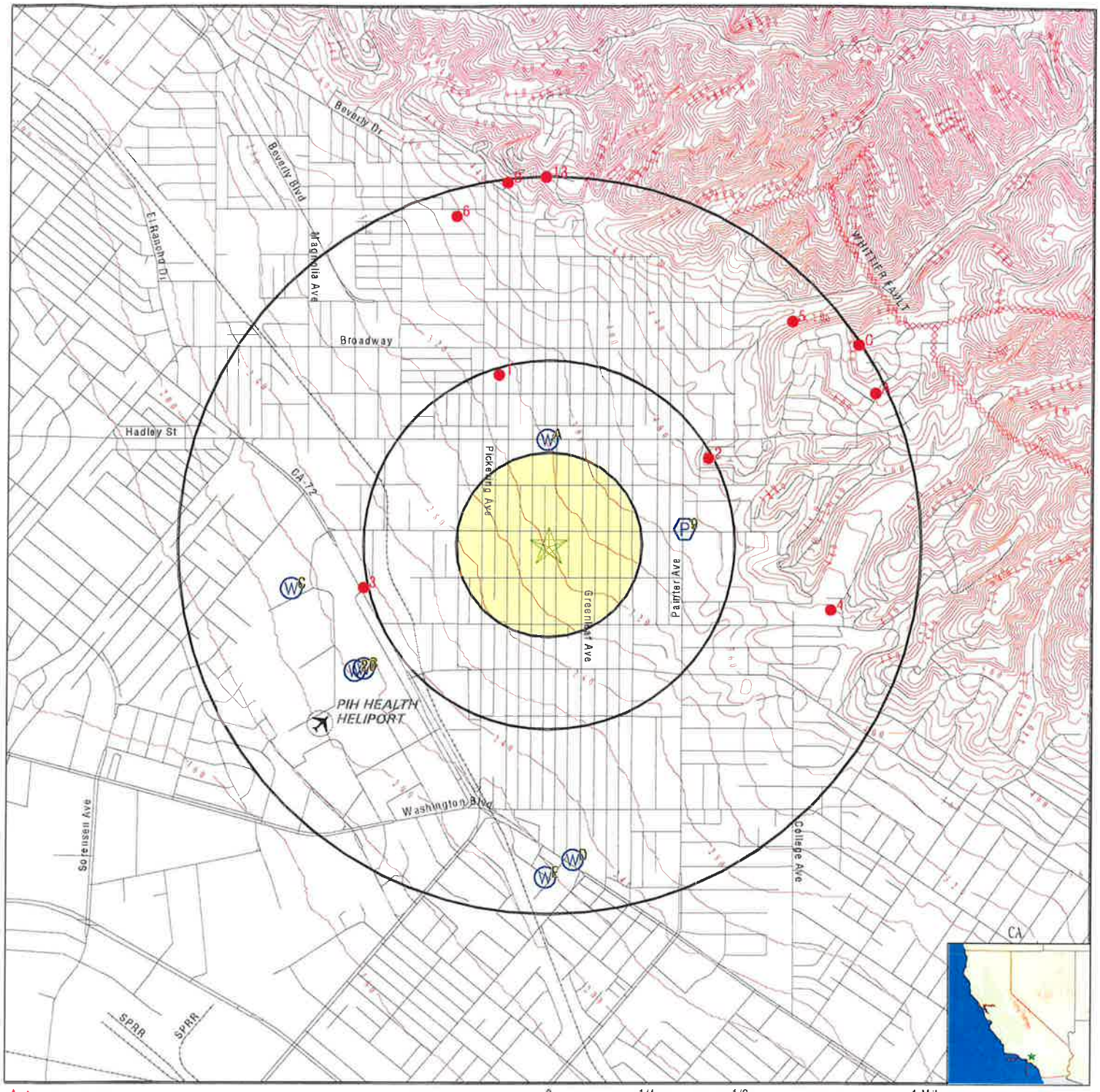
MAP ID	WELL ID	LOCATION FROM TP
C22	CAEDF0000125201	1/2 - 1 Mile West
C23	CAEDF0000058609	1/2 - 1 Mile West
D24	CAEDF0000138468	1/2 - 1 Mile South
D25	CAEDF0000131694	1/2 - 1 Mile South
D26	CAEDF0000017030	1/2 - 1 Mile South
D27	CAEDF0000099792	1/2 - 1 Mile South
D28	CAEDF0000082960	1/2 - 1 Mile South
D29	CAEDF0000140935	1/2 - 1 Mile South
D30	CAEDF0000106368	1/2 - 1 Mile South
D31	CAEDF0000108655	1/2 - 1 Mile South
D32	CAEDF0000114939	1/2 - 1 Mile South
E33	CAEDF0000054348	1/2 - 1 Mile South
D34	CAEDF0000035866	1/2 - 1 Mile South
E35	CAEDF0000069226	1/2 - 1 Mile South
E36	CAEDF0000140265	1/2 - 1 Mile South
E37	CAEDF0000109810	1/2 - 1 Mile South
E38	CAEDF0000083379	1/2 - 1 Mile South

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000014237	1/4 - 1/2 Mile NNW
2	CAOG13000005896	1/4 - 1/2 Mile ENE
3	CAOG13000005271	1/2 - 1 Mile WSW
4	CAOG13000224579	1/2 - 1 Mile ESE
5	CAOG13000224784	1/2 - 1 Mile NE
6	CAOG13000224618	1/2 - 1 Mile NNW
A7	CAOG13000224609	1/2 - 1 Mile ENE
A8	CAOG13000224607	1/2 - 1 Mile ENE
B9	CAOG13000224797	1/2 - 1 Mile North
B10	CAOG13000224641	1/2 - 1 Mile North
C11	CAOG13000224811	1/2 - 1 Mile ENE
C12	CAOG13000224825	1/2 - 1 Mile NE
13	CAOG13000224636	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 6324469.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 12826 PHILADELPHIA ST ADDRESS: 12826 PHILADELPHIA ST WHITTIER CA 90602 LAT/LONG: 33.978569 / 118.038933	CLIENT: PIC Environmental Services CONTACT: Tim Hersch INQUIRY #: 6324469.2s DATE: January 08, 2021 8:53 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 NNW 1/4 - 1/2 Mile	Click here for full text details	OIL_GAS	CAOG13000014237
2 ENE 1/4 - 1/2 Mile	Click here for full text details	OIL_GAS	CAOG13000005896
3 WSW 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000005271
4 ESE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224579
5 NE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224784
6 NNW 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224618
A7 ENE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224609
A8 ENE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224607
B9 North 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224797
B10 North 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224641

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C11 ENE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224811
C12 NE 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224825
13 North 1/2 - 1 Mile	Click here for full text details	OIL_GAS	CAOG13000224636
A1 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000082915
A2 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000127383
A3 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000075715
A4 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000097592
A5 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000052445
A6 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000130527

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A7 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000041015
A8 North 1/4 - 1/2 Mile Higher	Click here for full text details	CA WELLS	CAEDF0000091995
9 East 1/4 - 1/2 Mile Higher	Click here for full text details	FRDS PWS	CA1900107
B10 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000051868
B11 SW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000133387
B12 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000135861
B13 SW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000009080
B14 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000039488
B15 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000043509

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B16 SW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000136271
B17 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000031932
B18 SW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000074590
B19 SW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000106411
20 WSW 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000135858
C21 West 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000068697
C22 West 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000125201
C23 West 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000058609
D24 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000138468

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D25 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000131694
D26 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000017030
D27 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000099792
D28 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000082960
D29 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000140935
D30 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000106368
D31 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000108655
D32 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000114939
E33 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000054348

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D34 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000035866
E35 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000069226
E36 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000140265
E37 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000109810
E38 South 1/2 - 1 Mile Lower	Click here for full text details	CA WELLS	CAEDF0000083379

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90602	8	3

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX I:

ATC "UST CLOSURE REPORT"
DATED JUNE 15, 1994

ATC ENVIRONMENTAL INC.

1

ATC JOB # 81934.0004

PHASE I ENVIRONMENTAL ASSESSMENT REPORT AND LIMITED ASBESTOS SURVEY 12826 PHILADELPHIA STREET WHITTIER, CALIFORNIA 90601

Prepared for

6/15/1994

WORLD VISION
919 HUNTINGTON DRIVE
MONROVIA, CALIFORNIA

JUNE 15, 1994

Solutions For Environmental Concerns

50 E. Foothill Blvd. • Arcadia, CA 91006 • (818) 447-5216 • FAX (818) 447-7593

EXECUTIVE SUMMARY

This report contains the procedures, findings, conclusions, and limitations of the Phase I Environmental Site Assessment of the property at 12826 Philadelphia Street, in the City of Whittier, County of Los Angeles, California. The purpose of this assessment was to provide an indication of the presence of potential environmental liabilities or concerns associated with the Subject Property. This objective was met by performing a walk-through visual survey of the Subject Property, reviewing historical aerial photographs and maps, reviewing readily available government records, and presenting those findings in this report.

The Subject Property is rectangular in shape. Improvements to the property consist of one (1) one-story brick and stucco over wood framed vacant building, with a mezzanine and basement, constructed in 1952.

A limited asbestos survey was performed on the Subject Property. This included the sampling and assessment of suspect asbestos-containing materials. The survey identified the following materials as asbestos containing;

- pipe insulation, straights and fittings
- various 9" x 9" vinyl floor tiles
- various 12"x 12" floor tile
- lt. brown vinyl sheet flooring
- drywall joint compound
- duct flex connector
- general roofing membrane
- roofing debris
- transite-type pipe

The flooring materials were found to be in good condition at the time of the survey and do not require remedial action. However, pipe insulation, roofing debris and a duct flex connector located in the attic area, and drywall joint compound on the mezzanine level are in damaged condition and pose an uncertain environmental hazard to the Subject Property. Renovations and building improvements necessary in the building may impact asbestos-containing materials, this may necessitate abatement of some of the aforementioned materials. An Operations and Maintenance Plan should be implemented for the building to minimize the risks of disturbance of these materials.

Small quantities of paint and cleaning materials were stored in a closet on the mezzanine level of the building. Other than these limited quantities of chemicals, the information available for review and contained within this report does not indicate the past or present use, storage, or disposal of hazardous waste or substances at the Subject Property.

Review of readily available federal, state, and local regulatory database information

indicated environmental concerns within the area of the Subject Property. There were six (6) CERCLIS sites and two (2) landfill sites listed within one (1) mile, and six (6) CORTESE sites, three (3) RCRA small quantity generator sites, and four (4) LUST sites listed within one-half mile of the Subject Property.

There are currently no LIENS sites, NPL sites, RCRIS-TSD sites or oil and gas fields listed within one (1) mile of the Subject Property.

Based on the information presented in this report, it is ATC's professional opinion that, with the exception of the asbestos containing materials as noted herein, the Subject Property, located at 12826 Philadelphia Street, Whittier, California, has a low potential to be impaired by hazardous materials, and the potential for environmental liability is low.

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1.0 INTRODUCTION

This report summarizes the results of a Phase I Environmental Assessment of the property located at 12826 Philadelphia Street, City of Whittier, County of Los Angeles, California (Subject Property). This work was performed by ATC Environmental Inc. (ATC) for World Vision. This assessment was performed in accordance with the ATC proposal P94-352, as authorized by Mr. Bob Owen on May 25, 1994. A site location map is included in Appendix A.

1.1 Purpose and Scope

The purpose of the Phase I Environmental Site Assessment was to evaluate the potential for environmental concerns or liabilities due to past and/or current land use practices at the Subject Property or from nearby sites.

The scope of services for this assessment included the following tasks:

A visit to the Subject Property to obtain information regarding obvious visual signs of contamination; hazardous materials usage, storage or disposal in the vicinity of the Subject Property if any; and type of business activities within the area;

Review of available historical aerial photographs, fire insurance maps, and topographic maps for information regarding previous land use of the Subject Property and vicinity;

Assess the presence of underground storage tanks on the Subject Property;

Observation of the property for potential PCB-contaminated electrical equipment;

Contact applicable regulatory agencies and review local, state and U.S. Environmental Protection Agency (EPA) lists to obtain information regarding environmental permits, environmental violations or incidents and/or status of enforcement actions at the Subject Property and immediate vicinity;

Review of geologic and hydrogeologic literature to obtain information regarding general subsurface conditions;

Visually observe 100% of the facility to evaluate if asbestos-containing materials (ACM) may be present; and

Preparation of this report to present our findings.

1.2 Site Location

The Subject Property at 12826 Philadelphia Street, Whittier, California, is located in Section 28, Township 2 South, Range 11 West. The site is located on a block bound by Philadelphia Street to the north, Comstock Avenue to the east, Wardman Street to the south and Milton Avenue to the west. A site location map is attached in Appendix A.

2.0 PHYSICAL SITE DESCRIPTION

On June 6, 1994, ATC representative Allan S. Coffee, a 40 hour hazardous waste worker trained, and California state and EPA certified building inspector, management planner and contractor supervisor, performed a reconnaissance visit to the Subject Property and vicinity to visually observe existing site conditions, types of land use and nature of businesses. Photographs taken at the time of the site visits are included in Appendix B.

2.1 Description of Current Property Use

The Subject Property is rectangular in shape. Improvements to the property consist of one (1) one-story stucco over wood and brick framed building, with a mezzanine, basement and attic area. The building was constructed in 1952, is comprised of 10,639 square feet and was previously occupied by a bank. The building is situated in the northeast section of the Subject Property. Asphaltic concrete parking areas are located on the west and south portions of the Subject Property.

The building is comprised of a main lobby, bank teller area, two (2) vaults and small office areas on the main level, a lounge area, restrooms, storage areas and attic access on the mezzanine level, and restrooms, several storage rooms, and mechanical and electric rooms on the basement level. The HVAC/air handling equipment is located in the attic area and on the roof.

Interior improvements are constructed of plaster and drywall materials. The ceilings are constructed of drywall, concealed by lay-in 2'x 4' ceiling panels in the main level teller area. Various floor tiles and sheet flooring materials are located throughout the building, with carpet over the tiles in the main teller area and the mezzanine area. The restrooms have ceramic tile floors. The building is roofed with standard asphaltic roofing materials.

A roof leak has caused significant damage to the ceiling panels and drywall in the south section of the main area of the building.

Small quantities of paint and cleaning materials were stored in a storage room on

the mezzanine level. No stains or spills were observed. ATC did not observe any stressed vegetation. The entire complex was clean and all landscaping appeared healthy.

2.2 Description of Adjacent Land Use

The Subject Property is bordered by Philadelphia Street to the north, Comstock Avenue to the east, a large self storage building to the south and an alleyway to the west. A building occupied by a fabric store and a liquor store is located across the alleyway, west of the Subject Property. A Wells Fargo Bank branch building is located across Philadelphia Street, north of the Subject Property. A vacant lot is located across Comstock Avenue, east of the Subject Property.

The area surrounding the Subject Property is predominately commercial/retail with some residential properties located west along Philadelphia Street. The central area of downtown Whittier is located two (2) blocks east of the Subject Property, along Greenleaf Avenue.

2.3 Underground Storage Tanks

No evidence of underground storage tanks such as fill ports, vent lines, or dispensers, were observed on the Subject Property.

2.4 PCB Equipment

Prior to 1976, Polychlorinated Biphenyls (PCBs) were commonly used in dielectric fluids in transformers, capacitors, and light ballasts due to their desirable thermal characteristics. Due to the demonstrated toxicity and persistence in the environment PCB manufacture in the United States was discontinued.

There were fluorescent lights located in the building on the Subject Property.

There were no transformers located on the Subject Property, although two (2) pole-mounted Southern California Edison transformers are located west across the alleyway from the Subject Property.

There is a potential for the presence of PCB containing capacitors in the fluorescent lights on the Subject Property, although the potential for a hazard is low.

2.5 Asbestos-Containing Materials

A limited asbestos survey was performed on the Subject Property. This included the sampling and assessment of suspect asbestos-containing materials. The survey identified the following materials as asbestos containing;

- pipe insulation, straights and fittings
- various 9" x 9" vinyl floor tiles
- various 12"x 12" floor tile
- lt. brown vinyl sheet flooring
- drywall joint compound
- duct flex connector
- general roofing membrane
- roofing debris
- transite-type pipe

The flooring materials were found to be in good condition at the time of the survey and do not require remedial action.

The pipe insulation, roofing debris and a duct flex connector located in the attic area are in damaged condition. The joint compound on the mezzanine level shows signs of water damage. These materials pose an uncertain environmental hazard to the Subject Property.

Renovations and building improvements necessary in the building may impact asbestos-containing materials, this may necessitate abatement of some of the aforementioned materials. An Operations and Maintenance Program should be implemented for the building to minimize the risks of disturbance of these materials.

The Asbestos Survey Report is included in Appendix D.

2.6 Solid and Hazardous Waste

Previous waste generated at the Subject Property appears to be limited to normal office wastes. City of Whittier trash dumpsters were located in the alleyway along the west border of the Subject Property.

2.7 Chemical Use and Storage

Small quantities of cleaning and paint materials were stored in a storage room on the mezzanine level. No stains or spills were observed. ATC did not observe any stressed vegetation. The entire complex was clean and all landscaping appeared healthy.

2.8 Utilities

Based on our observations, the Subject Property appears to be serviced by underground utilities including telephone, natural gas, water, and sanitary and storm sewers.

Permeable fill materials associated with subsurface utility lines can provide pathways for migration of contaminants which may exist at a site, however the information reviewed and contained within this report does not indicate such a problem on the subject or adjacent properties.

2.9 Lead-Based Paint

In 1978, due to the dangers of lead poisoning the Consumer Product Safety Commission banned the sale of lead-based paint, defined as containing more than 0.06% lead by dry weight, to consumers and the use of lead based paint in residences and other areas where consumers have direct access to painted to surfaces.

No chipped or flaking paint was observed on the interior or exterior of the building at the time of our site visit. No paint samples were collected. Based on the date of construction, 1952, there is a potential for the presence of lead-based paint (LBP) in the buildings on the Subject Property.

2.10 Urea-Formaldehyde Foam Insulation

At the time of our site visit, there were no indications of the presence of urea-formaldehyde foam insulation on the Subject Property. Building mechanical drawings were not available and destructive sampling techniques were not employed during the survey.

3.0 GENERAL SITE CONDITIONS

3.1 Topography

The Subject Property is located within the U.S. Geological Survey, Whittier, California, 7.5-minute quadrangle map (1965, photorevised 1972). The elevation of the Subject Property is shown as approximately 260 feet above mean sea level (MSL). The local topographic gradient from the street level is approximately 100 feet per mile to the southwest, as measured from the topographic map.

3.2 Soils and Geology

The area is mapped as being underlain by Quaternary (recent) Alluvium (Geological Map of California, Los Angeles Sheet, 1969). The Quaternary Alluvium deposit is described as consisting of recent clay, silt, sand, and gravel; unconsolidated; poorly stratified to well stratified; includes alluvial fan, flood plain, and steambed deposits.

Soils in the area of the Subject Property are mapped as the Yolo association (U.S. Department of Agriculture Soil Conservation Service, 1969). The Yolo association is characterized as over 60 inches deep, are well drained, and have moderate subsoil permeability. They have grayish-brown, medium acid and slightly acid, loam surface layers about 18 inches thick, underlain by a grayish-brown neutral loam, near silt loam subsoil about 18 inches thick.

3.3 Surface Hydrology

Surface drainage from the subject and adjacent properties is to local storm sewers. Several intermittent creeks are located northeast of the Subject Property.

3.4 Ground Water Hydrology

The Subject Property is located within the Coastal Plain as shown in the Hydrologic Report of the Los Angeles County Department of Public Works (1987-1988 and 1988-1989). Ground water in the area of the Subject Property was shown at an elevation of approximately 120 feet in the 1987-1988 and 1988-1989 Hydrologic Report. Based on a surface elevation of 260 feet, ground water is historically expected to be found at a depth of approximately 140 feet below the Subject Property. The ground water gradient is shown in the Hydrologic reports as to the southwest.

3.5 Radon

Radon is an odorless, radioactive gas that occurs naturally in soil, rock and building materials. It results from the natural radioactive decay of radium. In outdoor air, radon is generally diluted to such low concentrations that it is usually not of concern. In enclosed spaces such as homes or offices, radon can accumulate and pose an environmental concern. Indoor levels of radon depend on a building's construction and the concentration of radon in the underlying soil and rock. Information concerning radon levels in California was provided in a Radon Report from the Department of Health Services (1990). The areas in Southern California that have produced potential radon levels of concern are situated near the foothills and above granite rock. Based on the location of the Subject Property, elevated levels of Radon are not expected to be of concern, although samples would have to be collected to confirm the presence or absence

of radon gas.

4.0 HISTORIC SITE CONDITIONS

4.1 Historical Aerial Photographs

ATC reviewed historical aerial photographs from the Spence-Fairchild Collection at UCLA. Photographs from 1954, 1956, 1963 and 1968 were available for review. A summary of the history of the subject and surrounding properties as shown on the aerial photographs is as follows:

1954 Photograph

The current building is located on the Subject Property. What appear to be commercial buildings are located in the surrounding area. A large building is located across Comstock Avenue, east of the Subject Property. Whittier is urbanized in all directions. Single family houses and farms are visible in outer laying areas.

1956 Photograph

The Subject Property and the surrounding area are essentially unchanged from the 1954 photograph.

1961 Photograph

The Subject Property and the surrounding area are essentially unchanged from the 1956 photograph.

1968 Photograph

The Subject Property and the surrounding area are essentially unchanged from the 1961 photograph.

No environmental concerns were noted in the historical aerial photograph search.

4.2 Historical Topographic Maps

The UCLA Map Library was researched for historical topographic map coverage of the subject area. The Whittier, California 7.5-minute quadrangle map from 1949, 1965, and 1965 (Photorevised 1972) were reviewed. The information found on the topographic maps is summarized as follows:

1949 - Whittier, California 7.5 Minute Quadrangle

No buildings are shown on the Subject Property. The local road pattern in the vicinity of the Subject Property is in place, including the streets of Philadelphia Street, Comstock Avenue, Milton Avenue, and Greenleaf Avenue. The subject area is shown as urbanized.

1965- Whittier, California 7.5 Minute Quadrangle

The Subject Property and surrounding area are unchanged from the 1949 Topographical Map. The San Gabriel River Freeway (Interstate 605) is shown with eight (8) lanes, and is located approximately 2 1/2 miles west of the Subject Property.

1965- (Photorevised 1972) Whittier, California 7.5 Minute Quadrangle

No significant changes to the Subject Property or surrounding area were observed.

No environmental concerns were noted in the historical topographical map search.

4.3 Sanborn Fire Insurance Maps

California State University, Northridge Map Library is the regional repository for historical Sanborn Fire Insurance Maps. Sanborn maps were not available for review.

4.4 Oil and Gas Wells

The Munger Map Book, California - Alaska Oil and Gas Fields contains detailed maps of oil and gas, wells and fields in California. The Munger Map Book was reviewed for information about the Subject Property and nearby oil fields. Map W-65 shows no oil or gas wells within one (1) mile of the Subject Property.

5.0 GOVERNMENT AGENCY RECORDS REVIEW

Since the early 1970s, environmental agencies have been tracking the compliance of many facilities with the various laws that were promulgated to halt the pollution of the air, land and water. More recently, records have been maintained documenting spills of hazardous materials and the locations of known waste sites or regulated waste handling facilities. The following sections summarize our review of a computerized search of a database (Environmental Data Resources, Inc. Toxicheck) of local, state and federal lists and highlights the approximate location of such sites with respect to the Subject Property.

5.1 Federal

The following EPA lists were reviewed to search for sites within the area of the Subject Property:

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List;

The Resource Conservation Recovery Act (RCRA) Notifiers, Violations and Corrective Action List;

The National Priority List (NPL); and

The Federal Superfund Liens (LIENS) List;

NPL, LIENS, and CERCLIS facilities within one (1) mile, and RCRA facilities within one-half mile of the Subject Property are listed below and/or in Appendix C.

The CERCLIS List is the EPA compilation of sites for which the EPA has, or is investigating a release or threatened release, of hazardous substances which may be subject to review in accordance with the terms and conditions of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund Act). **The Subject Property was not listed as a CERCLIS site.** There were six (6) CERCLIS sites listed within one (1) mile of the Subject Property. The reported distance and status of those sites were as follows:

Distance:	0.7 mile west
Site:	Washington Plating Inc.
Address:	7060 South Elmer Avenue, Whittier, CA
Status:	Under investigation to assess the extent of further action

Distance:	0.7 mile west-southwest
Site:	Modine Manufacturing Company
Address:	12252 East Whittier Boulevard, Whittier, CA
Status:	Under investigation to assess the extent of further action

Distance:	0.8 mile west-northwest
Site:	Whittier Propel
Address:	12450 East Whittier Boulevard, Whittier, CA
Status:	N/A

Distance:	0.9 mile south-southwest
Site:	Omega Chemical Corp.
Address:	12504 East Whittier Boulevard, Whittier, CA
Status:	Under investigation to assess the extent of further action

Distance:	0.9 mile west
Site:	Vacant lot
Address:	Washington Boulevard and Putman Street, Whittier, CA
Status:	No further action necessary

Distance:	0.8 mile southwest
Site:	Rippy, Fred R. Inc.
Address:	12471 Washington Boulevard, Whittier, CA
Status:	No further action necessary

Based on the distance to these sites and the groundwater gradient, the potential for an adverse environmental impact on the Subject Property is low.

The RCRA Notifiers list designates generator numbers to facilities which generate, store, treat, or dispose of hazardous materials. Violations and Corrective Actions Lists are also published by the USEPA. **The Subject Property was not listed as a RCRA site.** There were no RCRA -TSD facilities within one (1) mile of the Subject Property. There were three (3) RCRA small quantity generator sites listed within one-quarter mile of the Subject Property. The reported distance and status of those sites were as follows:

Distance:	0.2 mile northeast
Site:	Reliable Printing Service
Address:	6743 Bright Street, Whittier, CA
Status:	Small quantity generator

Distance:	0.2 mile south-southwest
Site:	Covenant Cooperative Enter Inc.
Address:	12727 Philadelphia Street, Whittier, CA
Status:	Small quantity generator

Distance:	0.2 mile west
Site:	Brothers Automotive
Address:	12722 Philadelphia Street, Whittier, CA
Status:	Small quantity generator

Based on the distance and/or locations of these sites, the potential for an adverse environmental impact on the Subject Property is low.

An NPL site is an uncontrolled or abandoned hazardous waste site identified for priority remedial action under the Superfund Program. **The Subject Property was not listed as a NPL site. There were no NPL sites listed within one (1) mile of the Subject Property.**

A LIENS site is a Superfund site that the agency has spent money on for remedial action or notified the owner of the potential liability for remedial action. **The Subject Property was not listed as a LIENS site. There were no LIENS sites listed within one (1) mile of the Subject Property.**

5.2 State

The following state lists and/or files were reviewed to search for sites within the area of the Subject Property:

California Leaking Underground Storage Tanks (LUST) Sites List;

California Hazardous Waste Substance (CORTESE) Sites List;

California Solid Waste Information System (SWIS) List;

California Solid Waste Assessment Test Program (SWAT) List;

California EPA (Cal-Sites) List.

LUST facilities, CORTESE and Cal-Sites within one-half mile, and SWAT and SWIS facilities within one (1) mile of the Subject Property are listed below and in Appendix C.

The Leaking Underground Storage Tank (LUST) Sites List is a compilation of sites where leaks of hazardous substances from underground tanks have been detected and reported to state and local agencies. **The Subject Property was not listed as a LUST site.** There were four (4) LUST sites listed within one-half mile of the Subject Property. The reported distance and status of those sites were as follows:

Distance:	0.2 mile north-northwest
Site:	UNOCAL Service Station #3132
Address:	12823 East Hadley Street, Whittier, CA
Substance:	Misc. Motor Fuels
Case Type:	Groundwater has been affected

Distance:	0.2 mile east
Site:	Chevron
Address:	7001 South Painter Avenue, Whittier, CA
Substance:	Waste oil
Case Type:	Only soil has been affected

Distance: 0.2 mile east-northeast
Site: Southland Corp
Address: 12515 Philadelphia Street, Whittier, CA
Substance: Gasoline
Case Type: N/A

Distance: 0.4 mile west
Site: ARCO Facility #5206
Address: 12525 Hadley Street, Whittier, CA
Substance: N/A

Based on the distance of these sites and groundwater gradient, the potential for an adverse environmental impact on the Subject Property is low.

The California Hazardous Waste Substance (CORTESE) Sites List is a compilation of identified hazardous waste sites. **The Subject Property was not listed as a CORTESE site.** There were four (4) CORTESE sites listed within one-half mile of the Subject Property. All of these sites were listed as LUST sites, and as stated above, based on the distance and/or locations of those sites, the potential for an adverse environmental impact on the Subject Property is low.

The California Solid Waste Information System (SWIS) List contains an inventory of known active, inactive or closed solid waste disposal (landfills) and transfer stations. **The Subject Property was not listed as a SWIS site.** There was one (1) SWIS sites listed within one (1) mile of the Subject Property. The distance and status of that site was listed as follows:

Distance: 0.9 mile east-southeast
Site: City of Whittier-Savage Canyon Landfill
Address: 13919 East Penn Street, Whittier, CA
Status: Permitted landfill

Based on the location and status of this site, the potential for an adverse environmental impact on the Subject Property is low.

The California Solid Waste Assessment Test Program (SWAT) List is managed by the State of California Water Resources Control Board staff and the Regional Water Control Boards for program tracking and inventory of waste management units. This list is a ranking of solid waste disposal sites (landfills) on the basis of the potential threat they may pose to water quality. Priority landfills are then tested to see whether there is any hazardous waste leakage. **The Subject Property was not listed as a landfill site.** There was one (1) landfill site listed within one (1) mile of the Subject Property. The reported distance and status of that site was listed as follows:

Distance:	0.9 mile east-southeast
Site:	Savage Creek Disposal Site
Address:	13919 East Penn Street, Whittier, CA
Status:	Permitted waste discharge system

As stated above, based on the location and status of this site, the potential for an adverse environmental impact on the Subject Property is low.

5.3 Local Agencies

5.3.1 City of Whittier Building and Safety Department

ATC Representatives visited the City of Whittier Building and Safety Department to review building permits for the Subject Property. A permit dated March, 1952 was on file for the original construction of the building. A permit dated November, 1974 was on file for major alteration to the existing building. A permit dated April, 1991, was on file for the installation of a new roof.

5.3.2 Los Angeles County Fire Prevention Bureau

The Los Angeles County Fire Prevention Bureau is the lead agency for the enforcement of underground storage tank and hazardous waste laws in the City of Whittier.

A representative of the Fire Prevention Bureau searched their records for the Subject Property at 12826 Philadelphia Street.

The representative stated that the Fire Prevention Bureau did not have any records of underground storage tanks or hazardous waste at the Subject Property.

6.0 CONCLUSIONS

Based on the information presented in this report, it is ATC's professional opinion that, with the exception of the asbestos-containing materials as noted herein, the Subject Property, located at 12826 Philadelphia Street, Whittier, California, has a low potential to be impaired by hazardous materials, and the potential for environmental liability is low.

7.0 RECOMMENDATIONS

A limited asbestos survey was performed on the Subject Property. This included the sampling and assessment of suspect asbestos-containing materials. The survey identified the several materials as asbestos containing and in damaged condition. Renovations and building improvements necessary in the building may impact asbestos-containing materials, this may necessitate abatement of some of the aforementioned materials. An Operations and Maintenance Plan should be implemented for the building to minimize the risks of disturbance of these materials.

8.0 LIMITATIONS

ATC's work was performed in a professional manner with the best interests of our client in mind. Our objective was to perform our work with care, exercising the customary skill and competence of consulting professionals in the relevant disciplines. The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity and our interpretation of the available historical information and documents reviewed. The opinions and recommendations presented herein apply to site conditions existing at the time of our investigation and those reasonably foreseeable. ATC cannot act as insurers, and no expressed or implied representation or warrant is included or intended in our report except that our work was performed, within the limits prescribed by our clients, with the customary thoroughness and competence of our profession at the time and place the services were rendered.

This report has been prepared for the exclusive use of World Vision. Any other use of this report or any portion of the contents of this report is inappropriate and unauthorized.

Report Prepared By:
ATC ENVIRONMENTAL INC.



Allan S. Coffee
Environmental Specialist

REFERENCES

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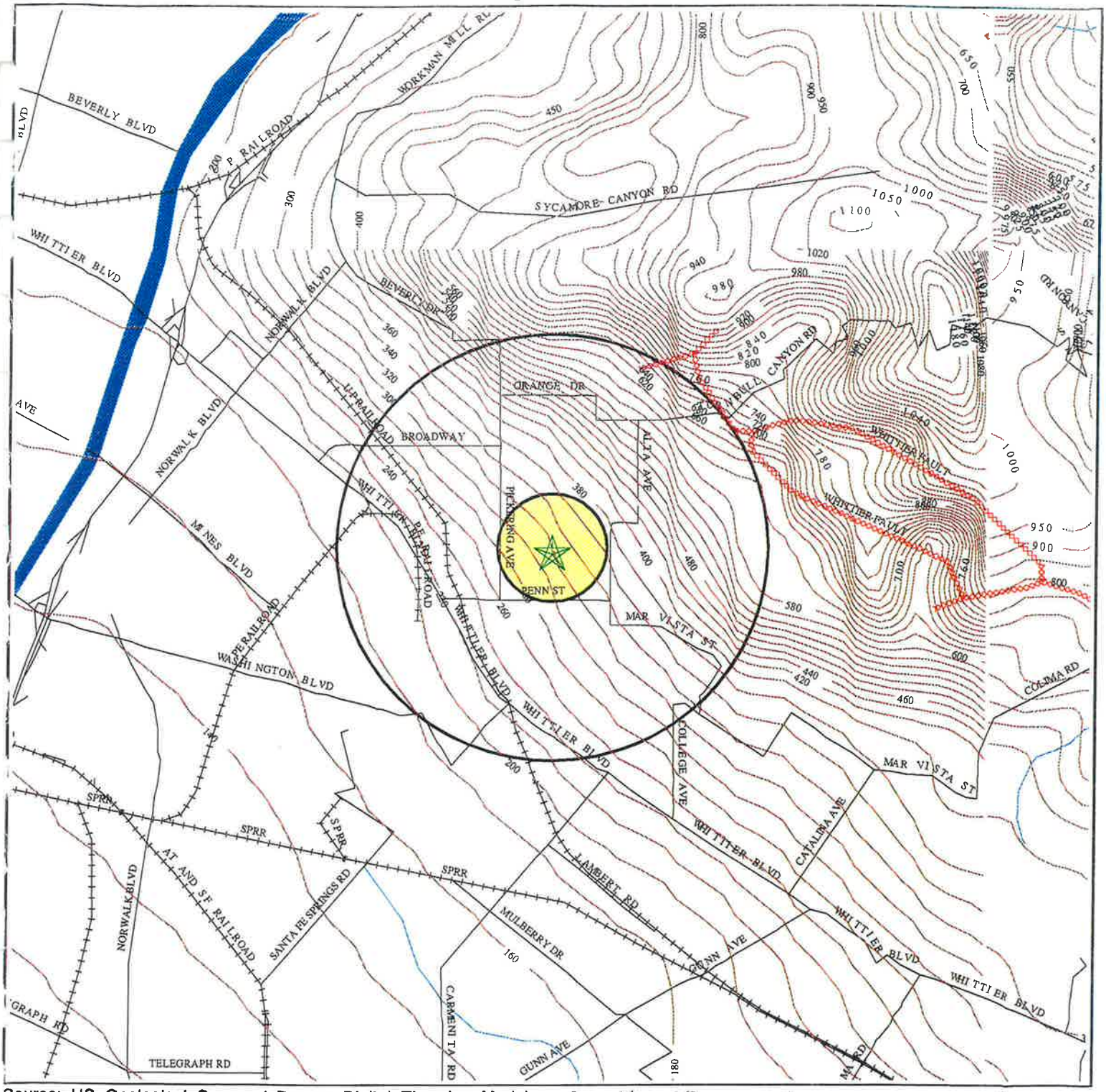
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TOPOGRAPHIC MAP



Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

0 1/4 1/2 1 2
Miles

- Major Roads
- Contour lines (50 foot interval unless otherwise shown)
- Waterways
- Earthquake fault lines

TARGET PROPERTY:	81934.0004	CUSTOMER:	ATC Environmental
ADDRESS:	12826 Philadelphia St.	CONTACT:	Allan Coffee
CITY/STATE/ZIP:	Whittier CA 90602	INQUIRY #:	47317.1
LAT/LONG:	33.9790 / 118.0367	DATE:	May 26, 1994

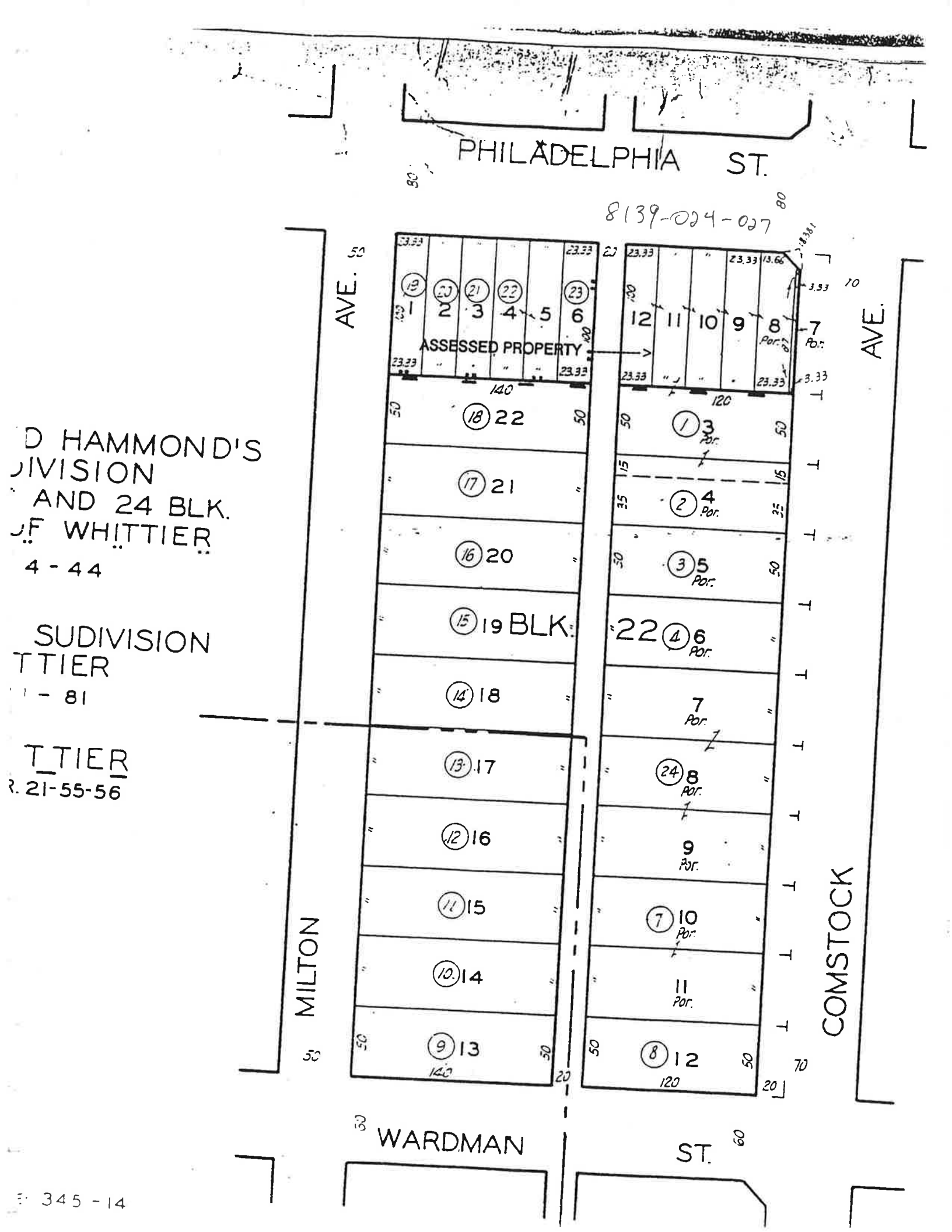

PHILADELPHIA ST.
8139-024-027
ASSESSED PROPERTY
MILTON AVE.
COMSTOCK AVE.
WARDMAN ST.
D HAMMOND'S
DIVISION
AND 24 BLK.
OF WHITTIER
4 - 44
SUDIVISION
TTIER
1 - 81
T TIER
R. 21-55-56
345 - 14

Photo Log

1 Subject Property, main teller area

2 Subject property, water damaged ceiling tiles and drywall

3 Subject Property, limited paints in storage room on mezzanine level

4 Subject Property, water damaged to drywall on mezzanine level

5 Subject Property, damaged duct flex connector in attic

6 Subject Property, damaged pipe insulation in attic

7 Subject Property, roofing debris on attic floor

8 Subject Property, insulated pipe in attic

Site Photographs
12826 Philadelphia Street, Whittier, CA



1



2

Site Photographs
12826 Philadelphia Street, Whittier, CA

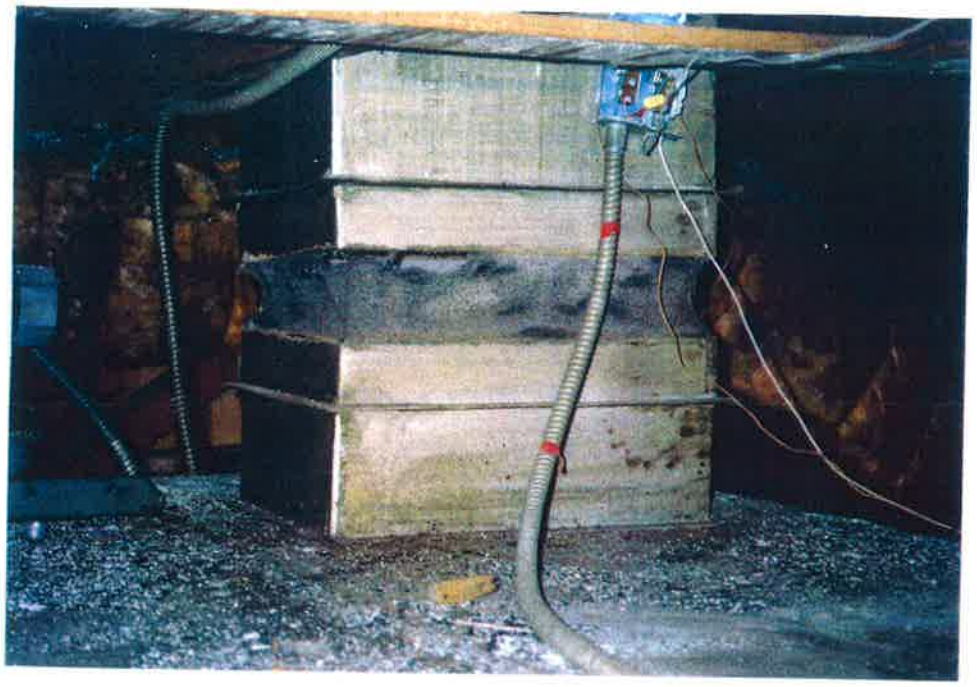


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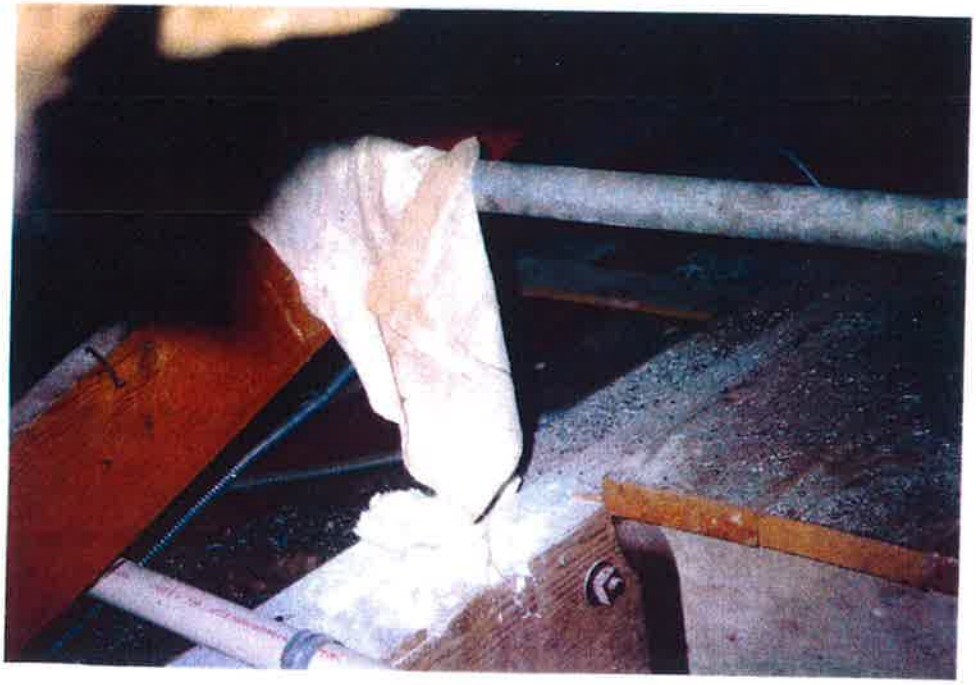


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Site Photographs
12826 Philadelphia Street, Whittier, CA



5

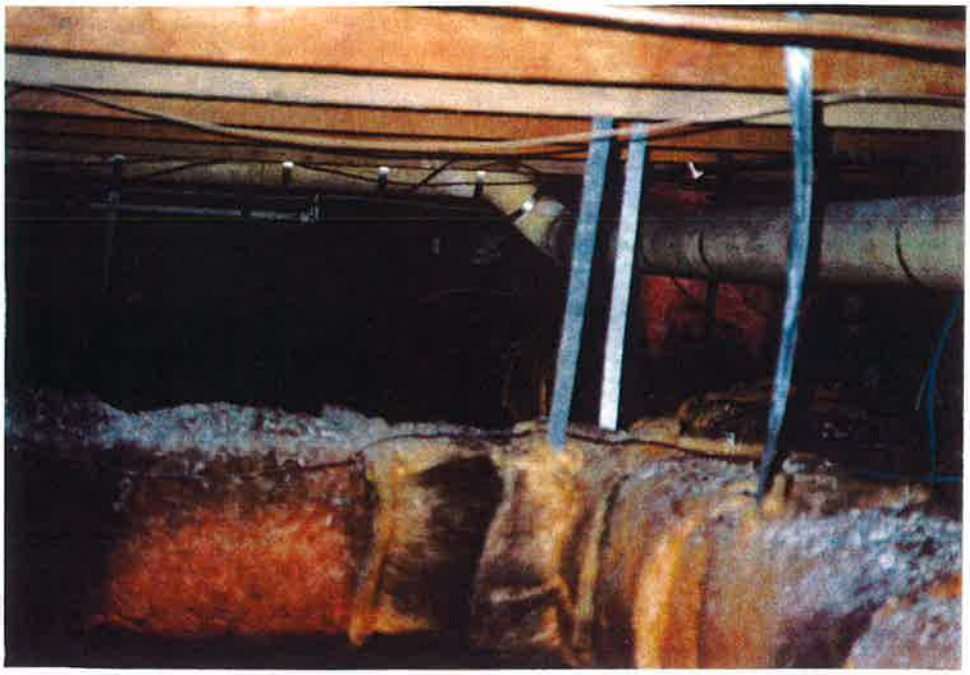


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Site Photographs
12826 Philadelphia Street, Whittier, CA



7



8

ASBESTOS SURVEY REPORT

PREPARED FOR:

WORLD VISION

12826 PHILADELPHIA STREET
WHITTIER, CALIFORNIA

PREPARED BY:

ATC ENVIRONMENTAL INC.
50 EAST FOOTHILL BOULEVARD
ARCADIA, CALIFORNIA 91006
(818) 447-5216

JUNE 20, 1994

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- ***Table 1 - Hazard Assessments***
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5. Laboratory Results Sheets/Chain of Custody

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INTRODUCTION

ATC Environmental Inc. was contracted by World Vision to perform a limited asbestos survey of the former bank building, located at 12826 Philadelphia Street, Whittier, California. The purpose of the survey was to identify, quantify, and assess asbestos-containing building materials (ACBM) located at the above site and to provide a report of the findings.

The survey was conducted on June 6, 1994, by ATC Environmental Specialist Allan S. Coffee, an EPA-accredited Building Inspector, management planner and contractor supervisor.

The survey identified the following materials as asbestos containing;

- *pipe insulation, straights and fittings*
- *various 9" x 9" vinyl floor tiles*
- *various 12"x 12" floor tile*
- *lt. brown vinyl sheet flooring*
- *drywall joint compound*
- *duct flex connector*
- *general roofing membrane*
- *roofing debris*
- *transite-type pipe*

The flooring materials were found to be in good condition at the time of the survey and do not require remedial action. However, if renovations and building improvements may impact asbestos-containing materials, this may necessitate abatement of some of the aforementioned materials.

The pipe insulation, roofing debris, and duct flex connector located in the attic area, are in damaged condition. The joint compound material is water damaged on the second floor.

A detailed list of findings is enumerated upon below.

BUILDING DESCRIPTION

The Subject Property is rectangular in shape. Improvements to the property consist of one (1) one-story stucco over wood and brick framed building, with a mezzanine, basement and attic area. The building was constructed in 1952, is comprised of 10,639 square feet and was previously occupied by a bank.

The building is comprised of a main lobby, bank teller area, two (2) vaults and small office areas on the main level, a lounge area, restrooms, storage areas and attic access on the mezzanine level and restrooms, several storage rooms, and mechanical and electric rooms on the basement level.

Interior improvements are constructed of plaster and drywall materials. The ceilings are constructed of drywall, concealed by lay-in 2'x 4' ceiling panels in the main level teller area. Various floor tile and sheet flooring are located throughout the building, with carpet over the tiles in the main teller area and the mezzanine area. The restrooms have ceramic tile floors. The building is roofed with standard asphaltic roofing materials.

A roof leak has caused significant damage to the ceiling panels and drywall in the south section of the main area of the building.

Those materials not specifically listed in this report should be considered "suspect" and should be submitted for bulk sample analysis before they are disturbed.

FACILITY ACCESS

Facility access was coordinated through Tom Niemerow, a representative of Beitler Preferred Properties. The entire facility was accessible for surveying, although destructive sampling techniques were not utilized. If any additional materials not covered in this report are located in the facility, they should be sampled prior to any renovation or demolition activity.

SURVEY AND ASSESSMENT METHODOLOGIES

The first step in the survey process was to conduct a visual survey of the complex to gather information concerning building materials used in the construction of the buildings.

During the walkthrough, building materials suspected of containing asbestos were classified into homogeneous material areas. Homogenous materials are those that have a uniform appearance and texture that were installed in the same time period. The quantity and condition of the materials were noted.

SAMPLING AND ANALYTICAL METHODOLOGIES

Bulk sampling was performed in accordance with the Environmental Protection Agency's (EPA) Guidance Document, "Guidance for Controlling Asbestos-Containing Materials in Buildings" (EPA 560/5-85-024, 1985), EPA 40 CFR Part 763, Asbestos Containing Materials in Schools, Final Rule and Home Savings of America sampling procedures.

Fifty-seven (57) bulk samples were obtained of various suspect building materials and placed in sample containers for transport. The samples were assigned a unique sample number and then submitted to the laboratory for analysis.

Bulk samples were analyzed via Polarized Light Microscopy (PLM), utilizing dispersion staining techniques in accordance with the EPA document: Interim Method of the Determination of Asbestos in Bulk Insulation Samples (40 CFR Part 763, Appendix A). The detection limit of the PLM analytical method is one percent (1%) asbestos by weight. Per Home Saving's request, samples were analyzed utilizing a "first positive" strategy. Once asbestos was detected in a sample from a particular Homogenous Area, usually no additional samples were analyzed from that Homogenous Area and the samples were labeled as "Not Analyzed" in the Bulk Sample Analysis Table. In some instances samples of positive Homogenous Areas were continued to be analyzed for quality assurance purposes. If no asbestos was detected in a sample, the microscopist proceeded to analyze the next sample from that Homogeneous Area until all samples were analyzed or a "positive" sample was found.

BULK SAMPLE RESULTS

Manufactured materials that contain more than one tenth of one percent (0.1%) asbestos by weight are considered by the California Department of Health Services to be "asbestos containing building materials" (ACBM). The U.S. Environmental Protection Agency's (EPA) National Emissions Standards for Hazardous Air Pollutants (NESHAP) define asbestos materials as those that contain one-percent (1.0%) or more asbestos.
For the purposes of this report, materials which contain less than one percent asbestos, but have some asbestos fibers present, are listed as "Trace." Materials in which no asbestos was detected are defined in the laboratory report as "None Detected" (Refer to Tables 1 & 2).

ATC will archive the samples for a period of thirty (30) days. At the end of the 30 day period, the samples will be properly disposed of, unless otherwise directed by the client.

TABLE 1: BULK SAMPLE RESULTS (POSITIVE)

The following table is a listing of bulk samples found to contain some quantities of asbestos, the quantities and locations represent all areas in which the specified material is located (see page 7 of this section for a legend explaining definitions and asterisks):

MATERIAL	SAMPLE #	ASBESTOS %	LOCATION**	CONDITION	NESHAP CLASS.
9"x 9" red floor tile	38 & 43	5% Ch	Three basement storage rooms, men's restroom entry & hallway	Good	CLASS 1
9"x 9" gray floor tile	37 & 45	5% Ch	Basement women's restroom entry	Good	CLASS 1
9"x 9" green floor tile w/ mastic	12 & 26	5% Ch	East section of main area (under carpet), mezzanine area (under carpet), & west vault	Good	CLASS 1
12"x 12" lt. brown floor tile	11	3% Ch	Mezzanine room at attic entry	Good	CLASS 1
12"x 12" creme floor tile w/ mastic	25	2%	West section of main area (under carpet) & east vault	Good	CLASS 1
Pipe insulation, corrugated and mudded straights and mudded fittings	01, 02, 06, 07, 08, & 09	20-30% Ch 35% Am	Basement mechanical room, vertical pipe chase & attic area	Damaged in attic	FRIABLE
Sheet flooring, yellow	10	2% Ch	Entry to roof hatch in attic	Good	CLASS 1
Drywall joint compound	16 & 29	2% Ch	Throughout building	Water damage	CLASS 1
General roofing membrane	47	20% Ch	Roof area	Good	CLASS 1
Roof debris	04	20% Ch	Attic area	Damaged	FRIABLE
Exterior stucco	55, 56 & 57	2% Ch	Building exterior	Good	CLASS 1

MATERIAL	SAMPLE #	ASBESTOS %	LOCATION"	CONDITIO N	NESHAP CLASS
Transite-type pipe		Assumed	Vertical pipe chase from basement to roof	Good	CLASS 2
Duct flex connector	44	70% Ch	Mechanical room and attic	Damaged in attic	FRIABLE

Ch=Chrysotile ***A***=Amosite ***Cr***=Crocidolite ***Trem***=Tremolite ***TR***=Trace

LEGEND

Asterisks

* - *Approximate quantities refer to actual floor surface area rather than actual square footage of materials*

** - *Top layer refers to visible surface layer of flooring*

Conditions

Good Condition *- Material shows little or no damage and requires no remedial action.*

Moderate Condition *- Material is somewhat damaged and is need of minor repairs.*

Significantly Damaged Condition *- Material is in need of remedial action.*

NESHAP Classification

NESHAP CLASS. *- Refers to the classification system for asbestos-containing materials, as promulgated by 40 CFR, Part 61 of the National Emission Standards for Hazardous Air Pollutants (NESHAP).*

FRIABLE - *Any material containing more than one-percent asbestos that, when dry, can be pulverized, crumbled or reduced to powder by hand pressure.*

CLASS 1 *- Any material containing more than one-percent asbestos that, when dry, cannot be pulverized, crumbled or reduced to powder by hand pressure. CLASS 1 materials include packings, gaskets, resilient floor coverings, and asphalt roofing products.*

CLASS 2 *- Any material, excluding CLASS 1 non-friable materials, containing more than one-percent asbestos that, when dry, cannot be pulverized, crumbled or reduced to powder by hand pressure.*

TABLE 2 - BULK SAMPLE RESULTS (NEGATIVE)

*The following table is a listing of materials that were sampled by ATC during the inspection and found **not to contain asbestos:***

MATERIAL
Wall plaster
12"x 12" acoustic ceiling tile
Drywall
2'x 2' white acoustic ceiling panel, new
2'x 2' white acoustic ceiling panel, old
2'x 2' ceiling panel mastic
12"x 12" gray floor tile and mastic
Mastic under 9" red and gray floor tiles
Sheet flooring marble pattern
Acoustic wall tile
2'x 4' acoustic ceiling panels
Parapet roofing
Blown-in insulation
Plaster debris

RECOMMENDATIONS

GENERAL

The asbestos-containing flooring and roofing membrane materials identified during the survey were found to be in good condition and do not require remedial action. However, renovations and building improvements may impact asbestos-containing materials, which may necessitate asbestos abatement. All asbestos-containing materials that will be impacted by renovation or demolition, should be properly abated by a qualified State-certified and Cal/OSHA registered asbestos contractor. All asbestos work should proceed under the guidance or direction of a State-Certified Asbestos Consultant.

The pipe insulation, roofing debris, and duct flex connector located in the attic area, are in damaged condition. The joint compound material has suffered water damaged on the second floor.

An Operations and Maintenance Program should be implemented for the building to minimize the risks of disturbance of these materials.

Below are specific recommendations for the management of asbestos-containing materials identified during the survey:

FLOORING

- *Consistent with the Environmental Protection Agency's guidance document Managing Asbestos In-Place, a.k.a. the "Green Book," ATC recommends that the flooring materials that are **good condition** be managed in-place. The procedures outlined in the Resilient Floor Covering Institute's "Recommended Work Practices For Resilient Floor Coverings" should be used as guidelines. The flooring should not be sanded, abraded or disturbed in any way that would release asbestos fibers.*

  Since flooring is covered with carpet in some areas, materials not specifically listed in this report should be considered suspect and should be submitted for bulk sample analysis before they are disturbed.

EXTERIOR STUCCO

- *The exterior stucco material was in good condition at the time of the survey, and does not need to be abated immediately. The material will only need to be abated when the building is altered in a manner that affects the material, such as renovation or demolition.*

  The material is a non-friable material and, by definition, will not release asbestos

fibers into the ambient air with the application of hand pressure. However, abrading the material by mechanical means, such as sanding or drilling may render the material friable. Care should be taken not to abrade the material.

GENERAL ROOFING MEMBRANE

- *The general roofing membrane is in good condition and does not need to be abated immediately. The material will only need to be abated when the building is altered in a manner that affects the material, such as renovation, demolition, or reroofing.*

  The material is a non-friable material and, by definition, will not release asbestos fibers into the ambient air with the application of hand pressure. However, abrading the material by mechanical means, such as sanding or drilling may render the material friable. Care should be taken not to abrade the material.

DRYWALL JOINT COMPOUND

- *The drywall joint compound has been damaged by water from a roof leak. Walls in east section of the mezzanine level are molding. If renovations or demolition is to be performed in the building that will affect the drywall material, it will have to be removed by a licensed asbestos abatement contractor in accordance with local, state and federal regulations regarding asbestos abatement.*

  The material is a non-friable material and, by definition, will not release asbestos fibers into the ambient air with the application of hand pressure. However, abrading the material by mechanical means, such as sanding or drilling may render the material friable. Care should be taken not to abrade the material.

PIPE INSULATION

- *The pipe insulation material shows only minor damage in the basement area. The material is significantly damaged in the attic area. If renovations or demolition is to be performed in the building that will affect the pipe insulation material, it will have to be removed by a licensed asbestos abatement contractor in accordance with local, state and federal regulations regarding asbestos abatement.*

  The material is friable and, by definition, will release fibers into the ambient air with the application of hand pressure. The areas containing this material, especially the attic area, should be restricted to authorized personnel only, and warning signs should be placed at the access to these areas. Care should be taken not to disturb the material.

DUCT FLEX CONNECTORS

- *The flex duct connector material shows only minor damage in the basement mechanical room, but is significantly damaged in the attic area. If renovations or demolition is to be performed in the building that will affect the material, it will have to be removed by a licensed asbestos abatement contractor in accordance with local, state and federal regulations regarding asbestos abatement.*

  The material is friable in the attic area only, and, by definition, will release fibers into the ambient air with the application of hand pressure. The areas containing this material, especially the attic area, should be restricted to authorized personnel only, and warning signs should be placed at the access to these areas. Care should be taken not to disturb the material.

ROOFING DEBRIS

- *The roofing debris is located throughout the attic area, and is significantly damaged. The material appears to be debris from a previous roof replacement. If any activities are to be performed in the attic area, the material will have to be removed by a licensed asbestos abatement contractor in accordance with local, state and federal regulations regarding asbestos abatement.*

  The material is friable and, by definition, will release fibers into the ambient air with the application of hand pressure. The attic area containing this material, should be restricted to authorized personnel only, and warning signs should be placed at the access to these areas. Care should be taken not to disturb the material.

TRANSITE-TYPE PIPING

- *The transite-type pipe is in good condition and does not need to be abated immediately. The material will only need to be abated when the building is altered in a manner that affects the material, such as renovation or demolition.*

  The material is a non-friable material and, by definition, will not release asbestos fibers into the ambient air with the application of hand pressure. However, abrading the material by mechanical means, such as sanding or drilling may render the material friable. Care should be taken not to abrade the material.

This report has been prepared for the exclusive use of World Vision. Any other use of this report or any portion of the contents of this report is inappropriate and unauthorized.

SIGNATURES

The survey report was prepared by the following ATC Representative:
ATC ENVIRONMENTAL INC.



Allan S. Coffee
Environmental Specialist

LABORATORY REPORT

OF

BULK SAMPLE ANALYSIS

BY

POLARIZED LIGHT MICROSCOPY

ATC Project No. 81934.0004

ATC Environmental Inc.
50 East Foothill Boulevard
Arcadia, California 90001
(818) 447-5216

CLIENT:	World Vision
SITE:	12826 Philadelphia Street Whittier, CA
CLIENT CONTACT:	Bob Owen
DESCRIPTION OF WORK:	Analysis of bulk samples for asbestos content.
LABORATORY:	Hygeia Environmental Laboratories, Inc. 82 W. Sierra Madre Blvd. Sierra Madre, CA 91024 (818) 355-4711

This report must not be used by the client to claim product endorsements by NVLAP or any agency of the U.S. Government. This test report relates only to the items stated.

POLARIZED LIGHT MICROSCOPY

Analysis Methodology

All samples were analyzed utilizing the Environmental Protection Agency's Interim Method for the Determination of Asbestos in Bulk Insulation Samples, (EPA 600/M4-82020, December 1982) and the McCrone Research Institute's The Asbestos Particle Atlas as method references.

Laboratory Equipment

Laboratory analysis was accomplished utilizing a Nikon LaboPhot polarized light microscope equipped with a dispersion staining objective.

Laboratory Analyst(s)

Samples were analyzed by qualified Hygeia Environmental Laboratories, Inc. employees under the direction of Mr. Gustavo Delgado. All polarized light microscopy laboratory analysts have successfully completed the McCrone Asbestos Identification Course.

Laboratory Accreditations

Hygeia's Los Angeles laboratory is accredited by the National Institute of Standards and Technology (NIST)/National Voluntary Laboratory Accreditation Program (NVLAP). The laboratory identification number is 1011-04.

Quality Control Programs

Hygeia's Los Angeles laboratory participates in the American Industrial Hygiene Association's (AIHA) Bulk Asbestos Proficiency Testing Program. The laboratory identification number is 91024-001.

In addition, a minimum of ten percent (10%) of all incoming bulk samples are re-analyzed and documented in an in-house quality control log. A minimum of two percent (2%) of all incoming bulk samples are re-analyzed by ATC's Sioux Falls, South Dakota laboratory as part of an intra-laboratory quality control program.

Results of all quality control programs are available at the laboratory for review.

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
50 East Foothill Boulevard
Arcadia, California 91006
(818) 447-5216

Client: World Vision
Site: 12826 Philadelphia Street
Whittier, California

Client Number: 81934
Project Number: 0004
Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
01	Pipe insulation fitting. (ftg), attic area	30% Chrysotile 30% Amosite		40%
02	Pipe insulation straight (strt), attic area	25% Chrysotile	55%	20%
03	Roofing debris, attic area	ND	50%	50%
04	Roofing debris, attic area	20% Chrysotile		80%
05	Roofing debris, attic area	ND	5%	95%
06	Pipe insulation ftg., attic area near entry	25% Chrysotile 35% Amosite		40%
07	Pipe insulation strt., attic area near entry	30% Chrysotile	45%	25%
08	Pipe insulation debris, attic area	15% Chrysotile 35% Amosite		50%
09	Pipe insulation strt., attic area near entry	20% Chrysotile 30% Amosite		50%
10	Sheet flooring, attic area entry below roof hatch	2% Chrysotile	50%	48%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
50 East Foothill Boulevard
Arcadia, California 91006
(818) 447-5216

Client: World Vision
Site: 12826 Philadelphia Street
Whittier, California

Client Number: 81934
Project Number: 0004
Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
11	12" brown floor tile, Mezzanine rm with attic entry	3% Chrysotile		97%
12	9" green floor tile w/ mastic, mezzanine rm. with attic entry	5% Chrysotile		95%
13	Wall plaster, mezzanine rm with attic entry	ND		100%
14	12' acoustic ceiling tile, mezzanine rm with attic entry	ND	95%	5%
15	Drywall, mezzanine women's restroom	ND	3%	97%
16	Drywall joint compound, mezzanine women's restroom	2% Chrysotile		98%
17	2'x 2' ceiling panel new, 1st floor main area	ND	75%	25%
18	2'x 2' ceiling panel new, 1st floor main area	ND	90%	10%
19	2'x 2' ceiling panel new, 1st floor main area	ND	70%	30%
20	2'x 2' ceiling tile old, 1st floor east stairway	ND	90%	10%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
50 East Foothill Boulevard
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Client: World Vision
Site: 12826 Philadelphia Street
Whittier, California

Client Number: 81934
Project Number: 0004
Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
21	2'x 2' ceiling panel, 1st floor south entry	ND	95%	5%
22	2'x 2' ceiling panel, 1st floor south entry	ND	95%	5%
23	2'x 2' tile mastic, 1st floor south entry	ND	5%	95%
24	12" gray floor tile, 1st floor center main area	ND	5%	95%
25	12" creme floor tile w/ mastic, 1st floor west main area	2% Chrysotile		98%
26	9" green floor tile w/ mastic, 1st floor east main area	5% Chrysotile		95%
27	Sheet flooring marble pattern, east stairs	ND	50%	50%
28	Drywall, 1st floor SE main area	ND		100%
29	Drywall joint compound, 1st floor SE main area	ND		100%
30	Acoustic wall panel, 1st floor walk-up teller area	ND	75%	25%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
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Client: World Vision
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Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
31	Acoustic wall panel, 1st floor SE walk-up teller area	ND	70%	30%
32	Acoustic wall panel, 1st floor SE walk-up teller area	ND	70%	30%
33	2'x 4' ceiling panel, 1st floor east office area	ND	75%	25%
34	2'x 4' ceiling panel, 1st floor east office area	ND	70%	30%
35	2'x 4' ceiling panel, 1st floor east office area	ND	75%	25%
36	Wall plaster, 1st floor east office area	ND		100%
37	9" gray floor tile, basement women's restroom entry	5% Chrysotile		95%
38	9" red floor tile, basement hallway	5% Chrysotile	20%	75%
39	Plaster debris, basement hallway	ND		100%
40	Pipe insulation ftg., basement mechanical room	20% Chrysotile 30% Amosite		50%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
50 East Foothill Boulevard
Arcadia, California 91006
(818) 447-5216

Client: World Vision
Site: 12826 Philadelphia Street
Whittier, California

Client Number: 81934
Project Number: 0004
Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
41	Pipe insulation strt., basement mechanical room	35% Chrysotile	45%	20%
42	Wall plaster, basement mechanical room	ND		100%
43	9" red floor tile, basement hallway	5% Chrysotile	10%	85%
44	Duct flex connector, basement mechanical room	70% Chrysotile	20%	10%
45	9" gray floor tile, basement women's restroom entry	5% Chrysotile		95%
46	Parapet roofing, roof	ND	20%	80%
47	General roofing, roof	20% Chrysotile		80%
48	General roofing, roof	ND	35%	65%
49	Roofing mastic, roof	ND	30%	70%
50	Blown-in insulation, attic area	ND	90%	10%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

BULK SAMPLE ANALYSIS

ATC Environmental Inc.
50 East Foothill Boulevard
Arcadia, California 91006
(818) 447-5216

Client: World Vision
Site: 12826 Philadelphia Street
Whittier, California

Client Number: 81934
Project Number: 0004
Samples Collected: 6/6/94
Samples Analyzed: 6/15/94

SAMPLE ID NUMBER	SAMPLE DESCRIPTION AND LOCATION	PERCENT AND TYPE ASBESTOS	PERCENT AND TYPE OTHER FIBROUS MATERIAL	PERCENT NON-FIBROUS MATERIAL
51	Blown-in insulation, attic area	ND	95%	5%
52	Blown-in insulation, attic area	ND	90%	10%
53	12" ceiling tile, mezzanine lounge area	ND	75%	25%
54	12" ceiling tile, mezzanine lounge area	ND	75%	25%
55	Exterior stucco, west building face	2% Chrysotile		98%
56	Exterior stucco, north building face	2% Chrysotile		98%
57	Exterior stucco, east building face	2% Chrysotile		98%

Key:

TR = trace - less than one percent (<1%)
ND = none detected in representative sample analyzed

APPENDIX J:

PIC RESUMES

PIC ENVIRONMENTAL SERVICES
A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.
2619 Sierra Way, La Verne, CA 91750
909/593-2427
email: picenv@verizon.net

J. T. (TIM) HERSCH

PROFESSIONAL PROFILE

B.A., Geology, Occidental College, Los Angeles, 1971
M.S., Geology, University of Washington, Seattle, 1974

OVER 40 YEARS OF EXPERIENCE IN PETROLEUM AND ENVIRONMENTAL GEOLOGY

1986 – Present
Consulting Environmental and Petroleum Geologist. He owns and is the president of PIC Environmental Services, which provides a broad array of services, including site assessments/investigations, petroleum and hazardous materials abatement/remediation, underground storage tank removal/monitoring, Phase I and Phase II Property transfer assessments and groundwater investigations. PIC professionals have particular expertise in biological remediation methods, soil gas (vapor) appraisal/extraction technology and recycling of petroleum contaminated soil into commercial products. He has managed over 4,000 separate environmental projects conducted by PIC's professional staff during the last thirty three years. He is the qualifying officer for PIC's California Class A General Engineering Contractor's License and PIC's Hazardous Substances Remediation License. He has substantial experience and expertise as an expert witness concerning environmental litigation. He has been a California professional geologist since 1985.

1972 – 1986

Senior Exploration and Petroleum Geologist for Elf Aquitaine, Aminoil, Santa Fe Energy and Texaco, Inc. He was Project Leader and Geologist for Federal and State Offshore Lease Sales. He generated exploration/development prospects throughout California's principal oil basins, supervised geochemical research involving the Miocene Monterey Formation and conducted regional basin studies for all of California's oil producing basins. He designed and implemented steam flood pilot projects. He recommended and supervised the drilling/coring/logging of over 60 development wells in nine oil and gas fields. He conducted seismic stratigraphic studies of Miocene and Eocene Sands in the San Joaquin Valley. He was a Community college instructor in Physical Science and Geology from 1972 until 1978.

California Class A and HAZ General Engineering Contractor #579293
California Professional Geologist #4082
Lifetime Community College Teaching Credential

ETHAN HERSCH

ENVIRONMENTAL PROFESSIONAL

CONTACT

818-915-0352
4336 Gaviota Avenue
Long Beach, CA 90807
ejhersch@yahoo.com

PROFILE

Over 17 years of field experience assessing and managing proprieties with various environmental impairments under the supervision of a Professional Geologist. Extensive communication experience with clients and various regulatory oversight agencies.

EDUCATION

Pepperdine University

1997 – 1999

M.A. Clinical Psychology

Cumulative GPA – 3.98

Course study in Research Methods, Statistics, Physiological Psychology, Ethics, Psychological Assessment

University of La Verne

1991 – 1995

B.S. Psychology

Cumulative GPA – 3.92

Summa Cum Laude

Departmental Honors – Psychology

Presented Senior Research at the Pacific Sociological Association Annual Meeting in 1996

Course study in Research Methods, Statistics, Life Science, Logic, Development, Algebra

EXPERIENCE

Environmental Professional/Project Manager – PIC Environmental Services

2003 – Present

- Communicate with Representatives/Regulators from DTSC (CalEPA), RWQCB (Water Board), AQMD, Local Oversight Agencies
- Collaborate with Professional Geologist, Client, Lenders, and Regulatory Oversight Agencies to develop and implement Site Specific Work Plan including Site Investigation and Remediation
- Collaborate with Professional Geologist to complete Phase I Site Assessment Reports, Subsurface Site Investigation Reports, and Remediation Reports
- Manage onsite Soil, Groundwater, and Soil Vapor Investigations

  Record Lithologic Data and Complete Boring Logs, Including: Soil Classification (Unified Soil Classification System), Dilatancy, Plasticity, Cementation, Color, Odor

  Field Assessment/Monitoring of VOCs, Methane, H2S, Turbidity, Conductivity

  Collect and Transport Samples under Chain of Custody Protocols
- Complete Geologic Reports/Figures, Including:

  Groundwater Contour Maps, Isochron Maps, Description of Geology and Hydrogeology underlying sites, Assessment of contaminant migration, Interpretation of Laboratory Data
- Vapor Intrusion Assessment and Calculations

Mental Health Professional - Various

1999 – 2003

- Provided individual, group and family therapy to emotionally disturbed children and adolescents ages five to eighteen.
- Diagnosed and treated patients with mental, emotional and behavioral disorders in a private practice office setting.
- Developed and created formal documentation of progress and treatment interventions to the Dept. of Mental health, Dept. of Children and Family Services and Dept. of Probation.

APPENDIX 11b

PIC ENVIRONMENTAL SERVICES
A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.
2619 Sierra Way, La Verne, CA 91750
Phone: (909) 593-2427 - Cell (909) 450-1703
Email: picenv@verizon.net

PHASE II SITE ASSESSMENT
GEOLOGIC REPORT

PREPARED FOR:

MATT WAKEN
MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, SUITE D4-197
LADERA RANCH, CA 92694

CONCERNING COMMERCIAL PROPERTY AT:

12826 – 12856 PHILADELPHIA STREET
WHITTER, CA 90601

MARCH 17, 2021

PIC ENVIRONMENTAL SERVICES
2619 SIERRA WAY
LA VERNE. CA 91750

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Scope of Investigation 1

Site Assessment Procedures 2

Laboratory Results 2

Geology and Hydrogeology 3

Conclusions and Recommendations 3

DISPLAYS

Figure 1: Site Location and Topographic Map

Figure 2: Site Map

Figure 3: Groundwater Map

Figure 4: Aerial Photo – 2019

Appendix A: Site Photos

Appendix B: Laboratory Results

Appendix C: PIC "Phase I Report" dated January 26, 2021

PIC ENVIRONMENTAL SERVICES

A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.
2619 Sierra Way, La Verne, CA 91750
Phone: (909) 593-2427 - Cell (909) 450-1703
Email: picenv@verizon.net

March 17, 2021

INTRODUCTION

PIC Environmental Services (PIC) was contracted by MW Investment Group, LLC to conduct a Phase II Subsurface Environmental Assessment at 12826 – 12856 Philadelphia Street, Whittier, CA 90601. This Phase II Assessment was conducted in response to environmental concerns identified in a PIC Phase I Environmental Assessment Report dated January 26, 2021 for the subject property (see Appendix C). The purpose of the Phase II Site Assessment was to determine if subsurface environmental impairments exist at the subject property. Drilling and sampling operations were completed March 8, 2021 at three (3) proposed locations. Attached laboratory results document that no analyzed subsurface sample measured any detectable concentrations of petroleum or volatile organic contaminants. Accordingly, PIC concludes that no significant petroleum or hazardous materials contamination exists under the property. As a result, PIC concludes the site does not contain Recognized Environmental Conditions (impairments). PIC recommends no further investigation.

BACKGROUND

The subject property consists of a medical office building in the northern portion of the property (see Figure 2). Historic permit records confirm the location of a former gasoline service station and probably one or more underground storage tanks (USTs) in the northeast portion of the property. The former UST(s) and dispenser(s) were apparently removed prior to 1952 when the existing building was constructed. Potential contaminants of concern include petroleum hydrocarbons (gasoline) and other volatile organic compounds (VOCs).

In consideration of the environmental concerns summarized above, a subsurface Phase II Environmental Investigation was conducted to determine if elevated concentrations of petroleum and/or VOC contaminants were present.

SCOPE OF INVESTIGATION

PIC recommended and drilled a total of three (3) borings (B1 – B3). Borings were located in proximity to the former gasoline service station facilities as illustrated on Figure 2. A total of 4 soil samples and 3 soil gas samples were recovered from the three borings at depths of 5 to 10 feet below surface.

SITE ASSESSMENT PROCEDURES

Phase II Site Assessment operations were conducted on March 8, 2021.

Soil boring locations (B1 - B3) were selected as illustrated on Figure 2.

Under the direction of Ethan Hersch, three (3) vertical borings (B1 - B3) were drilled/cored and sampled on March 8, 2021 by direct push equipment operated by StrongArm Environmental. The borings were located in proximity to the former USTs and fuel dispensers. Undisturbed soil samples were recovered at depths of 5 to 10 feet below surface. Soil gas tubing was installed at a depth of 5 feet in all borings. A total of 4 soil samples and 3 soil gas samples were recovered from the three (3) borings. The lithology and field evidence of potential petroleum or hazardous materials contamination for each sample were recorded by Mr. Hersch.

The core barrels were decontaminated with liquinox detergent solution, and then rinsed with water between boring locations to minimize potential cross contamination. Mr. Hersch conducted vapor monitoring of recovered soil samples during coring operations using a MiniRae 2000 Photoionization Detector (PID).

None of the recovered soil samples measured elevated readings of volatile organic compounds. None of the soil samples exhibited obvious field evidence (odor or discoloration) of petroleum hydrocarbon or hazardous materials contamination. Soil borings were cored and sampled to a maximum total depth of 10 feet.

All recovered soil and soil gas samples were transported under Chain of Custody procedures to a State certified laboratory for quantitative analyses (see Appendix B: Chain of Custody Record).

The soil borings were backfilled with bentonite seal material on March 8, 2021 after completion of soil and soil gas sampling.

Groundwater was not encountered in any boring.

LABORATORY RESULTS

A total of 7 soil and soil gas samples were recovered. Upon recovery, all samples were transported to Environ-Chem, Inc. (Pomona).

Four (4) soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) via EPA Method 8015 and Total Volatiles via EPA Method 8260B. All three soil gas samples were analyzed for Total Volatiles via EPA Method 8260B. Table I below summarizes laboratory results, which are attached in Appendix B:

TABLE I
LABORATORY ANALYSES

Boring ID	Sample Depth (feet)	Soil / Soil Gas	Total Petroleum (TPH) EPA 8015 (ppm)	Total Volatiles (Solvents) EPA 8260B (ppm)
B1	5	Soil	All = ND	All = ND
B1	5	Soil Gas	-	All = ND
B2	5	Soil	All = ND	All = ND
B2	5	Soil Gas	-	All = ND
B2	10	Soil	All = ND	All = ND
B3	5	Soil	All = ND	All = ND
B3	5	Soil Gas	-	All = ND

Note: ND = None Detected -- = Not Analyzed
All results reported as mg/kg or mg/l = ppmillion

The laboratory results document a lack of detectable petroleum (gasoline) or solvents (volatiles) contamination in all soil and soil gas samples. All measured concentrations are well below screening guidelines adopted by the Federal EPA, the California Regional Water Quality Control Board, and the California Department of Toxic Substances Control.

GEOLOGY AND HYDROGEOLOGY

The elevation of the site is approximately 324 feet above sea level. The surrounding topography generally slopes southwesterly away from the nearby Whittier Hills (see Figure 1: Topographic Map). Sampling operations confirmed that underlying lithology consists of brown, fine grained clayey silt with some sand. Underlying native sediments are consistent with historic alluvial (flood plain) deposition.

A regional groundwater map indicates that depth to the first (shallowest) groundwater zone is about 150 feet below surface at an elevation of about 170 feet above sea level (see Figure 3). The flow gradient is southwesterly.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of this Phase II Environmental Site Assessment, PIC has found no evidence to conclude that significant petroleum or hazardous materials (VOCs) contamination exists at the subject property. More specifically, PIC concludes the following:

1. Site assessment operations completed by PIC are adequate to verify a lack of elevated petroleum (gasoline, diesel, or oil), and/or volatile organic compounds (VOCs) contamination at all boring locations.

2. PIC concludes that no significant subsurface petroleum, volatiles, or hazardous materials contamination is present under the subject property. Accordingly, PIC concludes the site does not contain Recognized Environmental Conditions.

3. PIC recommends no further action or investigation.

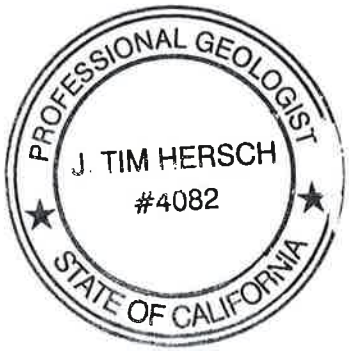
This report is proprietary and confidential, to be delivered to, and intended for the exclusive use of, the above named client or the client's assignees. PIC Environmental Services assumes no responsibility nor liability for the reliance herein or use hereof by anyone other than the above named client or the client's assignees. In addition, all of the lab work cited in this report was prepared under the supervision of Curt deSilets of Enviro-Chem, Inc. (Pomona), who is responsible for the contents and conclusions of the laboratory data.

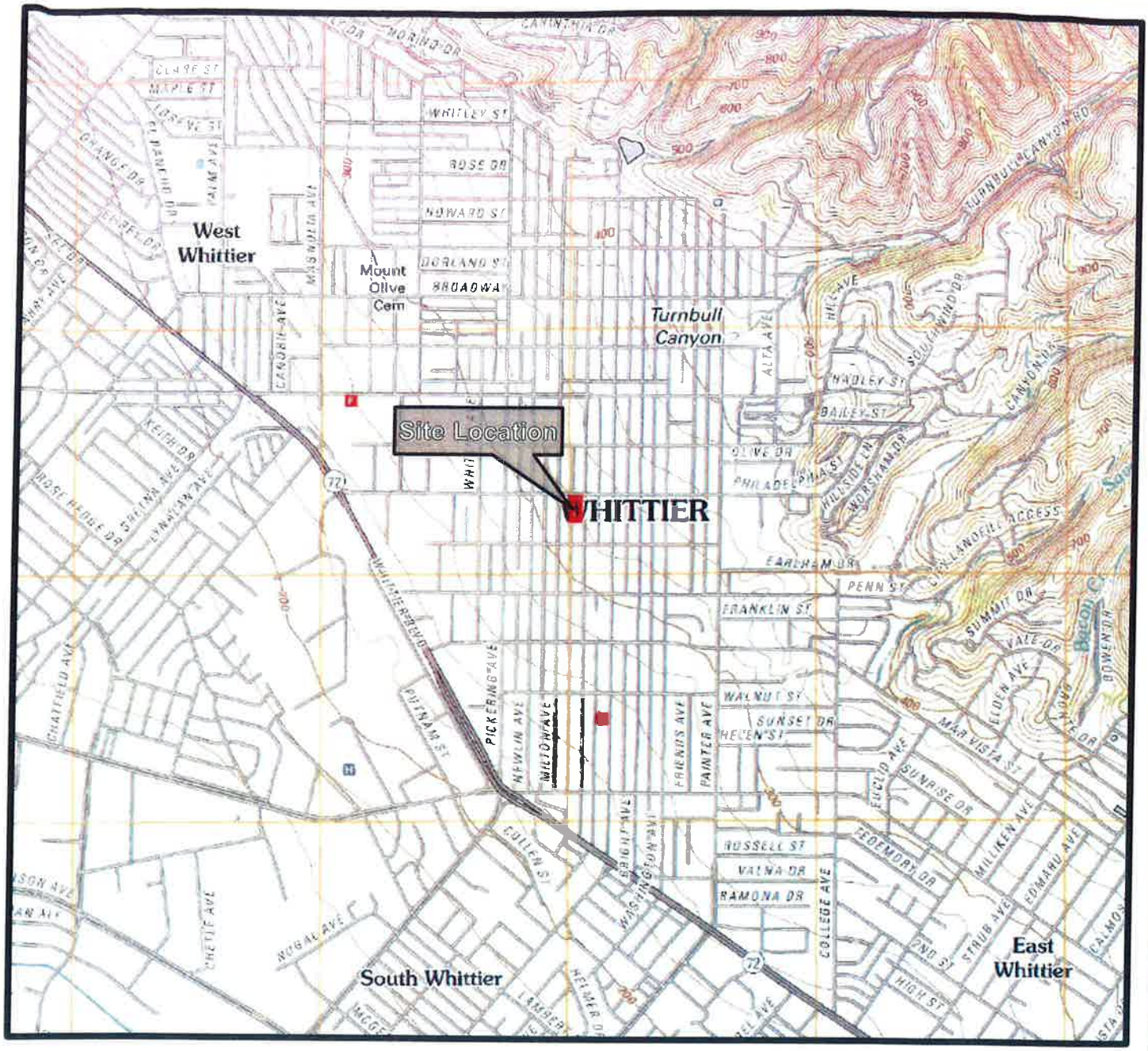
Should you have any questions or comments regarding the procedures outlined in this report, please do not hesitate to call us at 909/593-2427.

Respectfully submitted,

Ethan J. Hersch
Project Manager

J. Tim Hersch
California Professional Geologist #4082
President





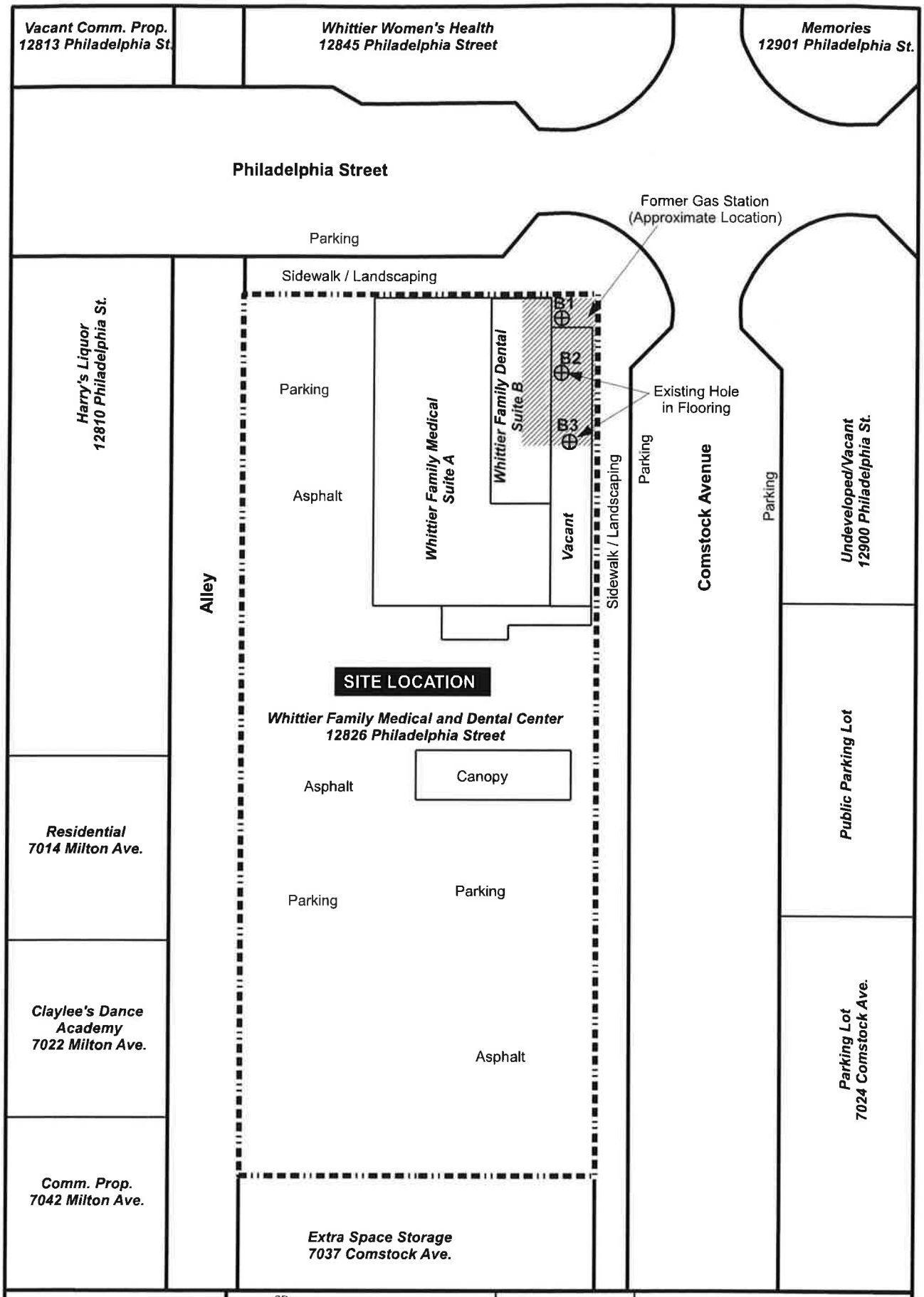


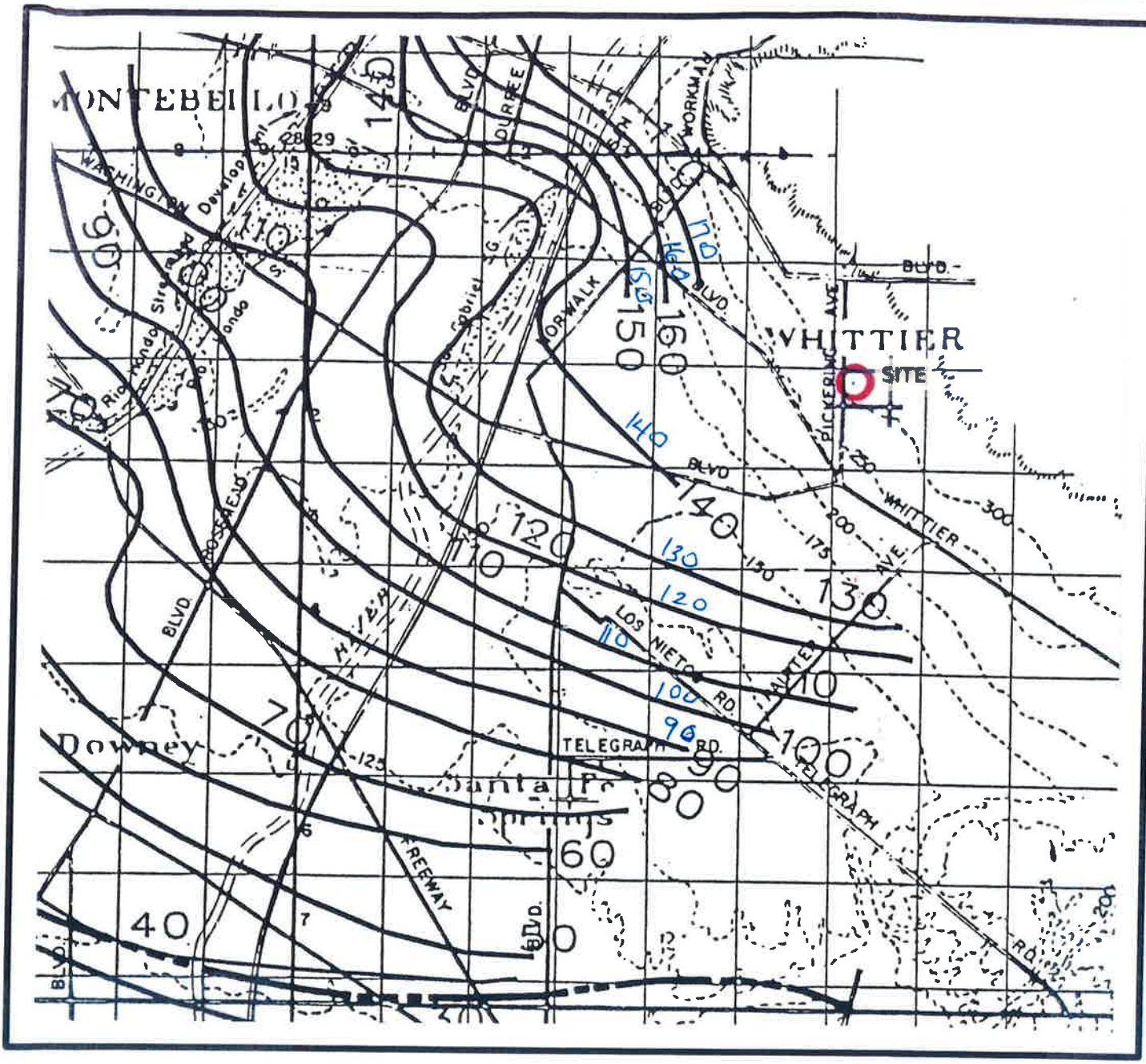
Site Latitude: N33.978859
Site Longitude: W118.038876
Site Elevation: 324 Feet
Source: USGS Topographical Quadrangle

North

PIC ENVIRONMENTAL SERVICES **Environmental Services**	0 2000 Scale In Feet	**Site Location Map Topographic Map**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 1


Vacant Comm. Prop.
12813 Philadelphia St.
Whittier Women's Health
12845 Philadelphia Street
Memories
12901 Philadelphia St.
Philadelphia Street
Former Gas Station
(Approximate Location)
Parking
Sidewalk / Landscaping
Harry's Liquor
12810 Philadelphia St.
B1
B2
B3
Existing Hole
in Flooring
Parking
Asphalt
Whittier Family Medical
Suite A
Whittier Family Dental
Suite B
Vacant
Sidewalk / Landscaping
Parking
Comstock Avenue
Parking
Undeveloped/Vacant
12900 Philadelphia St.
Alley
SITE LOCATION
Whittier Family Medical and Dental Center
12826 Philadelphia Street
Asphalt
Canopy
Public Parking Lot
Residential
7014 Milton Ave.
Parking
Parking
Claylee's Dance
Academy
7022 Milton Ave.
Asphalt
Parking Lot
7024 Comstock Ave.
Comm. Prop.
7042 Milton Ave.
Extra Space Storage
7037 Comstock Ave.
North
Boring Location
PIC Environmental Services
0
30
Scale In Feet
Site Map
Client:
MW Investment Group, LLC
Drafted By:
EJH
Project Manger:
J. Tim Hersch
Project No:
E4364
Site Location:
12826 Philadelphia Street, Whittier, CA 90601
Date:
1 / 2021
Figure:
2



North

PIC ENVIRONMENTAL SERVICES — **Environmental Services**	0 — 5280 Scale In Feet	**Groundwater Contour Map**	
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 3



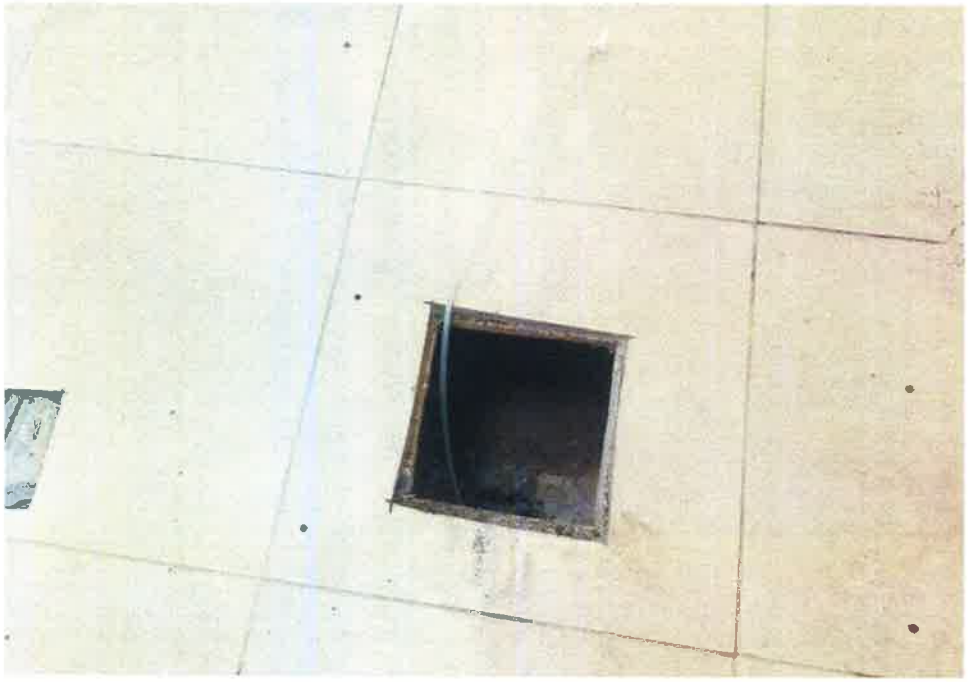
North

PIC Environmental Services	**Environmental Services**	0 100 Scale In Feet	**Aerial Photo May 2019**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 4

APPENDIX A:

SITE PHOTOS






PHARMACY
Pharmacy Hours:
MON - FRI 9AM - 6PM
(562) 846-1005
WARNING






USA





APPENDIX B:

LABORATORY RESULTS

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: March 12, 2021

Mr. J. Tim Hersch
PIC Environmental Services
2619 Sierra Way
La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

Project: **E4364 - MW**
Lab I.D.: **210308-13 through -19**

Dear Mr. Hersch:

The **analytical results** for the soil and vapor samples, received by our lab on March 8, 2021, are attached. All samples were received chilled, intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW

SOIL

DATE SAMPLED:03/08/21
MATRIX:SOIL
REPORTED TO:Mr. J. TIM HERSCH

DATE RECEIVED:03/08/21
DATE EXTRACTED:03/08/21
DATE ANALYZED:03/08/21
DATE REPORTED:03/12/21

TOTAL PETROLEUM HYDROCARBONS(TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C10-C28	C28-C35	DF
B1-5	210308-13	ND	ND	ND	1
B2-5	210308-14	ND	ND	ND	1
B2-10	210308-15	ND	ND	ND	1
B3-5	210308-16	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS
C4-C10 = GASOLINE RANGE
C10-C28 = DIESEL RANGE
C28-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B QA/QC Report

Date Analyzed: 3/8/2021 **Units:** mg/Kg (ppm)

Matrix: **Soil/Solid/Sludge/Liquid**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **210305-48 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C10~C28 Range	0	200	205	**103%**	178	**89%**	**14%**	**75-125**	**0-20%**

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C10~C28 Range	200	159	**80%**	**75-125**

Analyzed and Reviewed By: _____

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

SOIL

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

EPA 5030B/8260B FOR FUEL OXYGENATES
UNITS: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	ETBE	DIPE	MTBE	TAME	TBA	DF
B1-5	210308-13	ND	ND	ND	ND	ND	1
B2-5	210308-14	ND	ND	ND	ND	ND	1
B2-10	210308-15	ND	ND	ND	ND	ND	1
B3-5	210308-16	ND	ND	ND	ND	ND	1
Method Blank		ND	ND	ND	ND	ND	1
	PQL	0.01	0.01	0.005	0.01	0.05	

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
ETBE = ETHYL tert-BUTYL ETHER DIPE = ISOPROPYL ETHER
MTBE = METHYL tert-BUTYL ETHER TAME = TERT-AMYL METHYL ETHER
TBA = TERTIARY BUTYL ALCOHOL

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel: (909) 593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED: 03/08/21
MATRIX: SOIL
REPORTED TO: Mr. J. TIM HERSCH

DATE RECEIVED: 03/08/21
DATE ANALYZED: 03/08/21
DATE REPORTED: 03/12/21

SOIL

SAMPLE I.D.: B1-5

LAB I.D.: 210308-13

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel: (909) 593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED: 03/08/21
MATRIX: SOIL
REPORTED TO: Mr. J. TIM HERSCH

DATE RECEIVED: 03/08/21
DATE ANALYZED: 03/08/21
DATE REPORTED: 03/12/21

Soil

SAMPLE I.D.: B1-5

LAB I.D.: 210308-13

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SOIL

SAMPLE I.D.: B2-5 LAB I.D.: 210308-14

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **PIC Environmental Services**
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: **E4364 - MW**
DATE SAMPLED: 03/08/21 DATE RECEIVED: 03/08/21
MATRIX: SOIL DATE ANALYZED: 03/08/21
REPORTED TO: Mr. J. TIM HERSCH DATE REPORTED: 03/12/21

SOIL

SAMPLE I.D.: **B2-5** LAB I.D.: 210308-14

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
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LABORATORY REPORT

CUSTOMER: **PIC Environmental Services**
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: **E4364 - MW**
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SOIL

SAMPLE I.D.: **B2-10** LAB I.D.: 210308-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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LABORATORY REPORT

CUSTOMER: PIC Environmental Services
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Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SOIL

SAMPLE I.D.: B2-10 LAB I.D.: 210308-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **PIC Environmental Services**
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: **E4364 - MW**
DATE SAMPLED: 03/08/21 DATE RECEIVED: 03/08/21
MATRIX: SOIL DATE ANALYZED: 03/08/21
REPORTED TO: Mr. J. TIM HERSCH DATE REPORTED: 03/12/21

SOIL

SAMPLE I.D.: **B3-5** LAB I.D.: 210308-16

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **PIC Environmental Services**
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: **E4364 - MW**
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SOIL

SAMPLE I.D.: **B3-5** LAB I.D.: 210308-16

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:SOIL DATE ANALYZED:03/08/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

METHOD BLANK FOR LAB I.D.: 210308-13 THROUGH -16

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED: 03/08/21 DATE RECEIVED: 03/08/21
MATRIX: SOIL DATE ANALYZED: 03/08/21
REPORTED TO: Mr. J. TIM HERSCH DATE REPORTED: 03/12/21

METHOD BLANK FOR LAB I.D.: 210308-13 THROUGH -16

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 3/8/2021 **Matrix:** Solid/Soil/Liquid
Machine: D **Unit:** mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 210308-16 MS/MSD

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.043	86%	0.048	96%	10%	75-125	0-20
Chlorobenzene	0	0.050	0.045	90%	0.052	104%	14%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.047	94%	0.051	102%	8%	75-125	0-20
Toluene	0	0.050	0.045	90%	0.051	102%	12%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.047	94%	0.054	108%	14%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.047	94%	75-125
Chlorobenzene	0.050	0.051	102%	75-125
Chloroform	0.050	0.040	80%	75-125
1,1-Dichlorothene	0.050	0.046	92%	75-125
Ethylbenzene	0.050	0.052	104%	75-125
o-Xylene	0.050	0.051	102%	75-125
m,p-Xylene	0.100	0.104	104%	75-125
Toluene	0.050	0.049	98%	75-125
1,1,1-Trichloroethane	0.050	0.052	104%	75-125
Trichloroethene (TCE)	0.050	0.053	106%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	210305-50	210305-51	210308-13	210308-14	210308-15	210308-16
Dibromofluoromethane	50.0	70-130	84%	88%	92%	93%	93%	95%	95%
Toluene-d8	50.0	70-130	80%	93%	94%	90%	91%	91%	90%
4-Bromofluorobenzene	50.0	70-130	92%	96%	92%	92%	94%	94%	94%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			210308-21	210308-22	210308-23	210308-24	210308-25	210308-26	210308-27
Dibromofluoromethane	50.0	70-130	97%	100%	101%	96%	97%	98%	98%
Toluene-d8	50.0	70-130	91%	88%	89%	91%	89%	91%	93%
4-Bromofluorobenzene	50.0	70-130	93%	88%	90%	91%	92%	95%	90%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			210308-28						
Dibromofluoromethane	50.0	70-130	98%						
Toluene-d8	50.0	70-130	88%						
4-Bromofluorobenzene	50.0	70-130	94%						

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results *%RC = Percent Recovery*
spk conc = Spike Concentration *ACP %RC = Accepted Percent Recovery*
MS = Matrix Spike *MSD = Matrix Spike Duplicate*

Analyzed/Reviewed By: _____

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: PIC Environmental Services
2619 Sierra Way, La Verne, CA 91750
Tel:(909)593-2427 E-Mail: PICEnv@Verizon.net

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:VAPOR DATE ANALYZED:03/09/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SOIL GAS

EPA 5030B/8260B FOR FUEL OXYGENATES
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

SAMPLE I.D.	LAB I.D.	ETBE	DIPE	MTBE	TAME	TBA	DF
B1-5-SG	210308-17	ND	ND	ND	ND	ND	1
B2-5-SG	210308-18	ND	ND	ND	ND	ND	1
B3-5-SG	210308-19	ND	ND	ND	ND	ND	1
Method Blank		ND	ND	ND	ND	ND	1
	PQL	0.005	0.005	0.003	0.005	0.050	

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
ETBE = ETHYL tert-BUTYL ETHER DIPE = ISOPROPYL ETHER
MTBE = METHYL tert-BUTYL ETHER TAME = TERT-AMYL METHYL ETHER
TBA = TERTIARY BUTYL ALCOHOL

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

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SOIL
GAS

PROJECT: E4364 - MW
DATE SAMPLED: 03/08/21 DATE RECEIVED: 03/08/21
MATRIX: VAPOR DATE ANALYZED: 03/09/21
REPORTED TO: Mr. J. TIM HERSCH DATE REPORTED: 03/12/21

SAMPLE I.D.: B1-5-SG LAB I.D.: 210308-17

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.010
BENZENE	ND	0.001
BROMOBENZENE	ND	0.001
BROMOCHLOROMETHANE	ND	0.001
BROMODICHLOROMETHANE	ND	0.001
BROMOFORM	ND	0.001
BROMOMETHANE	ND	0.001
2-BUTANONE (MEK)	ND	0.010
N-BUTYLBENZENE	ND	0.001
SEC-BUTYLBENZENE	ND	0.001
TERT-BUTYLBENZENE	ND	0.001
CARBON DISULFIDE	ND	0.005
CARBON TETRACHLORIDE	ND	0.001
CHLOROBENZENE	ND	0.001
CHLOROETHANE	ND	0.001
CHLOROFORM	ND	0.001
CHLOROMETHANE	ND	0.001
2-CHLOROTOLUENE	ND	0.001
4-CHLOROTOLUENE	ND	0.001
DIBROMOCHLOROMETHANE	ND	0.001
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.001
1,2-DIBROMOETHANE	ND	0.001
DIBROMOMETHANE	ND	0.001
1,2-DICHLOROBENZENE	ND	0.001
1,3-DICHLOROBENZENE	ND	0.001
1,4-DICHLOROBENZENE	ND	0.001
DICHLORODIFLUOROMETHANE	ND	0.001
1,1-DICHLOROETHANE	ND	0.001
1,2-DICHLOROETHANE	ND	0.001
1,1-DICHLOROETHENE	ND	0.001
CIS-1,2-DICHLOROETHENE	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	0.001
1,2-DICHLOROPROPANE	ND	0.001
1,3-DICHLOROPROPANE	ND	0.001

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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SOIL GAS

PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:VAPOR DATE ANALYZED:03/09/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

SAMPLE I.D.: B1-5-SG LAB I.D.: 210308-17

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	0.001
1,1-DICHLOROPROPENE	ND	0.001
CIS-1,3-DICHLOROPROPENE	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	0.001
ETHYLBENZENE	ND	0.001
2-HEXANONE	ND	0.010
HEXACHLOROBUTADIENE	ND	0.001
ISOPROPYLBENZENE	ND	0.001
4-ISOPROPYLTOLUENE	ND	0.001
4-METHYL-2-PENTANONE (MIBK)	ND	0.010
METHYL tert-BUTYL ETHER (MTBE)	ND	0.003
METHYLENE CHLORIDE	ND	0.005
NAPHTHALENE	ND	0.001
N-PROPYLBENZENE	ND	0.001
STYRENE	ND	0.001
1,1,1,2-TETRACHLOROETHANE	ND	0.001
1,1,2,2-TETRACHLOROETHANE	ND	0.001
TETRACHLOROETHENE (PCE)	ND	0.001
TOLUENE	ND	0.001
1,2,3-TRICHLOROBENZENE	ND	0.001
1,2,4-TRICHLOROBENZENE	ND	0.001
1,1,1-TRICHLOROETHANE	ND	0.001
1,1,2-TRICHLOROETHANE	ND	0.001
TRICHLOROETHENE (TCE)	ND	0.001
TRICHLOROFLUOROMETHANE	ND	0.001
1,2,3-TRICHLOROPROPANE	ND	0.001
1,2,4-TRIMETHYLBENZENE	ND	0.001
1,3,5-TRIMETHYLBENZENE	ND	0.001
VINYL CHLORIDE	ND	0.001
M/P-XYLENE	ND	0.002
O-XYLENE	ND	0.001

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

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DATE REPORTED:03/12/21

SOIL GAS

SAMPLE I.D.: B2-5-SG

LAB I.D.: 210308-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.010
BENZENE	ND	0.001
BROMOBENZENE	ND	0.001
BROMOCHLOROMETHANE	ND	0.001
BROMODICHLOROMETHANE	ND	0.001
BROMOFORM	ND	0.001
BROMOMETHANE	ND	0.001
2-BUTANONE (MEK)	ND	0.010
N-BUTYLBENZENE	ND	0.001
SEC-BUTYLBENZENE	ND	0.001
TERT-BUTYLBENZENE	ND	0.001
CARBON DISULFIDE	ND	0.005
CARBON TETRACHLORIDE	ND	0.001
CHLOROBENZENE	ND	0.001
CHLOROETHANE	ND	0.001
CHLOROFORM	ND	0.001
CHLOROMETHANE	ND	0.001
2-CHLOROTOLUENE	ND	0.001
4-CHLOROTOLUENE	ND	0.001
DIBROMOCHLOROMETHANE	ND	0.001
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.001
1,2-DIBROMOETHANE	ND	0.001
DIBROMOMETHANE	ND	0.001
1,2-DICHLOROBENZENE	ND	0.001
1,3-DICHLOROBENZENE	ND	0.001
1,4-DICHLOROBENZENE	ND	0.001
DICHLORODIFLUOROMETHANE	ND	0.001
1,1-DICHLOROETHANE	ND	0.001
1,2-DICHLOROETHANE	ND	0.001
1,1-DICHLOROETHENE	ND	0.001
CIS-1,2-DICHLOROETHENE	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	0.001
1,2-DICHLOROPROPANE	ND	0.001
1,3-DICHLOROPROPANE	ND	0.001

----- TO BE CONTINUED ON PAGE #2 -----

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Soil GAS

SAMPLE I.D.: B2-5-SG LAB I.D.: 210308-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	0.001
1,1-DICHLOROPROPENE	ND	0.001
CIS-1,3-DICHLOROPROPENE	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	0.001
ETHYLBENZENE	ND	0.001
2-HEXANONE	ND	0.010
HEXACHLOROBUTADIENE	ND	0.001
ISOPROPYLBENZENE	ND	0.001
4-ISOPROPYLTOLUENE	ND	0.001
4-METHYL-2-PENTANONE (MIBK)	ND	0.010
METHYL tert-BUTYL ETHER (MTBE)	ND	0.003
METHYLENE CHLORIDE	ND	0.005
NAPHTHALENE	ND	0.001
N-PROPYLBENZENE	ND	0.001
STYRENE	ND	0.001
1,1,1,2-TETRACHLOROETHANE	ND	0.001
1,1,2,2-TETRACHLOROETHANE	ND	0.001
TETRACHLOROETHENE (PCE)	ND	0.001
TOLUENE	ND	0.001
1,2,3-TRICHLOROBENZENE	ND	0.001
1,2,4-TRICHLOROBENZENE	ND	0.001
1,1,1-TRICHLOROETHANE	ND	0.001
1,1,2-TRICHLOROETHANE	ND	0.001
TRICHLOROETHENE (TCE)	ND	0.001
TRICHLOROFLUOROMETHANE	ND	0.001
1,2,3-TRICHLOROPROPANE	ND	0.001
1,2,4-TRIMETHYLBENZENE	ND	0.001
1,3,5-TRIMETHYLBENZENE	ND	0.001
VINYL CHLORIDE	ND	0.001
M/P-XYLENE	ND	0.002
O-XYLENE	ND	0.001

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

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LABORATORY REPORT

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PROJECT: **E4364 - MW**
DATE SAMPLED: 03/08/21 DATE RECEIVED: 03/08/21
MATRIX: VAPOR DATE ANALYZED: 03/09/21
REPORTED TO: Mr. J. TIM HERSCH DATE REPORTED: 03/12/21

SOIL GAS

SAMPLE I.D.: **B3-5-SG** LAB I.D.: 210308-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.010
BENZENE	ND	0.001
BROMOBENZENE	ND	0.001
BROMOCHLOROMETHANE	ND	0.001
BROMODICHLOROMETHANE	ND	0.001
BROMOFORM	ND	0.001
BROMOMETHANE	ND	0.001
2-BUTANONE (MEK)	ND	0.010
N-BUTYLBENZENE	ND	0.001
SEC-BUTYLBENZENE	ND	0.001
TERT-BUTYLBENZENE	ND	0.001
CARBON DISULFIDE	ND	0.005
CARBON TETRACHLORIDE	ND	0.001
CHLOROBENZENE	ND	0.001
CHLOROETHANE	ND	0.001
CHLOROFORM	ND	0.001
CHLOROMETHANE	ND	0.001
2-CHLOROTOLUENE	ND	0.001
4-CHLOROTOLUENE	ND	0.001
DIBROMOCHLOROMETHANE	ND	0.001
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.001
1,2-DIBROMOETHANE	ND	0.001
DIBROMOMETHANE	ND	0.001
1,2-DICHLOROBENZENE	ND	0.001
1,3-DICHLOROBENZENE	ND	0.001
1,4-DICHLOROBENZENE	ND	0.001
DICHLORODIFLUOROMETHANE	ND	0.001
1,1-DICHLOROETHANE	ND	0.001
1,2-DICHLOROETHANE	ND	0.001
1,1-DICHLOROETHENE	ND	0.001
CIS-1,2-DICHLOROETHENE	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	0.001
1,2-DICHLOROPROPANE	ND	0.001
1,3-DICHLOROPROPANE	ND	0.001

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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SOIL GAS

SAMPLE I.D.: **B3-5-SG** LAB I.D.: 210308-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	0.001
1,1-DICHLOROPROPENE	ND	0.001
CIS-1,3-DICHLOROPROPENE	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	0.001
ETHYLBENZENE	ND	0.001
2-HEXANONE	ND	0.010
HEXACHLOROBUTADIENE	ND	0.001
ISOPROPYLBENZENE	ND	0.001
4-ISOPROPYLTOLUENE	ND	0.001
4-METHYL-2-PENTANONE (MIBK)	ND	0.010
METHYL tert-BUTYL ETHER (MTBE)	ND	0.003
METHYLENE CHLORIDE	ND	0.005
NAPHTHALENE	ND	0.001
N-PROPYLBENZENE	ND	0.001
STYRENE	ND	0.001
1,1,1,2-TETRACHLOROETHANE	ND	0.001
1,1,2,2-TETRACHLOROETHANE	ND	0.001
TETRACHLOROETHENE (PCE)	ND	0.001
TOLUENE	ND	0.001
1,2,3-TRICHLOROBENZENE	ND	0.001
1,2,4-TRICHLOROBENZENE	ND	0.001
1,1,1-TRICHLOROETHANE	ND	0.001
1,1,2-TRICHLOROETHANE	ND	0.001
TRICHLOROETHENE (TCE)	ND	0.001
TRICHLOROFLUOROMETHANE	ND	0.001
1,2,3-TRICHLOROPROPANE	ND	0.001
1,2,4-TRIMETHYLBENZENE	ND	0.001
1,3,5-TRIMETHYLBENZENE	ND	0.001
VINYL CHLORIDE	ND	0.001
M/P-XYLENE	ND	0.002
O-XYLENE	ND	0.001

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
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METHOD BLANK REPORT

CUSTOMER: PIC Environmental Services
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PROJECT: E4364 - MW
DATE SAMPLED:03/08/21 DATE RECEIVED:03/08/21
MATRIX:VAPOR DATE ANALYZED:03/09/21
REPORTED TO:Mr. J. TIM HERSCH DATE REPORTED:03/12/21

METHOD BLANK FOR LAB I.D.: 210308-17, -18, -19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 1 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.010
BENZENE	ND	0.001
BROMOBENZENE	ND	0.001
BROMOCHLOROMETHANE	ND	0.001
BROMODICHLOROMETHANE	ND	0.001
BROMOFORM	ND	0.001
BROMOMETHANE	ND	0.001
2-BUTANONE (MEK)	ND	0.010
N-BUTYLBENZENE	ND	0.001
SEC-BUTYLBENZENE	ND	0.001
TERT-BUTYLBENZENE	ND	0.001
CARBON DISULFIDE	ND	0.005
CARBON TETRACHLORIDE	ND	0.001
CHLOROBENZENE	ND	0.001
CHLOROETHANE	ND	0.001
CHLOROFORM	ND	0.001
CHLOROMETHANE	ND	0.001
2-CHLOROTOLUENE	ND	0.001
4-CHLOROTOLUENE	ND	0.001
DIBROMOCHLOROMETHANE	ND	0.001
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.001
1,2-DIBROMOETHANE	ND	0.001
DIBROMOMETHANE	ND	0.001
1,2-DICHLOROBENZENE	ND	0.001
1,3-DICHLOROBENZENE	ND	0.001
1,4-DICHLOROBENZENE	ND	0.001
DICHLORODIFLUOROMETHANE	ND	0.001
1,1-DICHLOROETHANE	ND	0.001
1,2-DICHLOROETHANE	ND	0.001
1,1-DICHLOROETHENE	ND	0.001
CIS-1,2-DICHLOROETHENE	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	0.001
1,2-DICHLOROPROPANE	ND	0.001
1,3-DICHLOROPROPANE	ND	0.001

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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METHOD BLANK REPORT

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METHOD BLANK FOR LAB I.D.: 210308-17, -18, -19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 8260B, PAGE 2 OF 2
UNITS: mg/L = MILLIGRAM PER LITER = PPMwv

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	0.001
1,1-DICHLOROPROPENE	ND	0.001
CIS-1,3-DICHLOROPROPENE	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	0.001
ETHYLBENZENE	ND	0.001
2-HEXANONE	ND	0.010
HEXACHLOROBUTADIENE	ND	0.001
ISOPROPYLBENZENE	ND	0.001
4-ISOPROPYLTOLUENE	ND	0.001
4-METHYL-2-PENTANONE (MIBK)	ND	0.010
METHYL tert-BUTYL ETHER (MTBE)	ND	0.003
METHYLENE CHLORIDE	ND	0.005
NAPHTHALENE	ND	0.001
N-PROPYLBENZENE	ND	0.001
STYRENE	ND	0.001
1,1,1,2-TETRACHLOROETHANE	ND	0.001
1,1,2,2-TETRACHLOROETHANE	ND	0.001
TETRACHLOROETHENE (PCE)	ND	0.001
TOLUENE	ND	0.001
1,2,3-TRICHLOROBENZENE	ND	0.001
1,2,4-TRICHLOROBENZENE	ND	0.001
1,1,1-TRICHLOROETHANE	ND	0.001
1,1,2-TRICHLOROETHANE	ND	0.001
TRICHLOROETHENE (TCE)	ND	0.001
TRICHLOROFLUOROMETHANE	ND	0.001
1,2,3-TRICHLOROPROPANE	ND	0.001
1,2,4-TRIMETHYLBENZENE	ND	0.001
1,3,5-TRIMETHYLBENZENE	ND	0.001
VINYL CHLORIDE	ND	0.001
M/P-XYLENE	ND	0.002
O-XYLENE	ND	0.001

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 3/9-10/2021 **Matrix:** Water/Vapor
Machine: B **Unit:** ug/L (PPB)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 210308-46 MS/MSD

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	25.0	23.2	93%	27.9	112%	19%	75-125	0-20
Chlorobenzene	0	25.0	25.2	101%	27.1	108%	8%	75-125	0-20
1,1-Dichloroethene	0	25.0	19.2	77%	23.0	92%	15%	75-125	0-20
Toluene	0	25.0	22.0	88%	25.0	100%	12%	75-125	0-20
Trichloroethene (TCE)	0	25.0	24.3	97%	28.9	116%	18%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	25.0	22.7	91%	75-125
Chlorobenzene	25.0	24.8	99%	75-125
Chloroform	25.0	23.3	93%	75-125
1,1-Dichloroethene	25.0	20.2	81%	75-125
Ethylbenzene	25.0	20.6	82%	75-125
o-Xylene	25.0	24.2	97%	75-125
m,p-Xylene	50.0	46.2	92%	75-125
Toluene	25.0	22.3	89%	75-125
1,1,1-Trichloroethane	25.0	22.1	88%	75-125
Trichloroethene (TCE)	25.0	25.2	101%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	210308-17	210308-18	210308-19	210308-46	210308-47	210308-48
Dibromofluoromethane	25.0	70-130	97%	126%	126%	96%	94%	107%	93%
Toluene-d8	25.0	70-130	89%	95%	92%	62*%	87%	94%	100%
4-Bromofluorobenzene	25.0	70-130	93%	45*%	80%	33*%	72%	78%	74%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			210308-49	210308-50	210308-51	210308-52	210308-53	210309-3	210309-4
Dibromofluoromethane	25.0	70-130	101%	95%	97%	69*%	80%	111%	102%
Toluene-d8	25.0	70-130	89%	98%	86%	35*%	87%	72%	86%
4-Bromofluorobenzene	25.0	70-130	83%	31*%	62*%	53*%	62*%	76%	64*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			210309-5	210309-6	210309-7	210309-20	210309-69	210309-70	
Dibromofluoromethane	25.0	70-130	83%	96%	54*%	106%	112%	72%	
Toluene-d8	25.0	70-130	87%	91%	97%	17*%	90%	66*%	
4-Bromofluorobenzene	25.0	70-130	83%	89%	70%	80%	83%	66*%	

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results
spk conc = Spike Concentration
MS = Matrix Spike
%RC = Percent Recovery
ACP %RC = Accepted Percent Recovery
MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: _____

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
1214 E. Lexington Avenue,
Pomona, CA 91766
Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
0 Same Day
0 24 Hours
0 48 Hours
0 72 Hours
X 1 Week (Standard)
Other:

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	8260B	8015-CC	Misc./PO#	COMMENTS
B1-5	2103088-13	3/8	8:33	Soil	1			X	X		
B2-5	-14	3/8	9:03	Soil	1	4°C/ice		X	X		
B2-10	-15	3/8	9:24	Soil	1			X	X		
B3-5	-16	3/8	9:37	Soil	1			X	X		
B1-5-SG	-17	3/8	11:00	Vapor	1			X			
B2-5-SG	-18	3/8	11:20	Vapor	1			X			
B3-5-SG	-19	3/8	11:40	Vapor	1			X			

Analysis Required

Company Name: PIC
Address: 2619 SIERRA WAY
City/State/Zip: LA VERNE CA 91750

Project Contact: TIM HERSCH
Tel: 909/593-2427
Fax/Email: PICENVCORP@YAHOO.NET

Sampler's Signature:
Project Name/ID: E4364 - MW

Relinquished by:	Received by:	Date & Time: 3/8/21 1705	Instructions for Sample Storage After Analysis:
Relinquished by:	Received by:	Date & Time:	O Dispose of O Return to Client O Store (30 Days)
Relinquished by:	Received by:	Date & Time:	O Other:

CHAIN OF CUSTODY RECORD

Date: 3/8/21

WHITE WITH SAMPLE • YELLOW TO CLIENT

APPENDIX C:

PIC "PHASE I REPORT"
DATED JANUARY 26, 2021

PIC ENVIRONMENTAL SERVICES
A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.
2619 Sierra Way, La Verne, CA 91750
Phone: (909) 593-2427 - Cell: (909) 450-1703
Email: picenv@verizon.net

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT

PREPARED FOR

MATT WAKEN
MW INVESTMENT GROUP, LLC
27702 CROWN VALLEY PARKWAY, SUITE D4-197
LADERA RANCH, CA 92694

CONCERNING COMMERCIAL PROPERTY AT

12826 – 12856 PHILADELPHIA STREET
WHITTIER, CA 90601

JANUARY 26, 2021

PIC ENVIRONMENTAL SERVICES
2619 SIERRA WAY
LA VERNE, CA 91750

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DISPLAYS

Figure 1: Site Location and Topographic Map
Figure 2: Site Map
Figure 3: Groundwater Contour Map
Figure 4: Oil and Gas Map
Figure 5: Asbestos Reference Display
Figure 6: Landfill Map
Figure 7: Aerial Photo – 2019

Appendix A: Title Information
Appendix B: Site Photos
Appendix C: City Building Department Records
Appendix D: Sanborn Fire Insurance Maps
Appendix E: Historic Topographic Maps
Appendix F: Historic Aerial Photographs
Appendix G: City Directory Report
Appendix H: EDR Report
Appendix I: ATC "Phase I Report" dated June 15, 1994
Appendix J: PIC Resumes

PIC ENVIRONMENTAL SERVICES

A DIVISION OF PETROLEUM INDUSTRY CONSULTANTS, INC.

2619 Sierra Way, La Verne, CA 91750

909/593-2427 CELL: 909/450-1703

January 26, 2021

INTRODUCTION

PIC Environmental Services (PIC) was contracted by MW Investment Group, LLC to perform a Phase I Environmental Site Assessment (PESA) at commercial property located in Whittier, California (see Figure 1). The purpose of this investigation was to determine if environmental impairments existed at the site. This document represents the PESA report prepared in accordance with customary industry practices and current ASTM (2013) Standards. This document also intends to satisfy the "All Appropriate Inquiries" guidelines established by the Federal Environmental Protection Agency (EPA).

The following sources were used to prepare this report:

1. Site Inspection
2. California Regional Water Quality Control Board (RWQCB) records
3. California Department of Toxic Substances Control (DTSC), Site Mitigation Division records
4. United States Environmental Protection Agency (EPA) and Geological Society (USGS) records
5. California Department of Natural Resources (CDNR), Division of Oil, Gas, and Geothermal Resources (DOGGR) records (now CalGEM)
6. Los Angeles County Waste Discharge Systems records of active and inactive landfills
7. EDR collection of historic aerial photographs
8. City of Whittier permit records
9. Los Angeles Fire Department UST and Hazardous Materials Permit Records
10. Los Angeles County Title Records
11. Historic Telephone Directories
12. Sanborn Fire Insurance Maps
13. Review of a previous Phase I Assessment Report

SCOPE OF INVESTIGATION

The scope of this investigation included: site inspection, survey of adjacent properties, review of the above listed government records, review of historical aerial photographs, and geologic and hydrogeologic information search.

SITE INSPECTION

On January 14, 2021, PIC Project Manager, Ethan Hersch, conducted site inspections at the subject property and adjacent/nearby properties. Ryan Campbell (Realtor) and Drs. Shahenaz K. Ahmed and Aliya Ali (Tenants) assisted PIC with the inspections and provided historical information.

SITE DESCRIPTION

The subject property includes about 35,847 square feet of commercial property located south of Philadelphia Street and west of Comstock Avenue in Whittier, CA.

Historic addresses used at the property appear to include 12826 – 12856 Philadelphia Street and 7001 – 7025 S. Comstock Avenue in Whittier, CA 90601 (see Appendices D and G). The Los Angeles County Assessor Parcel Number is 8139-024-027. Additional title information is attached in Appendix A.

Property boundaries are indicated by public streets to the north and east, a public alley to the west, and adjoining commercial properties to the south (see Figures 2 and 7).

The subject property has been improved with one medical building in the northeast portion of the property. Exterior areas of the property are paved for vehicle parking (see Figures 2 and 7). The existing building was occupied by medical and dental tenants at the time of PIC's inspection. Telephone directory listings document the property was occupied historically by numerous medical and dental offices, a graphics printing business, and a bank (see Appendix G). Prior to 1952, when the existing building was constructed, historic fire insurance maps in Appendix D confirm the property contained a retail gasoline station, a furniture store, a residential apartment building, a residential boarding house, an undertaker, and a commercial laundry (see Appendix D). PIC observed no existing underground storage tanks, no industrial waste interceptors (clarifiers), and no significant surface staining. Figures 2 and 7 and Site Photos in Appendix B identify the existing onsite building and exterior areas.

The onsite building was constructed prior to 1980. As a result, asbestos containing construction materials (ACM) may be present. PIC observed no obvious ACM but testing for ACM in suspect building materials was not conducted. A reference diagram of common ACM in older commercial structures is illustrated on Figure 5. In 1994, ATC Environmental (ATC) conducted a Phase I Assessment that included testing of building materials for asbestos content (see Appendix I). Hazardous waste disposal records in Appendix H confirm that much of the asbestos containing construction materials were removed in 1996.

PIC's review of existing site conditions did not identify any Recognized Environmental Conditions (RECs).

SITE HISTORY

Based on a review of regulatory permit records, County title records, historic telephone directories, historic topographic maps, historic fire insurance maps, and historic aerial photos, it appears the subject property was initially used for commercial purposes as early as 1888 when a former commercial laundry was constructed in the west-central portion of the property (see Appendix D).

By 1900, a former residential boarding house was constructed in the northeast portion of the property. By 1907, the former laundry and boarding house had been demolished. A former mortuary/undertaker was present in the northwest portion of the property and a residential apartment building was present in the east-central portion of the property (see Appendix D). By 1912, a former gasoline station was constructed in the northeast corner of the property. By 1949, a furniture store had replaced the mortuary in the northwest portion of the property. By 1952, all the former buildings had been demolished and the existing building was constructed in the northeast portion of the property (see Appendix D). PIC has confirmed that no permit records for the pre-1952 structures exist at City or County offices.

Based on PIC's review of historic records summarized above, PIC discovered one Recognized Environmental Condition (REC). Historic use of the property as a former gasoline station could have caused subsurface contamination from the release of gasoline and other petroleum compounds. Accordingly, PIC concludes that a precautionary Subsurface Phase II Investigation is warranted in the northeast portion of the property. PIC does not recommend subsurface testing under the former laundry because it was demolished prior to the manufacture and use of tetrachloroethene aka perchloroethene, aka PCE as a dry-cleaning solvent.

SURVEY OF ADJACENT PROPERTIES

Commercial developments were observed on adjoining properties.

None of the adjacent properties exhibited obvious evidence of petroleum or hazardous materials contamination problems. However, the subject property is located within ½ mile of a Federal Superfund site (NPL) known as the Omega Chemical Site (see Appendix H). The Omega Chemical Site is known to have contaminated groundwater locally by the historic release of volatile organic compounds (VOCs) and other chemicals. PIC's research of local groundwater conditions indicates the Omega Chemical Site is located down-gradient of the subject property. As a result, there is no evidence, nor likelihood, that contaminated groundwater from the Omega Chemical Site has migrated under and/or impacted the subject property. Finally, PIC's review of Potentially Responsible Parties (PRPs) who may have contributed to the Omega Chemical Site contamination "plume" does not include occupants at the subject property. Accordingly, PIC concludes the Omega Chemical Site has not caused any significant environmental risk to the subject property.

Surface runoff at all surrounding properties appeared to be southwesterly.

No evidence of historic or improper waste disposal was observed by PIC in any storm drain at the site.

HISTORICAL AERIAL PHOTOGRAPH REVIEW

Historical aerial photographs provided by EDR were reviewed by PIC (see copies in Appendix F). Available photographs were dated 1928, 1938, 1947, 1954, 1963, 1972, 1977, 1981, 1989, 1994, 2002, 2005, 2009, 2012, 2016, and 2019.

The 1928, photo indicates the subject property contained a retail gasoline station in the northeast corner of the property, residential apartment buildings in the east-central portion of the property, and a commercial building in the northwest corner of the property. Philadelphia Street and Comstock Avenue had been constructed adjacent to the property. Similar features are observed in the 1938 and 1947 photos.

By 1954, the subject property contained the existing building as illustrated on the 1961 fire insurance map in Appendix D. All former buildings had been demolished.

Subsequent photos reveal similar features and no significant changes. A recent (2019) photo has been enlarged and reproduced as Figure 7 for reference.

Except for the former gasoline station, the aerial photo study indicates no obvious environmental

impairments on the subject property or from adjacent properties. The aerial photo search did not indicate any historic oil well drilling or landfill activity on the site.

GOVERNMENT RECORDS REVIEW

The following federal, state, and local public records and associated lists were searched to determine the potential for or existence of onsite and/or offsite unauthorized releases of hazardous materials (i.e., contamination) related to onsite and/or offsite aboveground or underground storage tanks, or any other potential sources:

FEDERAL SOURCES

NPL	National Priority List
PROPOSED NPL	Proposed National Priority List
DELISTED NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS (SEMS)	Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS – NFRAP (SEMS)	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA	Resource Conservation and Recovery Act Information
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfield Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide, and Rodenticide Control Act)
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
DEBRIS REGION 9	Illegal Dumping Sites Listing
MCS	Military Cleanup Sites
RADINFO	Radiation Information Database
MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
LUCIS	Land Use Control Information
ECHO	Environmental Compliance and History Information

STATE OF CALIFORNIA AND LOS ANGELES COUNTY SOURCES

RESPONSE	State DTSC Response Sites
AWP	Annual Work Plan Sites
CALSITES	Calsites Database
CA BOND EXP. PLAN	Bond Expenditure Plan
NFA	No Further Action Determination
NFE	Properties Needing Further Evaluation
REF	Unconfirmed Properties Referred to Another Agency
SCH	School Property Evaluation Program
TOXIC PITS	Toxic Pits Cleanup Act Sites
AO CONCERN	Areas of Concern with Groundwater Contamination
SWF/LF (SWIS)	Solid Waste Information System
CA WDS	Waste Discharge System
WMUDS/SWAT	Waste Management Unit Database
CORTESE	"Cortese" Hazardous Waste & Substances Sites List
SWRCY	Recycler Database
LUST	Leaking Underground Storage Tank Report
CA FID UST	Facility Inventory Database
SLIC	Statewide SLIC Cases
SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
UST	Active UST Facilities
HIST UST	Hazardous Substance Storage Container Database
AST	Aboveground Petroleum Storage Tank Facilities
SWEEPS UST	SWEEPS UST Listing
CHMIRS	California Hazardous Material Incident Report System
NOTIFY 65	Proposition 65 Records
DEED	Deed Restriction Listing
LIENS	Environmental Liens Listing
VCP	Voluntary Cleanup Program Properties
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
CDL	Clandestine Drug Labs
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
ENVIROSTOR	DTSC Database
HWTS	Hazardous Waste Tracking System
NPDES	NPDES Permits Listing
CERS	California Environmental Reporting System
HAZMAT	Los Angeles Hazardous Materials Permits

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

MANUFACTURED GAS PLANTS	EDR Proprietary Manufactured Gas Plants
EDR HISTORICAL AUTO STATIONS	Historic Gas Stations
EDR HISTORICAL CLEANERS	EDR Proprietary Historic Drycleaners

All of the above records were examined for up to a one-mile radius by EDR (see Appendix H). The subject property does appear on two of the lists. More specifically, the property appears on the following list:

1. HAZNET: Facility and Manifest Data – This state list includes sites which have historically obtained permits to legally dispose of hazardous wastes (e.g. waste oil, asbestos, etc). The site appears on the HAZNET list in response to the legal offsite disposal of medical/dental liquid wastes and asbestos containing materials between 1996 – 2016. Appearance on the HAZNET list does not indicate the presence of a subsurface contamination problem.

2. HWTS: Hazardous Waste Tracking System – This state list compiles hazardous waste disposal manifests for both solid and liquid wastes. Copies of historic waste tracking documents for the subject property are attached in Appendix H. Historic onsite hazardous waste generators included World Vision, Inc. (asbestos) and Whittier Family Dental Center (dental wastes). Appearance on the HWTS list does not indicate the presence of a subsurface contamination problem.

The EDR record search also revealed that 15 sites exist within a one-half mile radius of the subject property which have sustained soil and/or groundwater contamination as a result of an underground storage tank leak. Please refer to the Executive Summary in Appendix H for the Leaking Underground Storage Tanks (LUST) list. PIC has confirmed that only two of the LUST sites is located in close proximity (less than 1/4 mile) to the subject property. Both nearby LUST sites have received regulatory closure after completing required remedial actions. As a result, it is not likely the subject property has been impacted by contamination from offsite LUST sites.

Finally, the EDR record search revealed the following concerning properties located within a one-mile radius of the subject site:

GOVERNMENT RECORDS Federal	SEARCH RADIUS (miles)	NUMBER OF SITES
NPL	1	1
PROPOSED NPL	1	0
DELISTED NPL	1	0
NPL LIENS	SITE ONLY	0
CERCLIS (SEMS)	0.5	0
CERCLIS NFRAP (SEMS)	0.5	1
CORRACTS	1	1
RCRA – TSD	0.5	0
RCRA – Lg Gen	0.25	2
RCRA – Sm Gen	0.25	3
ERNS	SITE ONLY	0
HMIRS	SITE ONLY	0

GOVERNMENT RECORDS Federal	SEARCH RADIUS (miles)	NUMBER OF SITES
US ENG CONTROLS	0.5	0
US INST CONTROLS	0.5	0
DOD	1	0
FUDS	1	0
US BROWNFIELDS	0.5	0
CONSENT	1	0
ROD	1	1
UMTRA	0.5	0
ODI	0.5	0
DEBRIS REGION 9	0.5	0
MCS	SITE ONLY	0
TRIS	SITE ONLY	0
TSCA	SITE ONLY	0
FTTS	SITE ONLY	0
SSTS	SITE ONLY	0
ICIS	SITE ONLY	0
PADS	SITE ONLY	0
MLTS	SITE ONLY	0
MINES	0.25	0
FINDS	SITE ONLY	0
RAATS	SITE ONLY	0
RADINFO	SITE ONLY	0
LUCIS	0.5	0
ECHO	SITE ONLY	0

GOVERNMENT RECORDS State and Local	SEARCH RADIUS (miles)	NUMBER OF SITES
RESPONSE	1	1
AWP	1	0
CAL-SITES	1	2
BOND EXP	1	0
NFA	0.25	0
NFE	0.25	0
REF	0.25	0
SCH	0.25	0
TOXIC PITS	1	0
AO CONCERN	1	0
LANDFILLS	0.5	1
WDS	SITE ONLY	0
SWAT	0.5	0
CORTESE	0.5	12
SWRCY	0.5	1
LUST	0.5	15

GOVERNMENT RECORDS State and Local	SEARCH RADIUS (miles)	NUMBER OF SITES
UST	0.25	1
SLIC	0.5	2
UST	0.25	5
HIST UST	0.25	1
AST	0.25	0
SWEEPS UST	0.25	4
CHMIRS	SITE ONLY	0
NOTIFY 65	1	0
DEED	0.5	0
LIENS	SITE ONLY	0
VCP	0.5	2
DRYCLEANERS	0.25	3
WIP	0.25	0
CDL	SITE ONLY	0
HAZNET	SITE ONLY	2
EMI	SITE ONLY	0
NPDES	SITE ONLY	0
ENVIROSTOR	1	13
HWTS	SITE ONLY	2
CERS	0.25	3
HAZMAT	SITE ONLY	0

GOVERNMENT RECORDS Tribal	SEARCH RADIUS (miles)	NUMBER OF SITES
INDIAN RESERV	1	0
INDIAN LUST	0.5	0
INDIAN UST	0.25	0

GOVERNMENT RECORDS EDR	SEARCH RADIUS (miles)	NUMBER OF SITES
MAN. GAS PLANTS	1	1
HIST AUTO STATIONS	0.25	0
HIST CLEANERS	0.25	3

Historic Oil and Gas Drilling Activity

Based on a review of State Division of Oil, Gas, and Geothermal Resources (DOGGR) records (now CalGEM), it appears that no historic oil production or exploratory oil well drilling activity has ever occurred on or within 2000 feet of the subject site. Figure 4 illustrates a lack of historic oil well drilling activity on the subject property. PIC concludes the property has not been impacted by historic oil well drilling activity.

Solid Waste Disposal Sites

The Los Angeles County Solid Waste Management Department provides a public index of Solid Waste and Liquid Industrial Waste Disposal Sites (see Figure 6). The EDR Report in Appendix H also includes a review of listings concerning landfills. Los Angeles County records and the EDR report both indicate that no landfills have been located on or near the subject property.

It appears the subject property has not been impacted historically by landfill activity.

GEOLOGY AND HYDROGEOLOGY

The elevation of the site is approximately 324 feet above sea level. The surrounding topography generally slopes southwesterly away from the nearby Whittier Hills (see Figure 1: Topographic Map and Appendix E).

A regional groundwater contour map published by Los Angeles County indicates that depth to the first groundwater aquifer is about 150 feet below surface at an elevation of about 170 feet above sea level (see Figure 3). The local groundwater flow direction is southwesterly.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of this Phase I Environmental Assessment, PIC offers the following:

1. No documented, significant, historic occurrences of petroleum or hazardous materials contamination were discovered at the subject property.

2. One significant, historic, potential onsite source of petroleum and/or hazardous materials contamination may exist. More specifically, the subject property contained a retail gasoline station prior to 1950. The former gasoline station likely contained one or more underground gasoline storage tanks (USTs).

3. PIC concludes the site may contain significant environmental impairments (Recognized Environmental Conditions).

4. PIC recommends completion of an onsite Phase II Subsurface Soil Investigation for petroleum hydrocarbons and volatile organic compounds (VOCs).

This report is proprietary and confidential, to be delivered to, and intended for the exclusive use of, the above named client and the client's assignees only. PIC Environmental Services assumes neither responsibility nor liability for the reliance herein or use hereof by anyone other than the above named client or the client's assignees. In addition, the results of the government record search were prepared and provided by Environmental Data Resources, Inc. (EDR), who is responsible for the accuracy and completeness of the information provided.

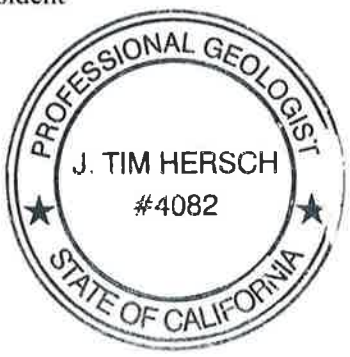
Accordingly, we, J. Tim Hersch and Ethan J. Hersch, declare to the best of our knowledge and belief, we meet the definition of Environmental Professional as defined by 40 C.F.R. Section 312.10 and we have the specific qualifications based upon education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Section 312.

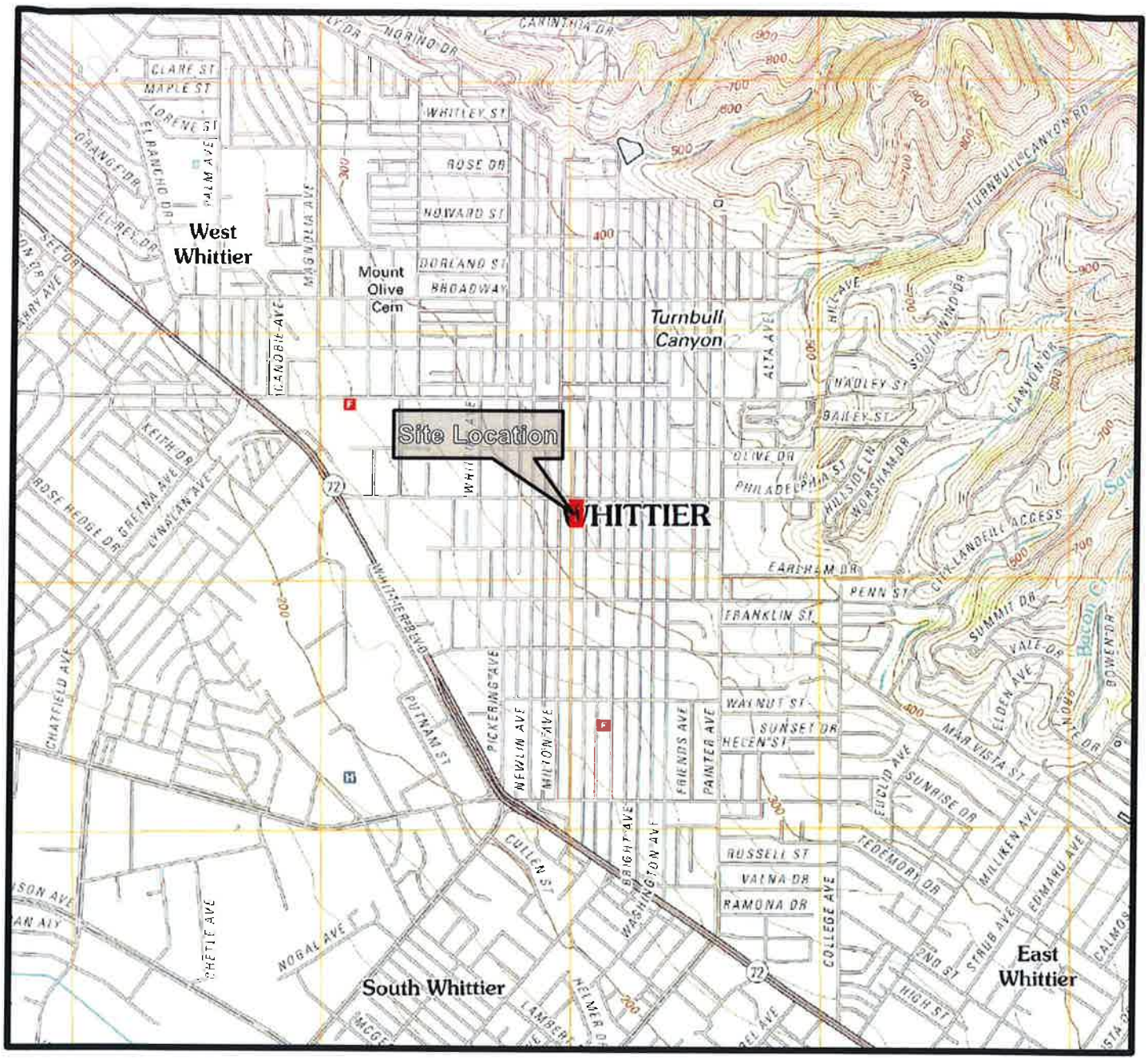
Should you have any questions or comments regarding the procedures outlined in this report, please do not hesitate to call us at 909/593-2427.

Respectfully submitted,

Ethan J. Hersch
Project Manager

J. Tim Hersch
California Professional Geologist #4082
President



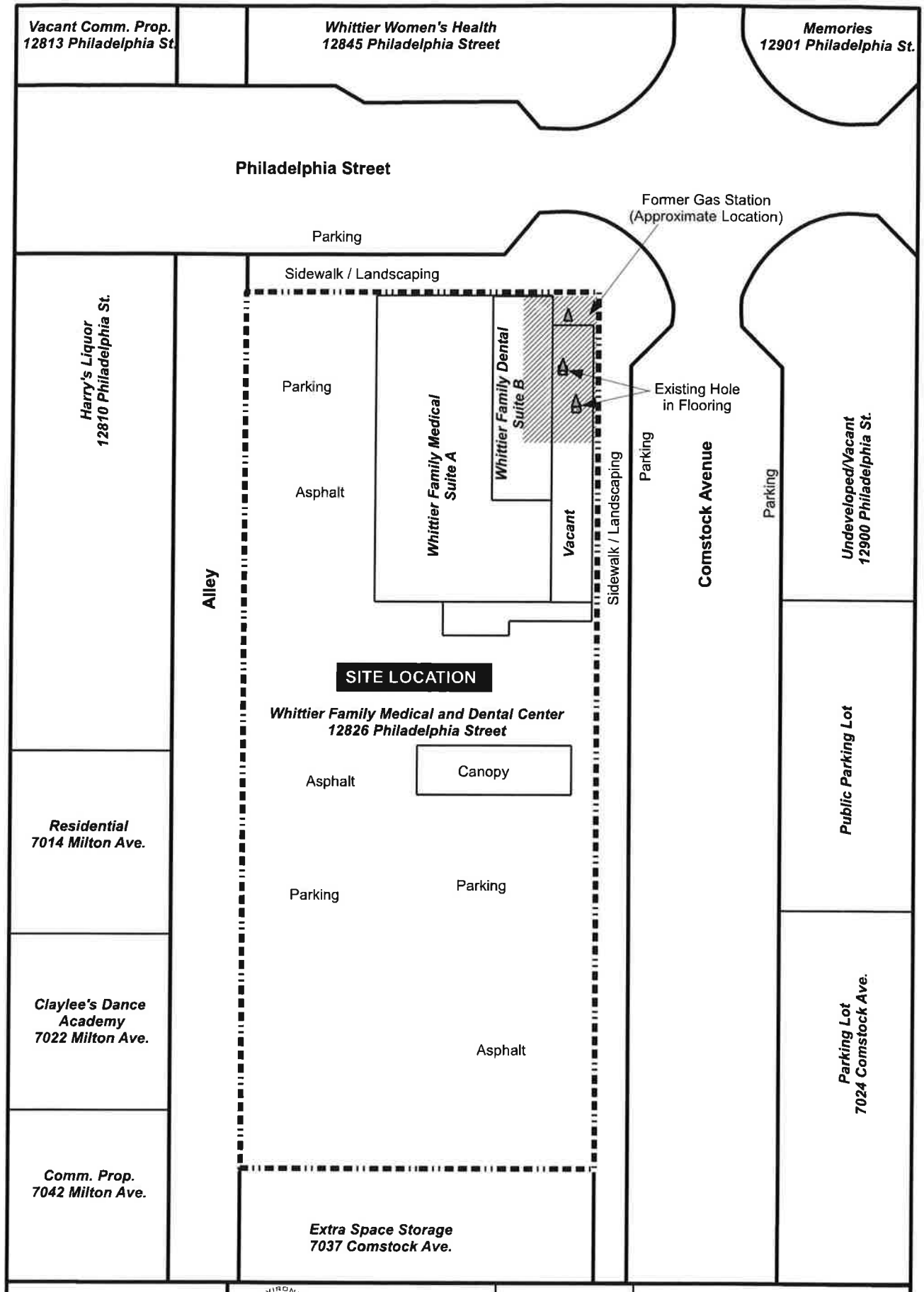


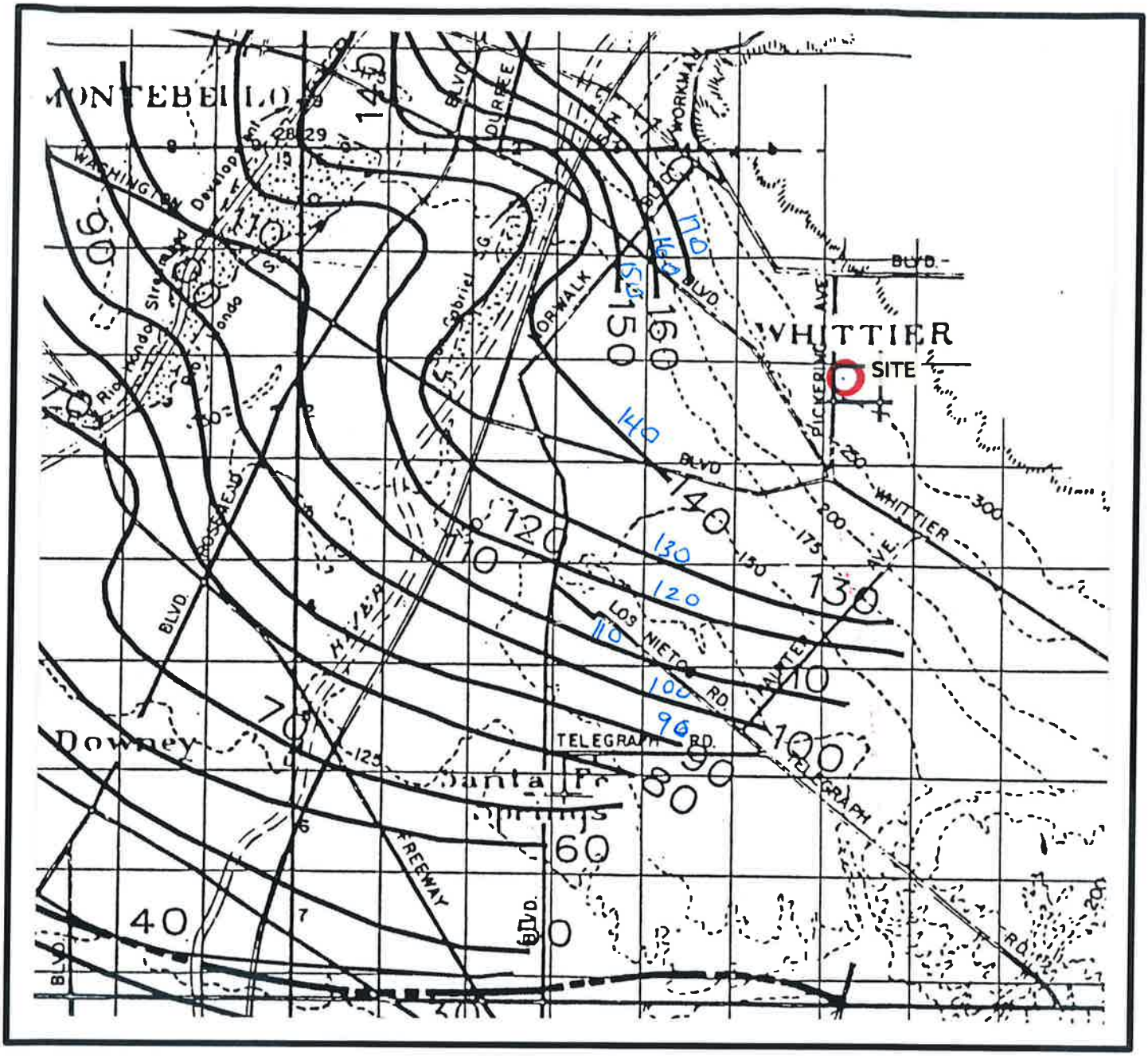
Site Latitude: N33.978859
Site Longitude: W118.038876
Site Elevation: 324 Feet
Source: USGS Topographical Quadrangle

North

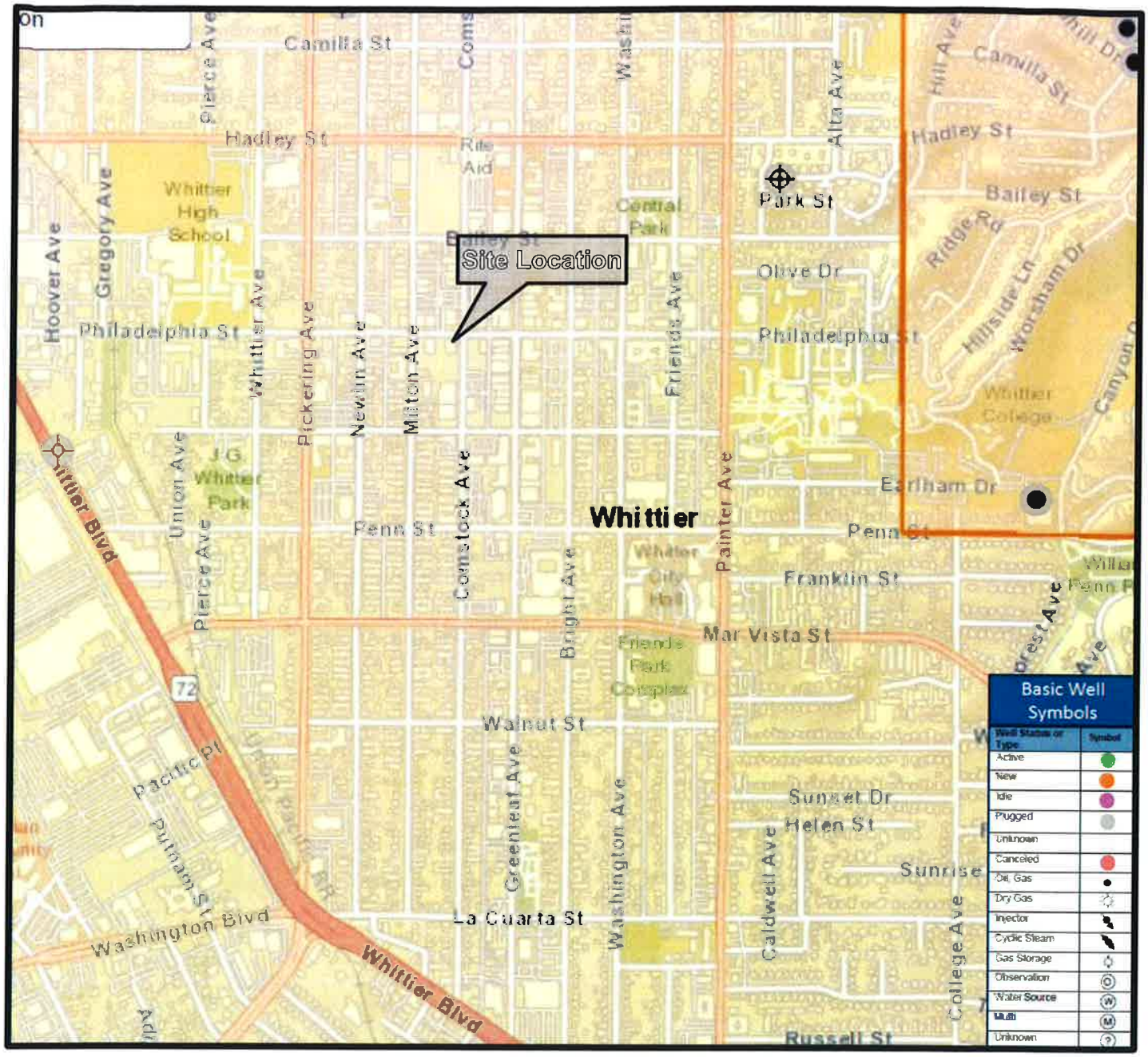
PIC Environmental Services	0 2000 Scale In Feet	**Site Location Map Topographic Map**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 1


Vacant Comm. Prop.
12813 Philadelphia St.
Whittier Women's Health
12845 Philadelphia Street
Memories
12901 Philadelphia St.
Philadelphia Street
Former Gas Station
(Approximate Location)
Parking
Sidewalk / Landscaping
Harry's Liquor
12810 Philadelphia St.
Parking
Asphalt
Whittier Family Medical
Suite A
Whittier Family Dental
Suite B
Vacant
Existing Hole
in Flooring
Parking
Comstock Avenue
Parking
Undeveloped/Vacant
12900 Philadelphia St.
Alley
Sidewalk / Landscaping
SITE LOCATION
Whittier Family Medical and Dental Center
12826 Philadelphia Street
Asphalt
Canopy
Public Parking Lot
Residential
7014 Milton Ave.
Parking
Parking
Claylee's Dance
Academy
7022 Milton Ave.
Asphalt
Parking Lot
7024 Comstock Ave.
Comm. Prop.
7042 Milton Ave.
Extra Space Storage
7037 Comstock Ave.
North
Proposed Boring Location
PIC Environmental Services
0
30
Scale In Feet
Site Map
Client:
Walbern Development
Drafted By:
EJH
Project Manger:
J. Tim Hersch
Project No:
E4364
Site Location:
12826 Philadelphia Street, Whittier, CA 90601
Date:
1 / 2021
Figure:
2



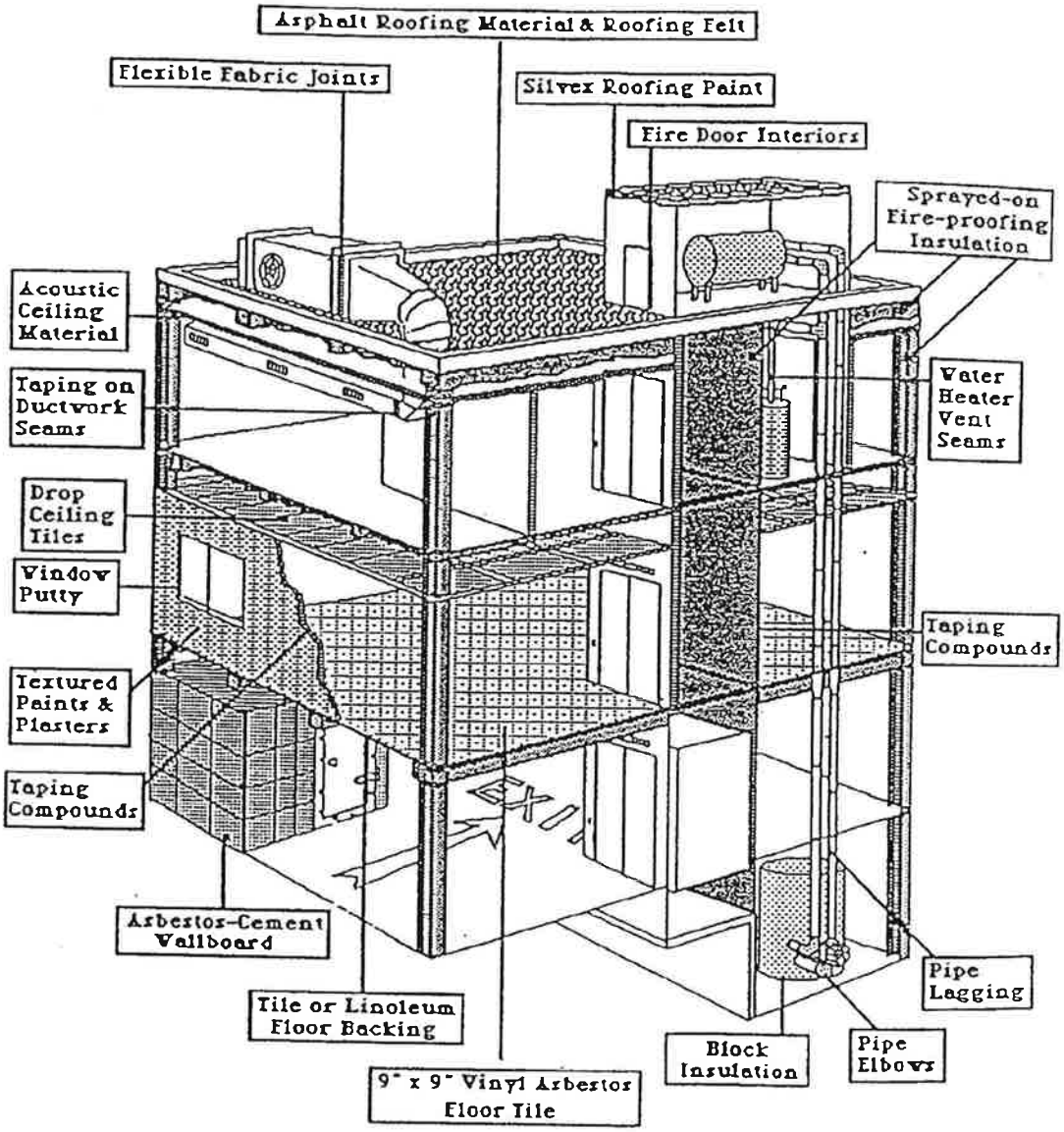
PIC Environmental Services	0 — 5280 Scale In Feet	**Groundwater Contour Map**	
Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601	Date: 1 / 2021		Figure: 3



PIC Environmental Services	0 1000 Scale In Feet	**Oil Well Map**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 4

Asbestos Containing Materials in Buildings



PIC Environmental Services	Not to Scale	**Common Asbestos Containing Materials (ASM's)**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 5



PIC Environmental Services	0 1000 Scale In Feet	**Landfill Map**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 6



North

PIC Environmental Services	0 100 Scale In Feet	**Aerial Photo May 2019**

Client: Walbern Development	Drafted By: EJH	Project Manger: J. Tim Hersch	Project No: E4364
Site Location: 12826 Philadelphia Street, Whittier, CA 90601		Date: 1 / 2021	Figure: 7

APPENDIX A:

TITLE INFORMATION

NETROnline

PROPERTY DETAIL REPORT created **2021-01-16** Prepared exclusively for **Ethan Hersch**

A

TARGET PROPERTY

12826 PHILADELPHIA ST WHITTIER, CA 90601-4117 C006

Owner Information

Owner Name:	BEVERLY PROFESSIONAL CO LLC		
Mailing Address:	12826 PHILADELPHIA ST WHITTIER CA 90601-4117 C006		
Phone Number:		**Vesting Codes:**	
Owner Occupied Indicator:	Y	**Pending Record Indicator:**	
Corporate Owner:			

Location Information

Legal Description:	EX OF ST LOTS 3 THRU 6 WHITTIER AND EX OF STS LOT 8,ALL LOTS 9 TO 12 MR 31-81		
County:	LOS ANGELES	**APN:**	8139-024-027
Census Tract / Block:	5015.04	**Alternate APN:**	
Township-Range-Sect:		**Subdivision:**	NICHOLS
Legal Book - Page:		**Map Reference:**	677-C6 /
Legal Lot:	8	**Tract #:**	
Legal Block:	22	**School District:**	WHITTIER UN
Market Area:	W1	**Munic / Township:**	
Neighbor Code:			

Owner Transfer Information

Recording / Sale Date:		**Sale Price:**	
Document #:		**Deed Type:**	
Instrument #:		**1st Mtg Document #:**	
Book - Page:			

Last Market Sale Information

Recording / Sale Date:	03/26/1999 / 03/19/1999	**1st Mtg Amount / Type:**	$313,633.00 / CONV
Sale Price:		**1st Mtg Int. Rate / Type:**	/ ADJUSTABLE INT RATE LOAN
Sale Type:		**1st Mtg Term:**	
Document #:	510947	**1st Mtg Document #:**	000000510948
Instrument #:	000000510947	**1st Mtg Instrument #:**	000000510948
Book - Page:		**1st Mtg Book - Page:**	
Deed Type:	GRANT DEED	**2nd Mtg Amount / Type:**	/
Transfer Document #:		**2nd Mtg Int. Rate / Type:**	/
New Construction:		**2nd Mtg Term:**	
Multi / Split Sale:	MULTI	**Price per SqFt:**	
Cash Down Payment:		**Stamps Amount:**	
Title Company:	FIRST AMERICAN TITLE INSURANCE		
Lender:	BANK OF WHITTIER		
Seller Name:	AHMED MAJJIDA & SUHAIL S		

Prior Sale Information

Prior Rec / Sale Date:	05/08/1998 / 04/23/1998	**Prior Deed Type:**	GRANT DEED
Prior Sale Price:	$354,000.00	**Prior Lender:**	BANK OF WHITTIER
Prior Sale Type:	FULL	**Prior 1stMtg Amount/Type:**	$265,500.00 / CONV
Prior Doc #:	778471	**Prior 1stMtg Int. Rate/Type:**	/
Prior Instrument #:	000000778471	**Prior Stamps Amount:**	$389.40
Prior Book - Page:			

Site Information

Land Use:	MEDICAL BUILDING	**Acres:**	.8229	**County Use:**	MEDICAL/DENTAL BLDG
Flood Zone:		**Lot Area:**	35847	**State Use:**	
Flood Zone Map:		**Lot Width / Depth:**	/	**Site Influence:**	
Flood Panel Date:		**Usable Lot:**		**Sewer Type:**	
Res / Comm Units:		**Lot Shape:**		**Topography:**	
# of Buildings:	4	**Bldg Width / Depth:**	/	**Water Type:**	
Zoning:	WHC2UD-MUD*	**Building Class:**		**Water District:**	CENTRAL AND W BASIN

Tax Information

Total Value:	$1,035,957.00	**Assessed Year:**	2020	**Property Tax:**	$23,153.63
Land Value:	$443,844.00	**Improve %:**		**Tax Area:**	9636
Improvement Value:	$592,113.00	**Dist:**		**Tax Year:**	2019
Total Taxable Value:	$1,035,957.00	**Fire Dist:**	CONSOLIDATED CO	**Tax Exemption:**	
Market Value:		**Garbage Dist:**		**Equal Rate:**	
		Delinquent Date:		**Equal Year:**	

Property Characteristics

Gross Area:	25293	**Parking Type:**		**Construction:**	
Living Area:	25293	**Garage Area:**		**Heat Type:**	

Tot Adj Area:		**Garage 2 Area:**		**Heat Fuel:**	
Above Grade:		**Garage Capacity:**		**Parcel Fuel:**	
Ground Floor Area:		**Parking Spaces:**		**Exterior Wall:**	
Base / Main Area:	/	**Carport:**		**Interior Wall:**	
Upper Area:		**Basement Area:**		**Foundation:**	
2nd Floor Area:		**Finish Bsmnt Area:**		**Air Cond:**	NONE
3rd Floor Area:		**Basement Type:**		**Roof Type:**	
Rentable Area:		**Attic Type:**		**Roof Shape:**	
Additional Area:		**Porch Type:**		**Roof Frame:**	
Total Rooms:		**Porch 1 Area:**		**Roof Material:**	
Bedrooms:		**Porch 2 Area:**		**Floor Type:**	
Bath (F/H):	/	**Patio Type:**		**Floor Cover:**	
Total Baths / Fixtures:	/	**Patio 1 Area:**		**Style:**	
Year Built / Eff:	1952 /	**Pool:**		**Quality:**	
Fireplace:		**Pool Area:**		**Condition:**	
Fireplace Description:				**# of Stories:**	
Basement Description:				**Other Rooms:**	
Other Improvements:					
Bldg Comments:					
Parcel Comments:					

Extra Features

Description:	Unit:	Size / Qty:	Width:	Depth:	Year Built:	Improvement Value:

NETRonline and its data supplier(s) do not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information in this report since this information is retrieved as it is recorded from the various agencies that make it available.

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8139	24 SHEET	P.A. 345-14	TRA 6845 9836	REVISED 880318-88 9801280200500l-11	9902040500200l-11 0/030804004001-11				SEARCH NO	MAP EXTENTS 4275829-4276474 4104161-4105050	OFFICE OF THE ASSE COUNTY OF LOS ANG COPYRIGHT © 19

2001



APN
8139-024-027

APPENDIX B:

SITE PHOTOS


FOR LEASE
LIQUOR
Happy's Liquor
NEW OWNERSHIP!

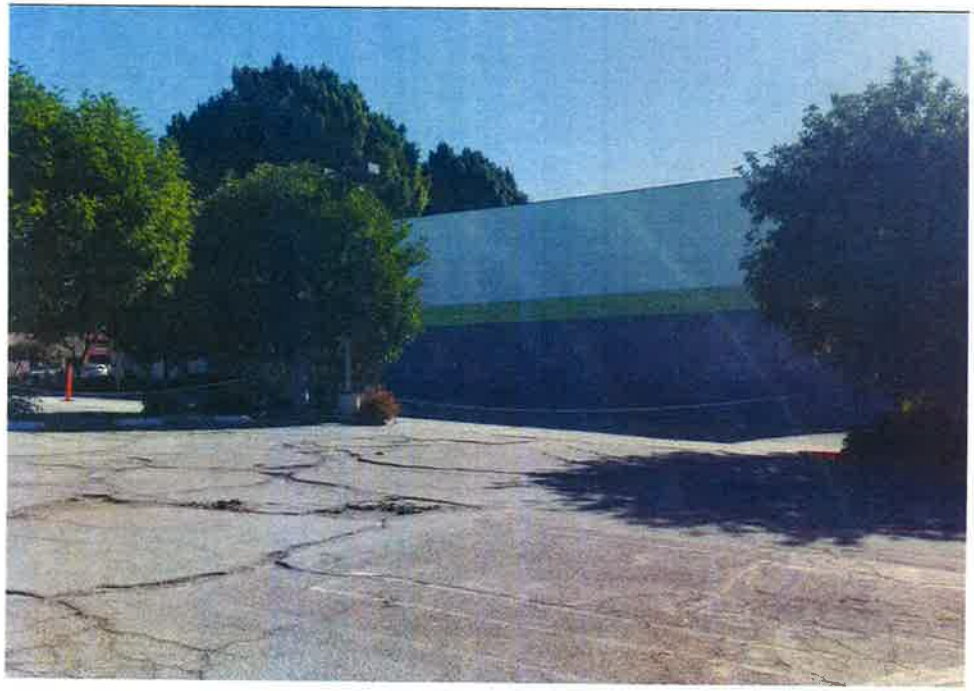



128
FOR LEASE


PHARMACIES
Pharmacy


JOIN US FOR
CHURCH ONLINE!











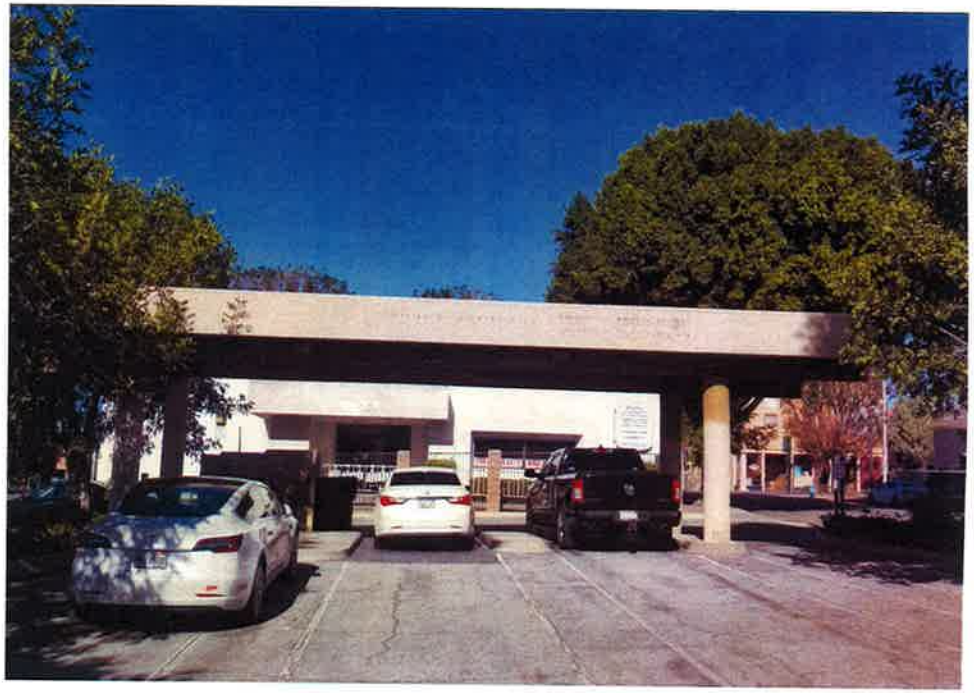

CAUTION
X-Ray
Radiation
CAUTION
X-RAY

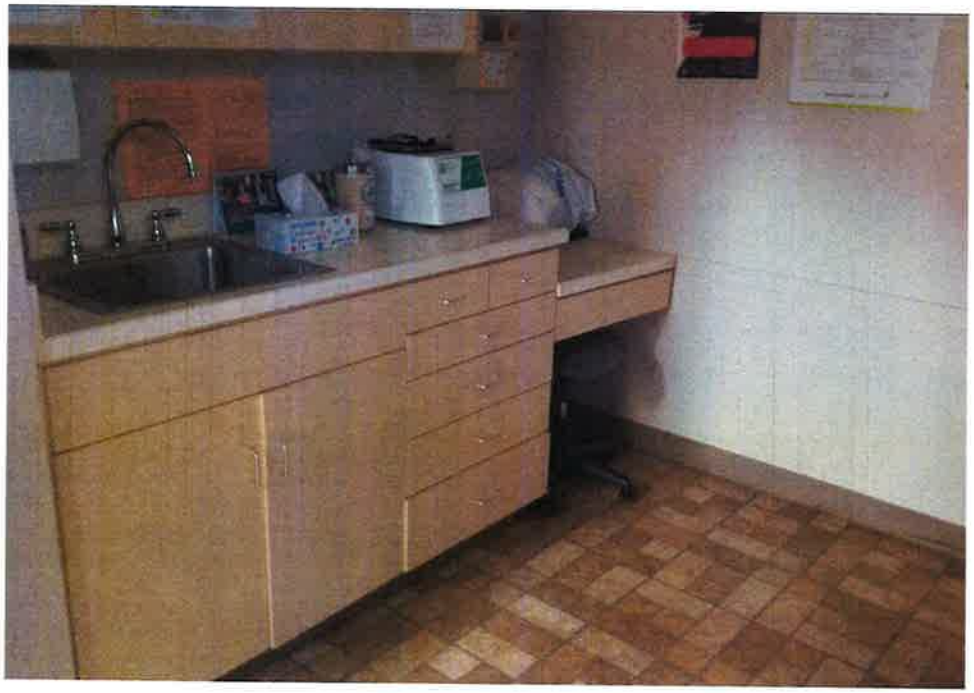








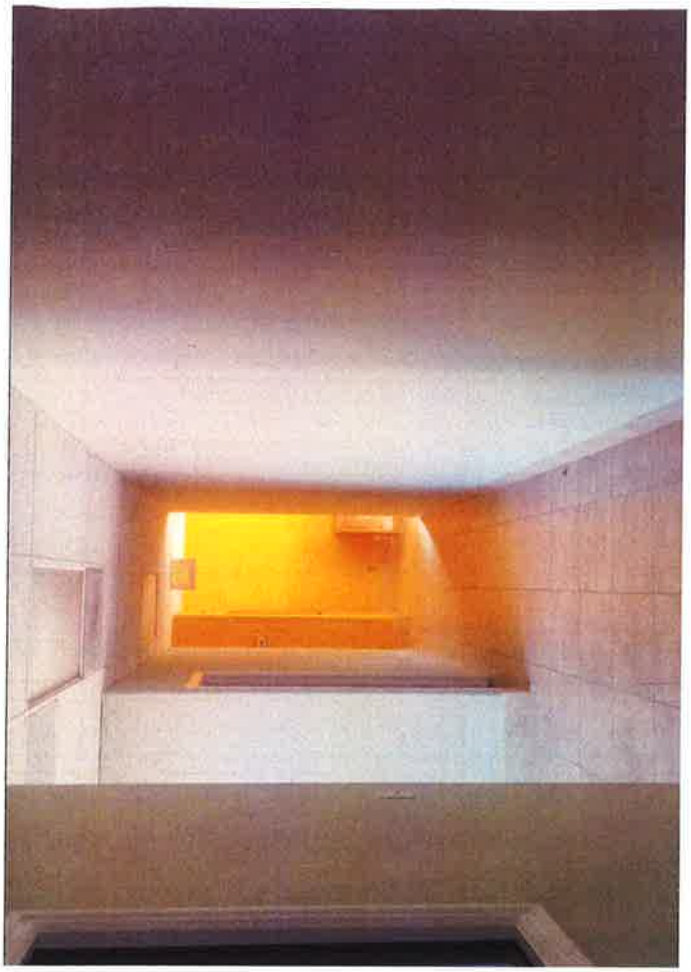


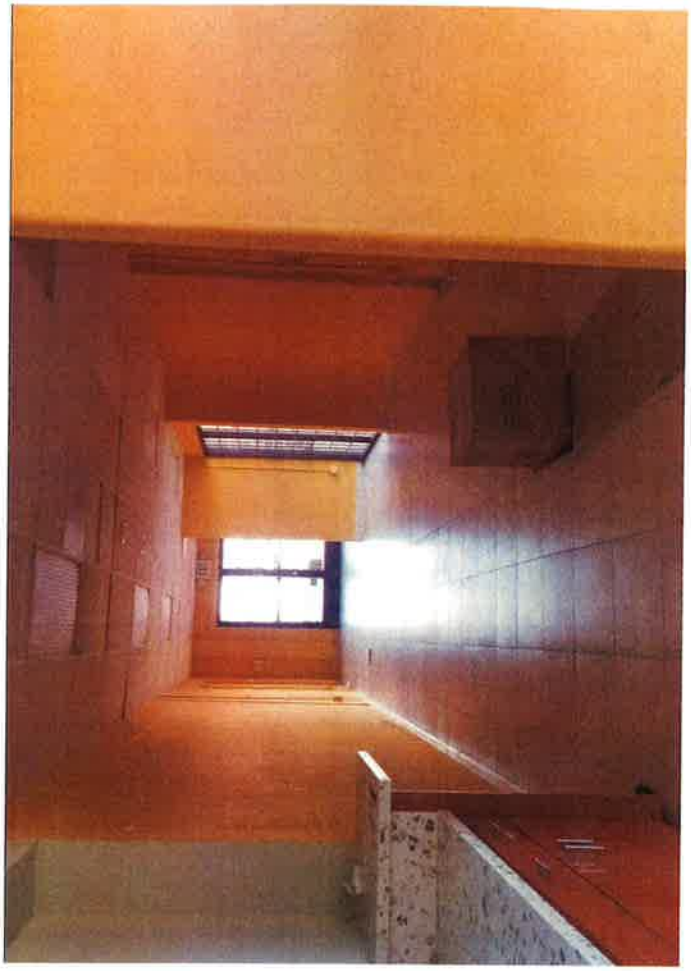



WE WILL
BEAT THIS
TOGETHER
COVID19



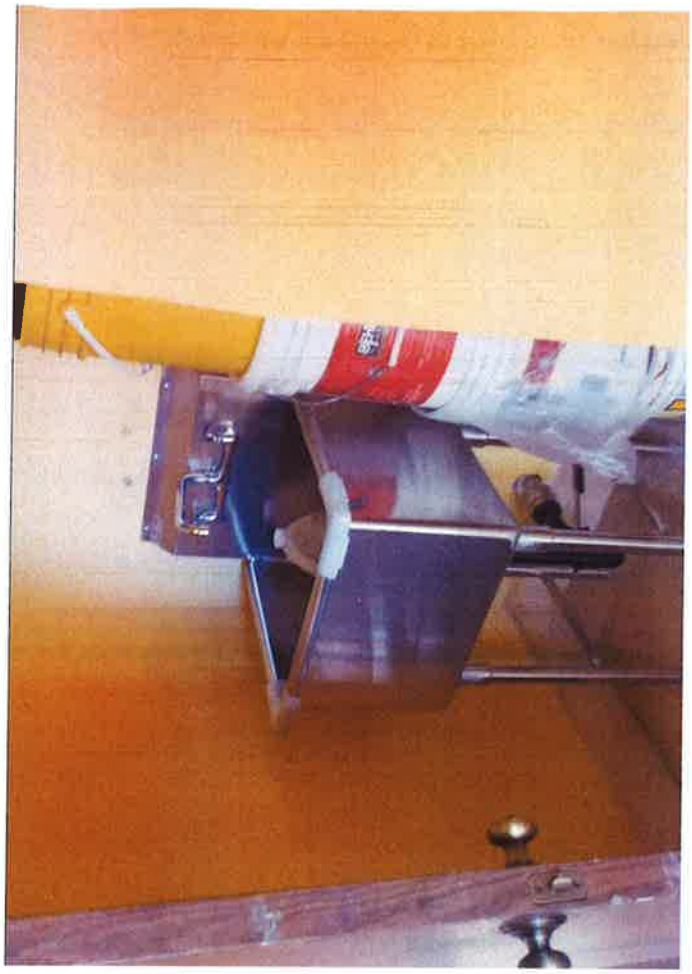

EXIT

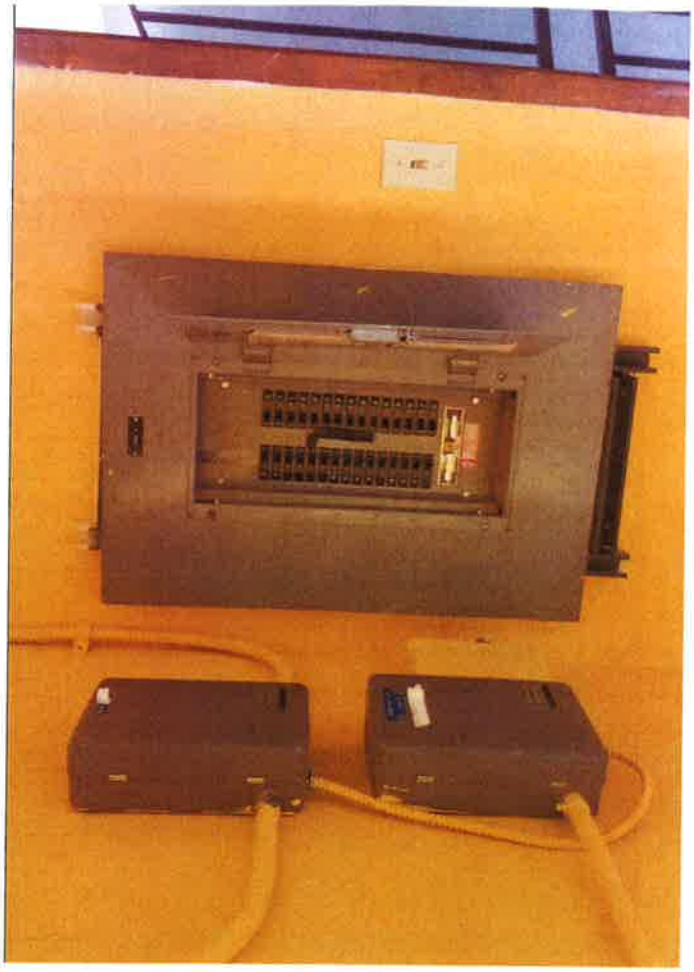


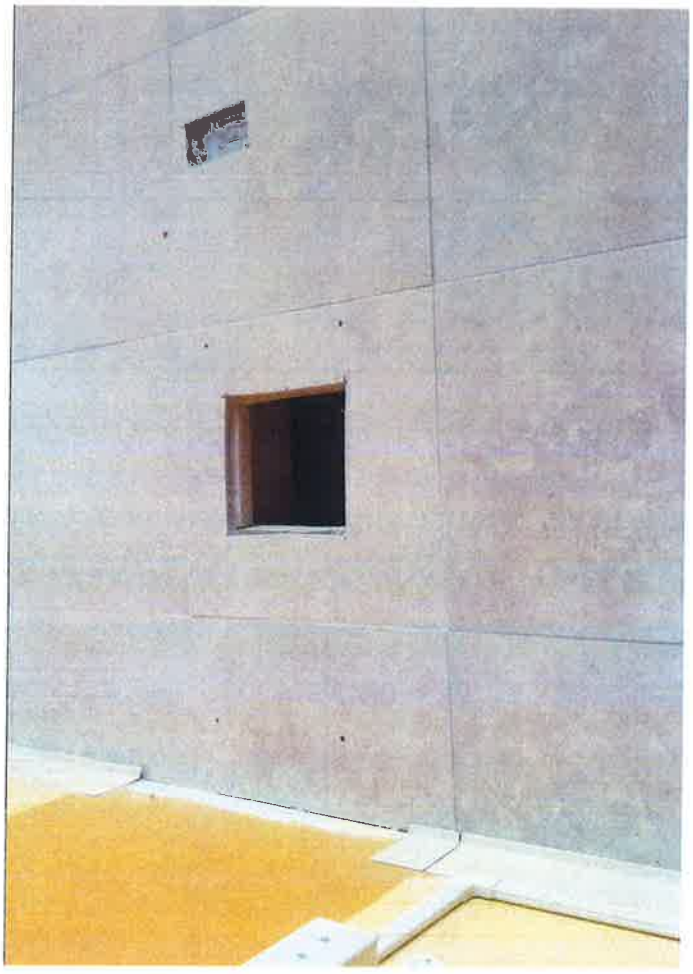













BIOHAZARD

APPENDIX C:

CITY BUILDING DEPARTMENT RECORDS

From: icasillas@cityofwhittier.org,
To: picenv@verizon.net,
Cc: rgarcia@cityofwhittier.org, jesquivel@cityofwhittier.org,
Subject: City of Whittier - Records Request
Date: Thu, Jan 21, 2021 9:30 am
Attachments: 12826 Philadelphia.pdf (2735K), Comstock - Planning.pdf (368K), image001.jpg (20K),

C

Good morning Ethan Hersh,

In response to your California Public Records Act (CPRA) request dated January 11, 2021 regarding records for APN 8139-024-027, the City Clerk Department has compiled the following response:

onsite

- Please see the attached building permits for 12826 Philadelphia Ave. and description of work for 7002 Comstock Ave., 7012 Comstock Ave, and 7024 Comstock Ave.

offsite

This concludes the City's response to your CPRA request. If you have any questions regarding this matter, please call the City Clerk Department at (562) 567-9850.

Sincerely,

Ifath Casillas | Office Specialist

City Clerk Department | 13230 Penn St. | Whittier, CA 90602

(562) 567 - 9850 | Email: icasillas@cityofwhittier.org | www.cityofwhittier.org

Go Green! Please consider the environment before printing this email.

This email and any information and/or files transmitted /attached with it may contain confidential information that is exempt from disclosure under applicable law, and is intended solely for the use of the individual or entity to whom they are addressed. No right to confidentiality is waived by this email transmission. If you are not the intended recipient, or responsible for delivering it to the intended recipient, you are hereby notified that any disclosure, copying, dissemination, distribution, or use of any of the information contained in or attached to this transmission is strictly prohibited. If you have received this email in error, please destroy the original transmission and its attachments without reading or saving them in any manner. Thank you.

1 Attached Images

OX 43966-

OWNER'S NAME Pacific Southwest Realty Co.

LOCATION OF WORK ~~203 W. Philadelphia St.~~ → 12826 Philadelphia St

THIS APPEARS TO BE A TYPE III-N 4-8-74

LOT 7-8-9-10 BLOCK 32 TRACT Nichols Subdivision

Lot 3 - & No. 15' of Lot 4 Original Townsite [redacted]

PERMIT NO.		CONTRACTOR	INSPECTIONS and REMARKS
D 7072	BUILDING FOOTING	Howard Hasting Inc. Bank Bldg. Security First Nat. Bk	See Footings & Steel on East ½ of Basement Footings only 3-31-52 See Footing & Steel 3-31-52 See Footing & Steel on West ½ of Basement Footings 4-2-52 See Basement Footings 4-2-52 Poured Con crete - Watched Pour 4-2-52 Watched Pour on Basement Footings & walls up to Basement Floor See Footings & Steel on East side 4-7-52 Footing Wall only - See Steel & Footings on Front wall & West side 4-9-52
D 7100	PLUMBING Rough in 10-9-52 Hold Fin Contractor Left	Howes Mfg 8 T - 6 L - 5 Slop sink. 3 Floor Drain. 1 Drinking Fountain. 1 W.H. - 1 Floor sink. 3 gas.	See Underground Plumbing in Basement only 6-18-52 See Underground Stub out of Bldg. in Basement 6-24-52 See Plumbing only 7-11-52 See Final on gas - 9-23-52 [redacted] 10-2-52 See Plbg. Fix count OK. gas 13 [redacted]
D 7100	SEWER	Howes Mfg	See Concrete Box For Backwater Sewer valve 6-25-52 See 4" Cast Iron pipe on So. Side of Bldg. 7-2-52 For Sewer line to S.W. corner of Bldg.
D 7168	ELECTRIC 4237 Cleaning Rough in 10-6-52 Extra Fix → 4 Signs	James Elect Co. 1 Pole For meter & Plgs. To Mr Keys on Power Pole 100 amp - 30 Sw - 50 Plgs - 100 Fix - 2 - 2P circuits. 2 - 5 TP. motors. 1 R.S. Neon Corp. Install - 1 Sign 1 Heater - 1 Fan - 15 TP - 1¼ TP - 15 Plgs - 11 Sw - 11 Fix 11 outlets	[redacted] 3-4-52 See Elect Wire - Conduit in Basement & Walls only 4-23-52 See Electric Conduit in Basement ceiling & 1st Floor area over Basement 5-1-52 See Elect Conduit in Walls & ceiling on 1st Floor Vaults 5-16-52 See Electric Conduit in Front Door 5-16-52 Panel to Roof. Entry Section only See Elect Conduit in Front Brick wall & on East Side of Bldg. 6-2-52
D 9266	PLASTER	H. M. Bell Inside & outside	See Lath in Basement Rooms 7-31-52 See Lath on Masonry walls 7-31-52 See Lath on Rear Main Floor walls 8-4-52
D 9447	TILE	Biderman Tile Co.	1952
8247	MISCEL.	Air conditioner - 50. Calif	Out 7557

BUILDING AND PLANNING USE ONLY

Use Zone	Fire Zone	Total Req'd Parking	Req'd Yards Front	Rear	Sides
C2	I	EXEMPT	0	40'	E - W 0-10'

Type Const.	Group	Stories	Occ. Load	Ex. Use
II 1HR	A-2	2	133	F2

# Var. or P.P.	Valuation of Job	Plan No.
—	$240,000.00	7241-A

1,179 ft = 1st fl.
371 ft = 2nd fl.
1,010 ft = Canopy - DRIVE-UP
601 ft / 299 ft = Canopy - NORTH & SOUTH

SEE P.C. [illegible]

Remarks
1-30-75 rebar in fly-trach. wm
2-25-75 rebar for grade beams wm
3-18-75 R.B. for (4) Col's at Canopy
60 Hrs. stair wk. & fm
2-19-75 Repair in masonry to 8 wm
3-25-75 rebar for 2nd lift wm
4-11-75 sheathing wm
4-30-75 rebar roland canopy wm
5-1-75 rebar recontrons walkway wm
5-7-75 box lights, mar intumescent
soffit wm
5-13-75 rebar for floor slab
at new addition wm

Rough	Final
6-27-75 wm	9-29-75 wm

Plan	No.
Check Fee 183.25	74594
Plan	No.
Check Fee	

Permit Fee 366.50

76269
No.

Job Address: 12826 PHILADELPHIA ST

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot Blk. Tract

Description of Work: ALTERATION, REMOVAL INTERIORS, ADD NEW 1 STORY 2ND FL. PORTIONS & [illegible] UP CANOPY, SITE WORK

Property Owner: [illegible] MURPHY HOME [illegible]

Owner's Address: 211 SO. MAIN ST
L.A., 90013 Phone (at job) 628-0311

Lender: SECURITY PACIFIC NATL. BANK

Address

Architect: GRIFFIN & BANKS AIA

State Lic. No. Phone (714) 527-8000

Engineer: WHELDON & GRAY S.E.

State Lic. No. Phone

Contractor: E&T Constructors

Contractor's Address: 20605 Earl St
Torrance Phone 722-2547

City Lic. No. 36238 State Lic. No. 140686

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws. I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee: [signature]

$16.80 WHEN VALIDATED THIS IS YOUR PERMIT

+ JUN-18-75 Stamp T02483 CK 74594 • B — 1 183.25
[illegible] 732713 CK 76269 • B — 2 366.50
[illegible] 732714 CK 1000 804 D 18 — 16.80

1975

DEPT. USE ONLY

Use Zone	Fire Zone	Type Const. Bldg.	Group	Plan No.

PERMIT FEES			No.	Each	Fee
Forced-air or Gravity-type Furnace incl. ducts and vents.		Up to 100,000 B.T.U.		$4.00	
		Over 100,000 B.T.U.	1	5.00	5.00
Floor Furnace				4.00	
Heater—suspended type				4.00	
Heater—recessed type				4.00	
Heater—floor mounted				4.00	
Appliance vent—only				2.00	
Boiler, Compressor, Absorption System	Up to 3 H.P.	Up to 100,000 B.T.U.		4.00	
	3 H.P. 15 HP.	100,001 to 500,000 B.T.U.	1	7.50	7.50
	15 H.P. 30 H.P.	500,001 to 1,000,000 B.T.U.		10.00	
	30 H.P. 50 H.P.	1,000,001 to 1,750,000 B.T.U.		15.00	
	Over 50 H.P.	Over 1,750,000 B.T.U.		25.00	
Air Handling Unit incl. ducts		Under 10,000 C.F.M.		3.00	
		Over 10,000 C.F.M.		5.00	
Evaporative cooler (non-portable)				3.00	
Vent fan/single duct			2	2.00	4.00
Mechanical exh. hood				3.00	
Comm./Indus. Incinerator				20.00	
Repair, alter, addition to each heating appl., refrig. unit, comfort cooling unit, or system incl. controls.			MX	4.00	4.00
Any equip regulated but not incl. above.				3.00	
FILING FEE					$3.00
TOTAL FEES					23.50

Plan	No.
Check Fee	
Permit Fee 23.50	Permit No. 77240

Street Address of Job: 12826 Philadelphia Street,

HEATING — AIR CONDITIONING REFRIGERATION — BOILERS

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Contractor: Russell Air Conditioning

Contractor's Address: 15007 Oxnard Street, Van Nuys, Calif. 91411

Contractor's Phone: 786-7200

Owner's Name: ~~Pacific Southwest Realty~~ (Security Pacific Nat'l.)

Contractor's State Lic. No.: 168635

Bus. License City #: 37080

REMARKS:

New Bldg. ☐ Existing ☒

Rough	Final
6-27-75 wm	9-29-75 wm

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws regarding same.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee: Manuel D Reese

WHEN VALIDATED THIS IS YOUR PERMIT

FEB 5 75 757663 CK 77240 • D — 8 23.50

1975

PERMIT FEES	No.	Each	Fee
Residence 750 sq. ft. max.		$ 7.50	
Residence 1000 sq. ft. max.		$10.00	
Residence 1400 sq. ft. max.		$14.00	
Residence 1700 sq. ft. max.		$17.00	
Residence 2000 sq. ft. max.		$20.00	
Residence 2500 sq. ft. max.		$25.00	
Residence 3000 sq. ft. max.		$30.00	
Residence over 3000 sq. ft.		$35.00	
RANGE		$ 1.00	
OVEN		$ 1.00	
SPACE/WATER HTR.		$ 1.00	
CLOTHES DRYER		$ 1.00	
FIXTURES	129	$ .15	19.35
OUTLETS	165	$ .15	24.75
TEMPORARY POLE	1	$ 3.00	3.00
SERVICE	2	$ 3.00	6.00
SIGN (1 Transf.)		$ 3.00	
(Extra Transf./Ballasts)		$ 1.00	
TIME CLOCK		$ 1.00	
MOTORS:			
1 H.P. MAX.		$ 1.00	
10 H.P. MAX.	1	$ 3.00	3.00
50 H.P. MAX.		$ 5.00	
100 H.P. MAX.		$10.00	
500 HP. MAX.		$15.00	
OVER 500 H.P.		$20.00	
FILING FEE			$3.00
TOTAL FEES			59.10

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating electrical wiring.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California or that I am the legal owner of the above described property and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permittee James A. Fitzpatrick

PERMIT NO. 77238

STREET ADDRESS OF JOB 12826 E. Philadelphia St

ELECTRIC

DEPT. OF BLDG. WHITTIER, CALIF.

ELECTRICAL CONTRACTOR Downey Electric

CONTRACTOR'S ADDRESS 7462 Burns Ave

CONTRACTOR'S PHONE 7734611

CITY REG. NO.	STATE LICENSE NO.
72	233327

PROPERTY OWNER Security Pacific Bank

PURPOSE OF BLDG. Banking

FLOOR AREA	NO. OF METERS
	2

NEW BLDG. ☐ EXISTING BLDG. ☒

REMARKS: Remodel ←

5-13-75 underslab conduit is PVC; PVC also for PBX. wm

Re Elec 2ND FL 6-18-75 dm

ROUGH	FINAL
6-27-75 wm	9-29-75 wm

LIGHTS CLEARED TO UTILITY CO. 9-29-75 ma

POWER CLEARED TO UTILITY CO.

FEB 9 75 753655 CK 77238 WHEN VALIDATED THIS IS YOUR PERMIT • D — 4 59.10

1975

Number	PERMIT FEES		
1	Gas System, 1st 5 Outlets	$1.75	1 75
	Each Outlet Additional	.35	
1	Water Heaters or Vents	$1.75	1 75
1	Water Piping	$1.75	1 75
0	Water Treating Equipment or Softeners	$1.75	
2	Sink, Kitchen-Slop	$1.75	3 50
1	Garbage Disp.	$1.75	1 75
0	Bath Tub	$1.75	
2	Lavatories	$1.75	3 50
0	Shower Pans	$1.75	
5	Water Closets	$1.75	8 75
0	Laundry Trays	$1.75	
0	Wash. Mach. Stand Pipes	$1.75	
0	Dishwasher	$1.75	
0	Sink, Floor, Bar	$1.75	
1	Urinals	$1.75	1 75
1	Drink Fountains	$1.75	1 75
2	Floor Drains	$1.75	3 50
0	Traps, Sand, Grease	$1.75	
	Plumbing Piping Without Fixtures	Each $1.75	
0	Lawn Sprinklers	$3.00	
0	Back Flow Devices	$3.00	
0	Sewer(s)	Each $7.00	
0	Septic Tank & Cesspool	$12.00	
	Swim Pool Plumbing	$8.25	
	FILING FEE		$3 00
	TOTAL FEES		32 75

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State Laws regulating plumbing.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and State of California or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permitee: Abdel Chehade

Permit Fee: $32.75

No. 77218

Street Address of Job: 12826 Philadelphia St. Whittier, California

PLUMBING

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Plumbing Contractor: Murray Company

Contractor's Address: 15902 S. Broadway Gardena, Calif 90248

Contractor's Phone: 770-8812

Property Owner's Name: Pacific Southwest Realty Company (Security Bank)

Contractor's State Lic. No. 162382

Contractor's City Lic. No.

New Bldg.

Old Bldg.

FLOORS TO BE LEFT OPEN UNTIL PIPING IS INSTALLED AND INSPECTED

SEWER CHARGE -

REMARKS

GAS LINE PRESSURE TEST AT METER, GAS LINE UNDER SIDEWALK, 6-16-75 Bdg

R & R 2ND FLOOR 6-18-75 dm

BELOW FOR OFFICE USE ONLY

Groundwork

Rough 6-22-75 dm

Gas 6-18-75 dm

Final 9-29-75 dm

Sewer

Utility Clearance

When Validated This Is Your Permit

FEB-5-75 756835 CK 77218 • D — 3 32.75

1975

Number	PERMIT FEES			
	Gas System, 1st 5 Outlets Each Outlet Additional	$1.75 .35		
	Water Heaters or Vents	$1.75		
	Water Piping	$1.75		
	Water Treating Equipment or Softeners	$1.75		
	Sink, Kitchen-Slop	$1.75		
	Garbage Disp.	$1.75		
	Bath Tub	$1.75		
	Lavatories	$1.75		
	Shower Pans	$1.75		
	Water Closets	$1.75		
	Laundry Trays	$1.75		
	Wash. Mach. Stand Pipes	$1.75		
	Dishwasher	$1.75		
	Sink, Floor, Bar	$1.75		
	Urinals	$1.75		
	Drink Fountains	$1.75		
	Floor Drains	$1.75		
	Traps, Sand, Grease	$1.75		
	Plumbing Piping Without Fixtures	Each $1.75		
1	Lawn Sprinklers	$3.00	3	00
	Back Flow Devices	$3.00		
	Sewer(s)	Each $7.00		
	Septic Tank & Cesspool	$12.00		
	Swim Pool Plumbing	$8.25		
	FILING FEE		**$3**	**00**
	TOTAL FEES		6	00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State Laws regulating plumbing.

I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and State of California or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workmen's compensation laws of California.

Signature of Permitee: Henry Ullmann

Permit Fee: 6.00

No. 78736

Street Address of Job: 13826 E Philadelphia ST.

PLUMBING

DEPT. OF BLDG. WHITTIER, CALIFORNIA

Plumbing Contractor: Vista Landscape Co

Contractor's Address: 1821 Workman Mill Rd Whittier

Contractor's Phone: OX 21736

Property Owner's Name: Security Pacific Bank

Contractor's State Lic. No.: 233750

Contractor's City Lic. No.: 36328

New Bldg.

Old Bldg.

FLOORS TO BE LEFT OPEN UNTIL PIPING IS INSTALLED AND INSPECTED

SEWER CHARGE -

REMARKS

BELOW FOR OFFICE USE ONLY

Groundwork 6-26-75 mm Rough

Gas Final 9-29-75 mm

Sewer

Utility Clearance

When Validated This Is Your Permit

790486 78736 • B — 3 6.00

1975

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of the Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class B License No. 188560

Date 6/11/81 Contractor W.C. Beggs, Contractor

OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec. 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

Date _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. 7705081O Company Workmen's

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Department of Building & Safety.

Date 6-11-81 Applicant [signature]

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name NONE

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

[signature] 6-
Signature of Owner or Contractor ONLY Date

— IMPORTANT —

Application is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the front and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within **ONE HUNDRED EIGHTY (180) DAYS** from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	—	/			

Valuation of Job 2000 00 — Plan No. File.

APPROVED AS DEPICTED IN ATTACHED PHOTO
Marian J. Malesker

Energy Check Fee	No.	(5100 Fund) 61249
Plan Check Fee 21 13	No.	01552
Plan Check Fee	No.	
Permit Fee 32 50	No.	01553
+ State Tax .50		

Job Address: 14606 Philadelphia St Whittier Cal.

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF

Lot Block Tract

Description of Work: Installing New Kandy Teller Machine

Property Owner Security Pacific Bank
Owner's Address 333 South Hope St LA
Owner's Phone 213-613883 City
Architect's Name Daniel Omura & Assoc
Address 6251 Wilshire Blvd
Phone 213-9804540 Regist. No.
Engineer's Name Regist. No.
Contractor's Name W.C. Beggs Construction, Inc
Address 765 Black Ave Los Angeles
Phone 213-6667995
State Lic. No. 188560 City Lic. No. 11746

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date 9-2-81 SH

1981

DECLARATIONS

e Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

104-215

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and ofessions Code, and my license is in full force and effect.

ense Class C-45 License No. 414351

te 12/19/84 Contractor W. Heath & Co.

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's License Law the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the eged exemption. Any violations of Sec. 7031.5 by any applicant a permit subjects the applicant to a civil penalty of not more than e hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as ir sole compensation, will do the work, and the structure is not anded or offered for sale (Sec. 7044, B. & P. C.: The Contractor's nse Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or ered for sale. If, however, the building or improvement is sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with ensed contractors to construct the project (Sec. 7044, B. & P. C.: e Contractor's License Law does not apply to an owner of contracts r such projects with a contractor(s) licensed pursuant to the Contctor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

_____

te _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. TRUB-114T830-684 Company Travelers

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 12/19/84 Applicant Rebecca Young

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

_____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Rebecca Young 12/19/84

Signature of Owner or Contractor ONLY Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the ont and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides
V-84-17				

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2		Wall signs			

Valuation of Job: $8000.- Plan No. in file

1 new sign
2 relocated signs
all signs to be non-illuminated
INTERNAL

O.K. Chip Leslie 12-19-85
MUST O.K. LIGHT FIXTURES BEFORE INSTALLATION

		No.
Energy Check Fee		(5100 Fund) 61249
Plan Check Fee		
Plan Check Fee	44.53	5442
Permit Fee	68.50	15441
+ State Tax	.56	CL

Job Address 12826 Philadelphia St.

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot 7-12 Block Tract

Description of Work:
(1) Single face non-illuminate wall sign 5'10" x 7'6"
Remove (1) roof sign
Relocate (2) wall signs
value $8,000.00

Property Owner Margot Chapman
Owner's Address Security Pacific Bank
Owner's Phone 6134341 City
Architect's Name
Address
Phone Regist. No.
Engineer's Name Jerry Hajek Regist. No. C27912
Contractor's Name W. Heath & Co.
Address 3225 Lacy St. LA 900_
Phone 2234141
State Lic. No. 414351 City Lic. No. 2626

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date

1984

DECLARATIONS

e Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

ereby affirm that I am licensed under provisions of Chapter 9 mmencing with Section 7000) of Division 3 of the Business and fessions Code, and my license is in full force and effect.

ense Class C-45 License No. 414351

e 12/28/84 Contractor W. Heath & Co.

OWNER-BUILDER DECLARATION

ereby affirm that I am exempt from the Contractor's License Law the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the aged exemption. Any violations of Sec. 7031.5 by any applicant a permit subjects the applicant to a civil penalty of not more than hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as ir sole compensation, will do the work, and the structure is not ended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or ered for sale. If, however, the building or improvement is sold hin one year of completion, the owner-builder will have the den of proving that he did not build or improve for the purpose sale.).

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☐ I am exempt under Sec._____, B. & P. C. for this reason:

_____

le _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. TRUB-114T830-6-84 Company Travelers

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 12/28/84 Applicant Rebecca Young

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

_____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Rebecca Young 12/28/84

Signature of Owner or Contractor (Agent) Date

— IMPORTANT —

plication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the nt and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

PERMIT FEES	No.	Each	Fee
Residence 750 sq. ft. max.		$15.00	
Residence 1000 sq. ft. max.		$20.00	
Residence 1400 sq. ft. max.		$28.00	
Residence 1700 sq. ft. max		$34.00	
Residence 2000 sq. ft. max.		$40.00	
Residence 2500 sq. ft. max.		$50.00	
Residence 3000 sq. ft. max.		$60.00	
Residence over 3000 sq. ft.		$70.00	
POOL OR SPA		$20.00	
RANGE or OVEN (ea.)		$ 3.00	
CLOTHES DRYER		$ 3.00	
SPACE/WATER HTR. (ea.)		$ 3.00	
TIME CLOCK		$ 3.00	
FIXTURES		$ .40	
OUTLETS		$ .40	
TEMPORARY POLE		$10.00	
SERVICE (200 AMP. MAX.)		$10.00	
(OVER 200 AMP.)		$20.00	
SIGN (INC. TIME CLOCK)	1	$10.00	10.00
TEMP LIGHTING		$ 8.00	
MOTORS:			
5 H.P. MAX.		$ 3.00	
10 H.P. MAX.		$ 6.00	
50 H.P. MAX		$10.00	
100 H.P. MAX.		$18.00	
500 H.P. MAX.		$25.00	
OVER 500 H.P.		$35.00	
FILING FEE			$10.00
PLAN CHECK FEE (OVER 1200 A.)			
TOTAL FEES			20.00

ROUGH	FINAL
LIGHTS CLEARED TO UTILITY CO.	
POWER CLEARED TO UTILITY CO.	

PERMIT NO. 5834

FEE 20.00

JOB ADDRESS 12826 Philadelphia

ELECTRIC

DEPT. OF BLDG. WHITTIER, CALIF.

ELECTRICAL CONTRACTOR W. Heath & Co.

CONTRACTOR'S ADDRESS 3225 Lacy St. LA 90031

CONTRACTOR'S PHONE 2234141 | CITY BUS. LIC. NO.

PROPERTY OWNER Margot Chapman

OWNER'S ADDRESS Security Pacific Bank

NEW BLDG. ☐ EXISTING BLDG. ☒ COM'L. ☒ RES'L ☐

WHEN VALIDATED THIS IS YOUR PERMIT

1984

DECLARATIONS

ie Declarations below are mandated by the tate of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and ofessions Code, and my license is in full force and effect.

ense Class AB-1 License No. 86393

te 12/17/84 Contractor Jeff Poperwitch for Oltmans

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's license Law the following reason (Sec. 7031.5, California Busines and Professions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basi for the eged exemption. Any violations of Sec. 7031.5 by any applicant a permit subjects the applicant to a civil penalty of not tore than e hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as eir sole compensation, will do the work, and the structun is not ended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or proves thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or ered for sale. If, however, the building or improvement s sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with ensed contractors to construct the project (Sec. 7044, B. & P. C.: e Contractor's License Law does not apply to an owner of contracts such projects with a contractor(s) licensed pursuant to the Contctor's License Law.).

☐ I am exempt under Sec._____, B. & P. C. for this reason:

te _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. IV-84-005967 Company FREMONT

☒ Certified copy is hereby furnished.

☐ Certified copy is filed with the Department of Building & Safety.

Date 12/17/84 Applicant Jeff Poperwitch for Oltmans

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Jeff Poperwitch for Oltmans 12/17/84

Signature of Owner or Contractor ONLY Date

— IMPORTANT —

plication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the nt and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of Issuance of such permit.

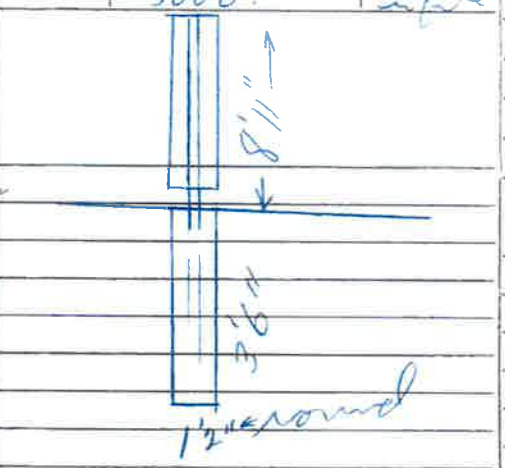
BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides
V48-17				

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
V-84-17		Monument			sign

Valuation of Job: 1300. Plan No. none

104-275 C-2



Energy Check Fee	No. (5100 Fund) 61249	
Plan Check Fee	No.	
Plan Check Fee 25.03	No.	
Permit Fee 38.50	No.	
+ State Tax .50		

CK

Job Address 12826 Philadelphia Ct

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot 7-12 Block Tract

Description of Work: REMOVE PLANTER, PLACE FOOTING IN, PLACE IN SIGN FROM HEATH COMPANY

Property Owner PACIFIC SOUTHWEST REALTY C/O SECURITY PACIFIC NATIONAL BANK

Owner's Address 600 WILSHIRE BLVD, SUITE 800

Owner's Phone 613-8778 City L.A., CAL PAUL EARLSON

Architect's Name

Address

Phone Regist. No.

Engineer's Name Regist. No.

Contractor's Name OLTMAN'S CONSTRUCTION CO

Address 516 MONTEREY PASS RD, MONT PARK,

Phone (818) 576 5479 ATTN: JIM RO

State Lic. No. 86393 City Lic. No. 24959

WHEN VALIDATED THIS IS YOUR PERMIT

Set Backs	Date	Foundation	Date
Rough OK	Date	Final OK	Date
		2/20/86	

1986

DECLARATIONS

1041-2

he Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

— APPLICANT —
CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5
OWNER: FILL IN DECLARATION 2, 4 AND 5

104.275

LICENSED CONTRACTOR'S DECLARATION

hereby affirm that I am licensed under provisions of Chapter 9 ommencing with Section 7000) of Division 3 of the Business and rofessions Code, and my license is in full force and effect.

ense Class B License No. 397283

ate 4/19/89 Contractor EXP 8/31/90

OWNER-BUILDER DECLARATION

hereby affirm that I am exempt from the Contractor's License Law r the following reason (Sec. 7031.5, California Business and Pro- ssions Code: Any City which requires a permit to construct, alter, prove, demolish or repair any structure, prior to its issuance, also quires the applicant for such permit to file a signed statement that is a licensed contractor pursuant to the provisions of the Contractor's ense Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the & P. C.) or that he is exempt therefrom and the basis for the leged exemption. Any violations of Sec. 7031.5 by any applicant r a permit subjects the applicant to a civil penalty of not more than ve hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as eir sole compensation, will do the work, and the structure is not tended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's ense Law does not apply to an owner of property who builds or prove thereon, and who does such work himself or through his n employees, provided that such improvements are not intended or fered for sale. If, however, the building or improvement is sold thin one year of completion, the owner-builder will have the rden of proving that he did not build or improve for the purpose sale.).

☐ I, as owner of the property, am exclusively contracting with ensed contractors to construct the project (Sec. 7044, B. & P. C.: e Contractor's License Law does not apply to an owner of contracts r such projects with a contractor(s) licensed pursuant to the Con- actor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

ate _____ Owner _____

3. ### WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of worker's Compensation Insurance or a certified copy thereof. (Sec. 3800, Lab. C.).

Policy No. 0168A54-88 Company STATE FUND

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Department of Building & Safety.

Date 4/19/89 Applicant

CERTIFICATE OF EXEMPTION FROM WORKER'S COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Work's Comp. provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

4. ### CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3907, Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City, and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Signature of Owner or Contractor ONLY 4/19/89 Date

— IMPORTANT —

pplication is hereby made to the Superintendent of Building and Safety for a permit subject to the conditions and restrictions set forth on the ont and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Use Zone	Fire Zone	Total Req'd Parking	Req'd Yards Front	Rear	E - W Sides
C-2	1	EXEMPT	0	40'	0-10'

Type Const.	Group	Stories	Occ. Load	Ex. Use
III - 1HR.	F-2	2	127	F-2

# Var. or P.P.	Valuation of Job	Plan No.
—	$ 40,000.00	724-A

EXISTING 1ST FL = 5628 #
" 2ND " = 1790 #
" CELLAR = 1856 #
NEW 1ST FL. AR. = 1195 #
DRIVE-UP CANOPY = 808 #

CANOPY NORTH = 107 #
CANOPY SOUTH = 253 #

Remarks

Rough

Final 9-29-75 wm

Plan 78 No. 76537

Check Fee 102.05

Plan No. 920m

Check Fee

Permit Fee 26.00

1.00

No.

Job Address: 12826 PHILADELPHIA

DEPT. OF BUILDING — BUILDING

Lot Blk. Tract

Description of Work REVISION OF PLANS #7241 PLAN CHECK FOR CHANGES (SEE PERMIT # 76269

Property Owner PACIFIC SO. WEST REALTY

Owner's Address 333 SO HOPE ST.

LOS ANGELES Phone

Lender

Address

Architect GRIFFIN & BANKS

State Lic. No. Phone (714) 8

Engineer WHEELER & GRAY, S

State Lic. No. Phone

Contractor E & T CONSTRUCTOR

Contractor's Address 20605 EARL ST.

TORRANCE Phone 772-7

City Lic. No. 36938 State Lic. No. 406

I hereby acknowledge that I have read this application above is correct and agree to comply with all ordinances I hereby certify that I am properly registered and or licen by the City of Whittier and/or State of California, or that owner of the above described property, and I certify th formance of the work for which this permit is issued I sh any person in violation of the workmen's compensation law

Signature of Permittee

WHEN VALIDATED THIS IS YOUR PERMIT

+ State Fee 7 9 4 0 3 CM 76537 • B — 1

1989

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The

— APPLICANT —

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AI

OWNER: FILL IN DECLARATION 2, 4 AND

1. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class C-39 License No. 365357

Date 04/25/91 Contractor Louis Ablaca

11/30/92

2. OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec. 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B. & P. C.: The Contractor's License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason:

Date _____ Owner _____

3. WORKER'S CC

I hereby affirm that I hav a certificate of worker's C thereof. (Sec. 3800, Lab. C.

Policy No. SXP0719

☑ Certified copy is he

☐ Certified copy is fi Safety.

Date 04/25/91 Applic

CERTIFICATE OF COMPEN

I certify that in the perfor is issued, I shall not empl become subject to the Wo

Date _____ Applic

NOTICE TO APPLICANT: If tion, you should become su the Labor Code, you must this permit shall be deemed

4. CONSTRUCT

I hereby affirm that there performance of the work fo Civ. C.).

Lender's Name _____

Lender's Address _____

5.

I certify that I have read th information is correct. I agre relating to the building co sentatives of this City to en for inspection purposes.

Louis Ab

Signature of Owner or Cont

— IMPORTANT —

Application is hereby made to the Superintendent of Building and Safety for a permit subject to the con front and rear faces of this application.

1. Each person upon whose behalf this application is made and each person at whose request under or pursuant to any permit issued as a result of this application agrees to and shall, i Whittier, its officers, agents and employees.

2. Any permit issued as a result of this application becomes null and void if work is not comr (180) DAYS from date of issuance of such permit.

DEPT. USE ONLY

BUILDING & PLANNING

Use Zone	Total Req'd Parking	Req'd Yards Front	Rear	Sides
C-2				

Fire Zone	Type Const.	Group	No. of Stories	Occupant Load	Exist. Use
1					

# Variance or Precise Plan	Lot { Int. Cor. Rev. Cor. }	Valuation of Job
	☐ ☐ ☑	1200.00

Job Area — Plan No. —

Remarks

11-13 cy Jst- done.
No call for insp. Amer

Rough — Final

Plan — No.

Check Fee

Plan — No.

Check Fee

Permit Fee 9.00

D29177 mk

No.

Job Address: 12826 Zoi W. Philadelphia

BUILDING

DEPT. OF BUILDING — WHITTIER, CALIF.

Lot — Blk. — Tract

Description of Work: Reroof. 5-15 # Rock. Subject to field insp. Fire retardant roof

Owner: See First Nat Bank

Owner's Address: Los Angeles. Phone

Architect: None

State Lic. No. 131545 Phone La 54232

Engineer: none

State Lic. No. 1 Phone

Contractor: Service Roofing Co.

Contractor's Address: P.O. Box. 133 Fullerton Phone La 54232

City Lic. No. 9941 State Lic. No. 131545

I hereby acknowledge that I have read this application and state the above is correct and agree to comply with all ordinances and State laws. I hereby certify that I am properly registered and/or licensed as required by the City of Whittier and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued, I shall not employ any person in violation of the workman's compensation laws of California.

Signature of Permittee

WHEN VALIDATED THIS IS YOUR PERMIT

OCT--8-64 45433 CK 29177• E — 2 9.00

E PHILADELPHIA
HITTIER

DING WHITTIER, CALIF.

Tract Whittier

ROOF:
- BUILT-UP
E TRUMBULL
ELT OCF
& BASE
AD 92#
D NAILS CLASS A
HWEST REALTY
TERMINAL ATTN:
766 City LOS ANGELES CA-9005

Regist. No.

Regist. No.

ORGANIZATION
LON BLVD
0155
y Lic. No. 30732
S IS YOUR PERMIT

49013#
1000-3 271.50
1000-204 5.82

undation Date

nal OK 11/25/91 Date

1991

DO NOT SEPARATE

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

– APPLICANT –

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5

OWNER: FILL IN DECLARATION 2, 4 AND 5

175000

1. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class C20 License No. 350935

Date 4/14/99 Contractor Dockstader

2. OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P. C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P.C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B. & P. C.: The Contractors License Law does not apply to an owner of contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____ B. & P. C. for this reason:

Date _____ Owner _____

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier Golden Eagle

Policy Number NWC545170 05

(The following section need not be completed if permit valuation is $100 or less)

____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date: 4/14/99 Applicant:

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

5. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

Signature of Applicant or Agent _____ Date 4/14/99

IMPORTANT

Application is hereby made to the Director of Building and Safety for a permit subject to the conditions and restrictions hereon.

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2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY - (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	V-N	B	1	30	

Valuation of Job	Plan No.
175000 00	6061

G.F.A = 5944 sq. ft.

East point thru clear (new)
OTC (2 months existing).
TEST 4/14/99

Team Smith (310) 652-8073

WILL THE APPLICANT OR FUTURE BUILDING OCCUPANT HANDLE A HAZARDOUS MATERIAL OR A MIXTURE CONTAINING A HAZARDOUS MATERIAL EQUAL TO OR GREATER THAN THE AMOUNTS SPECIFIED ON THE HAZARDOUS MATERIALS INFORMATION GUIDE

YES NO

WILL THE INTENDED USE OF THE BUILDING BY THE APPLICANT OR FUTURE BUILDING OCCUPANT REQUIRE A PERMIT FOR CONSTRUCTION OR MODIFICATION FROM THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) SEE PERMITTING CHECKLIST FOR GUIDELINES

YES NO

I HAVE READ THE HAZARDOUS MATERIALS INFORMATION GUIDE AND THE SCAQMD PERMITTING CHECKLIST. I UNDERSTAND MY REQUIREMENTS UNDER THE LOS ANGELES COUNTY CODE, TITLE 2, CHAPTER 2.28, SECTIONS 2.20.100 THROUGH 2.20.140 CONCERNING HAZARDOUS MATERIALS REPORTING AND FOR OBTAINING A PERMIT FROM THE SCAQMD

OWNER OR AGENT

Energy Check Fee $ 80 00	No. 453 1000 - [illegible]
Plan Check Fee $ 644 93	No.
Plan Check Fee	No.
Permit Fee $ 1007 20	No. 382400
+ State Tax $ 36 75	I or II
G. P. Update Fee 350 00	1000-341

Job Address 1282 E PHILADELPHIA

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot legal Block ou Tract

Description of Work: 5000 ± CONVERT EXIST'G BANK INTO MEDICAL OFFICES, NON-BEARING STL STUD PARTITIONS

Property Owner BEVERLY PROFFESSIONAL

Owner's Address 15624 MARVISTA

Owner's Phone 562-945-2816 City WHITTIER

Architect's Name ARCHEX INT'L

Address 1220 ROSECRANS STE 438

Phone 714-952-2233 Regist. No.

Engineer's Name FISCHER Regist No. 14501

Contractor's Name Dockstader

Address 6727 S Greenleaf

Phone 5626980241

State Lic. No. 350935 City Lic. No.

[illegible]

"WHEN VALIDATED THIS IS YOUR PERMIT"

04/14/99	9:43AM 000001#7382	**02
	1000-453	$80.00
04/14/99	9:43AM 000001#7382	**02
	1000-342	$1007.20
04/14/99	9:43AM 000001#7382	**02
	1000-204	$36.75
04/14/99	9:43AM 000001#7382	**02
	1000-341	$350.00

Set Backs	Date	Foundation	Date
Rough OK	**Date**	**Final OK**	**Date**
6-22-99 CK		10-12-99 CK	

1999

DO NOT SEPARATE

DECLARATIONS

The Declarations below are mandated by the State of California under Section 19825 of The Health and Safety Code.

– APPLICANT –

CONTRACTOR: FILL IN DECLARATION 1, 3, 4 AND 5

OWNER: FILL IN DECLARATION 2, 4 AND 5

1. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class B-C20 License No. 350935

Date 4-20-99 Contractor Dockstaders

2. OWNER-BUILDER DECLARATION

10-31-1000

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, California Business and Professions Code: Any City which requires a permit to construct, alter, improve, demolish or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is a licensed contractor pursuant to the provisions of the Contractor's License Law (Ch. 9 (Commencing with Sec. 7000) of Div. 3 of the B. & P.C.) or that he is exempt therefrom and the basis for the alleged exemption. Any violations of Sec. 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).)

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B. & P.C.: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.)

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☐ I am exempt under Sec. _____ B. & P.C. for this reason

Date _____ Owner

3. WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

✓ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier Golden Eagle

Policy Number NWC 545170-05

(The following section need not be completed if permit valuation is $100 or less)

____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 4-20-99 Applicant Wendy Farrell

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

4. CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

5. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

Wendy Farrell 4/20/99

Signature of Applicant or Agent Date

IMPORTANT

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1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within ONE HUNDRED EIGHTY - (180) DAYS from date of issuance of such permit.

BUILDING AND PLANNING USE ONLY

Var. or C.U.P.	Total Req'd Parking	Req'd Yards: Front	Rear	Sides

Use Zone	Type Const.	Group	Stories	Occ. Load	Ex. Use
C-2	Nwood				

Valuation of Job: 11000 00 — Plan No.:

70 squares

4-23-99 - North end of Roof Base sheet skid - Cla

4-23-99 - Base sheet skid - Cla

WILL THE APPLICANT OR FUTURE BUILDING OCCUPANT HANDLE A HAZARDOUS MATERIAL OR A MIXTURE CONTAINING A HAZARDOUS MATERIAL EQUAL TO OR GREATER THAN THE AMOUNTS SPECIFIED ON THE HAZARDOUS MATERIALS INFORMATION GUIDE

YES NO

WILL THE INTENDED USE OF THE BUILDING BY THE APPLICANT OR FUTURE BUILDING OCCUPANT REQUIRE A PERMIT FOR CONSTRUCTION OR MODIFICATION FROM THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) SEE PERMITTING CHECKLIST FOR GUIDELINES

YES NO

I HAVE READ THE HAZARDOUS MATERIALS INFORMATION GUIDE AND THE SCAQMD PERMITTING CHECKLIST. I UNDERSTAND MY REQUIREMENTS UNDER THE LOS ANGELES COUNTY CODE, TITLE 2, CHAPTER 2.28, SECTIONS 2.20.100 THROUGH 2.20.140, CONCERNING HAZARDOUS MATERIALS REPORTING AND FOR OBTAINING A PERMIT FROM THE SCAQMD.

OWNER OR AGENT

Energy Check Fee	No.	
Plan Check Fee	No.	
Plan Check Fee	No.	
Permit Fee $ 153 60	No.	082465
+ State Tax $ 2 31		I or II
G. P. Update Fee $ 22 00		1000-341

Job Address: 12826 Philadelphia

DEPT. OF BUILDING **BUILDING** WHITTIER, CALIF.

Lot Block Tract

Description of Work:

Install Built up roof over one exist. Roof Min. Class A

#5510 41

Property Owner: Beverly Professiona

Owner's Address: 15624 Marvista

Owner's Phone: 562 945-2816 City: Whittier

Architect's Name: Archex INTL

Address: 1220 Rosecrans #4

Phone: 714-952-2233 Regist. No.

Engineer's Name: Fischer Regist. No.

Contractor's Name: Dockstaders

Address: 6727 S. Greenleaf

Phone: 562 698-0201 #5510

State Lic. No. 350935 City Lic. No.

WHEN VALIDATED THIS IS YOUR PERMIT

1000-342		$153.6
04/20/99	3:15PM 000001#7948	**0
1000-204		$2.3
04/20/99	3:15PM 000001#7948	**0
1000-341		$22.0

Set Backs	Date	Foundation	Date
Rough OK	**Date**	**Final OK**	**Date**
		5-3-99 Cla	

City of Whittier
Building & Safety Division

13230 Penn Street, Whittier, California 90602-1772
(562) 567-9339 (562) 567-9320 Fax (562)567-2872

Project No.

Permit valid for 180 days

PROJECT DATA

No.	NESW	Street	Suffix	Unit No.	Project Valuation
12826		Philadelphia	St		$ -

AIN	8139-024-027	LU Zone	Uptown Center	Use/Division	B
Lot		Case Ref	DRC14-022	Const. Type	VB
Tract		Case Ref		No. Stories	1
Crest Map		VHFHSZ		Sprinklered	No

PROPERTY OWNER

Company: BEVERLY PROFESSIONAL COMPANY LLC
Last Name: First Name:
No. 12826 NESW: Street: Philadelphia Suffix: St Unit No.:
PO Box: Phone: (562) 789-9908
City: Whittier Fax:
State: CA Zip: 90601 E-Mail:

AGENT / CONTACT

Company:
Last Name: First Name:
No. NESW: Street: Suffix: Unit No.:
PO Box: Phone:
City: Fax:
State: Zip: E-Mail:

DESCRIPTION

Alter/Remodel 8 EA Replace 8 Exterior Light Fixtures on Existing Circuits

ARCHITECT / ENGINEER / DESIGNER

Company: Lic No.:
Last Name: First Name:
No. NESW Street: Suffix: Unit No.:
PO Box: Phone:
City: Fax:
State: Zip: E-Mail:

CONTRACTOR

Company:
Last Name: Wang Lic No.: 918347
No. 975 NESW: Street: Saed First Name: Andrew
PO Box: Suffix: St Unit No.:
City: Pomona Phone: (626) 376-3129
State: CA Zip: 91768 Fax:
E-Mail:

ELECTRICAL PERMIT

FEE CALCULATION

Qty	Description	$/Ea	Fee
New Residence			
-	To 750 SF	46.00	0.00
-	750 - 1,000 SF	61.50	0.00
-	1,001 - 1,400 SF	87.00	0.00
-	1,401 - 1,700 SF	105.50	0.00
-	1,701 - 2,000 SF	124.00	0.00
-	2,001 - 3,000 SF	165.00	0.00
-	3,001 - 4,000 SF	247.00	0.00
-	+4,000 SF/ ea 1,000 SF	49.50	0.00
-		0.00	0.00
Service, Panels, Circuits			
-	Temporary power pole	27.50	0.00
-	Serv Pnl to 200A	27.50	0.00
-	Serv Pnl 201A-1,000A	66.00	0.00
-	Serv Pnl +1,000A	165.00	0.00
-	Sub Panel	33.00	0.00
-	Circuit Protection	10.00	0.00
-	GFI Circuit Protectn	10.00	0.00
-	AFI Circuit Protectn	10.00	0.00
-	A/C Disconnect	7.50	0.00

Qty	Description	$/Ea	Fee
Devices			
-	120v Outlet	1.50	0.00
-	208v, 220v Outlet	9.00	0.00
-	Switches	1.50	0.00
8	Fixtures	1.50	12.00
-	Emergency light/sign	9.00	0.00
Motors, Transformers			
-	To 5 bhp	7.50	0.00
-	5.1 - 10 bhp	13.00	0.00
-	10.1 - 50 bhp	27.50	0.00
-	50.1 - 100 bhp	55.00	0.00
-	100.1 - 500 bhp	82.50	0.00
-	500+ bhp	93.50	0.00
Other			
-	Time Clock	9.00	0.00
-	Sign	27.50	0.00
-	Temp. Lighting	24.00	0.00
-	Pool / Spa Electrical	65.00	0.00
-	Appliance	9.00	0.00
-	Res Solar PV System	7.50	0.00

Added Plan Review Fees

Added MEP Review	- HR	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
Credit / Prior Pmt	- EA	$	-

Permit Fees

Permit Fee		$	12.00
Filing Fee	1 EA	$	31.00
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
Credit / Prior Pmt	- EA	$	-

Date Issued		January 9, 2014
Issued By		M. Connell
TOTAL PLAN REVIEW	BP1	$ -
		000000
Permit	EL	$ 43.00
Technology Fee	TE	$ 10.00
Document Imaging Fee		$ -
WRA Credits	- EA EL	$ -
TOTAL PERMIT, FEES		$ 53.00
PERMIT NUMBER		145663

VALIDATION

Application not valid unless Validation stamp appears below

RCP DATE:01/09/14 RCPNCT000940594

DESCRIPTION	AMOUNT
ZONING&SUBDIVISION F	$43.00
ELECTRICAL PERMIT	$43.00
TECH FEE BLDG PERMIT	$10.00
TOTAL PAID	$96.00
CRED AMT:	$96.00

INSPECTION RECORD

Other	Drywall Repair	
	Stucco Repair	
Electrical	Underfir/slab Elc	
	R. Electrical	
	Smoke Alarm	
	Release Power	
	F. Electrical	

COMMENTS

EXPIRED

2014

DECLARATIONS

1. LICENSED CONTRACTOR DECLARATION:
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the California Business and Professions Code, and my license is in full force and effect.
License No. and Class 918347 Expiration 05/31/2015 Contractor's Signature Andrew

2. OWNER / BUILDER DECLARATION:
I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the check mark(s) I have placed next to the applicable items(s) [Business and Professions Code Section 7031.5: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).]:

(__) **I, as owner of the property, or my employees with wages as their sole compensation, will do (__) all or (__) portions of the work,** and the structure is not intended or offered for sale (Business and Professions Code Section 7044: The Contractor's State License Law does not apply to an owner of a property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

(__) **I, as owner of the property, am exclusively contracting with licensed contractors to construct the project** (Business and Professions Code Section 7044: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project(s) with a licensed contractor pursuant to the Contractors' State License Law.).

(__) **I certify that, in the performance of the work from licensure under the Contractors' State License Law for the following reason(s):** _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: http://www.leginfo.ca.gov/calaw.html.

Property Owner or Authorized Agent signature _____ Date: _____

3. WORKERS' COMPENSATION DECLARATION:

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITIOIN TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

(X) **I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations** as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Policy No. _____

(__) **I have and will maintain workers' compensation insurance,** as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier _____ Policy No. _____ Expiration Date _____

(X) **I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California,** and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

4. CONSTRUCTION LENDING AGENCY DECLARATION:
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Civil Code Section 3097).
Lender's Name _____ Address _____

5. HAZARDOUS MATERIALS DECLARATION:
Will the applicant or future building occupant handle a hazardous material or a mixture containing a hazardous material equal to or greater than the amounts specified on the hazardous materials guide? ☐ Yes ☒ No

Will the intended use of the building by the applicant or future building occupant require a permit for construction or modification from the South Coast Air Quality Management District (see SCAQMD permitting checklist for guidelines)? ☐ Yes ☒ No

I have read the hazardous materials information guide and the SCAQMD permitting checklist. I understand my requirements under the Los Angeles County Code Title 2, Chapter 2.28, Sections 2.20.100 through 2.20.140 concerning hazardous materials reporting and for obtaining a permit from the SCAQMD.

Andrew Wang
Print Owner or Agent Name

6. PERMIT APPLICANT DECLARATION:
By my signature below, I certify to each of the following:

(X) **I am a California licensed contractor, or**

(__) **I am the property owner, or**

(__) **I am authorized to act on behalf of the property owner***

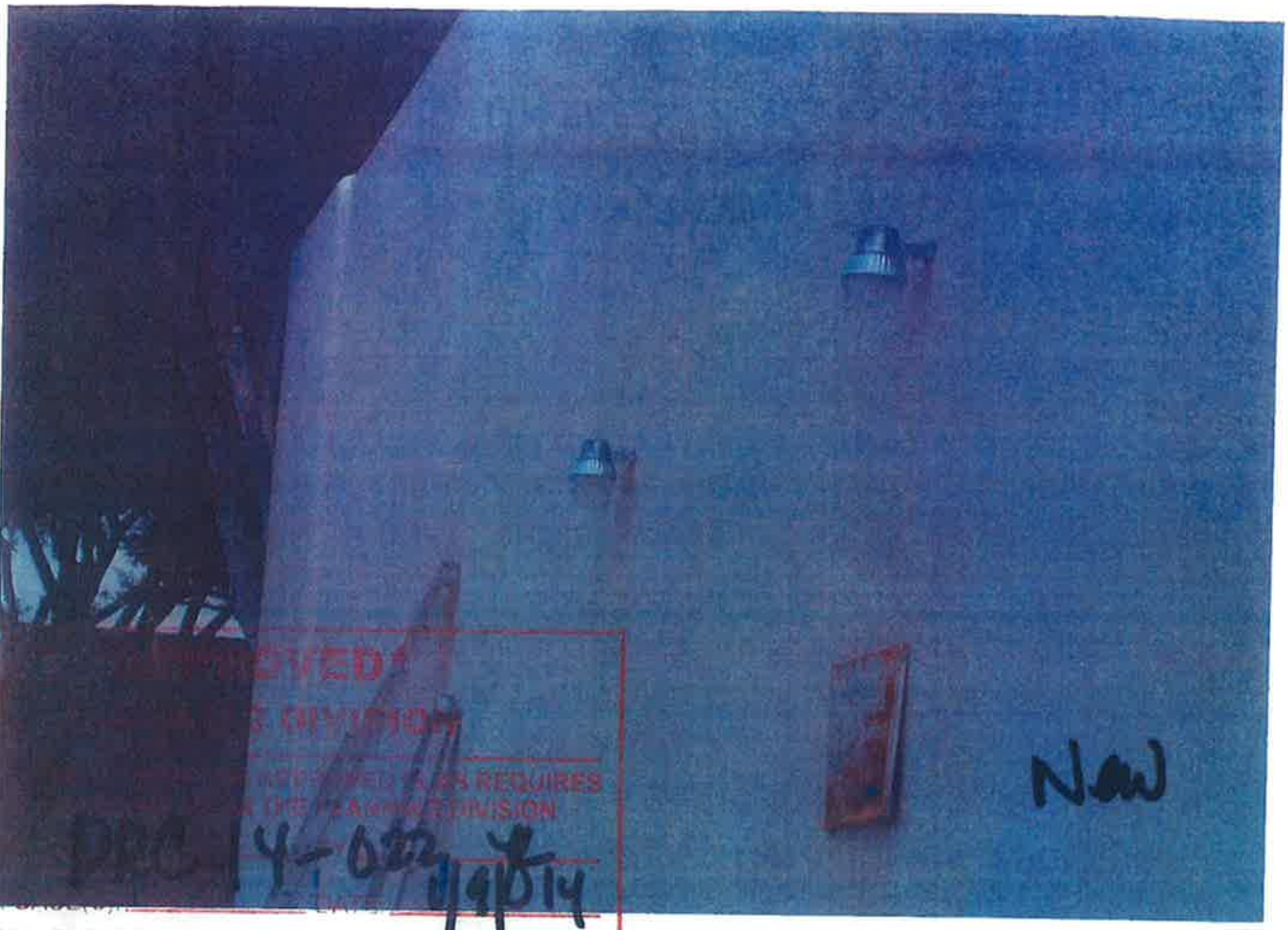
Building Permit#	
Mechanical Permit#	
Electrical Permit#	145663
Plumbing Permit#	
Job Address	12826 PHILADELPHIA.

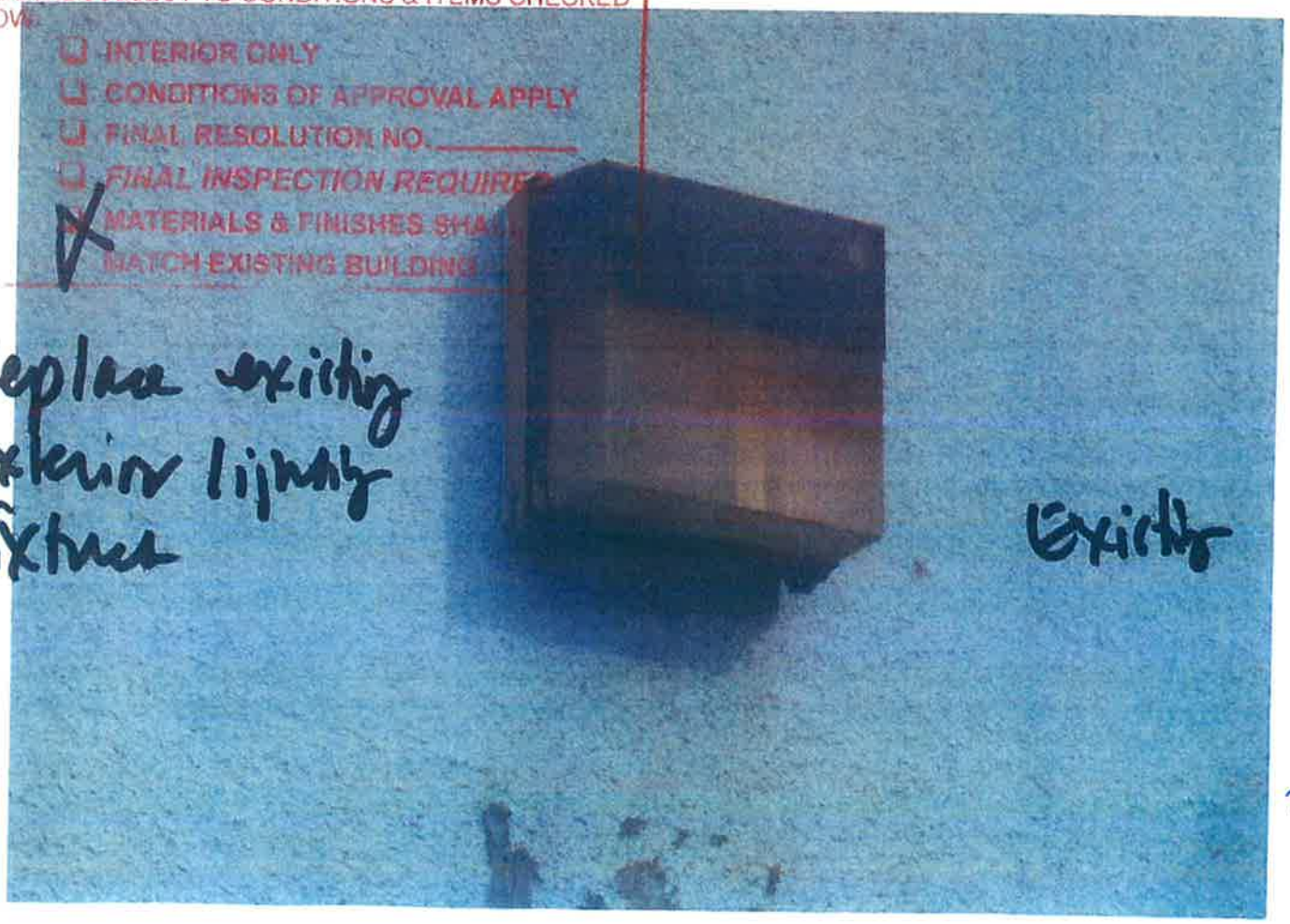
I have read this construction permit application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction and by my signature below further indicate that I understand said code requirements for the work to be performed. I authorize representatives of the City of Whittier to enter the property subject to this permit for inspection purposes. I understand that application to the Building Official for a permit is subject to the conditions and restriction hereon and including:

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within, or has become inactive for a period of, ONE HUNDRED EIGHTY (180) DAYS.
3. The issuance or granting of a permit or approval as a result of inspection shall not be construed to be an approval or a violation of the provisions of any state or local codes or ordinances. Plan review or inspection approvals presuming to give authority to violate or cancel the provisions of any state or local codes or ordinances shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

Print Name Andrew Wang
Signature Andrew
Date 01/09/2014
*Requires separate authorization form

2014
(Rev 05/12)





APPROVAL SUBJECT TO CONDITIONS & ITEMS CHECKED BELOW:

- ☐ INTERIOR ONLY
- ☐ CONDITIONS OF APPROVAL APPLY
- ☐ FINAL RESOLUTION NO. _____
- ☐ FINAL INSPECTION REQUIRED
- ☒ MATERIALS & FINISHES SHALL MATCH EXISTING BUILDING

2014

THIS FORM SHALL BE SUBMITTED WITH PLANNING APPROVAL TO THE BUILDING DIVISION WHEN APPLYING FOR BUILDING PERMITS

PROJECT ADDRESS: 12826 Philadelphia St. CASE NO.: DRC 14022

APN: 8139-024-027 TRACT NO. _____ LOT NO. _____

PROJECT DESCRIPTION: Replacement lights

ZONING PAGE MAP NO 104 - 275 ZONE: Uptown Centu

DATE APPROVED: 1/9/14 APPEAL PERIOD ENDS: _____

REVIEWED BY:

- ☐ Don Dooley
- ☐ Jeff Adams
- ☐ Sonya Lui
- ☐ Luis G. Escobedo
- ☒ Ellen Fitzgerald
- ☐ Brooke Daley

BUILDING DIVISION:

☐ Please consult with planner prior to final.

☐ Please consult with planner prior to: _____ Foundation Pouring; _____ Exterior Covering

☒ No consultation needed prior to final. Please drop in Planning box

Building Date Final: _____

- ☐ Matt Winter
- ☐ Robert Horney
- ☐ Mike Moser
- ☐ Chris Diercks
- ☐ Michelle Harencame
- ☐ _____

PLANNING – ONCE PERMIT IS FINALLED

☐ Green sheet entered in database Date entered: _____ BY _____

File Clearance Sheet as Appropriate

2014

City of Whittier

Building & Safety Division

13230 Penn Street, Whittier, California 90602-1772

(562) 567-9339 (562) 567-9320 Fax (562)567-2872

Project No.

14PR416

Permit valid for 180 days

PROJECT DATA

No	NESW	Street	Suffix	Unit No.	Project Valuation
12826		Philadelphia	St	Suite C	$ 3,000

AIN	8139-024-027	LU Zone	USP	Use/Division	M
Lot	9	Case Ref	DRC-14-801	Const. Type	V-B
Tract		Case Ref		No. Stories	1
Crest Map	104-275	VHFHSZ		Sprinklered	No

DESCRIPTION

Alter/Remodel 1 EA New ADA Counter

EA

Must meet ADA requirements

PROPERTY OWNER

Company: Beverly Professionals Company LLC

Last Name: First Name:

No. NESW Street: Suffix: Unit No:

12826 Philadelphia St Suite C

PO Box: 1188 Phone: (714) 826-8258

City: Whittier Fax:

State: CA Zip: 90601 E-Mail:

ARCHITECT / ENGINEER / DESIGNER

Company: TP Designs Lic No:

Last Name: Pham First Name: Tuan

No. NESW Street: Suffix: Unit No:

9025 Warner Ave D

PO Box: Phone: (714) 264-4898

City: Fountain Valley Fax:

State: CA Zip: 92708 E-Mail:

AGENT / CONTACT

Company:

Last Name: Pham First Name: Tuan

No NESW Street: Suffix: Unit No:

PO Box: Phone: (714) 264-4898

City: Fax:

State: Zip: E-Mail:

CONTRACTOR

Company: Chris Do Lic No: 894391

Last Name: Do First Name: Chris

No. NESW Street: Suffix: Unit No:

11742 Plamwod Dr

PO Box: Phone: (714) 422-4721

City: Garden Grove Fax:

State: CA Zip: 92840 E-Mail:

BUILDING PERMIT

INSPECTION RECORD

Prior to Concrete Pour	Setbacks		
	Undrflr/slab Mech		
	Undrlr/slab Elect		
	Undrflr/slab Plmb		
	Footings / Steel		
	Slab/Reinforcing		
Prior to Rough Approval	Floor Framing		
	Underfloor Insul		
	1st Flr Framing		
	2nd Flr Framing		
	Roof Sheathing		
	Ext. Shear Pnl		
Prior to Wall Cover	Gas Test		
	Plmb Top Out		
	Smoke Chamber		
	R. Mechanical		
	R. Electrical		
	R. Plumbing		
	Planning Div		
	R. Framing		
	Smoke Detectors		
	Carbon Monoxide		

Prior to Cover of Fasteners	Roof In Prog		
	Roof Base Sht		
	Ext. Lath		
	Ext. Siding		
	Insulation		
	Int. Lath		
	Drywall		
	T-Bar		
Prior to Cover w/ Soil	Site Sewer		
	Site Water		
	Site Drainage		
	Site Gas		
	Site Elect		
Prior to Building Used or Occupied	F. Mechanical		
	F. Electrical		
	F. Plumbing		
	Parks Dept.		
	Fire Dept.		
	Plng Final Required	No	BD
	Planning Div		
	PW Dept		
	Final Building	4-16-15 MN	

COMMENTS

FEE CALCULATION

Valuation

Final / Adjusted Value		$	3,000.00

Added Plan Review Fees

Added MEP Review	- HR	$	-
Added Plan Review	1	$	120.00
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
Credit / Prior Pmt	- EA	$	-

Permit Fees

Permit Fee (based on Final Value)		$	155.08
Filing Fee	1 EA	$	31.00
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
	-	$	-
Credit / Prior Pmt	- EA	$	-

Other Fees Paid

LA County Sanitation District	$	-
AIPP (In-Lieu) Fee	$	-
Parks (In-Lieu) Fee	$	-
Development Impact Fees	$	-
Other	$	-
	$	-
	$	-
	$	-
	$	-
	$	-

Date Issued: February 18, 2015

Issued By: C. Castillo

TOTAL PLAN REVIEW	BP1	$	120.00
			150584
Permit	BP2	$	186.08
CA SIMP Fee Class 2.8	BP3	$	0.84
CA Green Bldg Fee	BP3G	$	4.00
GP Update Fee	BP4	$	6.00
Technology Fee	TE	$	24.00
Document Imaging Fee		$	-
WRA Credits - EA	BP2	$	-
TOTAL PERMIT, FEES		$	220.92
PERMIT NUMBER			150585
TOTAL (PLAN CHECK/PERMIT)		$	340.92

VALIDATION

Application not valid unless Validation stamp appears below

DESCRIPTION	AMOUNT
ZONING&SUBDIVISION F	$104.00
PLAN CHECK FEE	$120.00
PERMIT FEE	$186.08
STATE TAX-STRONG MOT	$ .84
STATE TAX-GREEN BLDG	$4.00
GENERAL PLAN UPDATE	$6.00
TECH FEE BLDG PERMIT	$24.00
TOTAL PAID	$444.92
CASH PAID:	$444.92

2015

DECLARATIONS

1. LICENSED CONTRACTOR DECLARATION:
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the California Business and Professions Code, and my license is in full force and effect.
License No. and Class AB894391 Expiration 04/30/2015 Contractor's Signature _____

2. OWNER / BUILDER DECLARATION:
I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the check mark(s) I have placed next to the applicable items(s) [Business and Professions Code Section 7031.5: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).]:

(__) I, **as owner of the property, or my employees with wages as their sole compensation, will do (__) all or (__) portions of the work,** and the structure is not intended or offered for sale (Business and Professions Code Section 7044: The Contractor's State License Law does not apply to an owner of a property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

(__) **I, as owner of the property, am exclusively contracting with licensed contractors to construct the project** (Business and Professions Code Section 7044: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project(s) with a licensed contractor pursuant to the Contractors' State License Law.).

(__) **I certify that, in the performance of the work from licensure under the Contractors' State License Law for the following reason(s):** _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: http://www.leginfo.ca.gov/calaw.html.

Property Owner or Authorized Agent signature _____ Date: _____

3. WORKERS' COMPENSATION DECLARATION:

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITIOIN TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

(__) **I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations** as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Policy No. _____

(__) **I have and will maintain workers' compensation insurance,** as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier _____ Policy No. _____ Expiration Date _____

(X) **I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California,** and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

4. CONSTRUCTION LENDING AGENCY DECLARATION:
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Civil Code Section 3097).
Lender's Name _____ Address _____

5. HAZARDOUS MATERIALS DECLARATION:
Will the applicant or future building occupant handle a hazardous material or a mixture containing a hazardous material equal to or greater than the amounts specified on the hazardous materials guide? ☐ Yes ☒ No

Will the intended use of the building by the applicant or future building occupant require a permit for construction or modification from the South Coast Air Quality Management District (see SCAQMD permitting checklist for guidelines)? ☐ Yes ☒ No

I have read the hazardous materials information guide and the SCAQMD permitting checklist. I understand my requirements under the Los Angeles County Code Title 2, Chapter 2.28, Sections 2.20.100 through 2.20.140 concerning hazardous materials reporting and for obtaining a permit from the SCAQMD.

CHRIS DO
Print Owner or Agent Name

Building Permit#	150588
Mechanical Permit#	—
Electrical Permit#	—
Plumbing Permit#	—
Job Address	12826 Philadelphia

6. PERMIT APPLICANT DECLARATION:
By my signature below, I certify to each of the following:

(X) **I am a California licensed contractor, or**

(__) **I am the property owner, or**

(__) **I am authorized to act on behalf of the property owner***

I have read this construction permit application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction and by my signature below further indicate that I understand said code requirements for the work to be performed. I authorize representatives of the City of Whittier to enter the property subject to this permit for inspection purposes. I understand that application to the Building Official for a permit is subject to the conditions and restriction hereon and including:

1. Each person upon whose behalf this application is made and each person at whose request for whose benefit work is performed under or pursuant to any permit issued as a result of this application agrees to and shall, indemnify and hold harmless the City of Whittier, its officers, agents and employees.
2. Any permit issued as a result of this application becomes null and void if work is not commenced within, or has become inactive for a period of, ONE HUNDRED EIGHTY (180) DAYS.
3. The issuance or granting of a permit or approval as a result of inspection shall not be construed to be an approval or a violation of the provisions of any state or local codes or ordinances. Plan review or inspection approvals presuming to give authority to violate or cancel the provisions of any state or local codes or ordinances shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

Print Name CHRIS DO
Signature _____ Date 2/18/2015

2015

* Requires separate authorization form

(Rev 05-12)

APPENDIX D:

SANBORN FIRE INSURANCE MAPS

D

12826 PHILADELPHIA ST
12826 PHILADELPHIA ST
WHITTIER, CA 90602

Inquiry Number: 6324469.3
January 07, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

01/07/21

Site Name:

12826 PHILADELPHIA ST
12826 PHILADELPHIA ST
WHITTIER, CA 90602
EDR Inquiry # 6324469.3

Client Name:

PIC Environmental Services
2619 Sierra Way
La Verne, CA 91750
Contact: Tim Hersch

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by PIC Environmental Services were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 9D8B-4B2C-B355

PO # NA

Project E4364

Maps Provided:

1962
1961
1949
1925
1912
1907
1900
1894
1891
1888

Sanborn® Library search results

Certification #: 9D8B-4B2C-B355

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

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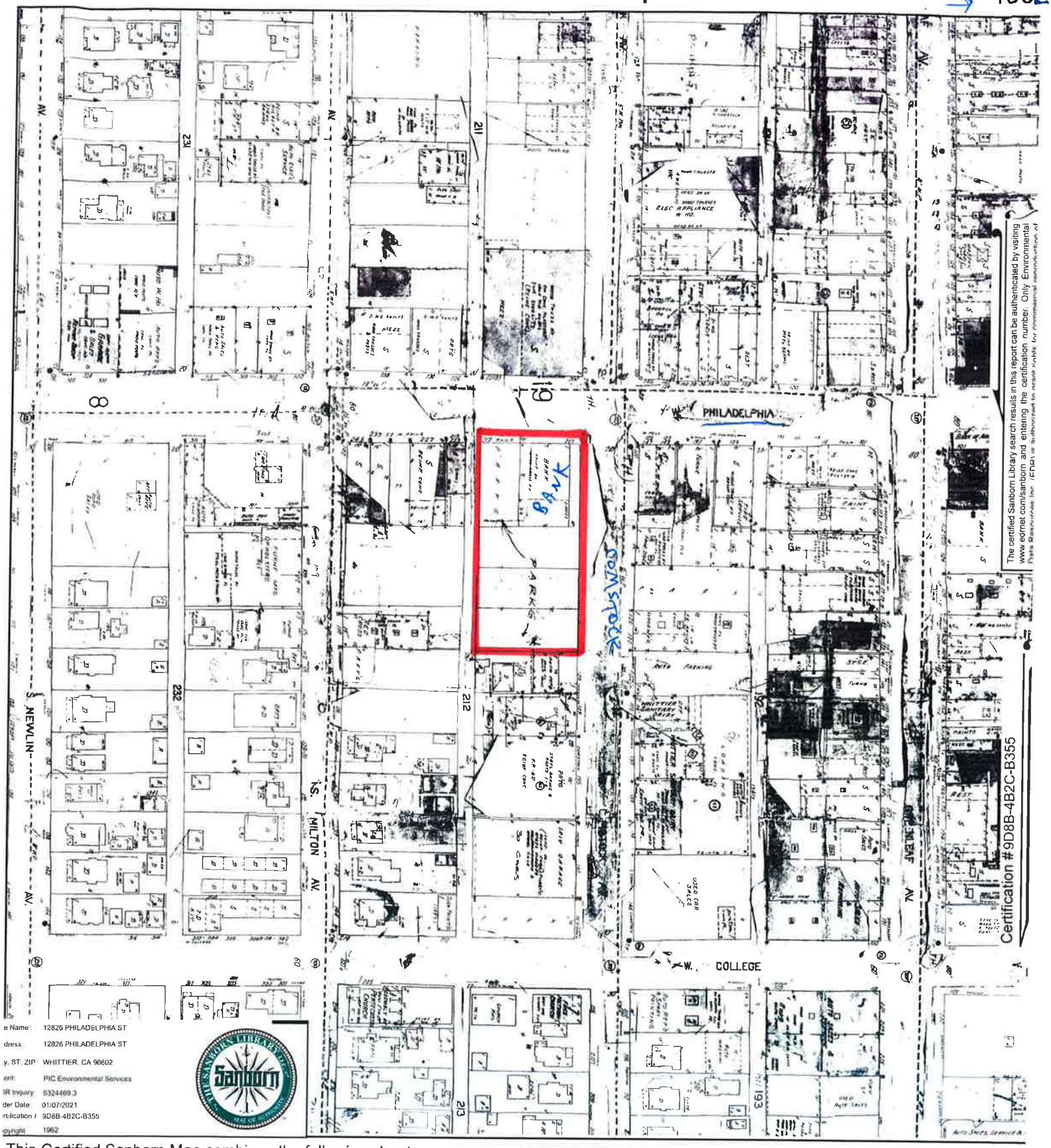
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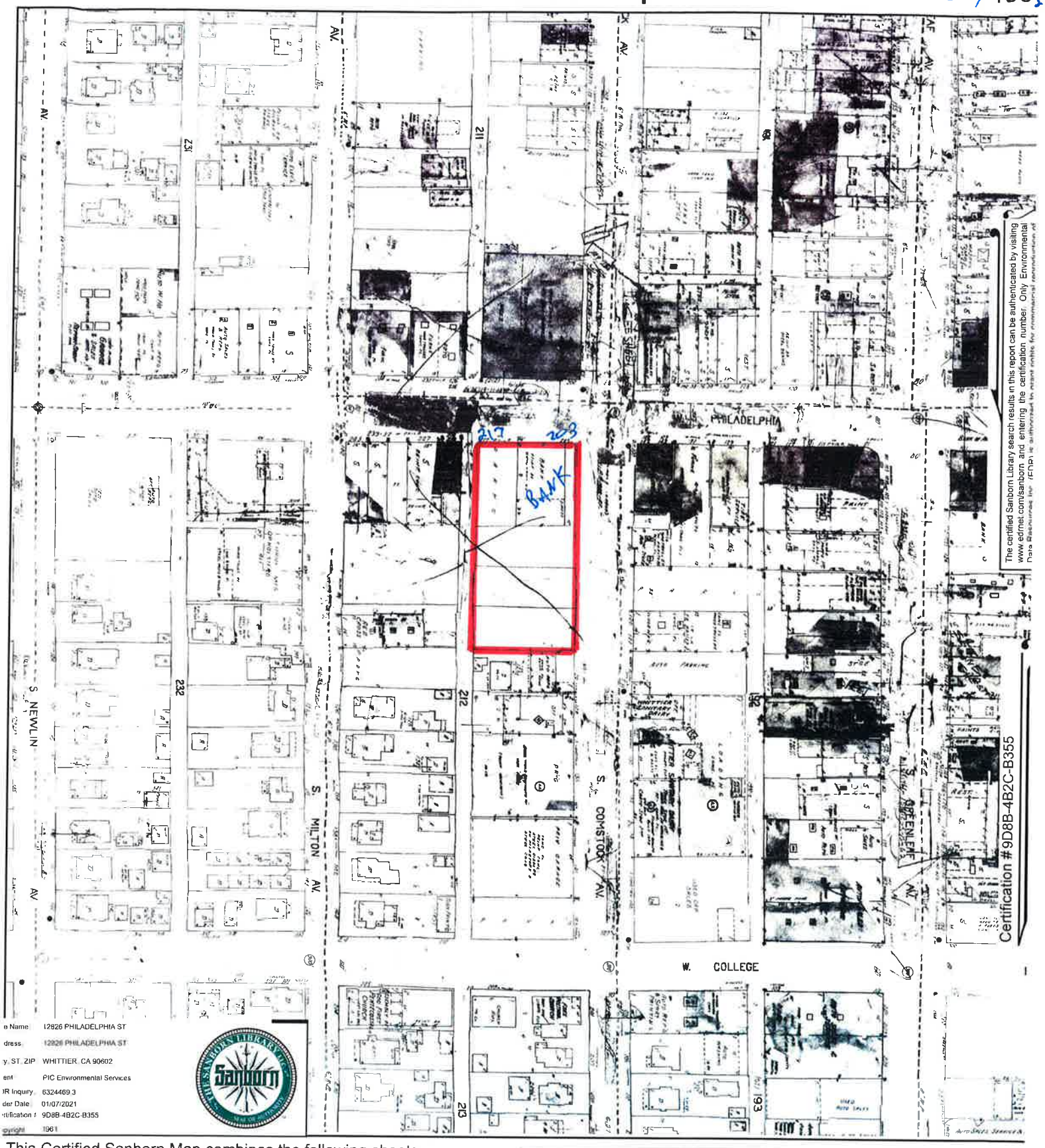
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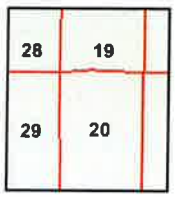


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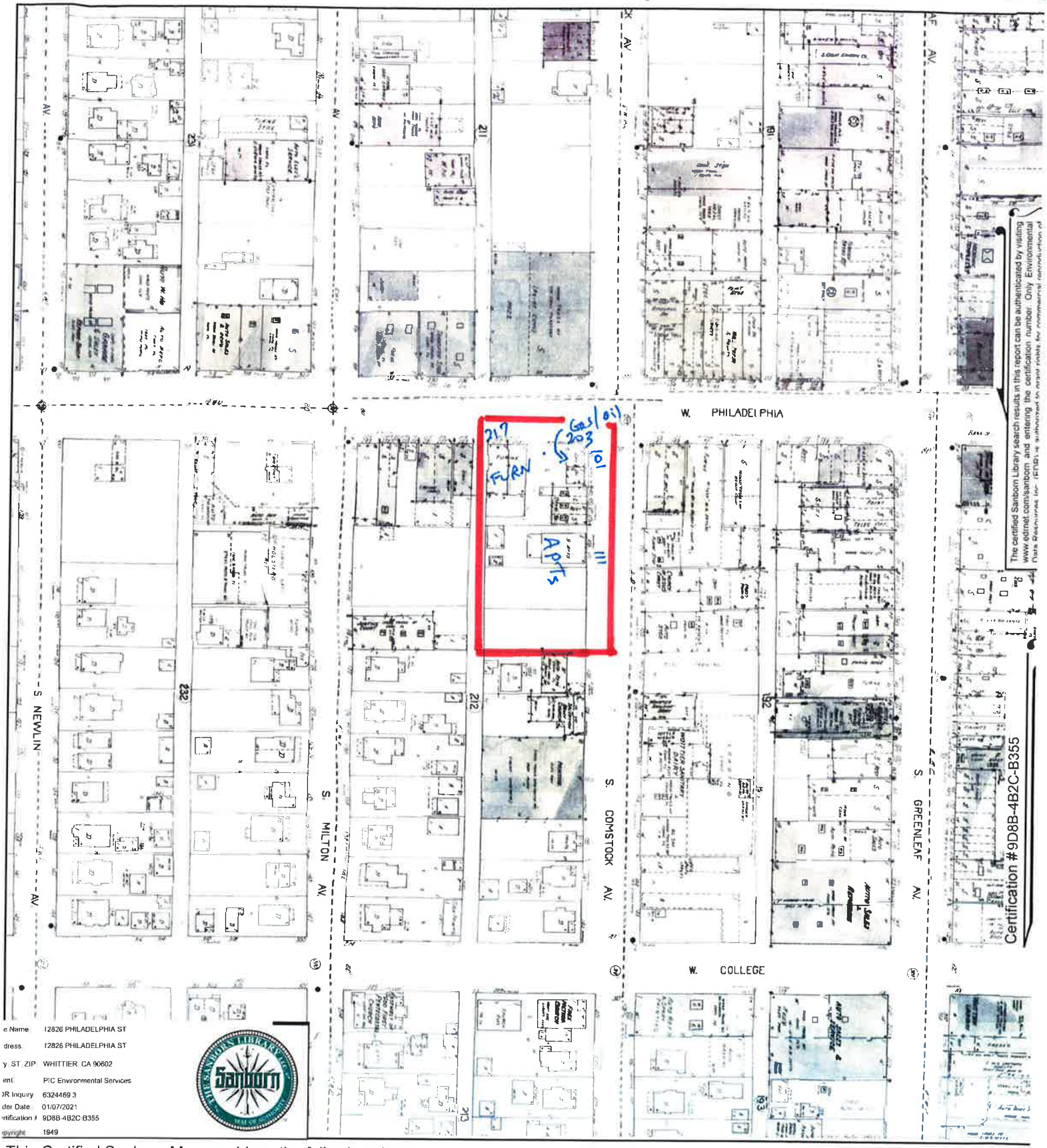


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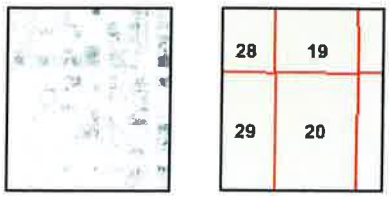
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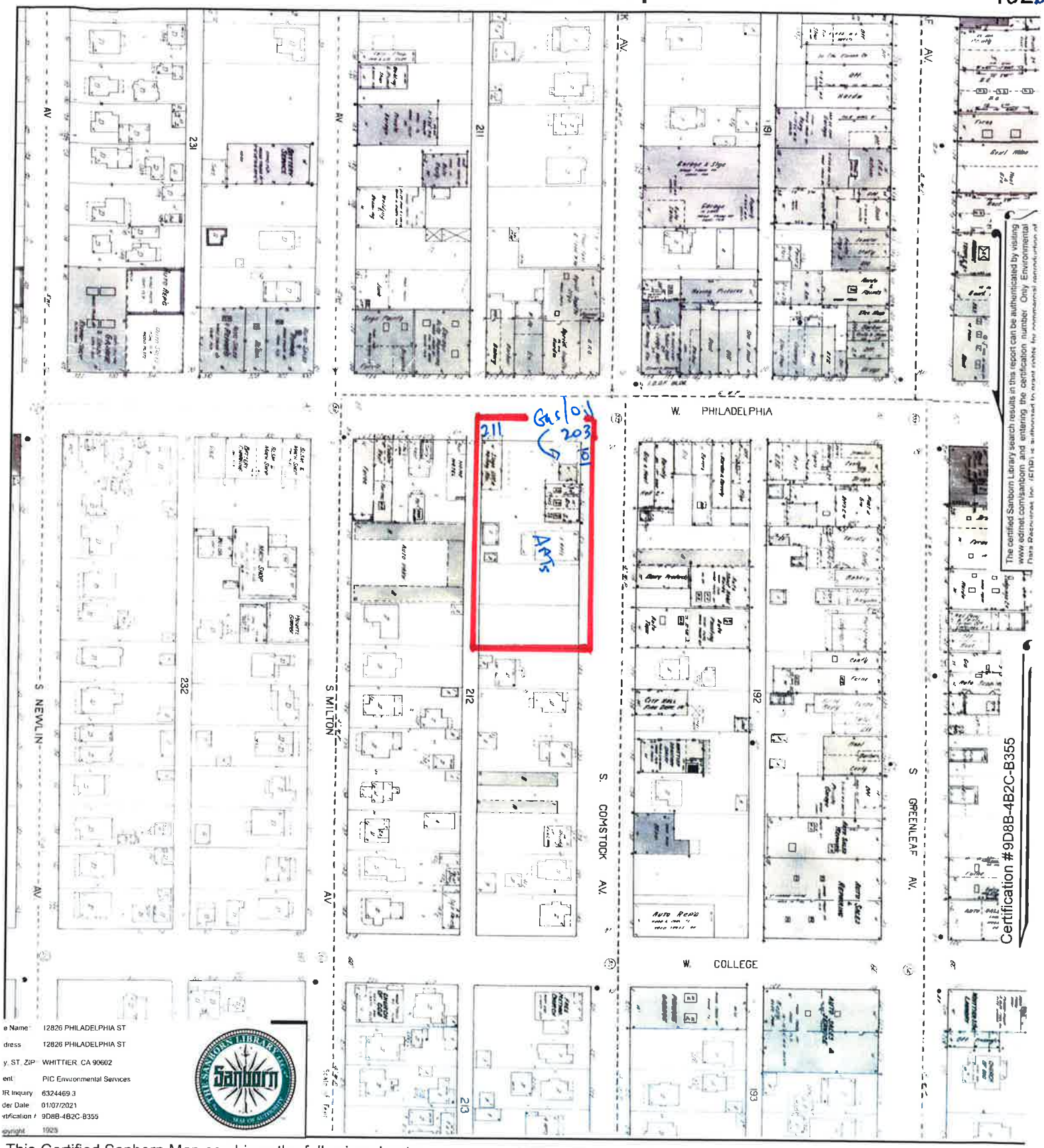
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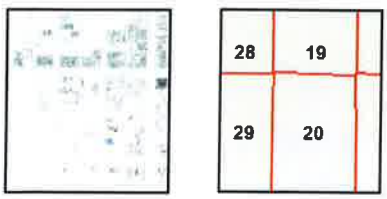
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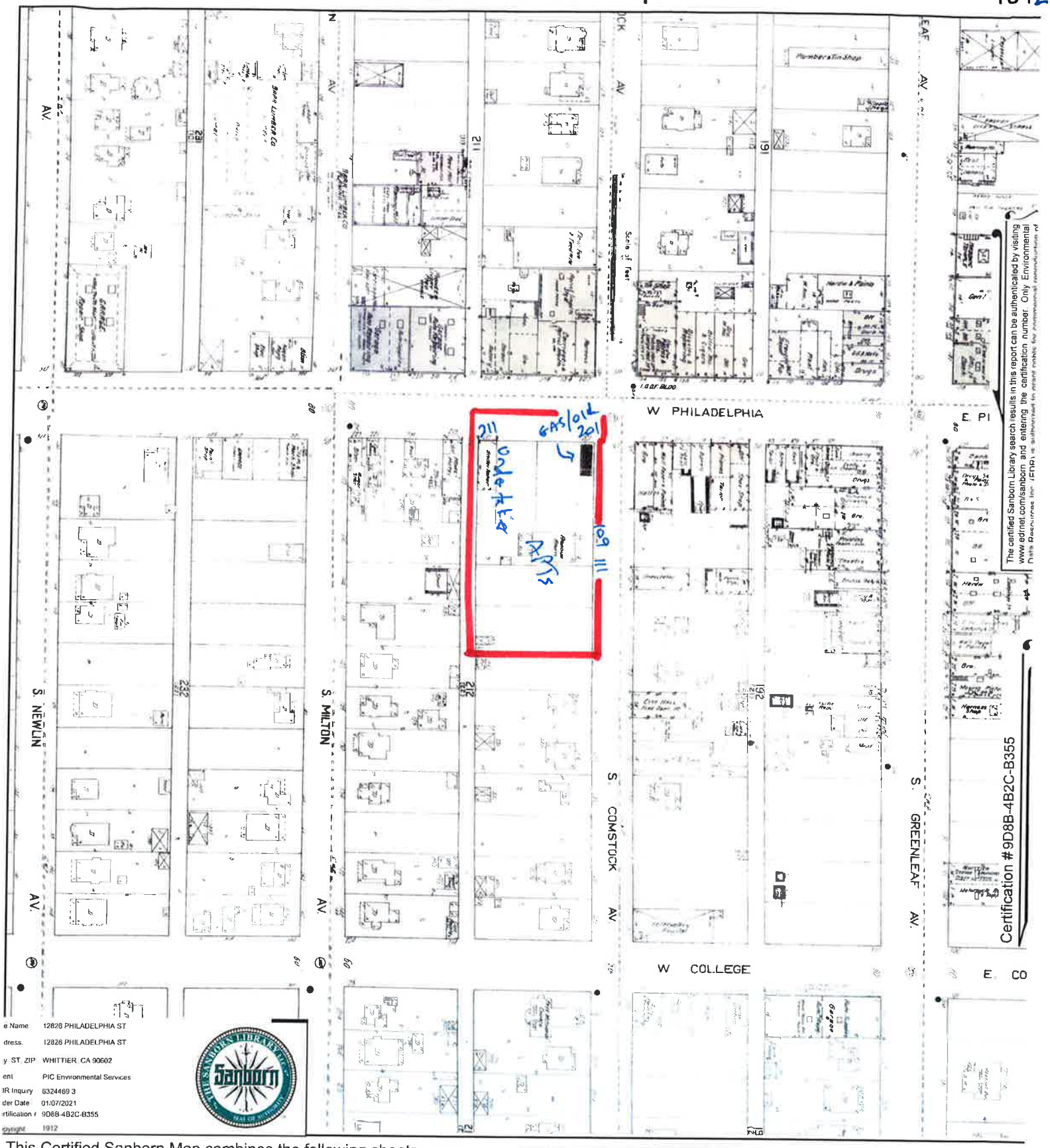


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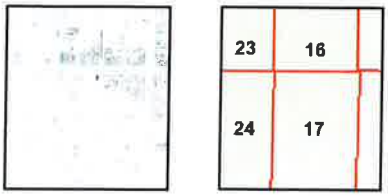
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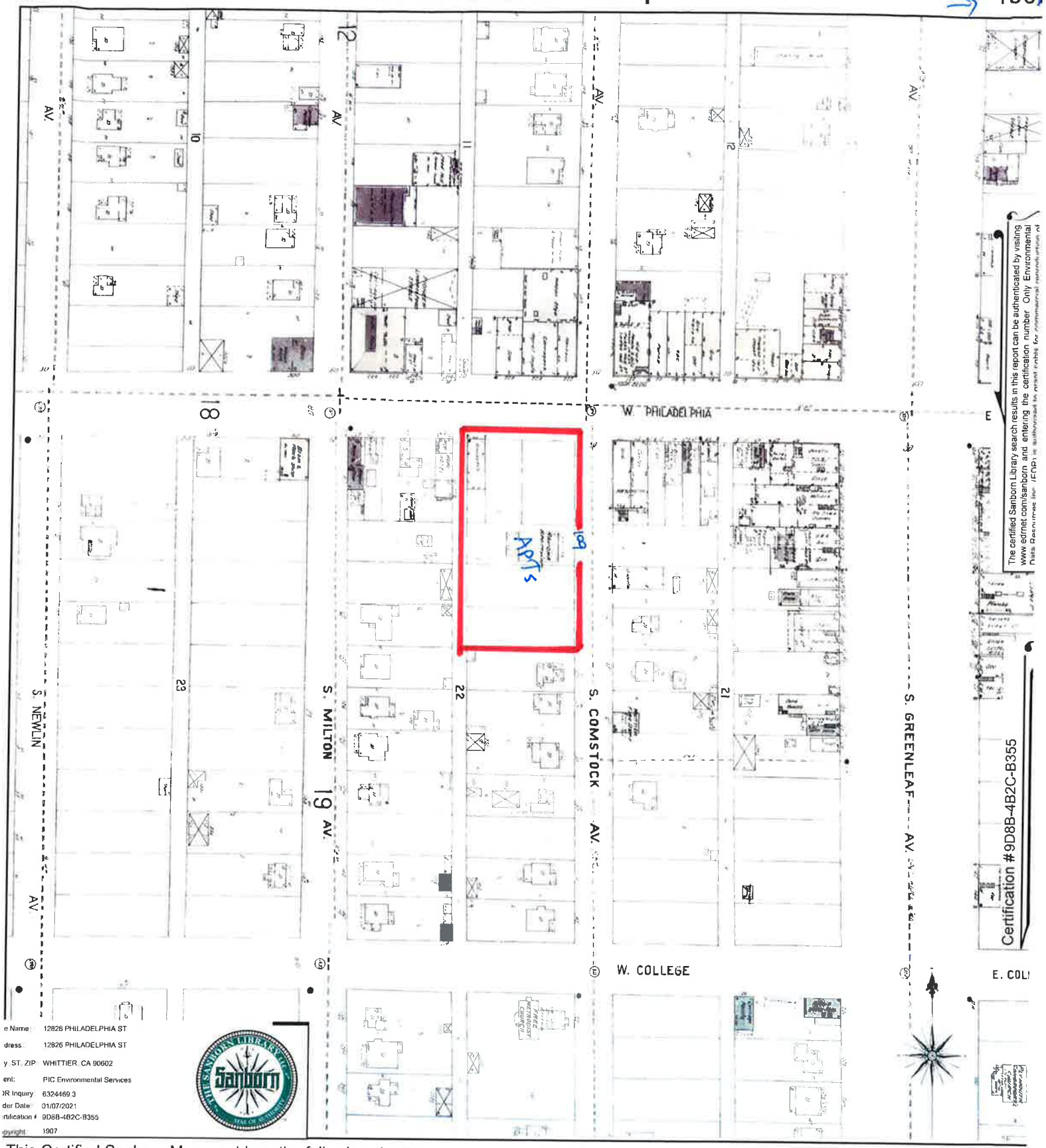


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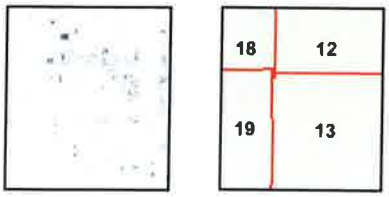
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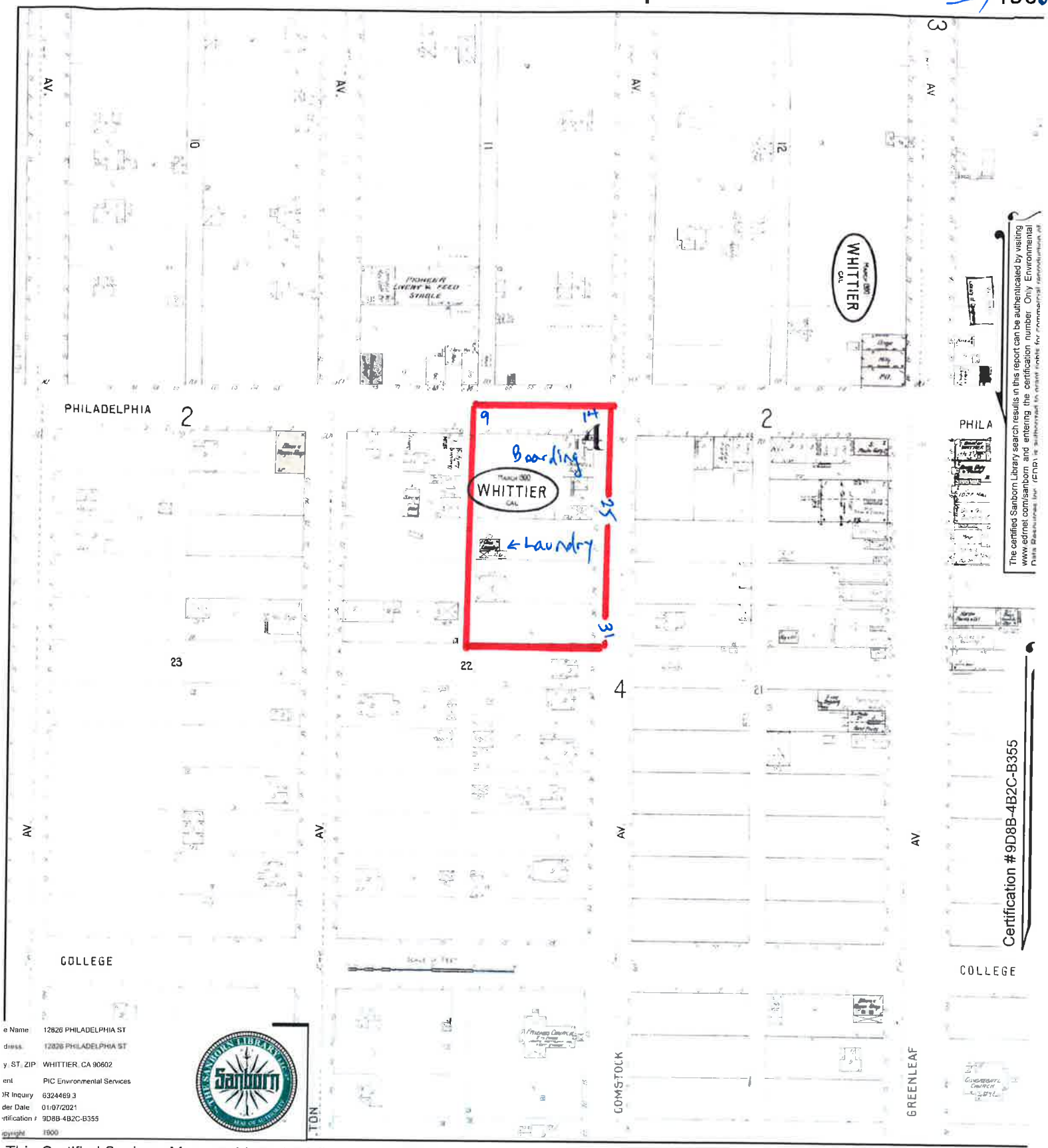


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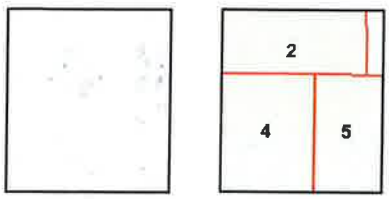


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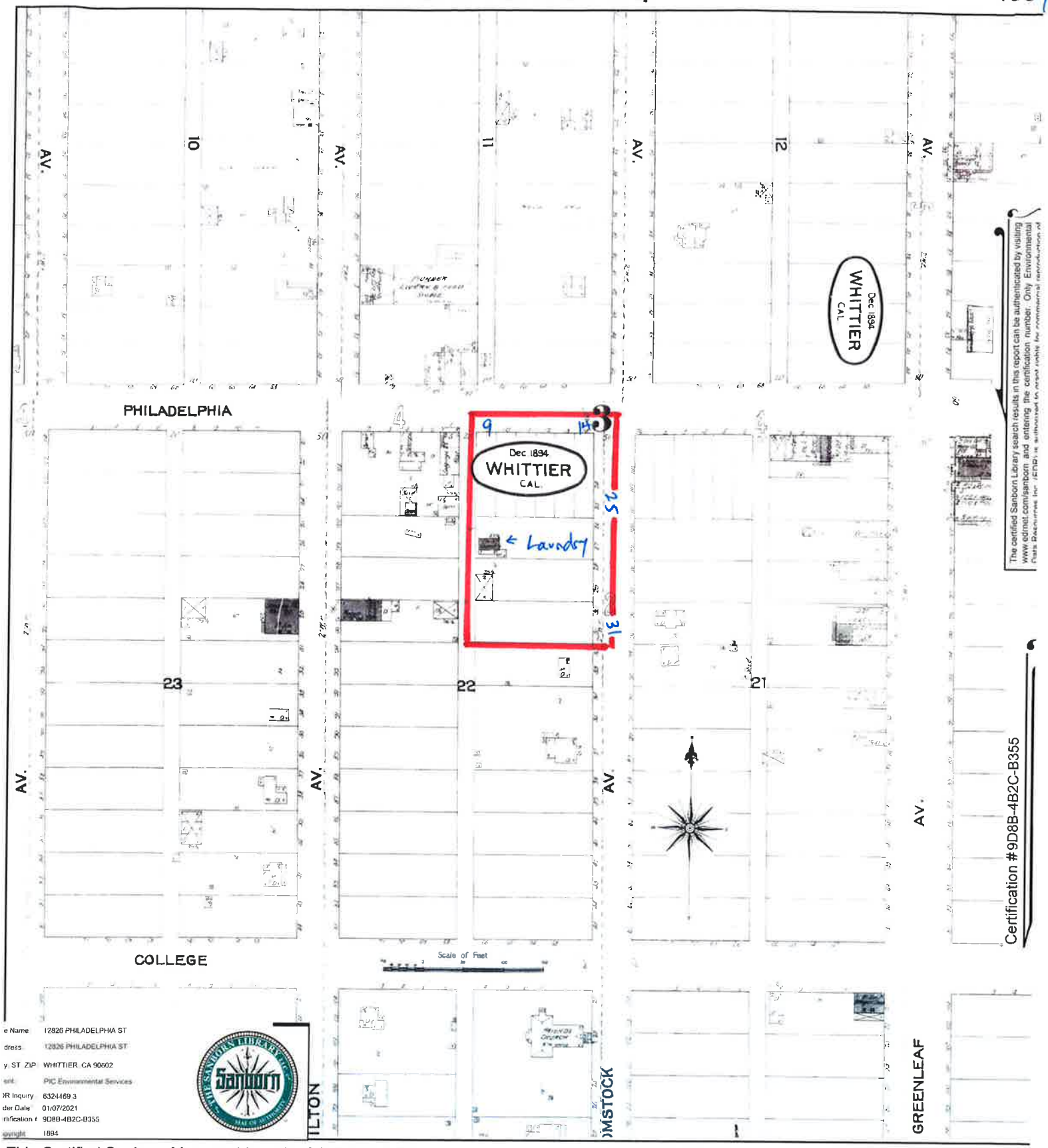
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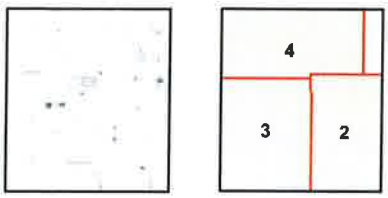
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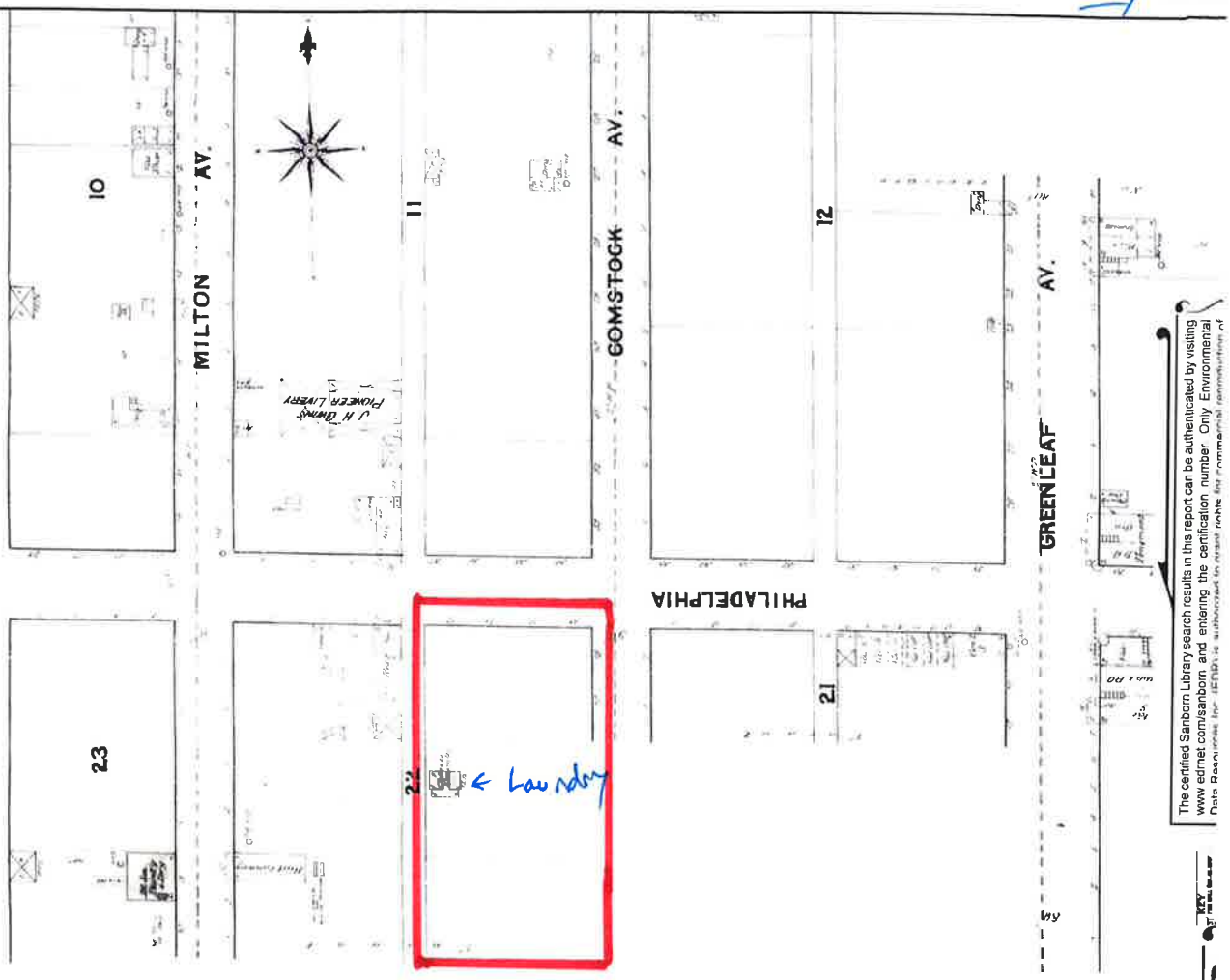
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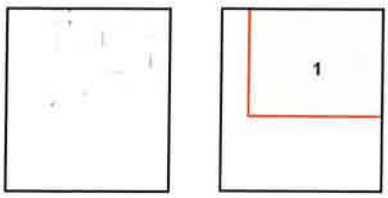


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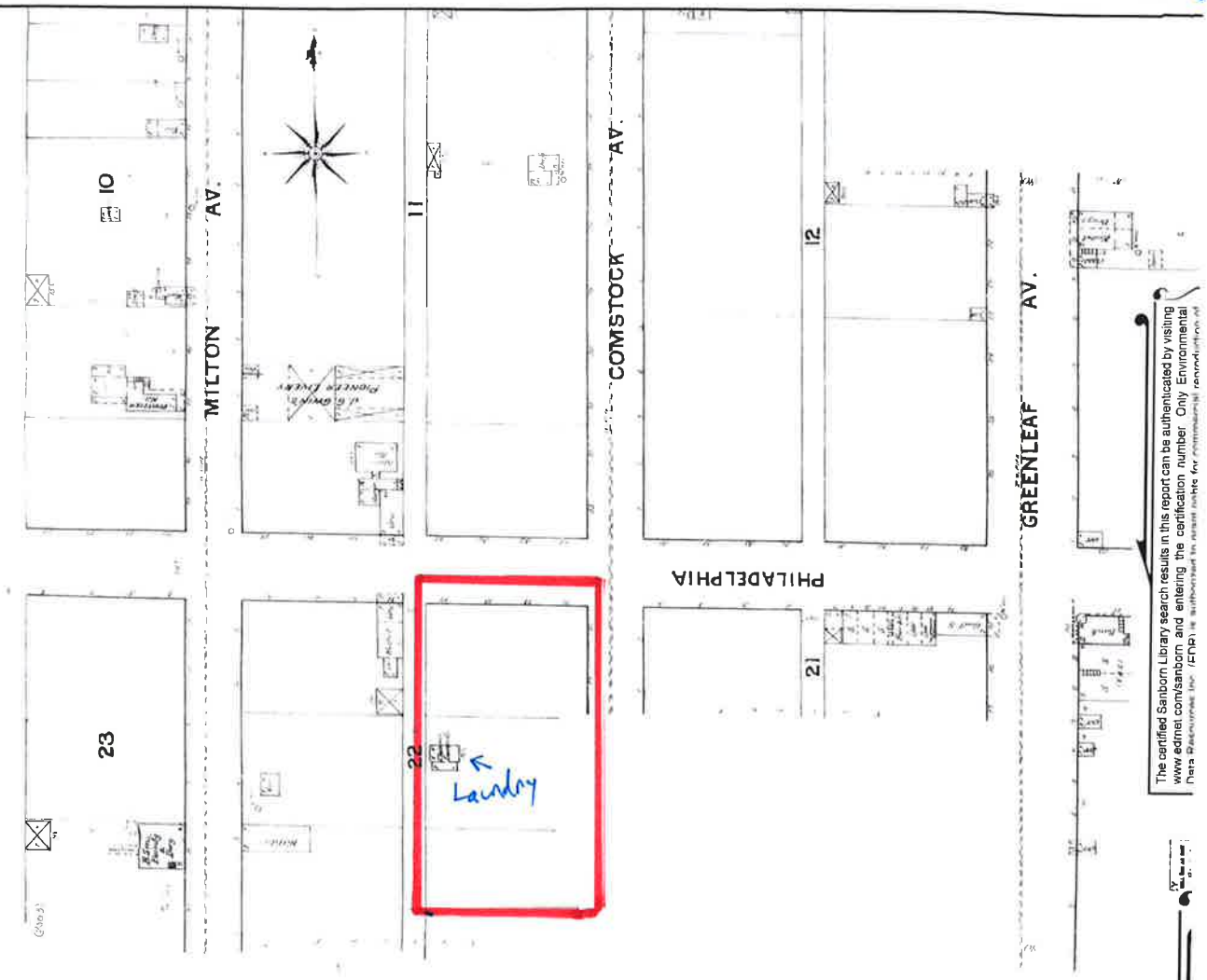
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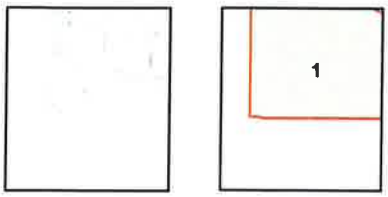


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APPENDIX 12

Comstock Residential

NOISE IMPACT ANALYSIS

CITY OF WHITTIER

PREPARED BY:

Bill Maddux, INCE
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(619) 788-1971

OCTOBER 22, 2024

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
INCE	Institute of Noise Control Engineering
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
mph	Miles per hour
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Comstock Residential
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the potential noise impacts and the necessary noise mitigation measures, if any, for the proposed Comstock Residential ("Project"). The Project site is located at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue, in the City of Whittier.

The results of this Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA. All impacts are considered less than significant without mitigation.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
On-Site Noise[1]	8	--	-
Interior Noise	8	*Less Than Significant*	-
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

[1] Impacts of the environment on a project are excluded from CEQA.

As discussed in the following report:

- the proposed buildings on the Project site would not exceed the City of Whittier maximum exterior noise level standard of 65 dBA CNEL;
- the proposed buildings on the Project site would be exposed to noise levels that are conditionally compatible with noise levels per the City General Plan, but with standard construction techniques and the provision of mechanical ventilation for each unit, interior noise levels would comply with State interior noise standards;
- operational noise sources, including heating, ventilation, and air conditioning units, and trash enclosure/collection activity, would not substantially increase noise levels in the Project area;
- construction activities would not expose local properties to excessive noise levels or result in substantial noise level increases; and,
- construction activities would not expose local properties to excessive vibration levels.

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Comstock Residential ("Project"). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for transportation related CNEL traffic noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related short-term construction noise and vibration impacts.

1.1 SITE LOCATION

The proposed Comstock Residential ("Project") is located at the southwest corner of the intersection of Philadelphia Street and Comstock Avenue, in the City of Whittier. The Project's location in relation to the surrounding area is shown on Exhibit 1-A.

The Project site is generally surrounded by commercial, medical, and residential land uses, with the nearest residential land use is approximately 36 feet west of the Project site and the Whittier Hospital Women's Health Center is located 80 feet north of the Project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates the preliminary Project site plan. The proposed Project consists of the development of 24 townhouses.

PROJECT DESIGN FEATURE

Project Design Features (PDF)

STRUCTURAL

To meet the State and City of Whittier 45 dBA CNEL interior noise standards for residential land use the Project is committed to and shall provide the following or equivalent noise abatement measures on Buildings A through F:

- Windows & Glass Doors: Windows and glass doors will be well-fitted, well-weather-stripped assemblies and shall have minimum sound transmission class (STC) ratings of 27.
- Exterior Doors: All exterior doors facing SR74 on Lots 1 through 32 will be well-fitted, well-weather stripped, and have minimum STC ratings of 27. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating.
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal. All exterior wall assemblies facing Philadelphia Street and Comstock Avenue shall have a minimum STC rating of 46.

- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ceilings: Ceilings shall be per manufacturer's specification or constructed of well-sealed gypsum board of at least one-half inch thick.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g., air conditioning) or active ventilation system (e.g., fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.

EXHIBIT 1-A: LOCATION MAP

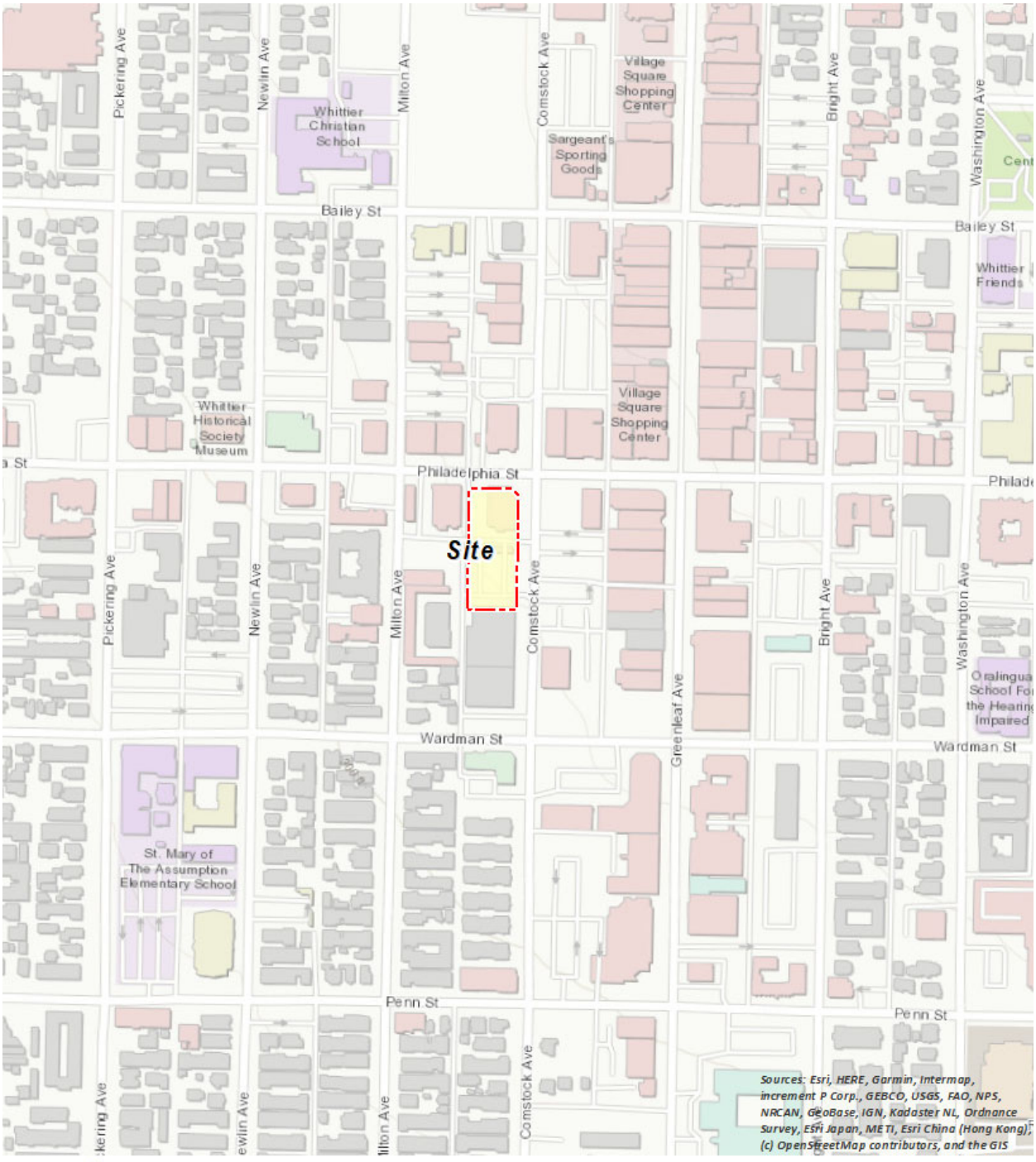
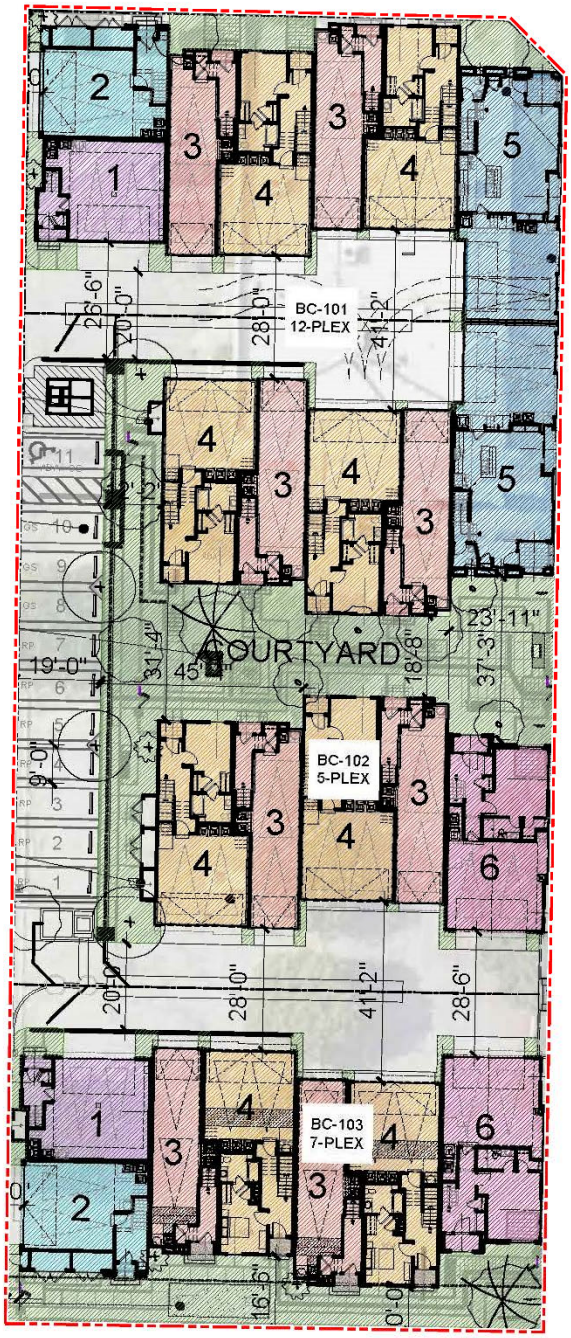


EXHIBIT 1-B: SITE PLAN



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LEGEND:

Site Boundary

2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud (2). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort (3). Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment, however. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Whittier relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. Based on guidance from the U.S. Department of Transportation, Federal Highway Administration (FHWA), Office of Environment and Planning, Noise and Air Quality Branch, the way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (2).

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation

associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source (4).

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects (2).

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearest residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure (4).

2.3.5 REFLECTION

Field studies conducted by the FHWA have shown that the reflection from barriers and buildings does not substantially increase noise levels (4). If all the noise striking a structure was reflected back to a given receiving point, the increase would be theoretically limited to 3 dBA. Further, not all the acoustical energy is reflected back to same point. Some of the energy would go over the structure, some is reflected to points other than the given receiving point, some is scattered by ground coverings (e.g., grass and other plants), and some is blocked by intervening structures and/or obstacles (e.g., the noise source itself). Additionally, some of the reflected energy is lost due to the longer path that the noise must travel. FHWA measurements made to quantify reflective increases in traffic noise have not shown an increase of greater than 1-2 dBA; an increase that is not perceptible to the average human ear.

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source (4).

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, recreation areas or buildings where people normally sleep. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized (5).

2.7 COMMUNITY RESPONSE TO NOISE

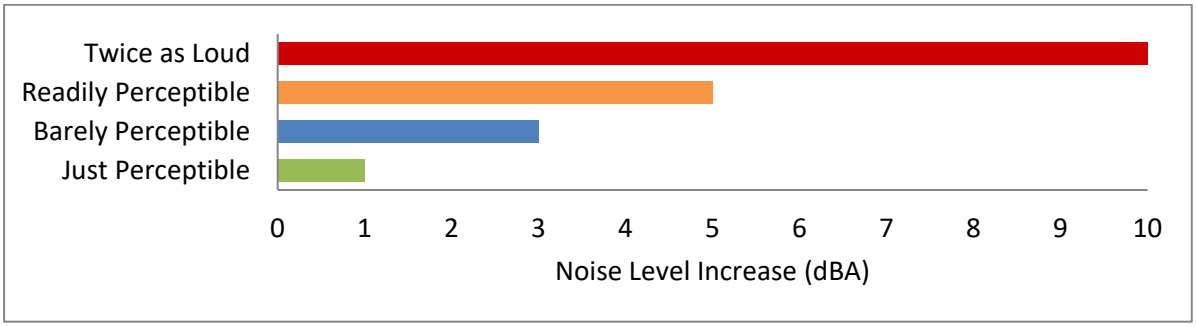
Community responses to noise varies depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty-five percent of the population will not complain even in very severe noise

environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment (6). Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain (6). Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. A change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



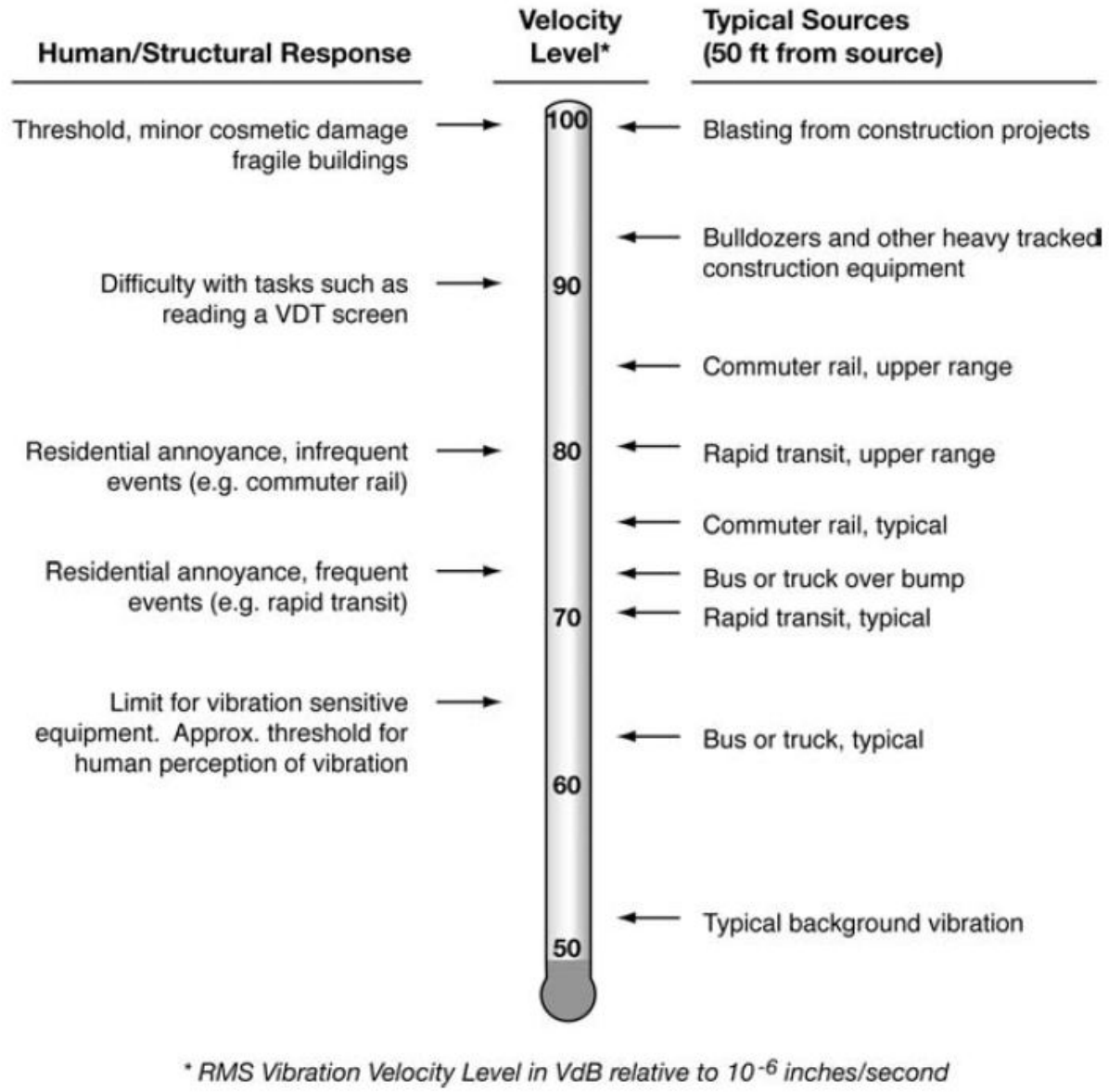
2.8 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (7), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



Source: Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual.

3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE

The State of California regulates transportation noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility.

GENERAL PLAN REQUIREMENTS

State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per the State of California General Plan Guidelines (General Plan Guidelines) adopted by the Governor's Office of Planning and Research (OPR). (8) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. Appendix D of the General Plan Guidelines provides additional guidelines for the preparation and content of a noise element, including land use and noise compatibility information.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts. CEQA is authorized by the California Public Resources Code, specifically Sections 21000 to 21189. (9) These sections outline the requirements for environmental review, public involvement, and the preparation of environmental documents, such as Environmental Impact Reports (EIRs) and Negative Declarations. CEQA also provides a framework for public agencies to mitigate environmental impacts when feasible.

In September 2023, the State of California added Section 21085 to the California Public Resources Code. Section 21085 – *Noise impact: residential projects*, states, "For purposes of this division, for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." Therefore, since this is a residential Project, this analysis does not evaluate potential noise generated by future occupants or their guests on sensitive receivers in the Project vicinity.

CALIFORNIA BUILDING CODE – TITLE 24

The State of California's interior noise standards for all new construction with habitable spaces are codified in the California Code of Regulations (CCR), Title 24, Building Standards Administrative Code, Chapter 12, Section 1206. A habitable space in a building is defined as a space used for "living, sleeping, eating, or cooking. Bathrooms, toilet rooms, closets, halls, storage, or utility spaces and similar areas are not considered habitable spaces." These noise standards primarily apply to all new residential construction, inns, hotels, motels, and residential care facility land uses in California for controlling interior noise levels resulting from exterior noise sources. The acceptable interior noise limit is 45 CNEL in all habitable rooms (10).

3.2 CITY OF WHITTIER

GENERAL PLAN

The City of Whittier has adopted the *Public Safety, Noise, and Health Element,* of the General Plan to control (11). The noise section specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise section identifies noise polices designed to protect, create, and maintain an environment free from noise that may jeopardize the health or welfare of sensitive receivers, or degrade quality of life. To protect the City of Whittier residents from excessive noise, the Noise section contains the following goal related to the Project:

Goal 10: *Noise levels community-wide that allow residents to enjoy quiet neighborhoods and outdoor activities.*

PSNH-10.1: Work toward the separation and buffering of major roadways from noise- sensitive land uses such as residences, care facilities, schools, and hospitals.

PSNH-10.2: Consider steps to correct existing noise problems. Avoid future problems through design measures such as buffers and barriers or through abatement procedures.

PSNH-10.3: Control, at their sources, any sounds that exceed accepted community noise levels.

PSNH-10.4: Consider noise impacts as part of the development review process, particularly the location of parking, recreational activities, crowd noises, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.

PSNH-10.5: Use the provisions in the City's noise ordinance to abate unlawful noise.

PSNH-10.6: Enforce Municipal Code noise controls for construction projects.

PSNH-10.7: Minimize new residential or other noise-sensitive land use development in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce outdoor activity area noise levels to a "normally acceptable" community noise equivalent level (CNEL).

PSNH-10.8: Require industrial uses and trucking-related uses to incorporate buffers that maintain acceptable noise levels for surrounding uses and areas.

PSNH-10.9: Regulate the use of sound-amplifying equipment to prevent impacts on sensitive receptors.

Land Use Compatibility

The General Plan Public Safety, Noise, and Health (PSNH) Element identifies a maximum exterior noise level limit for residential areas, by stating "In…Whittier…a CNEL of 65 dBA is used as a standard for maximum outdoor noise levels for residential areas." *Noise and Land Uses Compatibility Guidelines* (Table PSNH-5) in the City of Whittier PSNH Element, noise section provides guidelines to evaluate the compatibility of transportation-related noise with various land uses. It is based on the Noise Element Guidelines in the California Governor's Office of Planning and Research (OPR) General Plan Guidelines. The compatibility criteria, shown on Exhibit 3-A, provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

The *Noise and Land Use Compatibility Guidelines* describe categories of compatibility and not specific noise standards. According to these categories of compatibility, residential land uses in the city are considered *normally acceptable* with exterior noise levels below 60 dBA CNEL, *conditionally acceptable* with exterior noise levels below 70 dBA CNEL, and *normally unacceptable* for noise levels between 70-75 dBA CNEL (11). Based on the OPR Noise Element Guidelines, which the City of Whittier used to develop its compatibility guidelines, state that for land uses *exposed to conditionally compatible* and *normally unacceptable* noise levels, "new construction for development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design." Under *conditionally acceptable* conditions, "conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice." (12)

EXHIBIT 3-A: NOISE AND LAND USE COMPATIBILITY GUIDELINES

Land Use Category	Community Noise Exposure Limit (CNEL or DNL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low-Density Single-Family, Duplex, Mobile Homes	60	70	75	75+
Residential - Multi-Family	65	70	75	75+
Transient Lodging - Motels, Hotels	65	70	80	80+
Schools, Libraries, Religious Buildings, Hospitals, Nursing Homes	70	70	80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	70	N/A	70+
Sports Arenas, Outdoor Spectator Sports	N/A	N/A	75	75+
Playgrounds, Neighborhood Parks	70	70	75	75+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75	N/A	80	80+
Office Buildings, Business Commercial and Professional	70	77.5	77.5+	N/A
Industrial, Manufacturing, Utilities, Agriculture	75	80	80+	N/A

Source: OPR, 2017, Appendix D

Source: City of Whittier General Plan, 2021.

MUNICIPAL CODE

To analyze noise impacts originating from a designated fixed location or private property such as the Comstock Residential Project, stationary-source (operational) noise is typically evaluated against standards established under a City's Municipal Code where available.

Chapter 8.32 of the City of Whittier Municipal Code regulates control of noise and vibration. This Chapter was updated in February 2020. The current City Municipal Code is more general in nature and does not prescribe specific noise limits. Section 8.32.030 of the City Municipal Code specifies: It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any excessive or unreasonable noise, which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. Section 8.32.060 indicates that the official's normal hearing faculties shall be the primary means of noise detection. Based on the evaluation criteria, a readily noticeable change of ≥ 5 dBA CNEL Project increase is used to evaluate operational noise impacts. City of Whittier noise ordinance is included in Appendix 3.1.

3.4 CONSTRUCTION NOISE STANDARDS

Section 8.32.040 discusses loud, annoying, and unnecessary noises, and specifically defines horns and signaling devices (section F), erection or demolition of buildings, the grading and excavation of land, the start up and use of heavy equipment (e.g., dump trucks and graders), and the use of jack hammers. These noises would be in violation of the Municipal Code except on weekdays between the hours of 7:00 a.m. and 6:00 p.m. and on Saturdays 8:00 a.m. to 5:00 p.m.

However, neither the City of Whittier General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for residential land uses, 85 dBA L_{eq} for commercial land uses, and 90 dBA L_{eq} for industrial uses (7 p. 179).

3.5 CONSTRUCTION VIBRATION STANDARDS

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction

equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (7)

To analyze vibration impacts originating from the operation and construction of the Comstock Residential, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Whittier does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (13 p. 38) Table 19, vibration damage are used in this noise study to assess potential temporary construction-related impacts at adjacent building locations.

The construction vibration damage potential criteria include consideration of the building conditions. (3 p. 182) Table 3-1 describes the maximum acceptable transient and continuous vibration building damage potential levels by structure type and condition. The existing buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

TABLE 3-1: BUILDING DAMAGE VIBRATION CRITERIA

Structure and Condition	Maximum Transient Vibration Levels PPV (in/sec)	Maximum Continuous Vibration Levels PPV (in/sec)
Extremely fragile historic buildings	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.

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4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (8) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

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 ground-borne vibration or ground-borne 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 two 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?

While the City of Whittier General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Guideline A. CEQA Appendix G Guideline C applies to nearby public and private airports, if any, and the Project's land use compatibility.

4.1 CEQA GUIDELINES NOT FURTHER ANALYZED

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the San Gabriel Valley Airport located 7.2 miles north of the Project site. As such, the Project site would not be exposed to excessive noise levels from airport operations, and therefore, impacts are considered *less than significant,* and no further noise analysis is conducted in relation to Guideline C.

4.2 NOISE-SENSITIVE RECEIVERS

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (14)

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (15) developed guidance to be used for the assessment

of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (14) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria would be exceeded. Therefore, for this analysis, FICON identifies a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the noise compatibility levels (Exhibit 3-A) for a given land use is exceeded. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance.

The FICON guidance provides an established source of criteria to assess the impacts of a substantial permanent increase in ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (4 p. 9) and Caltrans (16 p. 2_48).

Based on Section 8.32.060 of the City of Whittier Municipal Code, a readily noticeable change of ≥ 5 dBA CNEL Project increase is used to evaluate operational noise impacts.

4.3 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
On-Site	Exterior Noise Compatibility[1]	See Exhibit 3-A	
	Interior Noise Level Standard[1]	45 dBA CNEL	
Operational	Exterior Noise Level Standards[2]	≥ 5 dBA CNEL Project increase	
Construction	Noise Level Threshold[3]	80 dBA L_{eq}	n/a
	Vibration Level Threshold[3]	0.3 in/sec PPV	

[1] City of Whittier General Plan.
[2] City of Whittier Municipal Code Section 8.32.060.
[3] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

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5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Tuesday, November 23, 2021. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (17)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (7)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (7) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the equivalent noise level or L_{eq}. The L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located northwest of the Project site near multi-family residential at 6704 Milton Avenue.	55.4	48.9
L2	Located east of the Project site near The Good Shepherd at 7021 Greenleaf Ave.	58.2	53.4
L3	Located southwest of the Project site near single-family residence at 7052 Milton Avenue.	62.8	54.7
L4	Located west of the Project site near single-family residence at 7014 Milton Avenue.	55.9	51.0

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with the local surface streets surrounding the Project site and measurement locations. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations.

EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS



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6 TRAFFIC NOISE PREDICTION METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future on-site traffic noise environment. Consistent with the *Land Use Compatibility for Community Noise Exposure*, all transportation related noise levels are presented in terms of the 24-hour CNEL's.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (18) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (19) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (20)

Table 6-1 presents the roadway parameters used to assess the Project's on-site transportation noise impacts. Table 6-2 provides the time of day (daytime, evening, and nighttime) vehicle splits and Table 6-3 presents the traffic flow distributions (vehicle mix) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA noise prediction model.

TABLE 6-1: ROADWAY PARAMETERS

Roadway	Lanes	Classification[1]	Design Capacity (ADT)[2]	Speed (MPH)[3]	Site Conditions
Philadelphia Street	4	Secondary	15,000	30	Soft
Comstock Street	2	Collector	15,000	25	Soft

[1] City of Whittier General Plan, Figure MI-1 Street Classification.
[2] Highway Capacity Manual, Simplified Method.
[3] Posted Speed Limit

TABLE 6-2: TIME OF DAY VEHICLE SPLITS

Vehicle Type	Time of Day Splits[1]			Total of Time of Day Splits
	Daytime	Evening	Nighttime	
Autos	77.50%	12.90%	9.60%	100.00%
Medium Trucks	84.80%	4.90%	10.30%	100.00%
Heavy Trucks	86.50%	2.70%	10.80%	100.00%

[1] Typical Southern California vehicle mix.
"Daytime" = 7:00 a.m. to 7:00 p.m.; "Evening" = 7:00 p.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

TABLE 6-3: TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

[1] Typical Southern California vehicle mix.

7 ON-SITE TRAFFIC NOISE IMPACTS

An on-site exterior noise impact analysis has been completed to determine the traffic noise exposure and to identify potential necessary noise abatement measures for the proposed Comstock Residential Project that is consistent with City of Whittier noise standards. It is expected that the primary source of noise impacts to the Project site will be traffic noise from Philadelphia Street and Comstock Avenue.

7.1 ON-SITE EXTERIOR NOISE ANALYSIS

Using the FHWA traffic noise prediction model and the parameters outlined in Section 6, the expected future exterior noise levels for the building façade were calculated. Table 7-1 presents a summary of future exterior noise levels at the building façade within the Project site. The on-site traffic noise level analysis indicates that the building facades will experience exterior noise levels ranging from 62.1 to 64.9 dBA CNEL.

The future exterior noise levels at the proposed balconies/building facades are shown to range from 62.1 to 64.9 dBA CNEL. This will comply with the City of Whittier maximum exterior noise level standard of 65 CNEL for residential land uses. However, future noise levels are also considered "*conditionally acceptable*" under the City of Whittier noise and land use compatibility standards for single-family residential land uses.

TABLE 7-1: EXTERIOR NOISE LEVELS (CNEL)

Roadway	Unmitigated Exterior Noise Level (dBA CNEL)[1]			
	1st Floor	2nd Floor	3rd Floor	4th Floor
Philadelphia Street	64.9	64.4	64.5	63.7
Comstock Street	63.6	64.1	63.1	62.1

[1] Exterior noise calculations at the building façade are shown in Appendix 7.1.

As shown in Table 7-1, exterior noise levels will meet the City of Whittier noise level *conditionally compatible* level for single-family residential land uses. Therefore, "*Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.*"

7.2 INTERIOR NOISE ANALYSIS

While the City does not explicitly define an interior noise level limit for residential land uses, the OPR Noise Element Guidelines and Section 1206.4 of the 2022 California Building Code identify an interior noise level limit of 45 CNEL for residential land uses. (10) (21) To assess the interior noise levels, the future exterior noise levels are calculated at the first through fourth-floor building facade locations. Since each unit would have air conditioning, as assessed in Chapter 9, a standard 25 dBA reduction is applied to the exterior noise level to determine if additional structural measures are necessary to comply with the 45 dBA CNEL interior noise level standard.

7.2.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (21) (22) (23) Several methods are used to improve interior noise reduction, including: [1] weather-stripping solid core exterior doors; [2] upgrading windows and glass doors; [3] ensuring exterior wall/roof assembles are free of cutouts or openings; and [4] providing mechanical ventilation/air conditioning.

7.2.2 ON-SITE INTERIOR NOISE LEVEL ASSESSMENT

The following interior analysis was completed assuming windows in a closed position. Table 7-2 shows that the future noise levels within the first-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 38.6 to 39.9 dBA CNEL. Table 7-3 shows that the future noise levels within the second-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 39.1 to 39.4 dBA CNEL. Table 7-4 shows that the future noise levels within the third-floor units adjacent to Philadelphia Street and Comstock Street are predicted to range from 38.1 to 39.5 dBA CNEL. The interior noise level analysis shows that the 45 dBA CNEL interior noise level standard can be satisfied using standard construction with the windows in a closed position.

TABLE 7-2: FIRST FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.9	19.9	25.0	No	39.9	45	No
Comstock Street	63.6	18.6	25.0	No	38.6	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

TABLE 7-3: SECOND FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.4	19.4	25.0	No	39.4	45	No
Comstock Street	64.1	19.1	25.0	No	39.1	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

TABLE 7-4: THIRD FLOOR INTERIOR NOISE IMPACTS (CNEL)

Receiver Location	Noise Level at Façade[1]	Required Interior NR[2]	Minimum Calculated Interior NR	Upgraded Windows[3]	Interior Noise Level[4]	Threshold	Threshold Exceeded?
Philadelphia Street	64.5	19.5	25.0	No	39.5	45	No
Comstock Street	63.1	18.1	25.0	No	38.1	45	No

[1] Exterior noise level at the facade with a windows closed condition with air conditioning.
[2] Noise reduction required to satisfy the City of Whittier General Plan 45 dBA CNEL interior noise standard for residential uses.
[3] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[4] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise Reduction

8 SENSITIVE RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Exhibit 8-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, five receiver locations (R#) in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: R1 represents 6737 Milton Avenue, approximately 352 feet northwest of the Project site, and is placed at the nearest building façade. A 24-hour noise measurement was taken near this location, L1.

R2: R2 represents the Grace Brethren Church Whittier at 6704 Milton Avenue, approximately 563 feet north of the Project site, and is placed at the nearest building façade. A 24-hour noise measurement was taken near this location, L1.

R3: R3 represents The Good Shepherd Church at 7021 Greenleaf Ave, approximately 225 feet east of the Project site, and is placed at the nearest building façade. A 24-hour noise measurement was taken near this location, L2.

R4: R4 represents an existing single-family residence at 7052 Milton Avenue, approximately 174 feet southwest of the Project site, and is placed in the outdoor living areas (backyards). A 24-hour noise measurement was taken near this location, L3.

R5: R5 represents an existing single-family residence at 7014 Milton Avenue, approximately 33 feet west of the Project site, and is placed in the outdoor living areas (backyards). A 24-hour noise measurement was taken near this location, L4.

EXHIBIT 8-A: SENSITIVE RECEIVER LOCATIONS



9 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source (i.e., on-site) operational noise impacts at the nearest receiver locations, identified in Section 8, resulting from the operation of the proposed Comstock Residential Project.

9.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical daytime and nighttime activities at the Project site. The proposed residential development is not expected to include any specific type of operational noise levels beyond the typical noise sources associated with residential land uses in the Project study area. However, to present a conservative approach, on-site Project-only operational noise sources are analyzed in this noise study and are expected to include: heating, ventilation, and air conditioning units, and trash enclosure/collection activity.

ROOF-TOP AIR CONDITIONING UNITS

To assess the noise levels created by the air conditioning units, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Rheem RP14 Series). The air conditioning units were modeled as operating 45 minutes per hour during the daytime and 30 minutes at nighttime, which represents the typical maximum operating time for properly sized AC systems. The acoustic center of the air conditioning units is anticipated to be located 3 feet above roof level. At a uniform reference distance of 50 feet, the units would generate a reference noise level of 45.4 dBA L_{eq}.

TRASH ENCLOSURE/COLLECTION ACTIVITY

To describe the noise levels associated with a trash enclosure and collection activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, and trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the Project site. The measured reference noise level at the uniform 50-foot reference distance is 57.3 dBA Leq for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the trash enclosures for the Project's proposed building. Typical trash enclosure activities are estimated to occur for 10 minutes per hour.

PARKING LOT ACTIVITY

Parking activities are based on the area of the parking spaces. The Project includes approximately 11 new surface parking spaces. The surface parking spaces are assumed to have up to 2 movements per hour for a total of 22 events in an hour. Based on studies conducted in Europe and Australia, the average parking procedure, which included movement associated with either

entering or exiting the parking area, parking the vehicles, and opening and closing doors resulted in a sound power level of approximately 63 dBA L_w/square meter per event (24) (25).

9.2 REFERENCE NOISE LEVELS

While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The reference project operational noise levels are based on the Project related noise sources shown on Exhibit 9-A. The reference Project operational sound power levels are summarized in Table 9-1.

TABLE 9-1: REFERENCE NOISE LEVELS

Noise Source	Noise Source Height (Feet)	Source Type	Min./Hour[2]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[3]
			Day	Night		
Air Conditioner Unit	3'	Point	45	30	45.4	77.0
Trash Enclosure Activity[1]	5'	Point	10	10	57.4	89.0
Parking Lot Activity	0'	Area	60	60	31.4	63.0

[1] As measured by Urban Crossroads, Inc.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

9.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise levels at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and

other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 9.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

9.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include heating, ventilation, and air conditioning units, and trash enclosure/collection activity, Urban Crossroads, Inc. calculated the unmitigated operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 9-2 shows the Project operational daytime noise levels. The hourly noise levels at the off-site receiver locations are expected to range from 27.4 to 46.3 dBA L_{eq}. Appendix 9.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

TABLE 9-2: PROJECT DAYTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})				
	R1	R2	R3	R4	R5
Air Conditioner Unit	28.5	25.3	33.3	33.7	43.3
Trash Enclosure Activity	26.7	23.2	28.2	27.5	43.3
Parking Lot Activity	15.4	11.7	18.9	19.6	40.9
Total (All Noise Sources)	**30.7**	**27.4**	**34.5**	**34.6**	**46.3**

[1] See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

Table 9-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 29.6 to 48.2 dBA L_{eq}. The differences between the daytime and nighttime noise levels is largely related to the duration of noise activity (Table 9-1). Appendix 9.1 includes the detailed noise model inputs including the existing perimeter walls used to estimate the Project operational noise levels presented in this section.

TABLE 9-3: PROJECT NIGHTTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})				
	R1	R2	R3	R4	R5
Air Conditioner Unit	31.3	28.1	36.0	36.4	46.0
Trash Enclosure Activity	27.7	24.2	29.1	28.5	44.3
Parking Lot Activity	15.4	11.7	18.9	19.6	40.9
Total (All Noise Sources)	**32.9**	**29.6**	**36.8**	**37.1**	**48.2**

[1] See Exhibit 9-A for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1.

9.5 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational, and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Tables 9-2 and 9-3, respectively.

As indicated in Tables 9-4 and 9-5, the Project will generate unmitigated daytime and nighttime operational noise level increases ranging from less than 0.0 to 1.3 dBA L_{eq} at the nearest receiver locations. In effect, the amount to which a given noise level increase is considered acceptable is reduced based on existing ambient noise conditions. Based on the significance criteria presented in Section 4.2, the Project-related operational noise level increases will satisfy the operational noise level increase criteria at the nearest sensitive receiver locations and the impact will be *less than significant.*

EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS

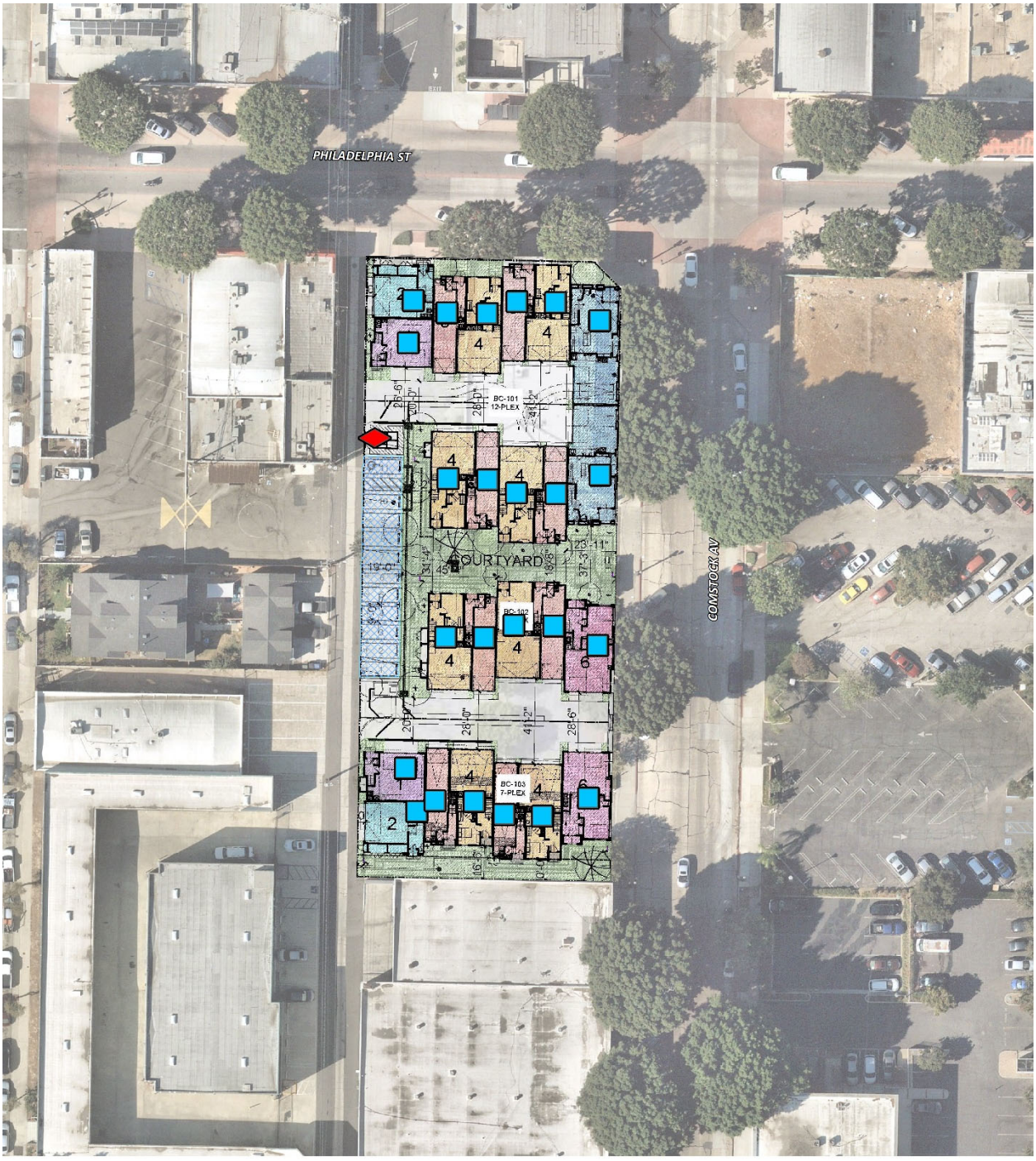


TABLE 9-4: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	32.9	L1	55.4	55.4	0.0	5.0	No
R2	29.6	L1	55.4	55.4	0.0	5.0	No
R3	36.8	L2	58.2	58.2	0.0	5.0	No
R4	37.1	L3	62.8	62.8	0.0	3.0	No
R5	48.2	L4	55.9	56.6	0.7	5.0	No

[1] See Exhibit 8-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 9-2.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] See Table 4.1.

TABLE 9-5: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	30.7	L1	48.9	49.0	0.1	5.0	No
R2	27.4	L1	48.9	48.9	0.0	5.0	No
R3	34.5	L2	53.4	53.5	0.1	5.0	No
R4	34.6	L3	54.7	54.7	0.0	5.0	No
R5	46.3	L4	51.0	52.3	1.3	5.0	No

[1] See Exhibit 8-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 9-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] See Table 4.1.

10 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 10-A shows the construction noise source locations in relation to the nearest sensitive receiver locations previously described in Section 8. To prevent high noise-levels of construction noise from impacting noise-sensitive land uses, Section 8.32.040 of the City of Whittier Municipal Code prohibits construction activities between the hours of 6:00 p.m. and 7:00 a.m. and on Saturdays 5:00 p.m. and 8:00 a.m. .

10.1 CONSTRUCTION ACTIVITIES

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

10.2 TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

To describe peak construction noise activities, this construction noise analysis was prepared using reference noise level measurements published in the *FHWA Road Construction Nosie Model* (RCNM) (26). The RCNM database provides a conservative source of reference construction noise levels. Table 10-1 provides a summary of the FHWA construction reference noise level measurements expressed in hourly average dBA L_{eq} using the estimated FHWA RCNM usage factors to describe the typical construction activities for each stage of Project construction (26).

EXHIBIT 10-A: TYPICAL CONSTRUCTION NOISE SOURCE LOCATIONS



TABLE 10-1: TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Demolition	Front End Loader	75.0	83.8	115.4
	All Other Equip	82.0		
	Excavator	77.0		
Site Preparation	Dozer	78.0	81.0	112.7
	Front End Loader	75.0		
	Front End Loader	75.0		
Grading	Dozer	78.0	81.8	113.5
	Excavator	77.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	81.1	112.8
	Tractor	80.0		
	Welder/Torch	70.0		
Paving	Paver	74.0	83.1	114.7
	All Other Equip	82.0		
	Roller	73.0		
Architectural Coating	Crane	73.0	77.4	109.1
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

10.3 TYPICAL CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearest sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest combined reference noise level operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. As shown on Table 10-2, the construction noise levels are expected to range from 52.9 to 77.2 dBA L_{eq}, and the highest construction levels are expected to range from 59.3 to 77.2 dBA L_{eq} at the nearest receiver locations. Appendix 10.1 includes the detailed CadnaA construction noise model inputs.

TABLE 10-2: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})						
	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	62.2	59.4	60.2	59.5	61.5	55.8	62.2
R2	59.3	56.5	57.3	56.6	58.6	52.9	59.3
R3	67.1	64.3	65.1	64.4	66.4	60.7	67.1
R4	67.2	64.4	65.2	64.5	66.5	60.8	67.2
R5	77.2	74.4	75.2	74.5	76.5	70.8	77.2

[1] Construction noise source and receiver locations are shown on Exhibit 10-A.
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1.

10.4 TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level thresholds based on land use as developed by the FTA are used as reasonable thresholds to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the significance thresholds during Project construction activities as shown on Table 10-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

TABLE 11-3: TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})			
	Highest Construction Noise Levels[2]	Land Use	Threshold[3]	Threshold Exceeded?[4]
R1	62.2	Medical	80	No
R2	59.3	Religious	80	No
R3	67.1	Religious	80	No
R4	67.2	Residential	80	No
R5	77.2	Residential	80	No

[1] Noise receiver locations are shown on Exhibit 10-A.
[2] Highest construction noise level operating at the Project site boundary to nearby receiver locations (Table 11-2).
[3] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

10.5 TYPICAL CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground vibration levels associated with various types of construction equipment are summarized on Table 10-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 10-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

Table 10-5 presents the expected typical construction equipment vibration levels at the nearest receiver locations. At distances ranging from 33 feet to 563 from typical Project construction activities (at the Project site boundary), construction vibration levels are estimated to range from 0.001 to 0.059 in/sec PPV at the nearest receiver locations. The Project construction is not expected to generate vibration levels exceeding the City of Whittier maximum acceptable vibration standard of 0.03 in/sec PPV. Further, impacts at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period, but will occur rather only during the times that heavy construction equipment is operating proximate to the Project site perimeter.

Moreover, construction at the Project site will be restricted to daytime hours consistent with City requirements thereby eliminating potential vibration impact during the sensitive nighttime hours. On this basis the potential for the Project to result in exposure of persons to, or generation of, excessive ground-borne vibration is determined to be *less than significant*.

TABLE 10-5: TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Receiver Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level		
R1	352'	0.000	0.001	0.001	0.002	0.002	0.30	No
R2	563'	0.000	0.000	0.001	0.001	0.001	0.30	No
R3	225'	0.000	0.001	0.003	0.003	0.003	0.30	No
R4	174'	0.000	0.002	0.004	0.005	0.005	0.30	No
R5	33'	0.002	0.023	0.050	0.059	0.059	0.30	No

[1] Construction receiver locations are shown on Exhibit 10-A.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 10-5).
[4] FTA Construction Noise and Vibration Manual, 2018.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

11 REFERENCES

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3. **Environmental Protection Agency Office of Noise Abatement and Control.** *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* March 1974. EPA/ONAC 550/9/74-004.
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12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Comstock Residential Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
APA – American Planning Association
AWMA – Air and Waste Management Association
INCE – Institute of Noise Control Engineers – Member

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF WHITTIER NOISE ORDINANCE

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Chapter 8.32 - NOISE CONTROL

Sections:

Footnotes:
*--- (**2**) ---*
***Editor's note—** Ord. No. 2943, § 1, adopted Jan. 12, 2010, repealed the former Chapter 8.32, §§ 8.32.010—8.32.120, and enacted a new Chapter 8.32 as set out herein. The former Chapter 8.32 pertained to similar subject matter and derived from Ord. 2747, § 2(part), adopted in 1999; and Ord. 2869, § 29, adopted in 2006.*

8.32.010 - Purpose.

A. The making and creation of loud, unnecessary or unusual noises within the limits of the city is a condition which has existed for some time and the extent and volume of such noises is increasing.

B. The making, creation or maintenance of such loud, unnecessary, unnatural or unusual noises which are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the city; and

C. The necessity in the public interest for the provisions of this chapter is declared as a matter of legislative determination and public policy, and it is further declared that the provisions of this chapter are for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare, prosperity and peace and quiet of the city and its inhabitants.

(Ord. No. 2943, § 1, 1-12-10)

8.32.020 - Definitions.

A. "City" means the city of Whittier.

B. "City manager" means the city manager of the city of Whittier, or his/her designee.

C. "Chief of police" means the chief of the Whittier Police Department.

D. "Construction" means any site preparation, assembly, erection, substantial repair, alteration, demolition, or similar action.

E. "Continuous sound" means and denotes a sound the intensity of which remains essentially constant during a given period of time.

F. "Director" means the director of community development of the city of Whittier, or his/her designee.

G. "Daytime" denotes the local time of day between the hours of seven a.m. and nine p.m. on weekdays and between the hours of nine a.m. and nine p.m. on Saturdays, Sundays and local legal holidays.

H. "Emergency" means any occurrence or set of circumstances involving actual or imminent physical trauma or property damage, which demands immediate action.

I. "Emergency signal device" means any audible warning device, such as a gong, whistle or siren or any air horn or any similar device, used for emergency purposes or alert the public or emergency personnel to the existence of an emergency.

J. "Emergency work" means any work performed for the purpose of preventing or alleviating the physical trau property damage threatened or caused by an emergency.

K. "Mobile source" means any moving sound source on a public right-of-way.

L. "Motor vehicle" means a vehicle that is self-propelled. "Motor vehicle" includes, but is not limited to, passenger cars, trucks, truck-trailers, semi-trailers, campers, motorcycles, minibikes, go-carts, snowmobiles, mopeds, amphibious craft on land, dune buggies, all-terrain vehicles or racing vehicles. "Motor vehicle" does not include a self-propelled wheelchair, motorized tricycle, or motorized quadricycle, if operated by a person who, by reason of physical disability, is otherwise unable to move about as a pedestrian.

1. "Motorcycle" means (1) a motor vehicle having a seat or saddle for the use of the rider, designed to travel on not more than three wheels in contact with the ground; (2) a motor vehicle that has four wheels in contact with the ground, two of which are a functional part of a sidecar, is a motorcycle if the vehicle otherwise comes within the definition of subdivision (1); (3) a farm tractor is not a motorcycle; (4) a three-wheeled motor vehicle that otherwise meets the requirements of subdivision (1), has a partially or completely enclosed seating area for the driver and passenger, is used by local public agencies for the enforcement of parking control provisions, and is operated at slow speeds on public streets, is not a motorcycle. However, a motor vehicle described in this subdivision shall comply with the applicable sections of this code imposing equipment installation requirements on motorcycles.
2. "All-terrain vehicle (ATV)" means a motor vehicle that is all of the following: (1) designed for operation off of the highway by an operator with no more than one passenger; (2) fifty inches or less in width; (3) nine hundred pounds or less unladen weight; (4) suspended on three or more low-pressure tires; (5) has a single seat designed to be straddled by the operator, or a single seat designed to be straddled by the operator and a seat for no more than one passenger; (6) has handlebars for steering control.

M. "Nighttime" means those hours excluded from the definition of "daytime."

N. "Person" means any individual, corporation, partnership firm or any legal successor, representative or agent of the foregoing.

O. "Public right-of-way" means any street, avenue, boulevard, highway, alley, sidewalk or public space which has been dedicated for use by the general public and the dedication of which has been accepted by the appropriate governmental entity.

P. "Real property boundary" means an imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but it does not include intra-building real property division.

Q. "Small power equipment" means any motorized or engine powered device, including but not limited to lawn mowers, lawn and garden tools, leaf blowers, riding lawn mowers and power saws, but excluding motor vehicles.

R. "Sound amplifying equipment" means any machine or device for the amplification of the human voice, music or any other sound. Sound amplifying equipment as used herein shall not be construed

as including standard automobile radio when used and primarily audible only by the occupants of the vehicle in which installed or warning devices on authorized emergency vehicles or horns or other warning devices on other vehicles used only for traffic safety purposes.

S. "Special event" means assemblages, public meetings, and other special events including festivals, ceremonies, addresses, speeches, exhibits, performances, plays, circuses, musical events, athletic events that occur at a particular place and for a limited duration of time.

T. "Stadium event" means events held at a facility with permanent seating and accommodations for more than one thousand spectators.

U. "Stationary source" means any sound source operating or occurring on any public or private property.

V. "Weekday" means any day Monday through Friday, which is not a legal holiday.

(Ord. No. 2943, § 1, 1-12-10)

(Ord. No. 3112 , § 2, 2-25-20)

8.32.030 - Loud, annoying and unnecessary noises prohibited.

A. It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any excessive or unreasonable noise, which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

B. The standard that may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to, the following:

1. The level of the noise;
2. Whether the nature of the noise is usual or unusual;
3. Whether the origin of the noise is natural or unnatural;
4. The level and intensity of the background noise, if any;
5. The proximity of the noise to residential sleeping facilities;
6. The nature and zoning of the area within which the noise emanates;
7. The density of the inhabitation of the area within which the noise emanates;
8. The time of the day and night the noise occurs;
9. The duration of the noise, including whether it is of a temporary or short-term nature;
10. Whether the noise is recurrent, intermittent, or constant; and
11. Whether the noise is produced by a commercial or noncommercial activity.

(Ord. No. 2943, § 1, 1-12-10)

8.32.040 - Loud, annoying and unnecessary noises—Enumerated.

The city council finds the following to be loud, annoying and unnecessary noises, which are hereby declared to be in violation of this chapter; this list is deemed illustrative and shall not be construed in any way to be an exclusive or all-inclusive list of the noises prohibited by this chapter, it being the intent and purpose of this chapter to include

and prohibit all noises of the character described in this section. Where no specific distance is set for the determination of audibility, reference to noise disturbance shall be deemed to mean plainly audible at a distance of one hundred feet from the real property boundary of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on the public right-of-way, public property, or private property open to the public. References to "adjacent" or "neighboring" residences or units in this section shall mean those residences or units located next to or in close proximity to the source of the noise, and no specific distance standard shall be required for such locations.

A. Animals and Birds. The keeping of any animal or bird that causes frequent or long continued noise plainly audible by inhabitants or occupants of any adjacent or neighboring residential properties or units, or plainly audible at a distance of fifty feet from any nonresidential building or structure, shall be presumed to disturb the comfort and repose of any person in the vicinity and shall be prima facie evidence of a violation of this chapter; however, nothing in this subsection shall be construed to apply to occasional noises emanating from a legally operated kennel, animal hospital or veterinary clinic, humane society or pound.

B. Defect in Vehicle or Load. The use of any automobile, motorcycle or other vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.

C. Motor Vehicle Noises. Any loud or annoying noise made by any motor vehicle and not reasonably necessary to the operation thereof under the circumstances, including, but not limited to, noise caused by screeching of tires; racing or accelerating the engine, except in the course of repair or adjustment thereof during nighttime hours; backfiring the engine; or the emission of exhaust from the engine tail pipe or muffler.

D. Domestic Power Tools. Operating or permitting the operation of any mechanically powered saw, sander, drill, grinder, lawn or garden tool, snow blower, small power equipment, or similar device used outdoors in residential areas during nighttime hours so as to cause a noise disturbance across a residential real property boundary.

E. Engine-Repair and Testing. It shall be unlawful for any person to repair, rebuild or test any engine so as to create a noise disturbance, during nighttime hours.

F. Horns and Signaling Devices. The sounding of any horn or signaling device on any automobile, motor vehicle or any other vehicle on any street or public street except as a danger warning; the creation by means of any such signaling device of any unreasonably and unnecessarily loud or harsh sounds; the sounding of any such signaling device for an unnecessarily or unreasonably long period of time; or the use of any horn, whistle or other device operated by engine exhaust

G. Loudspeakers/Public Address System. The using, operating or playing, or permitting to be played, used or operated, of any radio receiving set, musical instrument, audio system, loudspeaker, sound amplifying equipment or other machine or device for the producing or reproducing of sound, which casts sound upon the streets for the purpose of commercial or noncommercial advertising, or attracting the attention of the public to any building, structure or attraction (1) such that the sound there from creates a loud, annoying or unnecessary noise across a residential area; or (2) on a public right-of-way or public space, except as provided in Section 8.32.080.

H. Radios, Musical Instruments and Similar Devices. The using, operating or playing, or the permitting to be used or operated, any stereo, radio receiving set, musical instrument, audio system, television set or any machine or device that produces or reproduces sound, in such manner as to disturb at any time, the peace and comfort of the neighboring inhabitants, with louder volume than is necessary for convenient hearing person or persons who are in the room, vehicle, chamber or place in which the machine or device is operated who are voluntarily listening thereto. The operation of any such machine or device during nighttime hours manner as to be plainly audible by inhabitants or occupants of any adjacent or neighboring residential properties or units, or plainly audible at a distance of fifty feet from any nonresidential building, structure, vehicle or which it is located, shall be prima facie evidence of a violation of this subsection.

I. Yelling and Shouting. Loud or raucous yelling, shouting, hooting, whistling or singing in the public streets or in public places, or any other place, so as to annoy or disturb the quiet, comfort or repose of persons in any office or inhabitants or occupants of any neighboring or adjacent dwelling, hotel, apartment building or other kind of residence. The occurrence of such conduct during nighttime hours shall be prima facie evidence of a violation of this subsection.

J. Noise in Proximity to Schools, Courts, Churches or Hospitals. The creation of any excessive noise on any street adjacent to a school, institution of learning, church or court while such facilities are in use, or adjacent to any hospital which unreasonably interferes with the work of the institution or which disturbs or unduly annoys patients of the hospital; however, this subsection shall not apply unless conspicuous signs are displayed in such streets indicating that there is located in the vicinity a school, hospital, court or church.

K. Hawkers and Peddlers. The shouting or crying of peddlers, hawkers or vendors, so as to disturb the peace and quiet of the neighborhood.

L. Erection or demolition of buildings, excluding owner resident additions or remodeling, and the grading and excavation of land including the use of blasting, the start up and use of heavy equipment such as dump trucks and graders and the use of jack hammers except on weekdays between the hours of seven a.m. and six p.m. and on Saturdays eight a.m. to five p.m. The city manager may waive any or all of the provisions of this subsection in cases of urgent necessity, or in the interest of public health and safety. The provisions of this subsection may also be waived or modified pursuant to a conditional use permit or other development entitlement processed and issued in accordance with the applicable city requirements and procedures.

M. Late night disturbances of any kind that are plainly audible by inhabitants or occupants of any adjacent or neighboring residential properties or units, or are plainly audible at a distance of fifty feet from a real property boundary, that occur during nighttime hours, shall be prima facie evidence of violation of this subsection.

(Ord. No. 2943, § 1, 1-12-10)

8.32.050 - Mixed use developments.

Due to the unique nature of mixed use developments, as are designated as such in a specific plan, violations of this chapter shall be determined pursuant to Section 8.32.030. The distance requirements of Section 8.32.040 shall not apply to mixed use neighborhoods.

(Ord. No. 2943, § 1, 1-12-10)

8.32.060 - Assessment of noise disturbance.

Any law enforcement officer, code enforcement officer, or other employee or official designated by the city manager or designee who hears a noise or sound that is plainly audible, as defined in Sections 8.32.030 and 8.32.040, in violation of this chapter, may enforce this chapter and shall assess the noise or sound according to the following standards:

A. The primary means of detection shall be by means of the official's normal hearing faculties, not artificially enhanced.

B. The official shall first attempt to have a direct line of sight and hearing to the vehicle or real property from which the sound or noise emanates so that the official can readily identify the offending source of the sound or noise and the distance involved. If the official is unable to have a direct line of sight and hearing to the vehicle or real property from which the sound or noise emanates, then the official shall confirm the source of the sound or noise by approaching the suspected vehicle or real property until the official is able to obtain a direct line of sight and hearing, and confirm the source of the sound or noise that was heard at the place of the original assessment of the sound or noise.

C. The official need not be required to identify words, song titles, artists, or lyrics in order to establish a violation.

(Ord. No. 2943, § 1, 1-12-10)

8.32.070 - Defenses.

In any prosecution for a violation of this chapter, it shall be a sufficient defense that the noise of which complaint is made resulted from reasons beyond the control of the person charged with making the noise, unless the noise is due to a reparable or otherwise curable cause which was not diligently cured or repaired; that it was necessary to make the noise to prevent injury to persons or property or that the creation or emission of the noise was done by or with a device, such as a horn, siren or muffler, installed and operated pursuant to state law and meeting the requirements thereof.

(Ord. No. 2943, § 1, 1-12-10)

8.32.080 - Exemptions and waivers.

The following uses of any activity shall be exempt from noise level regulations:

A. Emergency Exemption. The provisions of this chapter shall not apply to: (1) the emission of sound for the purpose of alerting persons to the existence of an emergency, or (2) the emission of sound in the

performance of emergency work performed by authorized personnel for the purpose of securing the immediate health and safety of the public.

B. Warning Devices. Warning devices necessary for the protection of public safety, as for example, police, fire and ambulance sirens, and train horns, shall be exempted from the provisions of this chapter.

C. Outdoor Activities. The provisions of this chapter shall not apply to outdoor gatherings, public dances, shows and sporting and entertainment events, provided such events are conducted pursuant to a permit or license issued by the city relative to the staging of the events.

D. Any noise resulting from activities of a temporary duration permitted by law and/or for which a waiver has been granted by the director.

E. The unamplified human voice, except as provided for in Section 8.32.040(I) (Yelling and Shouting).

F. Bells, chimes, carillons while being used for religious purposes or in conjunction with religious services, or for national celebrations or public holidays.

G. Scheduled stadium events, subject, however, to frequency and time limitations, parades, school activities, including band practice sessions.

H. Refuse collection trucks, provided the trucks do not collect refuse between the hours of nine p.m. and five a.m.

I. Permitted construction during daytime hours.

J. Federal or State Preempted Activities. Any other activity to the extent regulation thereof has been preempted by state or federal law shall be exempted from the regulations of this chapter.

K. Any activity by the city or any governmental entity.

L. Any activity that is protected by the First Amendment, provided that it takes place during daytime hours, except subject to time, place manner restrictions and/or any regulations imposed by a required or issued permit for such activity.

(Ord. No. 2943, § 1, 1-12-10)

8.32.090 - Thirty-day waivers.

A. Any person seeking a waiver pursuant to this section shall file an application with the director. The application shall contain information which demonstrates that bringing the source of sound or activity for which the waiver is sought into compliance with this chapter would constitute an unreasonable hardship on the applicant, on the community, or on other persons. The application shall be accompanied by a fee, as established by council resolution.

B. A separate application shall be filed for each noise source; provided, however, that several mobile sources under common ownership, or several fixed sources on a single property may be combined into one application.

C. Before a waiver application can be considered, the applicant must show proof that he/she has provided notice of the waiver application to all affected persons within a four-foot radius of the anticipated noise

source.

D. Any individual who claims to be adversely affected by allowance of the waiver may file a statement with the director containing any information to support his/her claim. If at any time the director finds that a sufficient controversy exists regarding an application, a public hearing will be held.

E. In determining whether to grant or deny the application, the director shall balance denial as a hardship on the applicant against: (1) the adverse impact on the health, safety and welfare of other persons affected; (2) the adverse impact on property affected; and (3) any other adverse impacts of granting the waiver. Applicants and persons contesting the waiver shall be required to submit such information as the director may reasonably require.

F. A waiver shall be denied if the director determines that the balance of hardships weighs against the applicant and that granting the waiver shall substantially adversely impact the health, safety and welfare of other persons affected, including the quiet enjoyment of property. The decision on the waiver application shall be in writing, explaining the reasons therefor. The notice of denial shall issue within ten days of the application.

G. Waivers shall be granted by notice to the applicant containing all necessary conditions, including a time limit on the permitted activity. Acceptance of the waiver implies acceptance of any conditions imposed. Noncompliance with any condition of the waiver shall terminate the waiver and subject the person holding it to those provisions of this chapter for which the waiver was granted. Notification that a waiver has been granted shall issue in writing within ten days of the application.

H. A waiver will not exceed thirty days from the date on which it becomes effective. Any request for extension of time to a waiver beyond the original thirty days or for modification of other material conditions of the waiver shall require a new application.

(Ord. No. 2943, § 1, 1-12-10)

8.32.100 - Special events not subject to waiver requirement.

A special event scheduled to take place either on public or private property is exempt from the requirement of obtaining a noise disturbance waiver, provided the special event is not scheduled to last more than forty-eight hours. Notwithstanding this exemption, the organizer or sponsor of an event must obtain and comply with any and all necessary city permits.

(Ord. No. 2943, § 1, 1-12-10; Ord. No. 3112 , § 2, 2-25-20)

8.32.110 - Request for appeal hearing.

Any person may contest the denial of a waiver by submitting a written request to the city manager for an appeal hearing, clearly stating the reasons for the appeal, within ten days from the date of service of the denial notice. A hearing before the city manager shall be set for a date that is not less than five, nor more than twenty days from the date the request for hearing is filed. The person requesting the hearing (the appellant) shall be notified of the time and place set for the hearing at least five days prior to the date of the hearing.

(Ord. No. 2943, § 1, 1-12-10)

8.32.120 - Appeal hearing process.

A. No hearing to contest the denial of a waiver before the city manager shall be held unless and until a written request for a hearing has been timely submitted and any applicable fines have been deposited.

B. The city manager shall only consider evidence that is relevant to whether the grounds for the denial of the waiver are valid and supported by evidence.

C. The appellant shall be given the opportunity to testify and present witnesses and any relevant evidence concerning the denial of the waiver.

D. The formal rules of evidence shall not apply. All relevant evidence may be considered, and the city manager has the discretion to exclude evidence if he/she finds such evidence to be irrelevant or needlessly repetitive. The city manager has the authority to cut off presentation of evidence if he/she reasonably believes that the evidence being presented is irrelevant or needlessly repetitive.

E. 1. The failure of the appellant to appear at the appeal hearing shall be considered an abandonment of the appeal and consent to its denial.

2. Notwithstanding the above, upon a showing of good cause by the appellant, the city manager may excuse the appellant's failure to appear at the hearing and reschedule the hearing. Under no circumstances shall the hearing be rescheduled more than one time.

F. The notice of denial of the waiver and any additional documents submitted by the director shall constitute prima facie evidence of the respective facts contained in those documents.

G. At least five days prior to the hearing, the appellant shall be provided with copies of reports and any other documents submitted or relied upon by the director. No other discovery disclosure is required.

H. The city manager may continue the hearing and request additional information from the director or the appellant prior to issuing a written decision.

(Ord. No. 2943, § 1, 1-12-10; Ord. No. 3112 , § 2, 2-25-20)

8.32.130 - City manager's decision—Right to judicial review.

A. After considering all of the testimony and evidence submitted at the hearing, the city manager shall issue a written decision to sustain or overrule the denial of the waiver and shall list in the decision the reasons for that decision. The decision of the city manager shall be final.

B. If the decision is to overrule the denial, suspension or revocation, then the director shall issue the waiver within ten days of the service of the decision.

C. The time for a challenge to the city manager's decision in a court of law is governed by California Code of Civil Procedure Sections 1094.5 and 1094.6. Notice of the city manager's decision shall include citation to California Code of Civil Procedure Sections 1094.5 and 1094.6.

D. The city manager's written decision shall be served on the appellant within ten days from the date of the hearing by mailing to the appellant by certified mail, return receipt requested, via the U.S mail. Service of

the hearing officer's decision shall be deemed to have been completed on the date of mailing.

(Ord. No. 2943, § 1, 1-12-10)

8.32.140 - Exceptions for time to comply.

A. Within ninety days following the effective date of this chapter, the owner of any commercial or industrial activity, which is the source of sound that constitute a violation of this chapter, may apply to the director for an exception to the time to comply with the provisions of this chapter. The director shall have the authority to grant an exception not to exceed one hundred eighty days from the effective date of this chapter.

B. Appeals. Appeals of an adverse decision under this section shall be made to the city manager. The city manager's review shall be limited to whether the decision is supported by substantial evidence. The appeal procedures outlined in this chapter shall apply to appeals under this section.

(Ord. No. 2943, § 1, 1-12-10)

8.32.150 - Violation—Enforcement and penalties.

A. A violation of this chapter shall be punished as prescribed in Section 1.08.010.

B. A violation of this chapter is hereby declared to be a public nuisance, which may be abated by the city in the manner provided by the laws of the State of California and the ordinances of this city for the abatement of a public nuisance, and the city shall also have all rights provided by such laws and ordinances to recover damages suffered from any such nuisance and to recover from the owner of the property upon which such nuisance is located the cost of any abatement thereof by the city.

C. Joint and Several Responsibility. In addition to the person causing the offending sound, the owner, tenant or lessee of property, or a manager, overseer or agent, or any other person lawfully entitled to possess the property from which the offending sound is emitted at the time the offending sound is emitted, shall be responsible for compliance with this chapter if the additionally responsible party knows or should have known of the offending noise disturbance. It shall not be a lawful defense to assert that some other person caused the sound. The lawful possessor or operator of the premises shall be responsible for operating or maintaining the premises in compliance with this chapter and may be cited regardless of whether or not the person actually causing the sound is also cited. Notwithstanding the foregoing, an owner, manager, overseer or agent of property from which offending sound is emitted and who does not reside on such property shall not be cited for violation of the provisions of this chapter unless such owner, manager, overseer or agent has previously been informed in writing by a law enforcement officer, code enforcement officer, or other employee or official designated by the city manager or designee of the existence of an offending noise disturbance on the property, and such disturbance continues, occurs again or is otherwise not reasonably or fully rectified or brought into compliance with this chapter.

(Ord. No. 2943, § 1, 1-12-10)

APPENDIX 5.1:

STUDY AREA PHOTOS

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JN: 14480 Study Area Photos



L1_E
33, 58' 50.140000"118, 2' 22.740000"



L1_N
33, 58' 50.310000"118, 2' 22.900000"



L1_S
33, 58' 50.250000"118, 2' 22.880000"



L1_W
33, 58' 50.130000"118, 2' 22.740000"



L2_E
33, 58' 42.710000"118, 2' 16.970000"



L2_N
33, 58' 42.820000"118, 2' 17.000000"

JN: 14480 Study Area Photos



L2_S
33, 58' 42.770000"118, 2' 17.000000"



L2_W
33, 58' 42.700000"118, 2' 17.000000"



L3_E
33, 58' 39.180000"118, 2' 21.010000"



L3_N
33, 58' 39.200000"118, 2' 20.980000"



L3_S
33, 58' 39.200000"118, 2' 20.980000"



L3_W
33, 58' 39.200000"118, 2' 21.010000"

JN: 14480 Study Area Photos



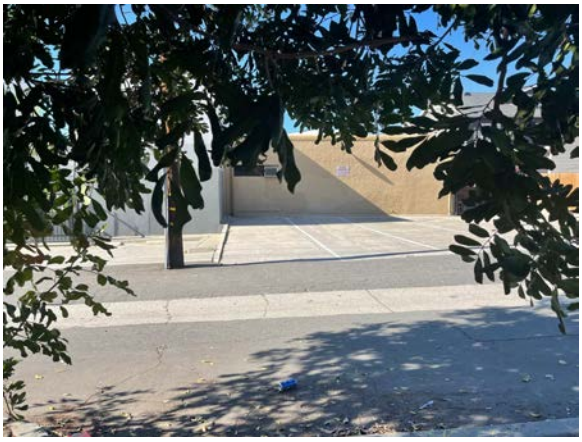
L4_E
33, 58' 42.000000"118, 2' 20.630000"



L4_N
33, 58' 42.220000"118, 2' 21.010000"



L4_S
33, 58' 42.150000"118, 2' 20.870000"



L4_W
33, 58' 42.000000"118, 2' 20.680000"

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APPENDIX 5.2:

NOISE LEVEL MEASUREMENT WORKSHEETS

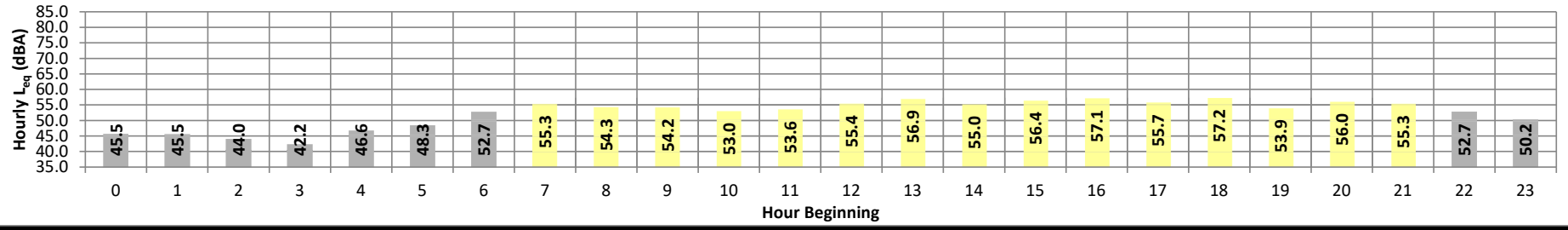
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24-Hour Noise Level Measurement Summary

Date: Tuesday, November 23, 2021 *Location:* L1 - Located northwest of the Project site near multi- *Meter:* Piccolo II *JN:* 14480

Project: Whittier Residential *Source:* family residential at 6704 Milton Avenue. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	45.5	54.8	38.5	54.3	53.9	52.5	50.5	45.2	41.3	39.0	38.8	38.6	45.5	10.0	55.5
	1	45.5	56.8	39.4	56.3	55.2	51.2	49.6	43.0	41.2	39.9	39.7	39.5	45.5	10.0	55.5
	2	44.0	63.2	40.0	62.6	61.4	56.5	50.6	44.2	41.9	40.4	40.3	40.1	44.0	10.0	54.0
	3	42.2	48.7	39.9	48.4	48.0	46.2	44.8	41.9	41.0	40.3	40.2	40.0	42.2	10.0	52.2
	4	46.6	54.0	43.6	53.6	53.0	51.1	49.5	46.4	45.3	44.1	44.0	43.7	46.6	10.0	56.6
	5	48.3	57.2	43.3	57.0	56.5	54.6	53.6	46.5	45.2	43.8	43.6	43.4	48.3	10.0	58.3
	6	52.7	61.0	45.5	60.4	59.9	58.3	57.5	52.4	49.2	46.4	46.0	45.6	52.7	10.0	62.7
Day	7	55.3	66.7	46.4	65.9	64.3	61.5	59.9	54.4	50.8	47.4	47.0	46.5	55.3	0.0	55.3
	8	54.3	61.3	47.4	60.9	60.4	59.1	58.1	55.3	52.3	49.0	48.4	47.7	54.3	0.0	54.3
	9	54.2	63.2	45.6	62.8	62.3	60.6	59.1	54.3	50.7	46.9	46.4	45.8	54.2	0.0	54.2
	10	53.0	68.9	44.8	68.5	67.8	65.8	62.7	54.8	51.2	46.1	45.5	45.0	53.0	0.0	53.0
	11	53.6	63.6	44.7	63.1	62.3	59.8	57.9	53.5	49.9	46.0	45.5	44.9	53.6	0.0	53.6
	12	55.4	85.2	46.6	84.4	83.4	75.3	73.0	55.3	51.4	47.8	47.3	46.8	55.4	0.0	55.4
	13	56.9	74.2	48.9	73.6	73.0	71.4	70.3	67.4	58.6	51.8	50.4	49.2	56.9	0.0	56.9
	14	55.0	63.8	46.8	63.3	62.9	61.0	59.1	55.3	52.1	48.1	47.6	47.0	55.0	0.0	55.0
	15	56.4	67.7	48.2	67.4	66.9	64.4	61.8	56.0	53.1	49.4	48.9	48.4	56.4	0.0	56.4
	16	57.1	66.2	48.7	65.5	64.9	63.0	61.4	57.4	54.0	49.9	49.4	48.8	57.1	0.0	57.1
	17	55.7	72.2	48.5	71.3	70.4	66.8	62.7	56.1	53.0	49.6	49.2	48.7	55.7	0.0	55.7
	18	57.2	68.3	47.5	67.8	67.3	65.0	62.7	56.9	53.5	48.6	48.0	47.6	57.2	0.0	57.2
	19	53.9	67.8	46.2	66.8	65.9	64.3	61.8	54.6	50.9	47.2	46.8	46.3	53.9	5.0	58.9
	20	56.0	63.7	49.9	63.4	63.0	61.7	60.3	56.4	53.5	50.7	50.3	50.0	56.0	5.0	61.0
	21	55.3	73.8	47.7	73.2	72.7	70.8	68.3	56.1	52.2	48.8	48.4	47.8	55.3	5.0	60.3
Night	22	52.7	60.5	45.0	60.2	59.7	58.3	57.3	53.7	49.9	46.0	45.6	45.1	52.7	10.0	62.7
	23	50.2	58.4	42.2	58.0	57.4	55.7	54.4	51.6	47.1	43.2	42.7	42.3	50.2	10.0	60.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	53.0	61.3	44.7	60.9	60.4	59.1	57.9	53.5	49.9	46.0	45.5	44.9
	Max	57.2	85.2	49.9	84.4	83.4	75.3	73.0	67.4	58.6	51.8	50.4	50.0
Energy Average		55.4	Average:		67.9	67.2	64.7	62.6	56.2	52.5	48.5	47.9	47.4
Night	Min	42.2	48.7	38.5	48.4	48.0	46.2	44.8	41.9	41.0	39.0	38.8	38.6
	Max	52.7	63.2	45.5	62.6	61.4	58.3	57.5	53.7	49.9	46.4	46.0	45.6
Energy Average		48.9	Average:		56.8	56.1	53.8	52.0	47.2	44.7	42.6	42.3	42.1

24-Hour	L_{eq} (dBA) Daytime (7am-10pm)	Nighttime (10pm-7am)
54.0	**55.4**	**48.9**

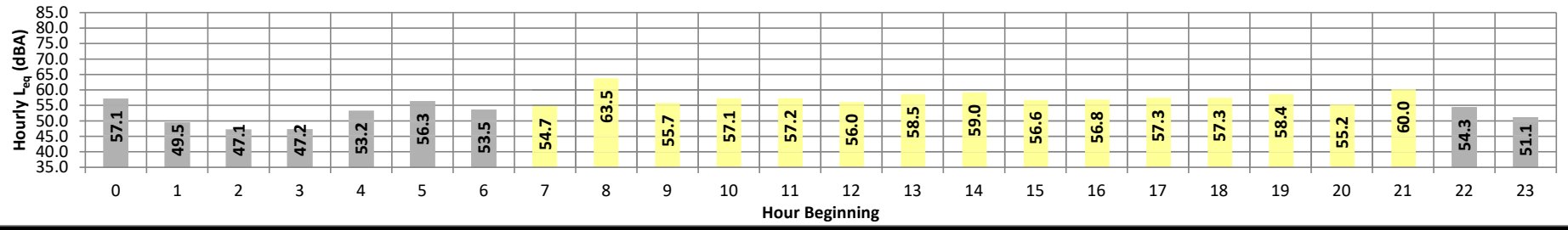
URBAN CROSSROADS

24-Hour Noise Level Measurement Summary

Date: Tuesday, November 23, 2021 *Location:* L2 - Located east of the Project site near Victory *Meter:* Piccolo II *JN:* 14480

Project: Whittier Residential *Source:* Outreach Church at 7021 Greenleaf Ave #1305. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	57.1	69.5	43.6	68.8	67.7	65.2	63.4	53.0	50.5	44.7	44.0	43.7	57.1	10.0	67.1
	1	49.5	58.9	43.9	58.3	57.6	56.1	54.8	47.9	46.2	44.3	44.2	44.0	49.5	10.0	59.5
	2	47.1	53.1	44.6	52.8	52.5	51.0	50.0	47.1	45.9	45.0	44.9	44.7	47.1	10.0	57.1
	3	47.2	54.7	44.6	54.1	53.5	52.1	50.8	46.5	45.7	45.0	44.9	44.7	47.2	10.0	57.2
	4	53.2	58.6	48.8	58.3	57.9	56.6	56.0	53.7	52.2	49.9	49.7	49.0	53.2	10.0	63.2
	5	56.3	60.7	50.3	60.4	60.2	59.6	59.2	57.5	55.9	52.2	51.7	50.9	56.3	10.0	66.3
	6	53.5	62.6	48.0	61.5	60.4	58.3	57.1	54.0	51.4	48.8	48.5	48.1	53.5	10.0	63.5
Day	7	54.7	61.4	49.7	60.9	60.4	59.1	58.3	55.5	52.9	50.4	50.1	49.8	54.7	0.0	54.7
	8	63.5	76.3	51.9	75.2	73.7	70.2	68.2	61.1	57.2	52.7	52.4	52.1	63.5	0.0	63.5
	9	55.7	64.2	49.7	63.5	62.6	60.6	59.3	56.0	53.8	51.0	50.4	49.8	55.7	0.0	55.7
	10	57.1	67.3	47.7	66.5	65.7	63.7	62.3	56.2	53.4	49.5	48.8	48.0	57.1	0.0	57.1
	11	57.2	65.1	48.6	64.5	63.9	62.3	61.2	57.8	55.2	51.5	50.2	48.8	57.2	0.0	57.2
	12	56.0	63.4	51.5	62.7	61.9	60.2	59.1	56.3	54.5	52.6	52.2	51.7	56.0	0.0	56.0
	13	58.5	70.0	51.0	68.7	67.2	65.0	63.2	56.8	53.9	51.7	51.5	51.1	58.5	0.0	58.5
	14	59.0	66.8	53.2	66.3	65.7	64.0	63.0	59.2	56.9	54.5	53.9	53.4	59.0	0.0	59.0
	15	56.6	66.2	48.4	65.4	64.5	62.4	61.3	57.0	53.2	49.5	49.0	48.5	56.6	0.0	56.6
	16	56.8	65.8	49.1	65.1	64.2	62.5	61.3	57.2	53.8	50.3	49.8	49.3	56.8	0.0	56.8
	17	57.3	66.2	50.2	65.4	64.7	63.0	61.9	57.0	54.8	51.6	51.0	50.4	57.3	0.0	57.3
	18	57.3	66.8	50.1	65.8	64.7	62.9	61.6	57.9	54.3	51.0	50.6	50.2	57.3	0.0	57.3
	19	58.4	67.9	49.3	67.0	66.1	64.2	63.1	59.1	55.1	50.8	50.1	49.5	58.4	5.0	63.4
	20	55.2	62.8	48.5	62.1	61.4	59.9	59.0	56.2	53.3	49.8	49.3	48.7	55.2	5.0	60.2
	21	60.0	70.1	47.9	69.4	68.5	66.8	65.7	59.8	54.5	49.3	48.7	48.1	60.0	5.0	65.0
Night	22	54.3	61.4	47.0	60.9	60.3	59.3	58.7	55.1	52.1	48.2	47.6	47.2	54.3	10.0	64.3
	23	51.1	57.8	44.6	57.4	57.1	56.1	55.2	52.3	49.0	45.3	45.0	44.7	51.1	10.0	61.1

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	54.7	61.4	47.7	60.9	60.4	59.1	58.3	55.5	52.9	49.3	48.7	48.0
	Max	63.5	76.3	53.2	75.2	73.7	70.2	68.2	61.1	57.2	54.5	53.9	53.4
Energy Average		58.2	Average:		65.9	65.0	63.1	61.9	57.5	54.5	51.1	50.5	50.0
Night	Min	47.1	53.1	43.6	52.8	52.5	51.0	50.0	46.5	45.7	44.3	44.0	43.7
	Max	57.1	69.5	50.3	68.8	67.7	65.2	63.4	57.5	55.9	52.2	51.7	50.9
Energy Average		53.4	Average:		59.2	58.6	57.1	56.1	51.9	49.9	47.1	46.7	46.3

L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
56.9	**58.2**	**53.4**

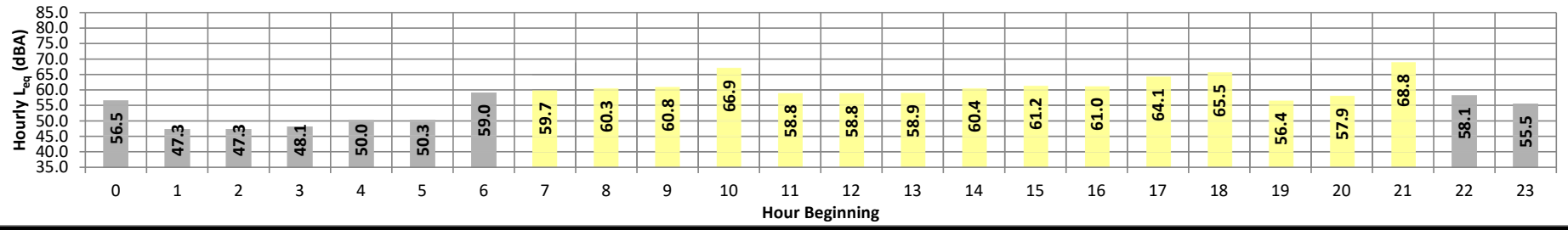
URBAN CROSSROADS

24-Hour Noise Level Measurement Summary

Date: Tuesday, November 23, 2021 *Location:* L3 - Located southwest of the Project site near single- *Meter:* Piccolo II *JN:* 14480

Project: Whittier Residential *Source:* family residence at 7052 Milton Avenue. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	56.5	70.1	43.9	69.6	68.5	64.2	59.1	51.6	46.1	44.4	44.2	44.0	56.5	10.0	66.5
	1	47.3	55.5	44.2	55.0	54.3	52.4	51.3	46.4	45.1	44.5	44.4	44.3	47.3	10.0	57.3
	2	47.3	53.8	44.9	53.3	52.7	51.3	50.5	47.3	46.0	45.2	45.1	45.0	47.3	10.0	57.3
	3	48.1	58.2	44.6	56.8	55.9	53.2	51.7	47.6	45.4	44.9	44.8	44.7	48.1	10.0	58.1
	4	50.0	56.0	47.4	55.4	54.8	53.5	52.8	50.4	48.8	47.8	47.7	47.5	50.0	10.0	60.0
	5	50.3	56.7	47.5	56.0	55.4	54.2	53.1	50.3	49.2	48.1	47.9	47.6	50.3	10.0	60.3
	6	59.0	73.1	48.9	71.7	69.6	64.4	62.9	56.4	52.4	49.5	49.3	49.0	59.0	10.0	69.0
Day	7	59.7	67.8	54.7	67.3	66.9	65.2	63.7	59.8	57.5	55.2	55.0	54.8	59.7	0.0	59.7
	8	60.3	69.3	52.0	68.3	67.4	65.6	64.6	61.0	57.8	53.4	52.9	52.2	60.3	0.0	60.3
	9	60.8	71.4	48.9	70.9	70.1	67.8	65.4	60.3	56.1	50.3	49.7	49.1	60.8	0.0	60.8
	10	66.9	78.6	49.2	77.8	77.2	75.1	74.0	60.9	55.7	50.5	49.9	49.4	66.9	0.0	66.9
	11	58.8	69.1	49.7	68.6	67.7	65.3	63.5	58.1	54.4	51.0	50.4	49.8	58.8	0.0	58.8
	12	58.8	69.1	49.2	68.5	68.0	65.6	63.9	57.7	54.8	50.8	50.2	49.4	58.8	0.0	58.8
	13	58.9	68.8	49.4	67.9	67.0	65.0	63.4	59.0	55.8	51.2	50.5	49.7	58.9	0.0	58.9
	14	60.4	72.6	49.0	71.0	69.8	67.6	66.0	58.3	54.6	50.4	49.8	49.1	60.4	0.0	60.4
	15	61.2	72.4	51.8	71.8	71.1	68.5	66.1	59.0	56.2	52.8	52.4	51.9	61.2	0.0	61.2
	16	61.0	70.3	50.5	69.5	68.7	66.7	65.4	62.4	57.3	52.0	51.3	50.6	61.0	0.0	61.0
	17	64.1	74.3	50.4	73.2	72.5	71.0	69.8	64.4	57.6	51.9	51.2	50.6	64.1	0.0	64.1
	18	65.5	77.0	49.3	75.9	74.9	73.1	71.8	61.9	56.1	51.0	50.3	49.6	65.5	0.0	65.5
	19	56.4	64.1	48.2	63.6	63.0	61.8	60.9	57.5	53.8	49.5	48.9	48.4	56.4	5.0	61.4
	20	57.9	65.8	48.9	65.4	64.8	63.5	62.5	58.7	55.1	50.3	49.7	49.1	57.9	5.0	62.9
	21	68.8	83.6	48.9	82.7	81.0	76.6	71.2	59.0	54.6	50.3	49.8	49.1	68.8	5.0	73.8
Night	22	58.1	66.2	48.5	65.5	65.0	63.6	62.8	59.0	55.3	49.9	49.1	48.7	58.1	10.0	68.1
	23	55.5	63.6	46.1	63.2	62.7	61.5	60.2	56.2	52.6	47.4	46.9	46.3	55.5	10.0	65.5

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	56.4	64.1	48.2	63.6	63.0	61.8	60.9	57.5	53.8	49.5	48.9	48.4
	Max	68.8	83.6	54.7	82.7	81.0	76.6	74.0	64.4	57.8	55.2	55.0	54.8
Energy Average		62.8	Average:		70.8	70.0	67.9	66.1	59.9	55.8	51.4	50.8	50.2
Night	Min	47.3	53.8	43.9	53.3	52.7	51.3	50.5	46.4	45.1	44.4	44.2	44.0
	Max	59.0	73.1	48.9	71.7	69.6	64.4	62.9	59.0	55.3	49.9	49.3	49.0
Energy Average		54.7	Average:		60.7	59.9	57.6	56.1	51.7	49.0	46.9	46.6	46.3

L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
61.2	**62.8**	**54.7**

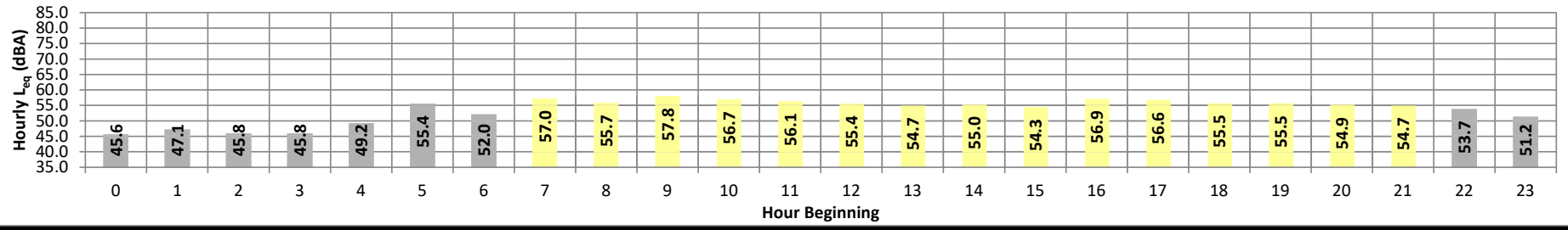
URBAN CROSSROADS

24-Hour Noise Level Measurement Summary

Date: Tuesday, November 23, 2021 *Location:* L4 - Located west of the Project site near single- *Meter:* Piccolo II *JN:* 14480

Project: Whittier Residential *Source:* family residence at 7014 Milton Avenue. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	45.6	73.3	42.5	72.8	71.9	67.0	61.5	51.7	48.6	43.4	43.0	42.6	45.6	10.0	55.6
	1	47.1	56.5	42.4	56.1	55.4	53.6	51.5	45.8	43.7	42.7	42.6	42.5	47.1	10.0	57.1
	2	45.8	53.5	42.7	52.9	51.9	50.3	49.5	45.7	44.2	43.2	43.0	42.8	45.8	10.0	55.8
	3	45.8	53.7	43.0	53.2	52.7	50.9	49.4	45.1	43.9	43.3	43.2	43.1	45.8	10.0	55.8
	4	49.2	54.6	45.9	54.3	54.0	53.0	52.3	49.5	48.1	46.8	46.6	46.1	49.2	10.0	59.2
	5	55.4	60.8	49.0	60.6	60.3	59.6	59.0	56.8	53.8	51.3	50.1	49.3	55.4	10.0	65.4
	6	52.0	59.9	47.1	59.0	58.2	56.6	55.5	52.4	50.5	47.8	47.6	47.2	52.0	10.0	62.0
Day	7	57.0	67.4	50.3	66.2	65.2	63.3	61.3	56.7	53.9	51.1	50.7	50.4	57.0	0.0	57.0
	8	55.7	63.4	48.0	62.9	62.5	60.9	59.8	56.5	53.5	49.3	48.7	48.2	55.7	0.0	55.7
	9	57.8	70.5	53.3	69.9	68.9	66.0	64.0	59.9	57.3	54.2	53.8	53.4	57.8	0.0	57.8
	10	56.7	67.1	48.3	66.7	66.1	64.6	63.3	57.3	53.9	49.9	49.2	48.5	56.7	0.0	56.7
	11	56.1	64.2	49.8	63.4	62.4	60.6	59.7	56.9	54.5	51.3	50.6	50.0	56.1	0.0	56.1
	12	55.4	63.5	48.7	63.2	62.7	60.5	59.6	55.5	53.2	49.8	49.3	48.8	55.4	0.0	55.4
	13	54.7	61.2	49.0	60.8	60.3	59.2	58.3	55.5	53.2	50.2	49.7	49.1	54.7	0.0	54.7
	14	55.0	63.8	48.0	63.2	62.4	60.4	59.2	55.3	52.8	49.3	48.7	48.2	55.0	0.0	55.0
	15	54.3	68.6	47.9	68.2	67.2	64.1	62.4	55.5	53.0	49.3	48.8	48.1	54.3	0.0	54.3
	16	56.9	63.9	49.6	63.5	63.1	62.0	61.0	57.7	55.0	50.9	50.3	49.7	56.9	0.0	56.9
	17	56.6	67.9	49.8	67.5	67.0	65.4	63.2	57.0	54.1	51.0	50.5	50.0	56.6	0.0	56.6
	18	55.5	64.2	49.3	63.6	63.0	61.5	60.4	57.0	53.7	50.6	50.1	49.5	55.5	0.0	55.5
	19	55.5	66.6	47.6	66.2	65.6	63.2	61.4	55.6	52.2	48.8	48.3	47.8	55.5	5.0	60.5
	20	54.9	62.9	48.4	62.5	61.8	60.0	59.0	55.3	53.1	49.5	49.1	48.5	54.9	5.0	59.9
	21	54.7	67.6	48.0	67.0	65.8	63.0	61.4	56.7	53.2	49.2	48.6	48.1	54.7	5.0	59.7
Night	22	53.7	61.2	46.7	60.8	60.1	58.4	57.5	54.8	51.7	47.8	47.3	46.9	53.7	10.0	63.7
	23	51.2	57.5	44.3	57.2	56.9	56.0	55.3	52.5	49.3	45.2	44.8	44.4	51.2	10.0	61.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	54.3	61.2	47.6	60.8	60.3	59.2	58.3	55.3	52.2	48.8	48.3	47.8
	Max	57.8	70.5	53.3	69.9	68.9	66.0	64.0	59.9	57.3	54.2	53.8	53.4
Energy Average		55.9	Average:		65.0	64.3	62.3	60.9	56.6	53.8	50.3	49.7	49.2
Night	Min	45.6	53.5	42.4	52.9	51.9	50.3	49.4	45.1	43.7	42.7	42.6	42.5
	Max	55.4	73.3	49.0	72.8	71.9	67.0	61.5	56.8	53.8	51.3	50.1	49.3
Energy Average		51.0	Average:		58.5	57.9	56.2	54.6	50.5	48.2	45.7	45.4	45.0

L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
54.6	**55.9**	**51.0**

URBAN CROSSROADS

APPENDIX 7.1:

ON-SITE NOISE MODEL

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Philadelphia Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	30 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	40.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	42.608
Heavy Trucks:	48.317

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	62.51	1.57	2.44	-1.20	-11.69	0.000	0.000
Medium Trucks:	73.11	-15.67	0.94	-1.20	12.36	-17.383	-20.383
Heavy Trucks:	78.76	-19.62	0.12	-1.20	15.83	-17.800	-20.800

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.3	63.4	61.7	55.6	64.2	64.8
Medium Trucks:	57.2	55.7	49.3	47.8	56.2	56.5
Heavy Trucks:	58.1	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	66.6	64.8	62.1	57.0	65.6	66.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.3	63.4	61.7	55.6	64.2	64.8
Medium Trucks:	39.8	38.3	31.9	30.4	38.8	39.1
Heavy Trucks:	40.3	38.8	29.8	31.0	39.4	39.5
Vehicle Noise:	65.3	63.5	61.7	55.6	64.3	64.9

Tuesday, December 14, 2021

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Comstock Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	35.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	37.652
Heavy Trucks:	43.361

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	59.44	2.36	3.49	-1.20	-11.67	0.000	0.000
Medium Trucks:	71.09	-14.88	1.74	-1.20	12.38	-17.386	-20.386
Heavy Trucks:	77.24	-18.83	0.82	-1.20	15.85	-17.802	-20.802

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.4	54.4	63.0	63.6
Medium Trucks:	56.8	55.2	48.9	47.3	55.8	56.0
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	65.7	63.9	60.9	56.1	64.6	65.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.4	54.4	63.0	63.6
Medium Trucks:	39.4	37.9	31.5	30.0	38.4	38.6
Heavy Trucks:	40.2	38.8	29.8	31.0	39.4	39.5
Vehicle Noise:	64.1	62.2	60.4	54.4	63.0	63.6

Tuesday, December 14, 2021

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Philadelphia Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	30 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	40.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	42.608
Heavy Trucks:	48.317

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	62.51	1.57	2.44	-1.20	-11.69	0.000	0.000
Medium Trucks:	73.11	-15.67	0.94	-1.20	12.36	-17.383	-20.383
Heavy Trucks:	78.76	-19.62	0.12	-1.20	15.83	-17.800	-20.800

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.3	63.4	61.7	55.6	64.2	64.8
Medium Trucks:	57.2	55.7	49.3	47.8	56.2	56.5
Heavy Trucks:	58.1	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	66.6	64.8	62.1	57.0	65.6	66.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.3	63.4	61.7	55.6	64.2	64.8
Medium Trucks:	39.8	38.3	31.9	30.4	38.8	39.1
Heavy Trucks:	40.3	38.8	29.8	31.0	39.4	39.5
Vehicle Noise:	65.3	63.5	61.7	55.6	64.3	64.9

Tuesday, December 14, 2021

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Comstock Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	35.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	37.652
Heavy Trucks:	43.361

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	59.44	2.36	3.49	-1.20	-11.67	0.000	0.000
Medium Trucks:	71.09	-14.88	1.74	-1.20	12.38	-17.386	-20.386
Heavy Trucks:	77.24	-18.83	0.82	-1.20	15.85	-17.802	-20.802

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.4	54.4	63.0	63.6
Medium Trucks:	56.8	55.2	48.9	47.3	55.8	56.0
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	65.7	63.9	60.9	56.1	64.6	65.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.4	54.4	63.0	63.6
Medium Trucks:	39.4	37.9	31.5	30.0	38.4	38.6
Heavy Trucks:	40.2	38.8	29.8	31.0	39.4	39.5
Vehicle Noise:	64.1	62.2	60.4	54.4	63.0	63.6

Tuesday, December 14, 2021

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Philadelphia Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	30 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	40.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	44.676
Heavy Trucks:	50.385

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	62.51	1.57	1.99	-1.20	*-11.36*	0.000	0.000
Medium Trucks:	73.11	-15.67	0.63	-1.20	*12.57*	-17.408	-20.408
Heavy Trucks:	78.76	-19.62	-0.15	-1.20	*17.47*	-17.996	-20.996

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	56.9	55.4	49.0	47.5	55.9	56.2
Heavy Trucks:	57.8	56.4	47.3	48.6	56.9	57.1
Vehicle Noise:	66.2	64.4	61.6	56.6	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	39.5	38.0	31.6	30.1	38.5	38.7
Heavy Trucks:	39.8	38.4	29.3	30.6	38.9	39.1
Vehicle Noise:	64.9	63.0	61.2	55.2	63.8	64.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Comstock Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	35.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	31.639
Medium Trucks:	30.691
Heavy Trucks:	45.702

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	59.44	2.36	2.88	-1.20	*-11.25*	0.000	0.000
Medium Trucks:	71.09	-14.88	3.08	-1.20	*-12.57*	0.000	0.000
Heavy Trucks:	77.24	-18.83	0.48	-1.20	*17.70*	-18.024	-21.024

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	63.5	61.6	59.8	53.8	62.4	63.0
Medium Trucks:	58.1	56.6	50.2	48.7	57.1	57.4
Heavy Trucks:	57.7	56.3	47.2	48.5	56.8	57.0
Vehicle Noise:	65.4	63.7	60.5	55.8	64.4	64.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	63.5	61.6	59.8	53.8	62.4	63.0
Medium Trucks:	58.1	56.6	50.2	48.7	57.1	57.4
Heavy Trucks:	39.7	38.2	29.2	30.5	38.8	38.9
Vehicle Noise:	64.6	62.8	60.3	54.9	63.5	64.1

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Philadelphia Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	30 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	40.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	54.147

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	62.51	1.57	1.25	-1.20	*-10.85*	0.000	0.000
Medium Trucks:	73.11	-15.67	1.46	-1.20	*-12.48*	0.000	0.000
Heavy Trucks:	78.76	-19.62	-0.62	-1.20	*18.58*	-18.130	-21.130

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.5	54.4	63.0	63.6
Medium Trucks:	57.7	56.2	49.8	48.3	56.8	57.0
Heavy Trucks:	57.3	55.9	46.9	48.1	56.5	56.6
Vehicle Noise:	65.7	63.9	61.0	56.1	64.7	65.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	62.2	60.5	54.4	63.0	63.6
Medium Trucks:	57.7	56.2	49.8	48.3	56.8	57.0
Heavy Trucks:	39.2	37.8	28.7	30.0	38.3	38.5
Vehicle Noise:	65.0	63.2	60.8	55.4	64.0	64.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Comstock Street
Lot No:

Project Name: Whittier Residential
Job Number: 14880
Analyst: A. Khan

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,000 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	0.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	35.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	Day	Evening	Night	Daily
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	Grade Adjustment:	0.0

Lane Equivalent Distance (in feet)

Autos:	36.524
Medium Trucks:	35.123
Heavy Trucks:	49.887

FHWA Noise Model Calculations

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	59.44	2.36	1.94	-1.20	*-10.63*	0.000	0.000
Medium Trucks:	71.09	-14.88	2.20	-1.20	*-12.40*	0.000	0.000
Heavy Trucks:	77.24	-18.83	-0.09	-1.20	*18.82*	-18.158	-21.158

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.5	60.6	58.9	52.8	61.4	62.1
Medium Trucks:	57.2	55.7	49.3	47.8	56.3	56.5
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	64.5	62.8	59.6	55.0	63.5	64.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.5	60.6	58.9	52.8	61.4	62.1
Medium Trucks:	57.2	55.7	49.3	47.8	56.3	56.5
Heavy Trucks:	39.0	37.5	28.5	29.8	38.1	38.2
Vehicle Noise:	63.7	61.9	59.3	54.0	62.6	63.1

APPENDIX 9.1:

CADNAA OPERATIONAL NOISE MODEL INPUTS

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14480 - Comstock Residential - Operation

CadnaA Noise Prediction Model: 14480-02_Operation.cna
Date: 20.02.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.01
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	999.99
Min. Length of Section (#(Unit,LEN))	1.01
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rvcr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	32.9	30.8	37.4	60.0	54.0	0.0				5.00	a	6019043.83	2304787.93	5.00
R2		R2	29.6	27.5	34.1	63.0	58.0	0.0				5.00	a	6019259.39	2305078.50	5.00
R3		R3	36.9	34.6	41.2	68.0	60.0	0.0				5.00	a	6019611.93	2304313.88	5.00
R4		R4	37.1	34.7	41.4	61.0	56.0	0.0				5.00	a	6019239.99	2304044.15	5.00
R5		R5	49.0	47.4	54.0	61.0	56.0	0.0				5.00	a	6019232.16	2304363.19	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			K0	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night				X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(dB)	(ft)		(ft)	(ft)	(ft)
AC01		AC01	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019293.40	2304226.35	3.00
AC02		AC02	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019302.26	2304231.42	3.00
AC03		AC03	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019321.01	2304231.16	3.00
AC04		AC04	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019335.46	2304224.78	3.00
AC05		AC05	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019353.82	2304224.13	3.00
AC06		AC06	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019375.96	2304232.73	3.00
AC07		AC07	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019272.70	2304278.71	3.00
AC08		AC08	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019304.55	2304355.41	3.00
AC09		AC09	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019323.11	2304355.20	3.00
AC10		AC10	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019337.43	2304361.16	3.00
AC11		AC11	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019356.53	2304360.84	3.00
AC12		AC12	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019377.58	2304351.51	3.00
AC13		AC13	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019377.93	2304385.66	3.00
AC14		AC14	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019356.75	2304376.72	3.00
AC15		AC15	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019337.65	2304377.16	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			K0	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night				X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(dB)	(ft)		(ft)	(ft)	(ft)
AC16		AC16	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019323.85	2304383.41	3.00
AC17		AC17	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019304.84	2304384.02	3.00
AC18		AC18	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019380.08	2304503.72	3.00
AC19		AC19	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019358.69	2304512.54	3.00
AC20		AC20	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019340.15	2304513.03	3.00
AC21		AC21	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019325.92	2304507.12	3.00
AC22		AC22	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019306.54	2304507.68	3.00
AC23		AC23	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019290.36	2304513.44	3.00
AC24		AC24	77.0	77.0	77.0	Lw	77		675.00	0.00	270.00	0.0	3.00	a	6019275.47	2304462.07	3.00
TRASH1		TRASH1	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	0.0	8.00	a	6019271.34	2304428.04	8.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	
PARK1		PARK1	76.4	76.4	76.4	53.7	53.7	53.7	Lw	76.4					0.

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
PARK1	PARK1	0.00	a			6019284.45	2304419.32	0.00	0.00
						6019282.89	2304313.24	0.00	0.00
						6019264.04	2304313.07	0.00	0.00
						6019265.68	2304419.31	0.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

APPENDIX 10.1:

CADNAA CONSTRUCTION NOISE MODEL INPUTS

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14480 - Comstock Residential - Construction

CadnaA Noise Prediction Model: 14480-02_Construction.cna
Date: 12.01.22
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.01
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	999.99
Min. Length of Section (#(Unit,LEN))	1.01
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	5.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rvcr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Incl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R01	57.0	57.0	63.7	80.0	0.0	0.0				5.00	a	6019043.83	2304787.93	5.00
RECEIVERS		R02	54.1	54.1	60.8	80.0	0.0	0.0				5.00	a	6019259.39	2305078.50	5.00
RECEIVERS		R03	61.9	61.9	68.6	80.0	0.0	0.0				5.00	a	6019611.93	2304313.88	5.00
RECEIVERS		R04	62.0	62.0	68.6	80.0	0.0	0.0				5.00	a	6019239.99	2304044.15	5.00
RECEIVERS		R05	72.0	72.0	78.6	80.0	0.0	0.0				5.00	a	6019232.16	2304363.19	5.00

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	
SITEBOUNDARY		Construction	113.0	113.0	113.0	77.8	77.8	77.8	Lw	113					8

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
SITEBOUNDARY	8.00	a			6019265.30	2304207.80	8.00	0.00
					6019270.81	2304507.76	8.00	0.00
					6019377.30	2304505.88	8.00	0.00
					6019387.10	2304495.67	8.00	0.00
					6019390.04	2304492.61	8.00	0.00
					6019384.78	2304205.65	8.00	0.00

APPENDIX 13

MEMORANDUM

URBAN | CROSSROADS



DATE: September 27, 2024
TO: Tom Dodson, Tom Dodson & Associates
FROM: Charlene So or Alex So, Urban Crossroads, Inc.
JOB NO: 14480-06 VMT & TG

PHILADELPHIA & COMSTOCK TOWNHOUSE VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION AND TRIP GENERATION ASSESSMENT

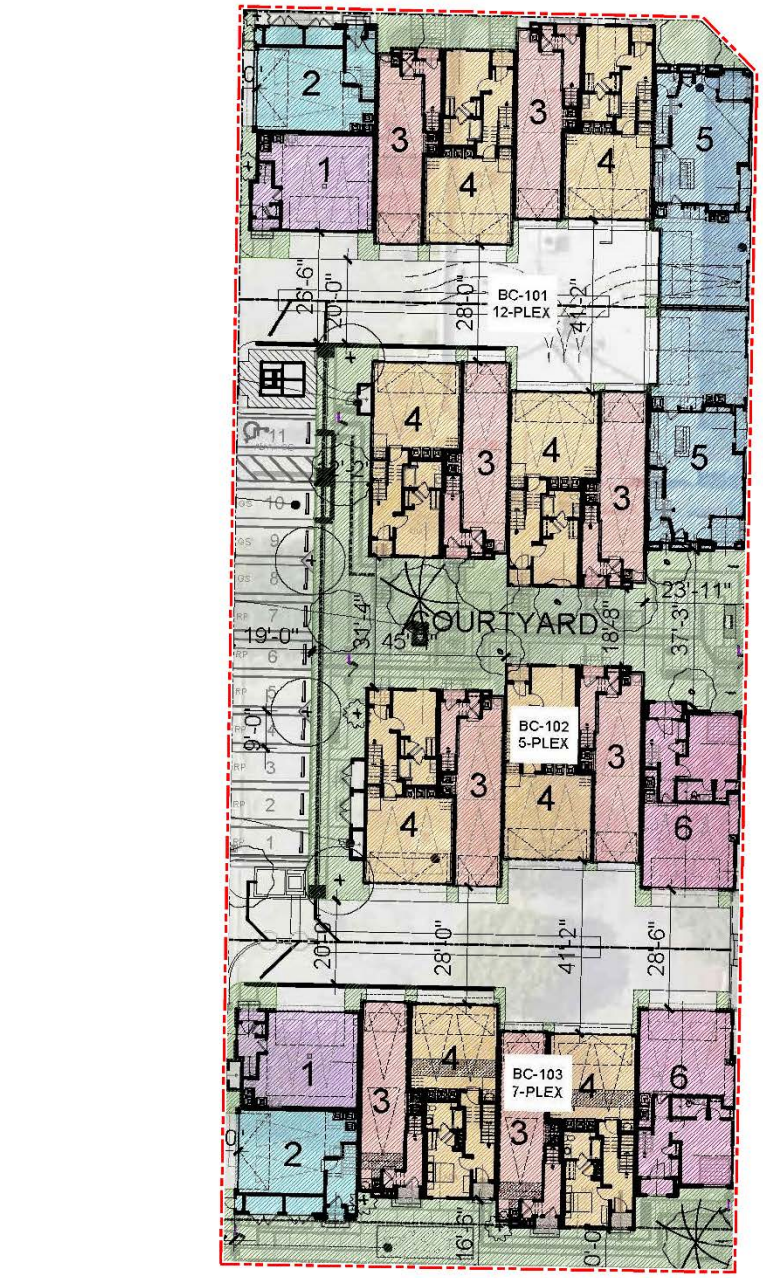
Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation and Trip Generation Assessment for the Philadelphia & Comstock Townhouse development (**Project**), which is located at 12826 Philadelphia Street in the City of Whittier (**City**). The purpose of this analysis is to determine whether additional VMT or traffic analyses are necessary for the proposed Project.

PROPOSED PROJECT

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (**UWSP**). The preliminary site plan is shown on Exhibit 1.

The site is currently occupied by a vacant 7,172 square foot office building. No credit has been taken for the existing office building for the purposes of this assessment.

EXHIBIT 1: PRELIMINARY SITE PLAN



BACKGROUND

Changes to California Environmental Quality Act (**CEQA**) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (**LOS**) as the measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (**OPR**) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**) (1). Based on OPR's Technical Advisory, the City of Whittier adopted its City of Whittier Transportation Study Guidelines (October 2021) (**City Guidelines**) (2), which documents the City's VMT analysis methodology and approved impact thresholds. The VMT screening evaluation and trip generation assessment presented in this report has been developed based on the adopted City Guidelines.

PROJECT SCREENING

The City Guidelines provide details on appropriate screening criteria and thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed analysis. Screening thresholds are broken into the following six types:

- Project Size
- Locally Serving Retail
- Projects Located in a Low VMT Area
- Transit Proximity
- Transportation Facilities
- Affordable Housing

A land use project needs only to meet one of the above screening thresholds to result in a less than significant VMT impact.

PROJECT SIZE SCREENING

The City Guidelines indicate that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact.

TRIP GENERATION

The Project proposes to develop 24 townhome residential dwelling units. Table 1 presents trip generation rates obtained from the latest Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the proposed use. The resulting trip generation for the proposed Project is also shown on Table 1. As shown in Table 1, the proposed Project is anticipated to generate 174 two-way trips per day with 12 AM peak hour trips sand 14 PM peak hour trips.

TABLE 1: PROJECT TRIP GENERATION

Land Use[1]	ITE Code	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Single Family Attached	215	DU	0.15	0.33	0.48	0.32	0.25	0.57	7.20

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] DU = Dwelling Units

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Single Family Attached	24	DU	4	8	12	8	6	14	174

[1] DU = Dwelling Units

However, for the purposes of VMT screening, the Project exceeds the 110 daily vehicle trips threshold.

Project Size screening criteria is not met.

LOCALLY SERVING RETAIL SCREENING

The City Guidelines identify that local serving retail less than 50,000 square feet or other local serving essential services (e.g., local parks, day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The Project is not intending to develop any locally serving retail.

Locally Serving Retail screening criteria is not met.

PROJECT LOCATED IN A LOW VMT AREA SCREENING

As noted in the City Guidelines, a residential or office project that is located in a Traffic Analysis Zone (**TAZ**) that is already 15% below the City and Sphere of Influence (**SOI**) Baseline VMT will tend to exhibit similarly low VMT. The City Guidelines provides a map of the City of Whittier+ SOI to locate areas of low VMT. As shown in attachment A, the Project Site is located in an area 15% below the City average daily home-based VMT per capita.

Low VMT Area screening criteria is met.

TRANSIT PROXIMITY

Consistent with guidance identified City Guidelines, Projects that are located within a ½ mile of the Eastside Transit Corridor Phase 2 Project, or a ½ mile of where two or more 15-minute (during commute hours) bus routes intersect or within a ½ mile of a corridor served by 15-minute (during commute hours) bus service. In addition, the project should have the following characteristics:

- A Floor Area Ratio (**FAR**) of 0.75 or greater
- Is consistent with the applicable SCAG Sustainable Community Strategy (**SCS**) (as determined by the City)
- Does not provide more parking than required by the City
- Does not replace affordable housing units

The Project's location is presented in Attachment B, which shows existing and planned future TPA areas for both bus and rail service within the City. The Project site is located within a TPA based on bus service. However, further examination shows that the Montebello Bus Lines have reduced the frequency of service above 15-minute service intervals during commute hours and the City of Whitter no longer has any transit eligible areas for screening purposes.

Transit Proximity screening criteria is not met.

AFFORDABLE HOUSING

City Guidelines state that residential projects that provide affordable housing units; if part of a larger development, the affordable housing units only satisfy the screening criteria. The Project does not intend to include any affordable housing units.

Affordable Housing screening criteria is not met.

TRANSPORTATION FACILITIES

The City Guidelines identify Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes. The Project will not be developing a transportation project.

Transportation Facilities screening criteria is not met.

CONCLUSION

Based on our review of applicable VMT screening criteria, the Project meets the Low VMT Area screening criteria and would therefore be presumed to result in a less than significant VMT impact; no additional VMT analysis is required. The City's Guidelines indicate that a localized transportation assessment must be prepared by a registered Civil or Traffic Engineer, or other qualified transportation professional. The localized transportation assessment is generally required if a project generates over 100 peak hour trips. As the proposed Project is anticipated to generate fewer than 100 peak hour trips in the AM and PM peak hours (with no more than 20 peak hour trips in the PM peak hour), additional peak hour traffic operations analysis is not necessary based on the City's Guidelines.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Whittier.** *City of Whittier Transportation Study Guidelines.* October 2021.
3. **City of Los Angeles Department of Transportation.** *Transportation Assessment Guidelines.* 2019.

ATTACHMENT A
CITY OF WHITTIER LOW VMT AREA MAP

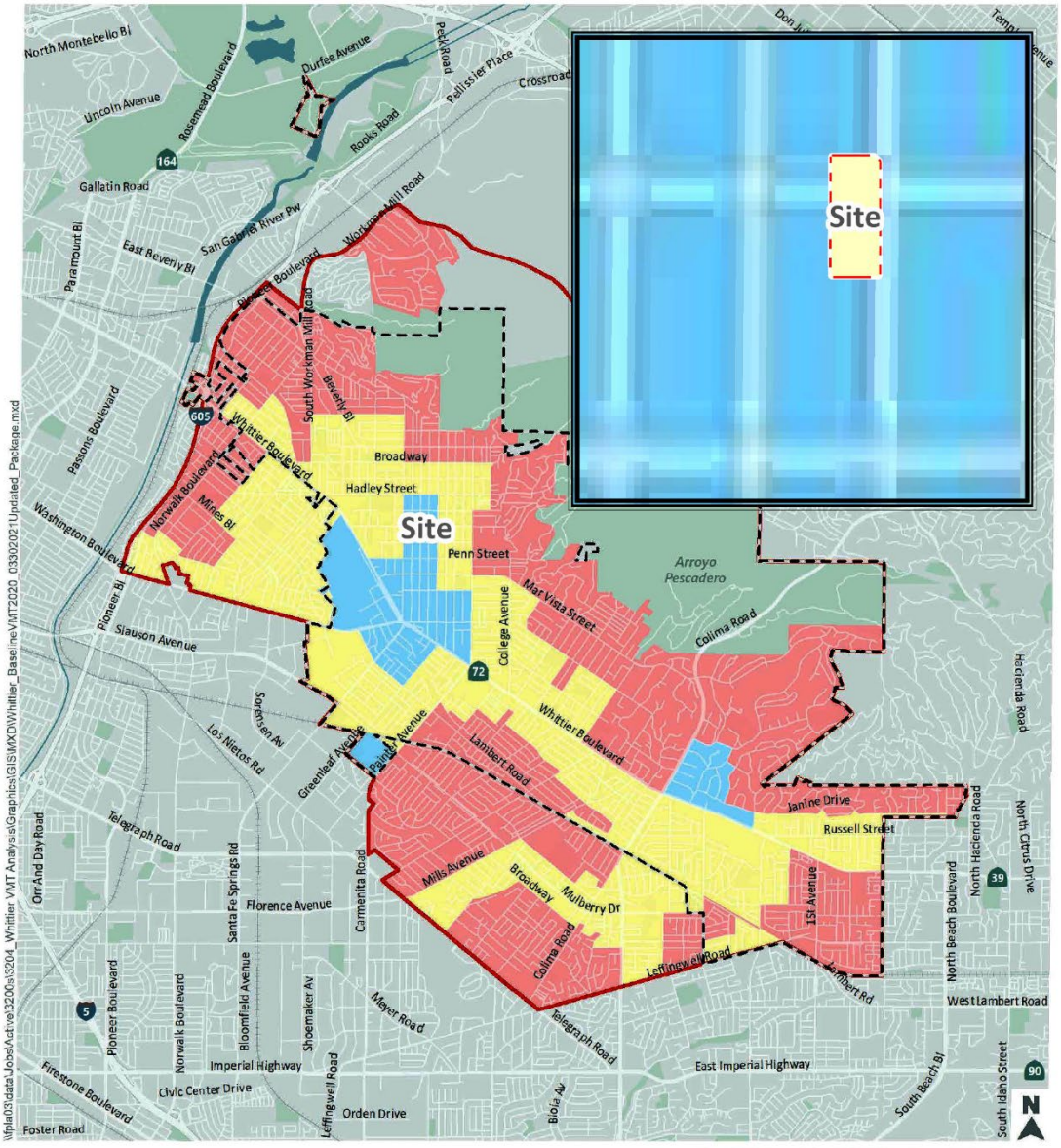


Figure 4

Daily Home-Based VMT per Capita (2020)

ATTACHMENT B
CITY OF WHITTIER TPA MAP

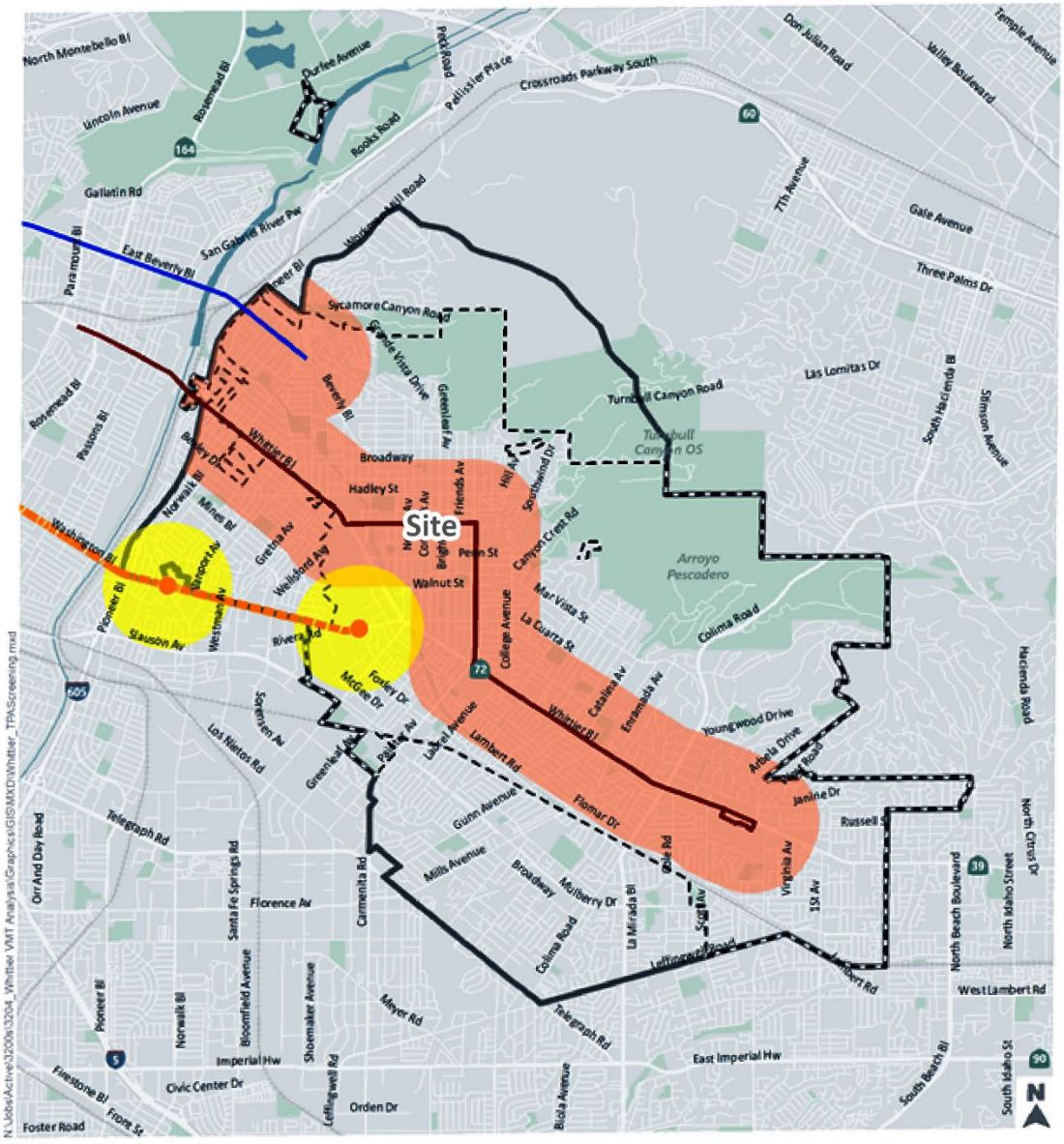


Figure 2

Future Transit Priority Areas in Whittier (With Eastside Transit Corridor Phase 2 Built Out)

APPENDIX 14

MEMORANDUM

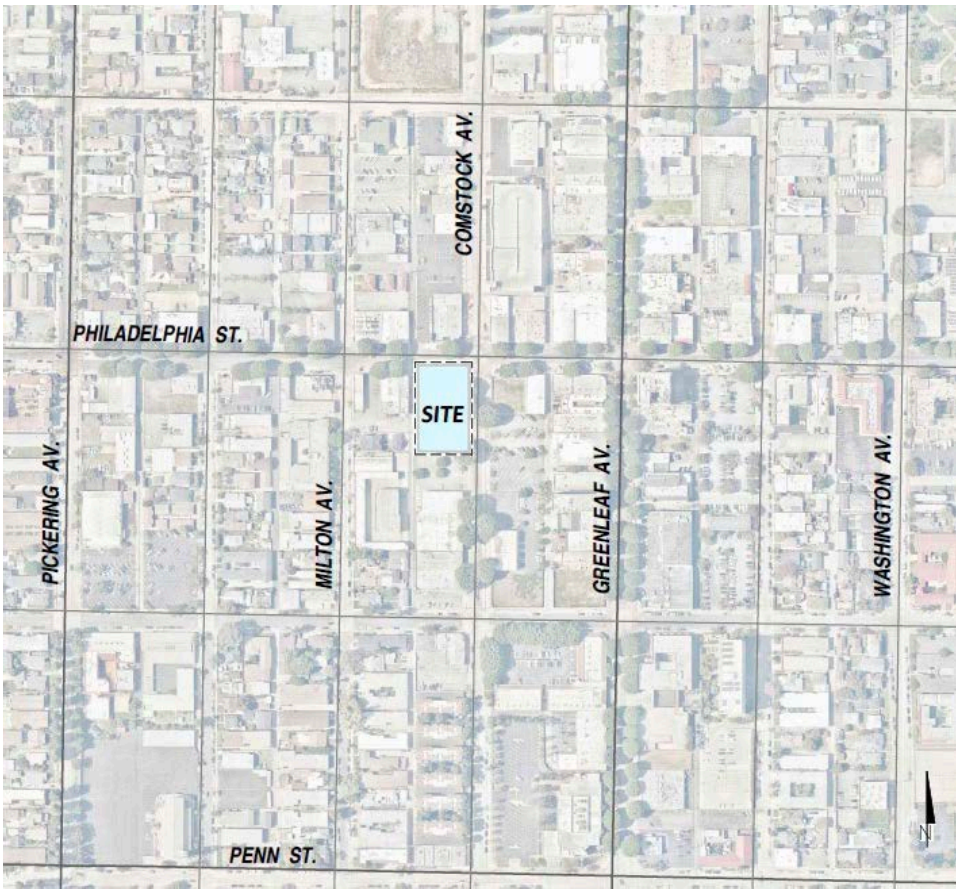
URBAN | CROSSROADS

DATE: November 6, 2024
TO: Matt Waken, Whittier Comstock, LLC
FROM: Brendan Dugan/Taryn Ferguson, Urban Crossroads, Inc.
JOB NO: 16181-11 Comstock Place Parking Management Plan

COMSTOCK & PHILADELPHIA TOWNHOMES PARKING MANAGEMENT PLAN

Urban Crossroads, Inc. is pleased to submit the following Parking Management Plan for the Comstock & Philadelphia Townhomes (**Project**). The Project is located at 12826 Philadelphia Street in the City of Whittier, as shown on **Exhibit A.** This Parking Management Plan (PMP) was prepared in accordance with the City of Whittier Uptown Specific Plan (UWSP).

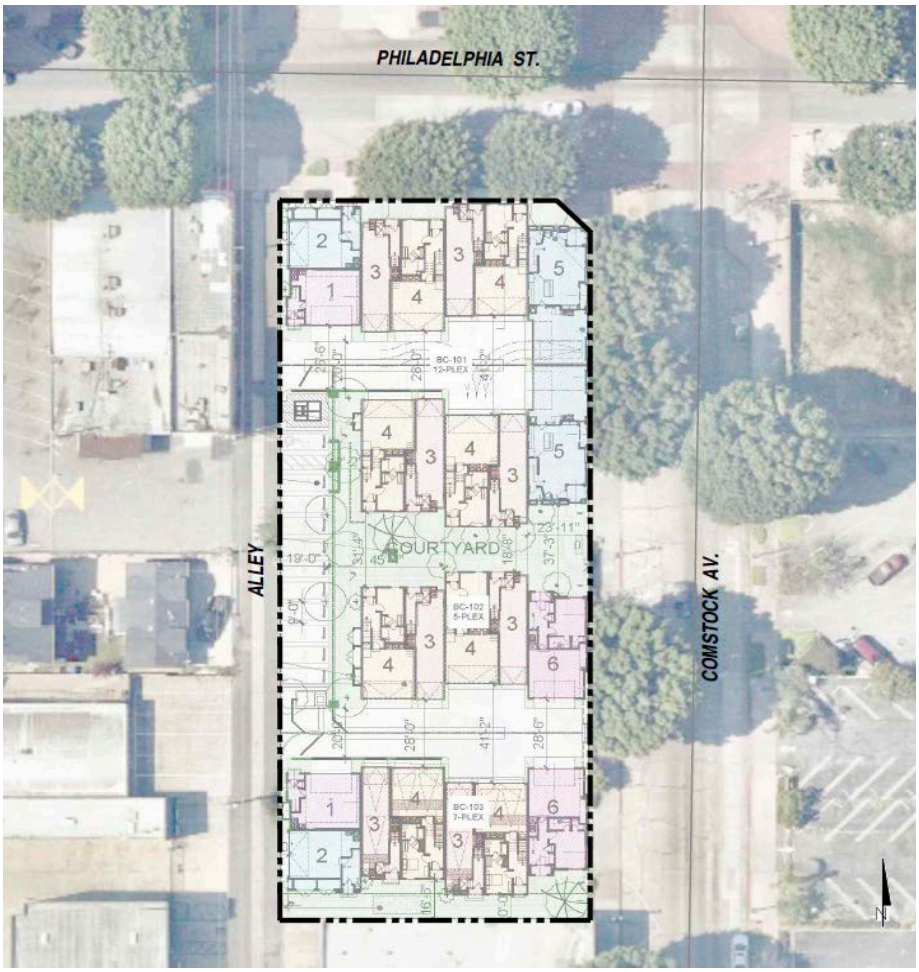
EXHIBIT A: PROJECT LOCATION



INTRODUCTION

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP), as shown on **Exhibit B**. The proposed Project will provide forty-eight (48) resident garage spaces and on-site open parking for seven (7) resident spaces, four (4) guest parking spaces, including one (1) Americans with Disabilities Act (ADA) parking space. Additionally, there is adjacent on-street open parking providing sixteen (16) spaces on Comstock Avenue and Philadelphia Street, that has not been included in the parking study and is only included for reference, shown on **Exhibit C**. The Project is also approximately 215 feet from the City's new public parking garage, located at 6738 Comstock Avenue. Based on information provided by the City, the parking garage contains approximately 388 to 495 parking stalls, including electric vehicle charging stations, for more parking opportunities for residents and local Uptown businesses. A copy of the site plan is included in **Attachment A**.

EXHIBIT B: PRELIMINARY SITE PLAN



PARKING REQUIREMENTS

To demonstrate that adequate parking supply exists within the proposed Project, this parking assessment provides a review of the City of Whittier Municipal Code parking requirements and an estimate of the peak parking demands. As stated previously, the Project site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP) and utilizes the Specific Plan parking requirements. Chapter 4.3.4 of the UWSP Code describes the Uptown Center off-street parking for residential land uses. Chapter 4.3.4.C.3 identifies the parking stalls required for residential land uses such as the proposed Project.

Table 1 provides a summary of the applicable UWSP Code parking requirements. For residential use, the UWSP Code requires 1.5 spaces/unit for studio/1 bedroom units, 2.0 spaces/unit for 2 bedroom units, 2.5 spaces/unit for 3+ bedroom units, 0.25 spaces/unit for guest parking.

TABLE 1: UWSP CODE PARKING REQUIREMENTS

Use	Parking Rate	Description
Residential	1.5 spaces per Studio & 1 bedroom units; 2 spaces per 2 bedroom units; 2.5 spaces per 3+ bedroom units	1.5 space / Studio & 1 bedroom 2 spaces / 2 bedrooms 2.5 spaces / 3+ bedrooms
Guest	0.25 spaces per unit	1.25 spaces / unit

Based on the UWSP Code Chapter 4.3.4.C.3.

Using the UWSP Code parking rates, it is possible to calculate the parking requirements for the proposed Project. As shown on **Table 2**, the proposed Project requires sixty-one (61) stalls. Per the UWSP Code, the Project is deficient by two (2) parking stalls.

TABLE 2: COMSTOCK & PHILADELPHIA TOWNHOMES UWSP CODE PARKING SPACE REQUIREMENTS

Use	Quantity[1]	Parking Rate[2]	Required Parking	Proposed Parking	Meets Requirement
Residential - Studio & 1bedroom	0	1.5 spaces/unit	0		
Residential - 2 bedroom	10	2 spaces/unit	20		
Residential - 3+ bedroom	14	2.5 spaces/unit	35		
Guest	24	0.25 spaces/unit	6		
Total	**24**	**--**	**61**	**59**	**No**

[1] Based on the February 7, 2024 preliminary site plan, prepared by ktgy Architecture + Planning.
[2] Based on the UWSP Code Chapter 4.3.4.C.3.

PARKING GENERATION

The parking generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Parking Generation Manual (6th Edition, 2021). ITE is nationally identified as an acceptable methodology to supplement local

agency parking demand justification due to the vast difference in parking rate methodologies by individual agencies nationwide. ITE Land Use Code 215 (Single-Family Attached Housing) was chosen for this analysis. ITE Land Use Code 215 identifies this classification as "any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space. This land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/ rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by side in a row and each with an outside entrance)." Data is separated into two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less. The Project is considered "not close to rail transit" per the ITE definition.

Table 3 shows the results of 10 studies and provides an average parking rate of 1.41. Additional data and information can be found in ITE's Parking Generation Manual (6th Edition, 2021).

TABLE 3: PEAK PERIOD PARKING DEMAND PER DU

Single-Family Attached Housing
Not Close to Rail Transit (215)

Peak Period Parking Demand vs: Dwelling Units
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. Num. of Dwelling Units: 36

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.41	0.90 - 2.55	1.26 / 2.27	***	0.39 (28%)

The average parking rate for the Project's classification per ITE standards is identified at 1.41. As shown on **Table 4**, the proposed Project requires thirty-four (34) stalls, which the Project exceeds ITE parking generation rate by twenty-five (25) stalls.

TABLE 4: PROJECT PARKING GENERATION SUMMARY

Land Use	Units[2]	ITE LU Code	Rate
Parking Generation Rates:[1]			
Single-Family Attached Housing	DU	215	1.41

[1] Source: Institute of Transportation Engineers (ITE), Parking Generation Manual, 6th Edition (2021).
[2] DU = Dwelling Units

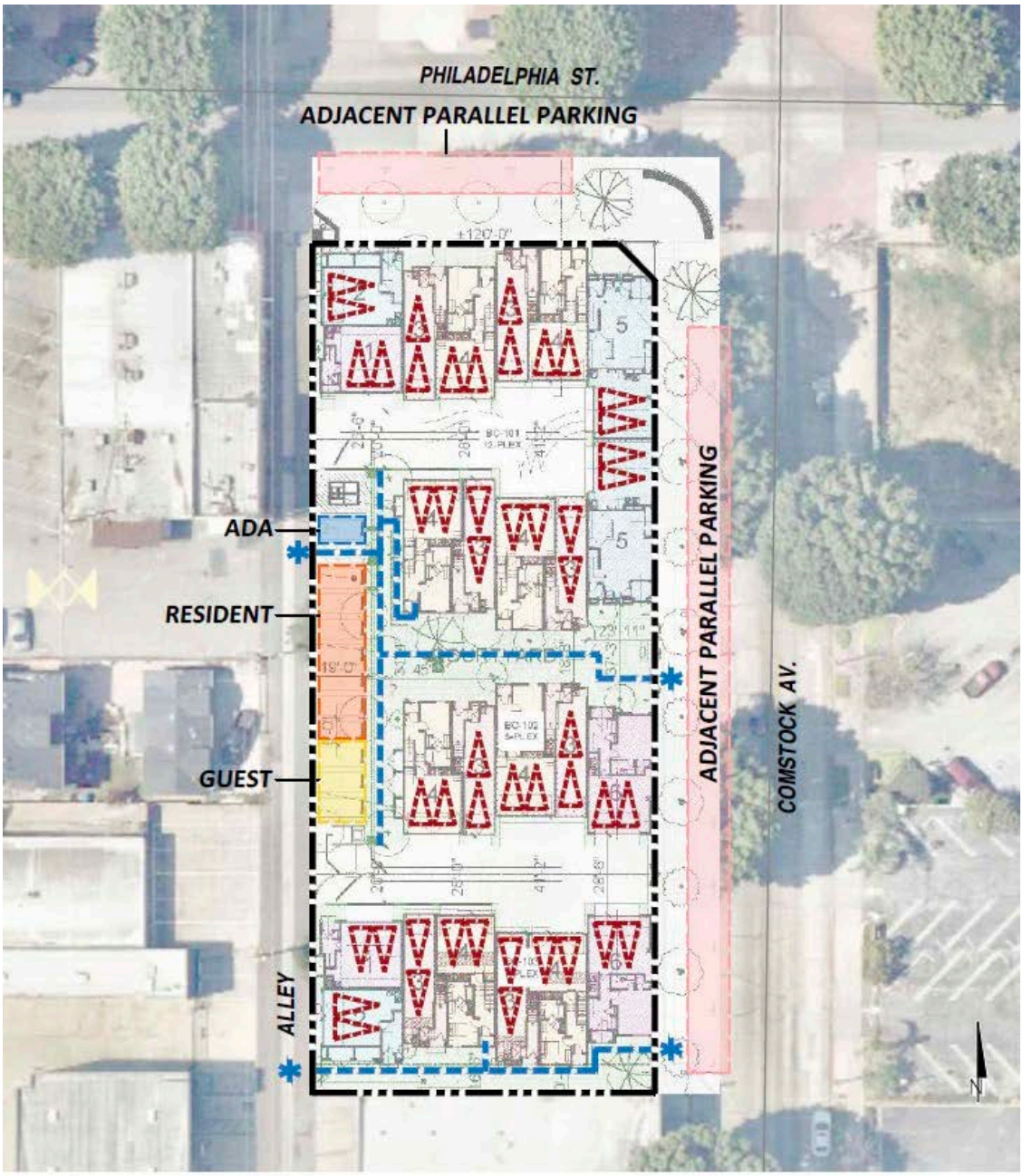
Land Use	Quantity	Units[1]	Spaces
Project Parking Generation Summary:			
Single-Family Attached Housing	24	DU	34

[1] DU = Dwelling Units

PARKING MANAGEMENT PLAN

The proposed Project can apply additional parking strategies to increase the parking supply. With a PMP, the availability of parking for guests and residents can be maximized. **Exhibit C** presents the proposed PMP recommendations for the Project. As shown below, there are forty-eight (48) garage stalls for resident only parking and on-site open parking for seven (7) resident spaces, four (4) guest parking spaces, including one (1) Americans with Disabilities Act (ADA) parking space. The adjacent parallel parking along Comstock Avenue and Philadelphia Street provides an additional sixteen (16) open parking spaces, which has not been included in the Project's proposed parking and is shown for reference only. The Project is located near public transportation (ie. LA Metro bus stops and Norwalk train station) and a new City Parking structure, containing electric vehicle charging stations, located approximately 215 feet north of the project site at 6738 Comstock Avenue. LA Metro Routes 10 & 50 operates on Philadelphia Street adjacent to and north of the Project site, with a bus stop located directly across the street from the Project site (Stop ID 1044). The Project site is also located a short distance from the Whittier Greenway Trail, which can be accessed from Philadelphia Street. The Whittier Greenway Trail provides a safe and commuter friendly pathway for bicyclists and pedestrians. The Greenway Trail connects with local and regional bus systems, including Metro, Foothill Transit, Montebello Bus Lines and Norwalk Transit.

EXHIBIT C: PARKING MANAGEMENT PLAN



LEGEND:

- ADA = 1
- RESIDENT = 7
- GUEST = 3
- ADJACENT PARALLEL PARKING = 16
- ADA PATH OF TRAVEL
- ADA CONNECTION TO PUBLIC R/W
- RESIDENT GARAGE SPACES = 48 SPACES

PARKING STRATEGIES

Changing economic and demographic conditions will continue to influence parking and transportation needs. Self-driving cars, parking guidance, peer-to-peer vehicle sharing, telecommuting, transportation network, and other forward-looking technologies will continue to shape current and future parking demands. Alternative modes of transportation, such as bicycle, walking, shared ride services, public transportation, etc. are currently available to alleviate congestion to better serve the Project and surrounding community. The parking strategies for this Project are described in more detail below to further mitigate and prevent any congestion issues for the Project and/or local community.

SHORT-TERM (GUEST) PARKING

The short-term parking spaces are located near high-turnover areas where guests/visitors are likely to drop-by and deliver goods or services. The short-term parking restrictions are provided to prevent long-term parking activity and reserve these spaces for the short-term, high frequency parking activities. **Exhibit C** identifies the optional short-term parking locations. Any parking space restrictions that limit its effective use to one group or user reduce the availability of these spaces for other groups or users. The Property Manager (HOA) will determine whether to implement specific time restrictions.

LONG-TERM RESIDENT PARKING

The PMP recommendations, as shown on **Exhibit C,** identify a total of forty-eight (48) resident parking spaces located within the garage. These spaces are identified as forty-eight (48) garage spaces for resident only parking to ensure an even distribution of onsite parking and preserve high-turnover spaces (or preferred spaces) for guests. The resident only spaces that are not garage spaces will be clearly marked and vehicles parking in those spaces shall be identifiable (tag, sticker, etc.). It shall be the responsibility of the Property Manager (HOA) to strictly monitor and ensure all garage spaces are being utilized for resident parking.

MONITORING AND ENFORCEMENT

To ensure that the PMP will be managed and implemented, the applicant should actively monitor and enforce the PMP recommendations, as summarized below. The Homeowners Association (HOA) should be on-site to ensure that residents and guests park in the assigned areas. To ensure monitoring and enforcement of the PMP, rules of conduct should be provided to all residents.

PARKING MANAGEMENT PLAN RECOMMENDATONS

This PMP outlines the onsite parking supply and key parking management strategies to maximize the utilization of parking for residents and guests. This PMP provides the following recommendations.

- Short-term parking will be located closest to the center of the community for equal distribution throughout the development for guests visiting the community.

- The ADA compliant parking stalls, resident stalls, and guest parking stalls will have the appropriate signage, as required by the City of Whittier. Monitoring of these stalls will be enforced by the Property Manager.
- The HOA will ensure residents comply with the PMP recommendations and rules of conduct. The HOA shall also promote alternative modes of transportation, such as bicycle, walking, shared ride services, public transportation, etc. to better serve the Project surrounding community.

CONCLUSIONS

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP). The UWSP Municipal Code requires sixty-one (61) parking stalls, the Project is proposing fifty-nine (59) stalls with a variance of two (2) stalls being requested.

Based on the ITE nationally accepted methodology for Single-Family Attached Housing development parking rates, the proposed Project requires thirty-four (34) stalls, which the Project exceeds by twenty-five (25) stalls. Additionally, there is adjacent on-street open parking along Comstock Avenue and Philadelphia Street providing sixteen (16) spaces for any overflow parking needs, as shown in **Exhibit C**. The Project is also approximately 215 feet from the City's new public parking garage. Based on information provided by the City, the parking garage contains approximately 388 to 495 parking stalls, including electric vehicle charging stations, for more parking opportunities for residents and local Uptown businesses. The Project will promote the many modes of alternative transportation available in the adjacent community as well (bicycling, walking, public transportation, etc.), along with the proposed Parking Management Strategies to enforce parking within the development. It is with the methodology and proposed parking management strategies herein that a variance for two (2) parking stalls is being requested by the Project.

If you have any questions, please contact me directly at bdugan@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.

Brendan Dugan

Brendan Dugan, P.E.
Transportation Engineer

Taryn Ferguson

Taryn Ferguson
Transportation Analyst

ATTACHMENT A

SITE PLAN



OPEN SPACE MATRIX PER LANDSCAPE
See Sheet L-6 for Designation
Open space requirement: 15% of Lot (5,397 SF)

OPEN SPACE PROGRAMMED PROVIDED
Courtyard & Paseo Amenities
Common Open Spaces 5,569 sf (15.5%)

OTHER COMMON SPACE PROVIDED
Builder Installed & Maintained 2,546 sf (7.1%)
(See Landscape's Sheet L-6 for breakdown)

PRIVATE OPEN SPACE PROVIDED
Ground Level
Homeowner Exclusive Use/Maintained 835 sf (2.3%)
Private Deck Open Space 3,240 sf (9.0%)
Breakdown (Net)
Plan 1 (120 sf)
Plan 2 (174 sf)
Plan 3 (480 sf)
Plan 4 (1,072 sf)
Plan 5 (1,160 sf)
Plan 6 (234 sf)

COMBINED TOTAL OPEN SPACE 12,190 sf (33.9%)
(See Landscape Plans for Type of Activity Areas)

U-TC COURTYARD HOUSING DEV STANDARDS
Front Setback: 0'
Side Setback: 0'
Rear Setback: 10'
Building Height: 2-4 stories*
Building south of Courtyard should be 1 story lower than the northern side to allow max exposure of sunlight in the courtyard
Courtyard with E/W axis: min 40'
Courtyard with N/S axis: min 30'
Couryard Size: 15% of lot for Open Space
Required Parking:
Studio/1bd: 1.5 sp/unit
2bd: 2.0 sp/unit
3bd: 2.5 sp/unit
Guest: 0.25 sp/unit
Min Parking Space for Residential:
Open Parking Space from 10'x20' to 9'x19' (with a two-foot overhang)
Tandem Parking Space to 10'x40' (in garages)

SITE DATA
Tentative Tract: 84431
Address: 12826 Philadelphia Street, Whittier, CA 90601
APN: 8139-024-027
Zoning: U-CT
Building Type: Courtyard Housing
Architectural Style Type: California Contemporary
Frontage Type: Stoop
Total Units: 24
Gross Building Area: 41,618 SF
FAR: 1.16
Density: 29.5
Net Site Area: .813 Acres (35,414 SF)
Gross Site Area: .826 Acres (35,980 SF)
Site Lot Coverage: 55.24%
Open space requirement: 15% (5,397 SF)
Landscape Area (Approx. Proposed): See Landscape Plan

BUILDING DATA
Type Construct: V-B
Fire Department: Whittier
Occupancy Type: R2
Fire Sprinkler Type: NFPA 13

Plan Types and Sizes (Net)	Park'g Req'd
(2) Plan 1 - 1340 SF (2B/2.5BA - 2 Car Gar.)	4 spaces
(2) Plan 2 - 1485 SF (3B/2.5BA - 2 Car Gar.)	5 spaces
(8) Plan 3 - 1336 SF (2B/2.5BA - 2 Car Tandem Gar.)	16 spaces
(8) Plan 4 - 1729 SF (3B/3.5BA - 2 Car Gar.)	20 spaces
(2) Plan 5 - 2251 SF (4B/3.5 BA/Loft - 2 Car Gar.)	5 spaces
(2) Plan 6 - 2177 SF (4B/3.5 BA - 2 Car Gar.)	5 spaces
Totals - (24) units 39,026 SF (Gross: 41,618 SF)	55 spaces
(Avg. 1626 Net SF)	+Guest .25/unit (6)

Total Spaces Required = 61 Spaces
Total Private Deck Space Provided: 2,398 Net SF (2,676 Gross SF)

Parking Spaces Provided/Proposed:

(RP) Garage -	48 Spaces
(RP) Resident Parking Space -	7 Spaces
(GS) Guest Parking Space -	4 Spaces (Includes 1 ADA space)
Total -	59 Spaces (Requires a Variance) (Avg. 2.46 sp/unit)

On-Street Adjacent Parallel Parking Proposed/Provided - 16**
See civil for details.
** Per Section 4.3.1.C.2 (Zones and Their Purposes/U-CT) and Section 18.48.020, Item 5 (Schedule of Parking Standards)

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MW INVESTMENT GROUP
MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840

Plot Date: 09.23.2024
2nd Planning Submittal: 04.30.2024
3rd Planning Submittal: 07.15.2024
DRC Planning Submittal: 09.23.2024

0 10 20 40

SITE PLAN
CONCEPTUAL DENSITY STUDY

A1.0

12826 PILADELPHIA STREET, WHITTIER, CA
COMSTOCK PLACE
WHITTIER, CA # 2023-0840
MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

APPENDIX 15

MEMORANDUM

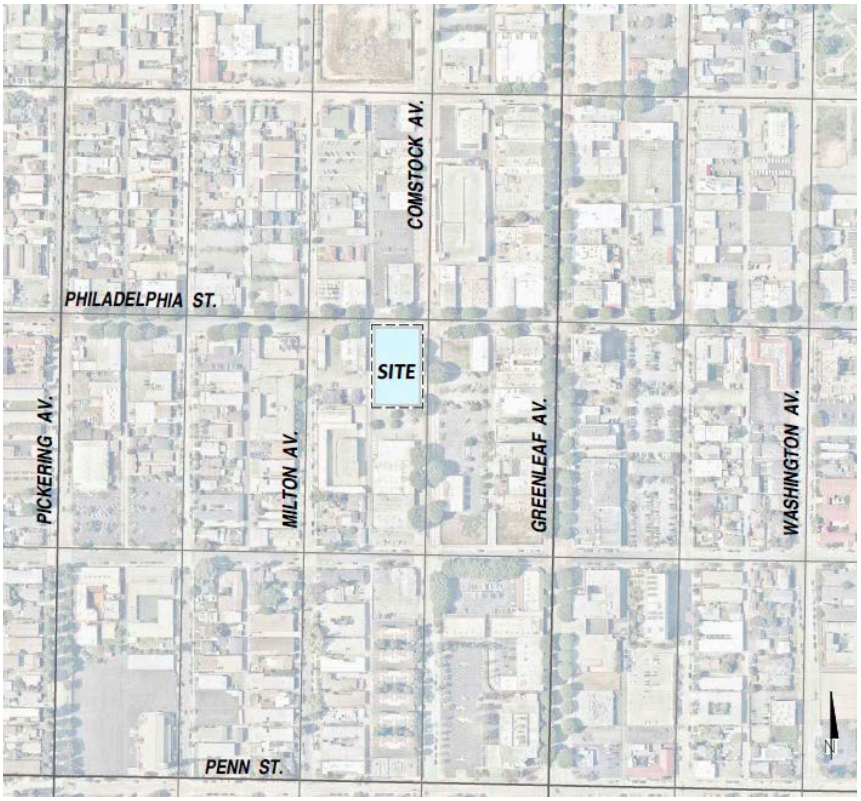
URBAN | CROSSROADS

DATE: November 6, 2024
TO: Matt Waken, Whittier Comstock, LLC
FROM: Brendan Dugan/Taryn Ferguson, Urban Crossroads, Inc.
JOB NO: 16181-10 Comstock Place TDMP

COMSTOCK & PHILADELPHIA TOWNHOMES TRANSPORTATION DEMAND MANAGEMENT STRATEGIES PLAN

Urban Crossroads, Inc. is pleased to submit this Transportation Demand Management Strategies Plan (**TDMP**) for the Comstock & Philadelphia Townhomes development (**Project**), which is located at 12826 Philadelphia Street in the City of Whittier, as shown on **Exhibit A**. Transportation Demand Management (**TDM**) measures are focused on reducing resident and visitor commute trips for the proposed Project and may be implemented following occupancy of the proposed Project. This TDMP also addresses recommendations for routing of Project traffic to the Project site in the buildout scenario while considering the buildout of nearby roadway improvements within the City of Whittier.

EXHIBIT A: PROJECT LOCATION



INTRODUCTION

The proposed Project consists of the development of a 24-unit residential (townhome) project located on the southwest corner of Philadelphia Street and Comstock Avenue. The site is located within the Uptown Center of the Uptown Whittier Specific Plan (UWSP), as shown on **Exhibit B**.

EXHIBIT B: PRELIMINARY SITE PLAN



TRANSPORTATION DEMAND MANAGEMENT RECOMMENDATIONS

To reduce VMT during Project operations, VMT reduction measures shall be provided in the form of TDM measures. These TDM measures are focused on reducing resident and visitor commute trips for the proposed Project and may be implemented following occupancy of the proposed Project.

1. Owners/tenants shall, to the extent practical, allow for and encourage ride-sharing programs and to utilize nearby public transportation.

- Educational information will be offered to residents to utilize rideshare programs or nearby public transportation (ie. LA Metro bus stops and Norwalk train station).

2. At a minimum, the TDM program shall:
    - Identify physical improvements (if any) to be implemented as part of the TDM program. The City Planning/Building Department shall verify completion of physical TDM improvements as part of the Certificate of Occupancy process.
    - Identify TDM program operational strategies to be implemented. These TDM strategies may include but would not be limited to the following:
        - Identify nearby services such as food, retail, and other services to encourage walking, bicycling, or utilizing public transportation to commute to and from.
        - Active Transportation – Identify and promote local bikeway and pedestrian networks within the vicinity of the Project.
    - Establish a TDM coordinator position. The position of TDM coordinator may be fulfilled by the members of the HOA, a resident, or third-party provider. The TDM coordinator shall:
        - Identify proposed TDM measures to be implemented and provide a list of implemented measures to the City Planning Division.
        - Inform residents of commute options and shall, as applicable, arrange rideshare or vanpool programs.
        - Develop and implement a TDM monitoring program. The TDM monitoring program shall identify trip generation, trip origin(s), average vehicle ridership, and provide an estimate of VMT per resident. The results of the survey shall be submitted annually to the City of Whittier Community Development Planning Division.

TRANSPORTATION DEMAND MANAGEMENT PLAN

The TDMP has been prepared for buildout of the proposed Project in the City of Whittier. The following TDM recommendations will reduce vehicle miles traveled (**VMT**):

- Site Access, On-Site Parking, and Circulation
- Truck/Passenger Car Routes
- Emergency Vehicle Access Routes
- Pedestrian Routes (walkability of surrounding neighborhood and services)
- Bicycle Routes (bicycle routes throughout the local community)
- Transit Routes (local bus routes, etc.)

SITE ACCESS, ON-SITE PARKING, AND CIRCULATION

Access to the proposed Project would be provided via Philadelphia Street and Comstock Avenue. Greenleaf Avenue will serve as the primary travel route for heavy trucks to and from the Project,

east of Comstock Avenue. Truck access to the buildings will primarily use Philadelphia Street. Trucks are anticipated to utilize designated truck routes such as Whittier Boulevard (SR-72) to reach regional freeways such as the I-605 Freeway. Once residents have taken occupancy of their units, truck traffic is anticipated to be minimal.

The following intersections will be signalized to maintain Right-of-Way (**ROW**) control for all vehicles, pedestrians, and bicyclists:

- Philadelphia Street and Comstock Avenue

The following Project driveways will provide truck access to the building:

- Philadelphia Street and Project Alleyway

Site access for Project passenger cars and service vehicles will be provided by Philadelphia Steet and the Project Alleyway.

On-site traffic signing and striping should be implemented consistent with the provisions of the California Manual on Uniform Traffic Control Devices (**CA MUTCD**) and in conjunction with detailed plans for the Project site. Sight distance at each project access point should be reviewed with respect to standard City of Whittier and/or applicable agency sight distance standards, as determined by the City Engineer, at the time of preparation of final grading, landscape, and street improvement plans.

TRUCK/PASSENGER CAR ROUTE

The route for trucks shall utilize Greenleaf Avenue to the east of Comstock Avenue before accessing the sight via Philadelphia Street. Trucks shall be prohibited from using other roadways to access the Project site (i.e., Comstock Avenue). Route maps shall be provided to all truck drivers. Passenger cars have no restrictions on roadways to access the Project.

EMERGENCY VEHICLE ACCESS ROUTES

Site access points shall be provided to the City and emergency service providers. The following driveways provide direct access to the fire lanes throughout the site:

- Philadelphia Street and the Project Alley
- Comstock Avenue

A minimum of two access points is required for emergency vehicle access. Fire lanes shall be constructed as required by the Fire Marshall. On-site parking and pedestrian routes shall be provided to all employees, City staff, and emergency service providers. Emergency service access shall be maintained during occupancy.

PEDESTRIAN ROUTES

Sidewalks and walkways along the Project frontage and within the site shall be ADA compliant. Any pedestrian accommodations deemed necessary by the Public Works inspector shall be implemented as necessary to ensure a safe path along an ADA compliant route for pedestrians.

BICYCLE ROUTES

The City of Whittier has future planned bicycle facilities, which proposes a Class III Intermodal Connection along Comstock Avenue, north of Mar Vista Street connecting Historic Uptown Whittier to the Whittier Greenway Trail. This short Class III route along Comstock Avenue north of Mar Vista Street would provide access to the rear parking lot of the Transit Center. The distance from the Whittier Greenway Trail to the Transit Depot is less than one mile. Bicycle facilities within the site and Project frontage should maintain proper connectivity to the planned City of Whittier planned bicycle facilities.

TRANSIT ROUTES

The City of Whittier is currently served by LA Metro, a public transit agency serving various jurisdictions within Los Angeles County. Based on a review of the existing transit routes within the vicinity of the proposed Project, as shown on **Exhibit C**, LA Metro Routes 10 & 50 operates on Philadelphia Street adjacent to and north of the Project site, with a bus stop located directly across the street from the Project site (Stop ID 1044). Transit service is reviewed and updated by LA Metro periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. The applicant should coordinate with La Metro to potentially provide additional bus service to the site.

EXHIBIT C: LA METRO BUS ROUTE



CLOSING

Urban Crossroads, Inc. is pleased to provide this Transportation Demand Management Plan for the proposed Project. The TDMP is subject to revisions and should be updated as development

for the proposed Project and City of Whittier occurs. The TDMP is also subject to change at the discretion of the City of Whittier.

If you have any questions or comments, I can be reached at bdugan@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.

Brendan Dugan

Brendan Dugan, P.E.
Transportation Engineer

Taryn Ferguson

Taryn Ferguson
Transportation Analyst

APPENDIX 16

1919 S. State College Blvd.
Anaheim, CA 92806-6114

October 4, 2021

KHR Associates
17530 Von Karman Ave, Suite 200
Irvine, CA 92614

Attn: Jennifer Pierce

Subject: Will Serve and Map Request for area around the intersection of Philadelphia St and Comstock Ave; Whittier

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (CPUC) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.



Katrina Regan
Planning Supervisor
SouthEast Region - Anaheim Planning & Engineering

KR/rs
wilserv.doc

Will Serve Letter

10/11/2021

Jennifer Pierce
KHR Associates
17530 Von Karman Ave Ste 200
Irvine CA 92614

Project Name:	WSL - 12826 Philadelphia Street, Whittier, CA 90601
LOCATION:	12826 Philadelphia Street, Whittier, CA 90601

Re: May Serve Letter by Charter Communications or an affiliate authorized to provide service ("Charter")

Thank you for your interest in receiving Charter service. The purpose of this letter is to confirm that the Property is within an area that Charter may lawfully serve. However, it is not a commitment to provide service to the Property. Prior to any determination as to whether service can or will be provided to the Property, Charter will conduct a survey of the Property and will need the following information from you:

- Exact site address and legal description
- Is this an existing building or new construction?
- Site plans, blue prints, plat maps or any similar data
- The location of any existing utilities or utility easements
- _____

Please forward this information to the construction manager listed below. Upon receipt, a Charter representative will be assigned to you to work through the process. Ultimately, a mutually acceptable service agreement for the Property will be required and your cooperation in the process is appreciated.

Construction Manager Contact:

Dianna Netherlain
SoCal Central Specialist, Business Development
3430 E Miraloma Ave
Anaheim CA 92806
714-414-1454
dianna.netherlain@charter.com

Sincerely,

Dianna Netherlain

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

9/30/2021

12826 Philadelphia St., Whittier

Your project is located in Southern California Edison (SCE) service territory. SCE will serve the above subject project's electrical requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

SCE may need to conduct utility studies, where applicable, to assess whether additions or modifications to the existing electric infrastructure are required to serve this project. Where applicable, SCE has attached Appendix (B) which not only describes the study, and permitting, but includes a Project Information Sheet that will need to be completed by you and submitted to SCE if your project is at a point where SCE has to determine the required electrical utility work. This Will-Serve letter does not imply that either: (i) these studies have been completed, or (ii) that any required California Environmental Quality Act (CEQA) analysis of project-related electric utility impacts has been conducted.

I am the SCE Design Representative currently assigned to this project. SCE or Applicant will design and construct all required electrical infrastructure to serve this project provided you enter into the applicable contractual agreements with SCE identify scope of electrical utility work required, and supply the following information:

- Site plans as required
- Required contracts and agreements (fully executed)
- Applicable fees
- Local permits
- Required easement documents

Your project will be scheduled for construction once SCE has all the necessary information for your project and you have submitted or agreed to the applicable requirements as stated above, and paid any necessary fees.

If your project will not require SCE services, please notify us so that we can update our records.

SCE appreciates your business. If you have any questions, please feel free to call me at (714) 296-7609.

Sincerely,

SCE Design Representative

Enclosure: Appendix B, where applicable

Appendix B

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

9/30/2021

12826 Philadelphia St., Whittier

As your Southern California Edison (SCE) Design Representative for this project, I am committed to providing you with excellent customer service. The following information is intended to help explain SCE's planning and permitting process for the electric infrastructure needed to serve your Project.

Depending on the scope of work necessary to serve your project (electric facility installation, removal, relocation, rearrangement and/or replacement), it may be necessary for you to submit an Advanced Engineering Fee. This Fee will be applied to certain expenses associated with preliminary design and engineering work required to estimate the cost for SCE to perform the electric work associated with your project. Please note: Depending on factors such as resource constraints, construction or relocation of SCE facilities requirements, the need for environmental review, and so forth, delays in meeting your projected completion date may occur. To help minimize the potential for delays it is imperative that you provide all requested information as early as possible.

If the project results in the need for SCE to perform work on SCE electrical facilities that operate at between 50 and 200 kilovolts (kV), please be advised these facilities are subject to the California Public Utilities Commission's (CPUC's) General Order 131-D (GO 131-D) Permit to Construct (PTC) requirements. For the CPUC PTC review, the CPUC acts as the lead agency under the California Environmental Quality Act (CEQA). Depending on the scope of SCE's work, certain exemptions to the PTC requirements may be available. If no exemptions are available, the PTC application preparation and environmental approval process could take a minimum of 24 - 48 months.

If you anticipate that your project will require work to be performed on SCE electrical facilities operated at between 50 kV and 200 kV, please inform me at your earliest possible convenience for further assistance to determine the potential G.O.131-D permitting requirements and/or permitting exemption(s).

In order for SCE to determine the required electrical utility work necessary to support your project, and to determine any permitting requirements and costs associated with constructing these facilities, project plans and a completed Customer Project Information Sheet will need to be submitted.

If you have any additional questions, please feel free to call me at (714) 296-7609.

Sincerely,

SCE Design Representative

City of Whittier
13230 Penn Street, Whittier, California 90602-1772
(562) 567-9500 Fax (562) 567-2874 www.cityofwhittier.org

October 4, 2021

Jennifer Pierce
KHR Associates
17530 Von Karman Avenue – Suite 200
Irvine, California 92614

Subject: 12826 Philadelphia St – Water and sewer will serve

Water Facilities

The above-referenced address is within the water service area of the City of Whittier and there is an existing 12-inch water main along Philadelphia St and Comstock Ave.

All water service connections, whether existing or proposed, are governed by the latest version of the City of Whittier Municipal Code Title 13, Division I. New water connections and/or water system improvements may be permitted, but are subject to review and approval; this shall include the payment of all applicable water connection and permit fees. In addition, all new water connections shall be installed and constructed in accordance with the latest version of the City of Whittier Water Utility Standard Specifications.

Sewer Facilities:

A city-owned 6-inch sewer exists on the alley east of Milton Ave. This system will receive sewage flow generated by a said development pending the following:

The developer shall conduct a flow study to determine if the existing sewer system has sufficient capacity to accept increased sewage from the proposed project. Any deficiencies caused by the proposed development shall be mitigated by the developer as approved by the Director of Public Works. In the case where sewer deficiencies are already identified in the City of Whittier's Sewer Master Plan, and the deficient segment of sewer main has been planned for sewer upgrade, the developer shall determine and pay the City approved fair-share cost for the sewer upgrade project.

If you have questions regarding water and/or sewer, please contact Alex Loayza at (562) 567-9508.

Sincerely,

Kyle Cason, P.E.
Director of Public Works

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

June 16, 2022

Ref. DOC 6583883

Ms. Jennifer Pierce
Senior Associate
KHR Associates
17530 Von Karman Avenue, Suite 200
Irvine, CA 92614

Dear Ms. Pierce:

Will Serve Letter for Comstock Residential Project

The Los Angeles County Sanitation Districts (Districts) received your will serve letter request for the subject project on May 27, 2022. The proposed project is located within the jurisdictional boundary of District No. 18. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' North Outfall Trunk Sewer, located in Washington Boulevard at La Cuerta Street. The Districts' 16-inch diameter trunk sewer has a capacity of 6.6 million gallons per day (mgd) and conveyed a peak flow of 1.4 mgd when last measured in 2019.

2. The wastewater generated by the proposed project will be treated at the Los Coyotes Water Reclamation Plant located in the City of Cerritos, which has a capacity of 37.5 mgd and currently processes an average flow of 23.1 mgd.

3. The expected increase in average wastewater flow from the project, described in the application as 52 residential apartments, is 6,293 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the Districts for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of

the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2708 or at dcurry@lacsd.org.

Very truly yours,

Donna J. Curry

Donna J. Curry
Customer Service Specialist
Facilities Planning Department

DC:dc