

FINAL

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION California Environmental Quality Act (CEQA)

STARBUCKS DRIVE-THROUGH PROJECT

Project Case # PHG 17-0015; ENV 17-0003
Address: 350 West Valley Parkway
Escondido, CA 92025
Assessor Parcel No. 229-332-45

Prepared for:

City of Escondido
Planning Division
201 North Broadway
Escondido, CA 92025

Prepared by:

RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101

June 2018



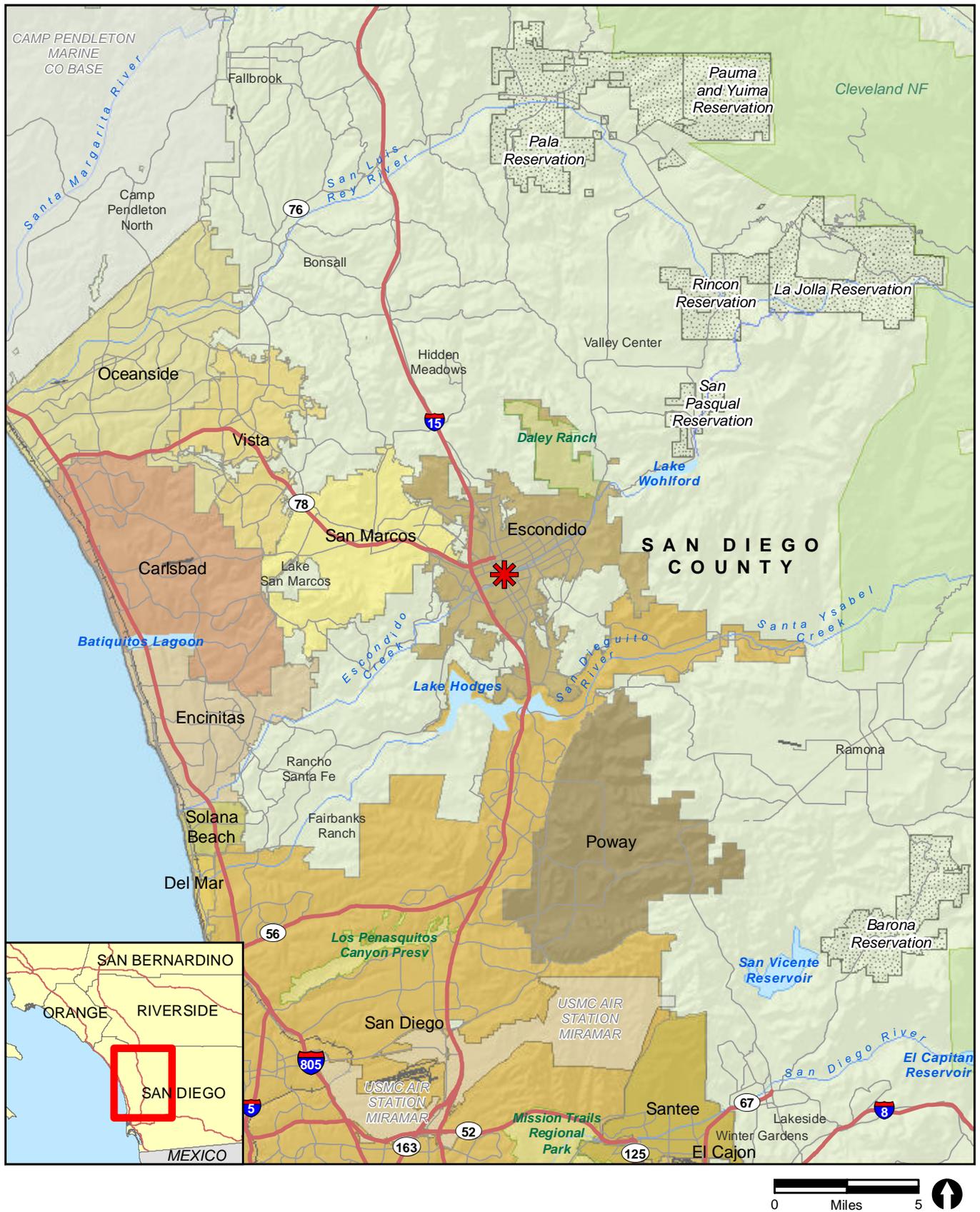
Environmental Checklist Form (Initial Study Part II)

1. Project title and case file number: Starbucks Drive-Through; PHG 17-0015; ENV 17-0003
2. Lead agency name and address: City of Escondido, 201 N. Broadway, Escondido, CA 92025
3. Lead agency contact person name, title, phone number and email:
Darren Parker, Associate Planner, (760) 839-4553, dparker@escondido.org
4. Project location: 350 West Valley Parkway, Escondido, California 92025 (APN 229-332-45)
5. Project applicant's name, address, phone number and email: John Rumsey, MPA Architects, 3578 30th Street, San Diego, CA 92104, (619) 236-0595 x 322, jrumsey@mpa-architects.com
6. General Plan designation: Specific Plan Area 9 (SPA 9)
7. Zoning: Specific Plan (SP)
8. Description of project: (Describe the whole action involved, including, but not limited to, later phases of the project and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The Starbucks Drive-Through project site is located in the city of Escondido, California (Figure 1), within the Centre City Urban District of the Downtown Specific Planning Area. The project is located on the north side of West Valley Parkway between North Escondido Boulevard and Centre City Parkway. Refer to Figure 2 for the project location on an aerial photograph. The 0.45-acre project site currently consists of paved parking and ornamental landscaping associated with an existing shopping center.

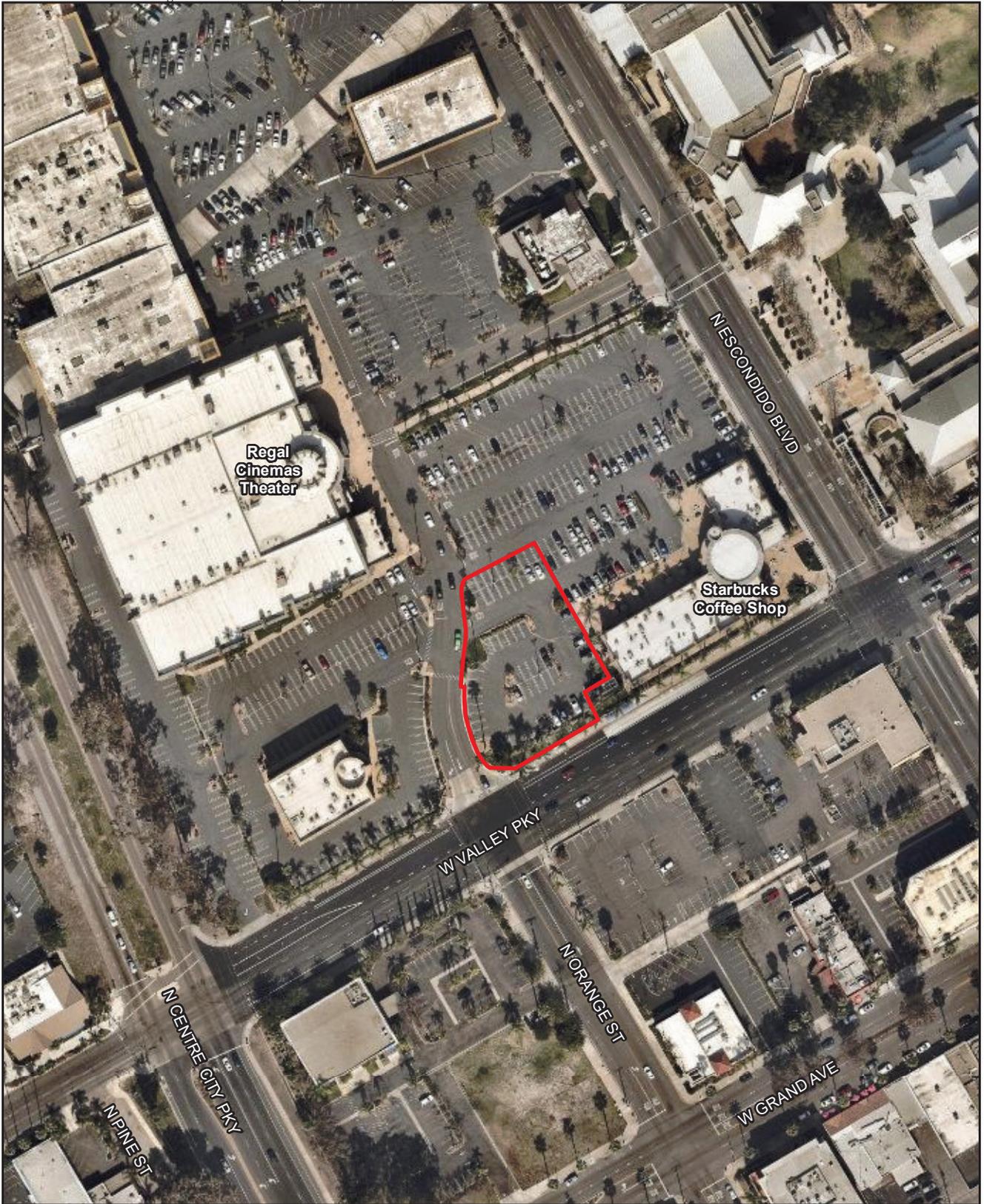
The project includes two components. The first is an application for an Amendment to the Downtown Specific Plan to allow drive-through restaurants within the Centre City Urban (CCU) and Gateway Transit (GT) districts, which is currently prohibited. The second component of the project is to allow the construction of a 1,900-square-foot Starbucks coffee shop with drive-through (Figure 3), through the issuance of a Conditional Use Permit (CUP). The proposed Specific Plan Amendment would allow potential future development of drive-through establishments within the CCU and GT districts of the Downtown Specific Plan area with issuance of a CUP. The new 1,900-square-foot coffee shop would include landscaping along the project perimeter, drive-through services, and parking islands (Figure 4). Upon issuance of a CUP and completion of the project, the existing Starbucks franchise operating at 320 West Valley Parkway would relocate to the new facility. The vacated commercial property at 320 West Valley Parkway would remain vacant or be leased to another permitted business or land use activity.
9. Surrounding land uses and setting (briefly describe the project's surroundings):

The project site is located at the southern boundary of an existing shopping center that includes a number of commercial uses including a grocery store, cinema, retail, and restaurants. The site is accessible to and from Interstate 15 (0.8-mile to the west) and State Route 78 (1.0-mile to the northwest) with West Valley Parkway bordering the site's southern frontage. Commercial development is located immediately opposite of West Valley Parkway, including several banks and a sit-down restaurant. Other land surrounding the project site and existing shopping consists of urban development within the Downtown Specific Planning Area.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement).
None



 Project Location

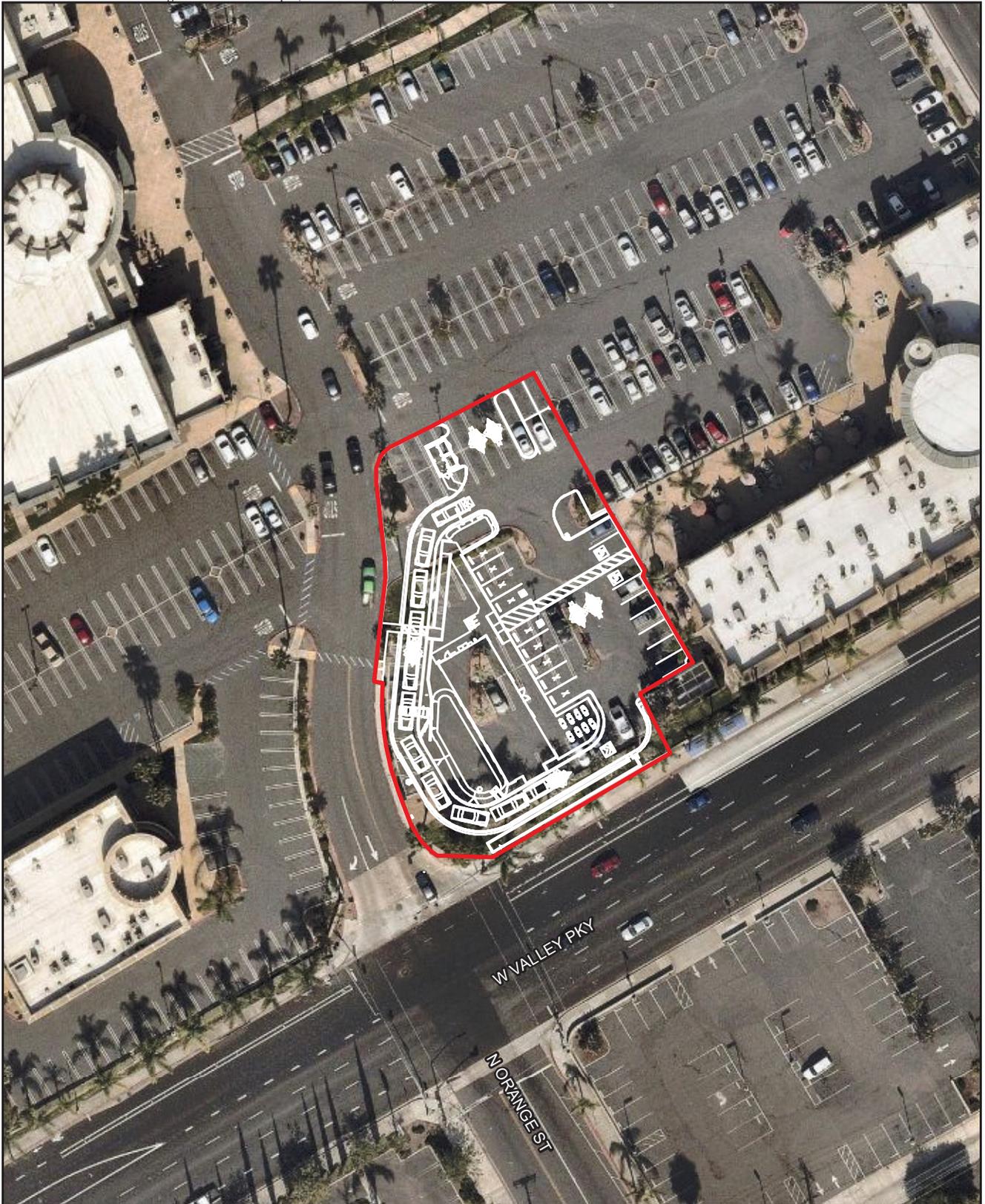
FIGURE 1
Regional Location



 Project Boundary

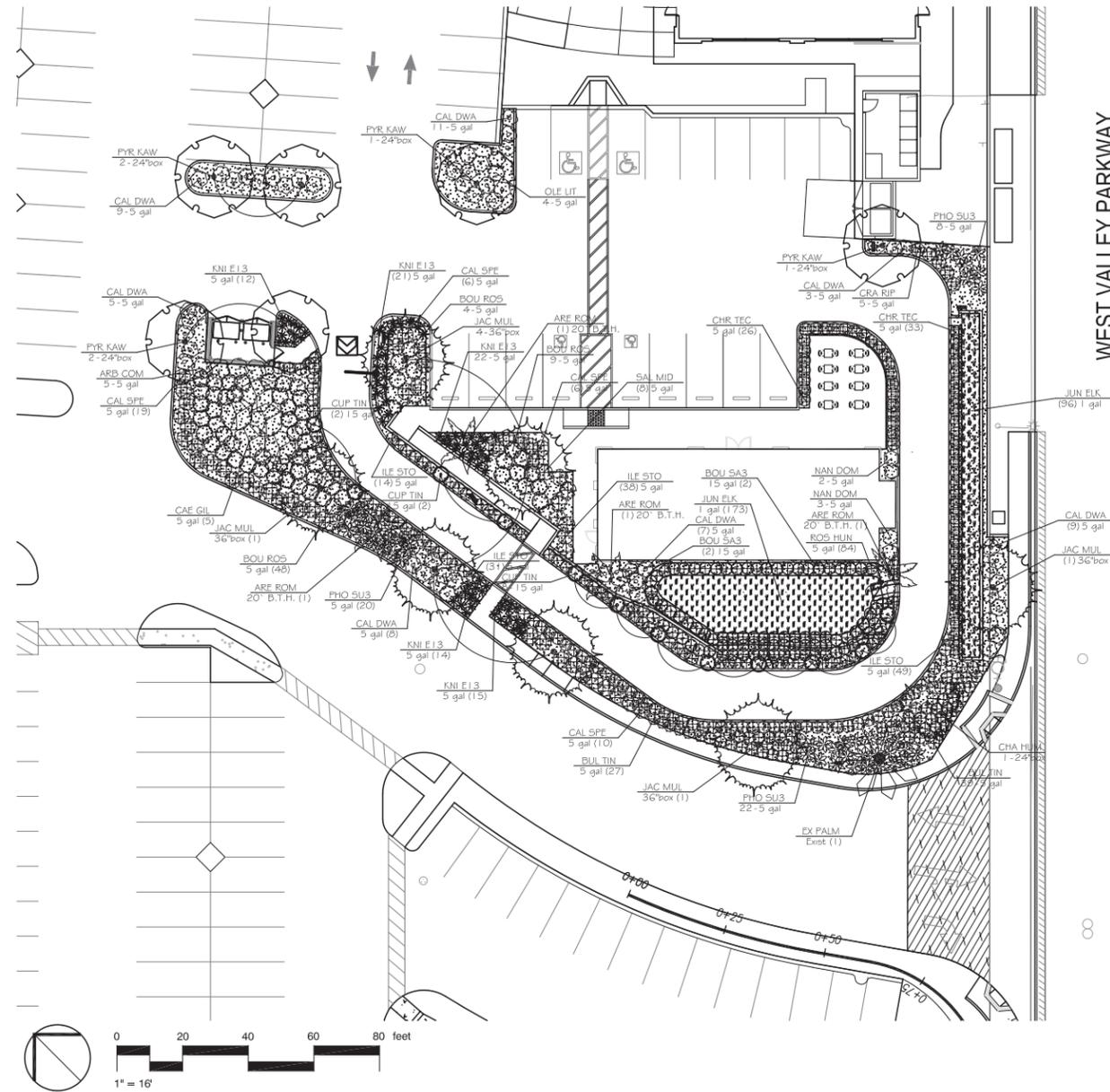
FIGURE 2

Project Location on Aerial Photograph



-  Project Boundary
-  Site Plan Lines

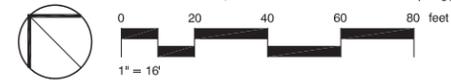
FIGURE 3
Site Plan



PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME / COMMON NAME	CONT	SIZE	QTY
	JAC MUL	Jacaranda mimosifolia / Jacaranda Multi-Trunk WUCOLS REG. 3 - M	36'box	10' Ht. 5' Sp.	7
	PYR KAW	Pyrus kawakami / Evergreen Pear WUCOLS REG. 3 - M	24'box		6
	ARE ROM	Arecastrum romanoffianum / Queen Palm WUCOLS REG. 3 - M	20' B.T.H.	Min 20' B.T.H.	4
	CHA HUM	Chamaecrops humilis / Mediterranean Fan Palm WUCOLS REG. 3 - M	24'box		1
	EX PALM	Exst Palm Tree / To Remain	Exst		1
	ARB COM	Arbutus unedo 'Compacta' / Dwarf Strawberry Tree WUCOLS REG. 3 - L	5 gal		5
	BOU ROS	Bougainvillea x 'Roselia' / Bougainvillea WUCOLS REG. 3 - L	5 gal		61
	BUL TIN	Dulcine frutescens 'Tiny Tangerine' / Tiny Tangerine Dulcine WUCOLS REG. 3 - L	5 gal		66
	CAE GIL	Caesalpinia gilliesii / Yellow Bird of Paradise WUCOLS REG. 4 - L	5 gal		5
	CAL SPE	Calandrinia spectabilis / Pink Calandrinia WUCOLS REG. 3 - L	5 gal		41
	CAL DWA	Callistemon viminalis 'Little John' / Dwarf Weeping Bottlebrush WUCOLS REG. 3 - M	5 gal		52
	CHR TEC	Chondropetalum tectorum / Small Cape Rush WUCOLS REG. 3 - M	5 gal		59
	CRA RIP	Crassula arborescens 'Ripple Jade' / Silver Dollar Plant WUCOLS REG. 3 - L	5 gal		5
	CUP TIN	Cyperus sempervirens 'Tiny Tower' TM / Tiny Tower Italian Cypress WUCOLS REG. 3 - L	15 gal		12
	ILE STO	Ilex vomitoria 'Stokes Dwarf' / Dwarf Yaupon WUCOLS REG. 4 - L	5 gal		132
	KNI E13	Kniphofia x 'Little Maid' / Echo Rajo Red Hot Poker WUCOLS REG. 3 - L	5 gal		64
	NAN DOM	Nandina domestica / Heavenly Bamboo WUCOLS REG. 3 - L	5 gal		5
	OLE LIT	Olea europaea 'Little Olive' TM / Little Olive Olive WUCOLS REG. 3 - L	5 gal		4
	PHO SU3	Phormium tenax 'Sundowner' / New Zealand Flax WUCOLS REG. 3 - L	5 gal		50
	ROS HUN	Rosmannus officinalis 'Huntington Carpet' / Huntington Carpet Rosemary WUCOLS REG. 3 - L	5 gal		64
	SAL MID	Salvia leucantha 'Midnight' / Mexican Bush Sage WUCOLS REG. 3 - L	5 gal		8
	BOU SA3	Bougainvillea x 'San Diego Red' / San Diego Red Bougainvillea Trellis WUCOLS REG. 3 - L	15 gal		4
	JUN ELK	Juncus patens 'Elk Blue' / Spreading Rush WUCOLS REG. 3 - M	1 gal	24' o.c.	269
	BARK	Forest Bark Mulch / Bark Min. 3' Max. Depth	None		6,728 sf

WEST VALLEY PARKWAY



GENERAL NOTES

1. Engendered soils and bio-filtration to be installed per Civil Engineers approved drawings.
2. Plant trees min. 15' from all underground utilities.
3. Location and elevation of all existing improvements within the area of work shall be confirmed by field measurement prior to construction of new work. Contractor will make exploratory excavations and locate existing underground facilities sufficiently ahead of construction to permit revisions to plans if revisions are necessary because of actual location of existing facilities.

NOTES:

1. Engendered soils and bio-filtration to be installed per Civil Engineers approved drawings.
2. Plant trees min. 15' from all underground utilities.

Soil Management Report

- A. The landscape contractor shall submit soils to soils laboratory for analysis and recommendations. The soils sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for intended plants. The soils analysis and report shall include the following:
 1. Soil texture
 2. Infiltration rate determined by laboratory test or soil texture infiltration rate table.
 3. Soil pH
 4. Total soluble salts
 5. Sodium
 6. Percent organic matter
 7. Recommendations will be utilized to make adjustments and amend the landscaped area soils.
- B. The soils analysis and report shall be available in a timely manner, to the Landscape Architect, to make necessary adjustments to the design plans.
- C. The soils analysis and report will be presented to the Municipality with Certification of Completion.

NOTES:

1. THE PLANTS SPECIFIED ARE RATED MODERATE OR LOW WATER REQUIREMENT PLANTS BY WUCOLS III - ESTIMATING IRRIGATION WATER NEEDS IN CALIFORNIA - REGION 4

IRRIGATION REGIME

FULLY AUTOMATIC, WATER EFFICIENT DRIP IRRIGATION SYSTEM WILL BE INSTALLED FOR THE ENTIRE PROJECT. THE IRRIGATION CONTROLLER FEATURES WILL INCLUDE: ET BASED SELF ADJUSTING STATION RUN TIME, MULTIPLE PROGRAM CAPABILITIES, MULTIPLE REPEAT CYCLE CAPABILITIES, FLEXIBLE CALENDAR PROGRAM.



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
- I find that, although the proposed project might have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made, or agreed to, by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
- I find that the proposed project might have a significant effect on the environment and/or deficiencies exist relative to the City's General Plan Quality of Life Standards, and the extent of the deficiency exceeds the levels identified in the City's Environmental Quality Regulations pursuant to Zoning Code Article 47, Section 33-924 (b), and an ENVIRONMENTAL IMPACT REPORT shall be required.
- I find that the proposed project might have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment, but at least one effect: a.) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and b.) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT shall be required, but it shall analyze only the effects that remain to be addressed.
- I find that, although the proposed project might have a significant effect on the environment, no further documentation is necessary 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.



Signature

Darren Parker, Associate Planner
Printed Name and Title



Date

City of Escondido

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. This section evaluates the potential environmental effects of the proposed project, generally using the environmental checklist from the State CEQA Guidelines as amended and the City of Escondido Environmental Quality Regulations (Zoning Code Article 47). A brief explanation in the Environmental Checklist Supplemental Comments 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. All answers must take into account the whole action involved, including off-site, on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts and mitigation measures. Once the lead agency has determined that a particular physical impact might occur, than the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. The definitions of the response column headings include the following:
 - A. "Potentially Significant Impact" applies if there is substantial evidence that an effect might be significant. If there are one or more "Potentially Significant Impact" entries once the determination is made, an EIR shall be required.
 - B. "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 Section 2 below, "Earlier Analyses," may be cross-referenced). Measures incorporated as part of the Project Description that reduce impacts to a "Less than Significant" level shall be considered mitigation.
 - C. "Less Than Significant Impact" applies where the project creates no significant impacts, only less than significant impacts.
 - D. "No Impact" applies where a project does not create an impact in that category. "No Impact" answers do not require an explanation if they are adequately supported by the information sources cited by the lead agency which 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 would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. 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 it is available for review.
 - B. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of an adequately analyzed 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.
3. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist (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.
4. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
5. The explanation of each issue should identify the significance of criteria or threshold, if any, used to evaluate each question, as well as the mitigation measure identified, if any, to reduce the impact to less than significant.

ISSUES:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. <u>AESTHETICS.</u> Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. **AGRICULTURAL 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

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 or (for annexations only) as defined by the adopted policies of the Local Agency Formation Commission, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. **AIR QUALITY.** Where applicable, 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 (or applicable air quality thresholds specified in City of Escondido Zoning Code Article 47)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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V. **CULTURAL RESOURCES.** Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 (or conflict with applicable historic thresholds specified in City of Escondido Zoning Code Article 47)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Disturb any human remains, including those interred outside of dedicated cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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VI. GEOLOGY AND SOILS. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Expose people or structures to potentially 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. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii. Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii. Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv. Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (or conflict with applicable greenhouse gas emissions thresholds specified in City of Escondido Zoning Code Article 47)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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VIII. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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 safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY. Would the project:

a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial/increased erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303 (d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired? Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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X. LAND USE PLANNING. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. 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, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XI. MINERAL RESOURCES. Would the project:

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XII. NOISE. Would the project result in:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (or conflict with applicable noise thresholds specified in City of Escondido Zoning Code Article 47)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIII. POPULATION AND HOUSING. Would the project:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIV. PUBLIC SERVICES. Would the project:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services (or conflict with applicable fire and emergency response time thresholds specified in City of Escondido Zoning Code Article 47):

i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. RECREATION. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVI. TRANSPORTATION/TRAFFIC. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit (or conflict with applicable traffic thresholds specified in City of Escondido Zoning Code Article 47)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| 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 §5020.1(k)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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 subdivision (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. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. UTILITIES AND SERVICE SYSTEMS. Would the project:

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|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Require, or result in, the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIX. MANDATORY FINDINGS OF SIGNIFICANCE

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|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. Does the project have the potential to 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, 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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.) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Where deficiencies exist relative to the City's General Plan Quality of Life Standards, does the project result in deficiencies that exceed the levels identified in the Environmental Quality Regulations (City of Escondido Zoning Code Article 47 Section 33-924(a))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

FINAL
MITIGATED NEGATIVE DECLARATION
ENVIRONMENTAL CHECKLIST
SUPPLEMENTAL COMMENTS

Starbucks Drive-Through
(Project Case # PHG 17-0015; ENV 17-0003)

An Initial Study Environmental Checklist was prepared for this project and is included as a separate attachment to this Draft Mitigated Negative Declaration (MND). The information contained in the Initial Study and the MND Supplemental Comments will be used by the City of Escondido to determine potential impacts associated with the project.

INTRODUCTION

This MND assesses the environmental effects of the Escondido Starbucks Drive-Through project located at 350 West Valley Parkway in Escondido, California (Assessor's Parcel Number 229-332-45).

As mandated by California Environmental Quality Act (CEQA) Guidelines Section 15105, affected public agencies and the interested public may submit comments on the **Draft Mitigated Negative Declaration** in writing before the end of the **20-day** public review period starting on **April 24, 2018** and ending on **May 14, 2018**. Written comments on the Draft Mitigated Negative Declaration should be submitted to the following address by **5:00 p.m., May 14, 2018**. Following the close of the public comment review period, the City of Escondido will consider this MND and any received comments in determining the approval of this project.

City of Escondido
Planning Division
201 North Broadway
Escondido, CA 92025-2798

Contact: Darren Parker, Associate Planner
Telephone: (760) 839-4553
Fax: (760) 839-4313
Email: dparker@escondido.org

A printed copy of this document and any associated plans and/or documents are available for review during normal operation hours for the duration of the public review period at the City of Escondido Planning Division at the address shown above, and also available on the City's website at: <http://www.escondido.org/planning.aspx>. The City of Escondido General Plan Update (2012a); Final Environmental Impact Report (2012b); and Climate Action Plan are incorporated by reference. These documents are available for review at, or can be obtained through the City of Escondido Planning Division or on the City of Escondido website.

Public Review Comment Period

The Draft Mitigated Negative Declaration was circulated for public review beginning April 24, 2018 and ending May 14, 2018. The City did not receive any comment letters on the Draft Mitigated Negative Declaration from any individuals, organizations, or agencies during the public review period. Therefore, no responses to comments or revisions to the Draft Mitigated Negative Declaration are required.

ISSUES:

I. AESTHETICS. Would the project

- a. Have a substantial adverse effect on a scenic vista?

No Impact. Scenic resources identified in the Resource Conservation Element of the General Plan include views to and from hillsides and prominent ridgelines, unique landforms, visual gateways, and edges of the community. The project site consists of paved parking and ornamental landscaping associated with an existing shopping center and does not possess any features or qualities that would qualify as a scenic vista. Furthermore, the project site is located in the Centre City Urban (CCU) District of the Downtown Specific Planning Area, and the surrounding urban environment does not possess any features or qualities that would qualify as a scenic vista. Figure VII-5 of the General Plan Resource Conservation Element shows that the property is not located within the immediate vicinity of notable ridgelines or peaks and high points. Similarly, the majority of slopes greater than 25 percent are located in the northern and eastern portions of the city and the project would not disturb any slopes or block existing views of peaks or slopes. Therefore, the project would not have a substantial adverse effect on a scenic vista. No impact would occur.

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no official State Scenic Highways as designated by the California Department of Transportation or considered eligible for such designation surrounding the project site. Additionally, the project site consists of paved parking and ornamental landscaping associated with an existing shopping center and does not possess any scenic resources. Therefore, the project would not substantially damage scenic resources within a state scenic highway corridor. No impact would occur.

- c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The project site is developed with an asphalt parking lot and ornamental landscaping associated with an existing shopping center and is located in an urbanized environment. Development of the project would introduce a Starbucks coffee shop with a drive-through that would be consistent in character with the other existing commercial and urban uses surrounding the project site. Although there are no other drive-throughs within the Downtown Specific Plan area, proposed landscaping would ensure that the project drive-through would be appropriately screened and would not adversely affect the existing visual character of the surrounding area. Additionally, the project would comply with the development standards outlined in the Downtown Specific Plan to ensure consistency in architectural treatment, height, and scale with the surrounding land uses. The project would also be appropriately screened and buffered from the adjacent properties and roads with landscaping and trees as shown on the Landscape Concept Plan (see Figure 4).

The project would require a Specific Plan Amendment (SPA) to allow drive-throughs to be permitted within the CCU and Gateway Transit (GT) districts of the Downtown Specific Plan. Although the proposed SPA would allow potential future development of drive-through establishments within the CCU and GT districts of the Downtown Specific Plan area with issuance of a Conditional Use Permit (CUP), impacts related to aesthetics would be minimized through appropriate landscaping that would adequately screen the future drive-through and avoid impacts to the existing visual character of the surrounding area. Therefore, the project would not degrade the existing visual character or quality of the site and its surroundings, and impacts would be less than significant.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The project would incrementally increase lighting within the existing shopping center and the surrounding urban environment. However, the proposed lighting would be similar to the existing lighting associated with the shopping center and other surrounding urban uses. New lighting associated with the project would be required to comply with the City's Outdoor Lighting Ordinance (Escondido Municipal Code, Chapter 33, Article 35), which is intended to minimize unnecessary nighttime lighting and glare for the benefit of the citizens of the city and astronomical research at Palomar Mountain Observatory. The Outdoor Lighting Ordinance also requires appropriate shielding and automatic timing devices, and all proposed lighting would be required to have dark sky compliance certification. In addition to stationary light sources, the project would create directional glare and spillover from vehicles as they enter, maneuver, and exit the proposed drive-through during the nighttime. In the existing condition, the project area is used for parking and has similar level of vehicular lighting and directional glare. To minimize light spillover from vehicles as they maneuver the drive-through, the project would introduce mature trees and shrubs as shown on the Landscape Concept Plan (see Figure 4) that would provide adequate screening along the property boundary to diffuse glare and spillover light. Therefore, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

II. AGRICULTURAL 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

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 or (for annexations only) as defined by the adopted policies of the Local Agency Formation Commission, to non-agricultural use?

No Impact. The project site is located in the CCU District of the Downtown Specific Planning Area. The project site does not contain any active agricultural uses, agricultural resources, or timberland. The site is not zoned for agricultural or forest land uses and is not adjacent to areas zoned for or in agricultural use or forestland. There are no Williamson Act Contract lands on or near the site. The property and surrounding area are classified as Urban and Built-Up Land by the California Department of Conservation Farmland Mapping and Monitoring Program and are not listed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) (State of California Department of Conservation 2014). Similarly, the project site and surrounding area are not listed as prime Agricultural Lands in the City's General Plan (City of Escondido 2012a). Therefore, the project would not result in the conversion of agricultural resources to non-agricultural use, or result in the conversion of forest land to non-forest use. No impact would occur.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. See response provided for II. a). No impact would occur.

- 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))?

No Impact. See response provided for II. a). No impact would occur.

- d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See response provided for II. a). No impact would occur.

- 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?

No Impact. See response provided for II. a). No impact would occur.

III. AIR QUALITY. Where applicable, 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 (or applicable air quality thresholds specified in City of Escondido Zoning Code Article 47)?

Less Than Significant Impact. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 United States Code 7409], the U.S. Environmental Protection Agency (EPA) developed primary and secondary National Ambient Air Quality Standards (NAAQS). The San Diego Air Basin (SDAB) is designated nonattainment for the federal 8-hour ozone (O₃) standard. The California Air Resources Board (CARB) has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The SDAB is a non-attainment area for the state ozone (O₃) standards, the state 10-micron particulate matter (PM₁₀) standard, and the state 2.5-micron particulate matter (PM_{2.5}) standard. The California State Implementation Plan (SIP) is a collection of documents that sets forth the state's strategies for attaining the NAAQS. The San Diego Air Pollution Control District (SDAPCD) is the agency responsible for preparing and implementing the portion of the California SIP applicable to the SDAB. The SDAPCD prepared the Regional Air Quality Study (RAQS) to prepare its portion of the SIP and in response to the requirements set forth in the California CAA Assembly Bill (AB) 2595 (SDAPCD 1992) and the federal CAA. As part of the RAQS, the SDAPCD identified transportation control measures (TCM) for the air quality plan prepared by the San Diego Association of Governments (SANDAG). The RAQS and TCM set forth the steps needed to accomplish attainment of NAAQS and CAAQS. The required triennial updates of the RAQS and corresponding TCM were adopted in 1995, 1998, 2001, 2004, 2009, and most recently in December 2016.

The RAQS is the applicable regional air quality plan that sets forth the SDAPCD's strategies for achieving the NAAQS and CAAQS. The SDAB is designated non-attainment for the federal and state ozone standard. Accordingly, the RAQS was

developed to identify feasible emission control measures and provide expeditious progress toward attaining the standards for ozone. The two pollutants addressed in the RAQS are reactive organic gasses (ROG) and nitrogen oxide (NO_x), which are precursors to the formation of ozone. Projected increases in motor vehicle usage, population, and growth create challenges in controlling emissions and by extension to maintaining and improving air quality.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the general plan would not conflict with the RAQS. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The project site is located within the CCU District of the Downtown Specific Planning Area. The project site is within an existing shopping center that is developed with a variety of commercial uses similar to the project. The Starbucks coffee shop proposed under the project is a permitted use in the Downtown Specific Plan and would be consistent with the growth anticipated by the City General Plan. Although the project would require a SPA to allow for the drive-through component of the project, this would not affect the growth anticipated by the City General Plan. Additionally, as discussed below in Section III. b), project emissions would not exceed the project-level significance thresholds from the City Municipal Code. These thresholds are intended to both define quality of life standards and implement the Growth Management Element of the City General Plan. The project would therefore not result in an increase in emissions that are not already accounted for in the RAQS. Therefore, the project would not obstruct or conflict with implementation of the RAQS, and impacts would be less than significant.

However, the drive-through component of the project is currently prohibited within the Downtown Specific Plan. Consequently, the project would require a SPA. With the approval of the SPA, impacts would be less than significant.

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The Environmental Quality Regulations, as established in the Escondido Municipal Code Chapter 33 Article 47, establish screening thresholds to determine if additional analysis is required to determine whether a project would result in significant impacts. Section 33-924(G) pertains to air quality impacts. A project would require a technical study if it would exceed the City's emission screening level criteria. Projects that would not exceed the screening level criteria are considered not to have a significant impact related to air quality violations.

Emissions were calculated using the California Emissions Estimator Model 2016.3.2 (CalEEMod; California Air Pollution Control Officers Association 2017) and compared to the City's screening thresholds.

Construction

Construction impacts are short-term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries, as well as construction-related power consumption. Table 1 shows the total projected maximum daily construction emissions for the project. CalEEMod output is provided in Appendix A.

Table 1 Summary of Worst-case Construction Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Site Preparation	2	21	8	0	7	4
Grading	2	17	7	0	6	3
Building Construction	3	17	14	0	1	1
Paving	1	10	9	0	1	1
Architectural Coatings	4	2	2	0	0	0
Maximum Daily Emissions	4	21	14	0	7	4
<i>Significance Threshold</i>	75	250	550	250	100	55
SOURCE: Escondido Municipal Code Section 33-924(G) ROG = reactive organic gases; NO _x = nitrogen oxide; CO = carbon monoxide; SO _x = sulfur oxide; PM ₁₀ = particulate matter less than 10 microns; PM _{2.5} = particulate matter less than 2.5 microns						

Standard dust control measures would be implemented as a part of project construction in accordance with SDAPCD rules and regulations. Fugitive dust emissions were calculated using CalEEMod default values, and did not take into account the required dust control measures. Thus, the emissions shown in Table 1 are conservative.

As shown in Table 1, project construction would not exceed the City's thresholds of significance. Therefore, project construction would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations, and impacts would be less than significant.

Operation

Long-term emissions of regional air pollutants occur from operational sources. Mobile source emissions would originate from traffic generated by the project. Area source emissions would result from the use of natural gas, consumer products, as well as applying architectural coatings and landscaping activities. Table 2 provides a summary of operational emissions for the project. CalEEMod output is provided in Appendix A.

Table 2 Summary of Project Operational Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	0	0	0	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	2	6	13	0	2	1
Total	2	6	13	0	2	1
<i>Significance Threshold</i>	<i>55</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
SOURCE: Escondido Municipal Code Section 33-924(G) ROG = reactive organic gases; NO _x = nitrogen oxide; CO = carbon monoxide; SO _x = sulfur oxide; PM ₁₀ = particulate matter less than 10 microns; PM _{2.5} = particulate matter less than 2.5 microns ¹ Note that ROG and volatile organic compounds are interchangeable in the context of this project analysis.						

As shown in Table 2, operation of the project would not exceed the City's thresholds of significance. Therefore, project operation would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations, and impacts would be less than significant.

- c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The region is classified as attainment for all criteria pollutants except ozone, PM₁₀, and PM_{2.5}. The SDAB is non-attainment for the 8-hour federal and state ozone standards. Ozone is not emitted directly, but is a result of atmospheric activity on precursors. NO_x and ROG are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone.

As shown in Tables 1 and 2, emissions of ozone precursors (ROG and NO_x), PM₁₀, and PM_{2.5} from construction and operation would be below the City's thresholds of significance. These thresholds were developed based on the CAA de minimis level, which are designed to provide limits below which project emissions from an individual project would not significantly affect regional air quality or the timely attainment of the NAAQS and CAAQS. Therefore, the project would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

- d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (CARB 2005). The project site is surrounded by commercial uses. There are no sensitive land uses located immediately adjacent to the project site. The California Center for the Arts is located approximately 400 feet east of the project site. The nearest residential uses are located at the intersection of Second Avenue and Orange Street, approximately 850 feet south of the project site, approximately 1,000 feet north of the project site, and along North Broadway approximately 1,400 feet east of the project site.

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project would result in the generation of diesel-exhaust diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the project site. Due to the distance to the nearest sensitive receptor, and because construction would be short-term, DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of noncarcinogenic toxic air contaminants that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new,

low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced over the years as the project construction continues. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentration.

Localized carbon monoxide (CO) concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. The SDAB is a CO maintenance area under the federal CAA. This means that SDAB was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. As a result, ambient CO levels have declined significantly. CO hot spots have been found to occur only at signalized intersections that operate at or below level of service (LOS) E with peak-hour trips for that intersection exceeding 3,000 trips (County of San Diego 2007). The Focused Transportation Study prepared for the project includes anticipated traffic volumes at intersections near the project site. No signalized intersection near the project site is anticipated to operate at LOS E or worse as a result of the project. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

- e. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Diesel equipment utilized during construction may generate some nuisance odors. As discussed, there are no sensitive receptors located immediately adjacent to the project site. Due to the distance to the nearest sensitive receptors and because exposure to odors associated with project construction would be short term and temporary in nature, construction impacts related to odor would be less than significant.

The following list provides some common types of facilities that are known producers of objectionable odors (Bay Area Air Quality Management District 2010). This list of facilities is not meant to be all-inclusive.

- Wastewater Treatment Plant
- Wastewater Pumping Facilities
- Sanitary Landfill
- Transfer Station
- Composting Facility
- Petroleum Refinery
- Asphalt Batch Plant
- Chemical Manufacturing
- Fiberglass Manufacturing
- Painting/Coating Operations
- Rendering Plant
- Coffee Roaster
- Food Processing Facility
- Confined Animal Facility/Feed Lot/Dairy
- Green Waste and Recycling Operations
- Metal Smelting Plants

The project does not include any of the uses listed above that are typically associated with odor complaints. The project would construct a coffee shop; however, it does not include a roasting facility. All coffee beans would be roasted off-site and shipped to the store. In addition, the existing Starbucks that is located in the same shopping center would be relocated to the project site, and is therefore part of the existing conditions at the project site. The project is not expected to generate significant objectionable odors affecting a substantial number of people. Impacts would be less than significant.

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?

No Impact. The project site consists primarily of paved parking associated with an existing shopping center. Vegetation on the project site is limited to ornamental landscaping and no sensitive plant species or habitat exists on-site. No impact would occur.

- 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?

No Impact. The project site consists primarily of paved parking associated with an existing shopping center. Vegetation on the project site is limited to ornamental landscaping. No riparian habitat or other sensitive natural communities occur on-site. No impact would occur.

- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The project site consists primarily of paved parking associated with an existing shopping center. Vegetation on the project site is limited to ornamental landscaping that does not qualify as wetlands, wetland buffer areas, or non-wetland waters of the U.S. No impact would occur.

- 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?

No Impact. The project site is located within an urbanized environment. Neither the project site nor surrounding land uses support wildlife. Therefore, the project site does not function as a wildlife corridor and would not impact undeveloped areas that may support the movement of wildlife. No impact would occur.

- e. Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance?

No Impact. The City Municipal Code – Grading and Erosion Control Ordinance (Chapter 33, Article 55, Section 33-1069) includes vegetation and replacement standards for impacts to mature and/or protected trees. However, there are no protected trees (i.e., oak trees [*Quercus* sp.]) located on-site. Therefore, the project would not conflict with local policies or ordinances. No impact would occur.

- 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?

Less Than Significant. Escondido is one of seven jurisdictional areas within the northern subregion of San Diego County covered by the Multiple Habitat Conservation Plan (MHCP; SANDAG 2003). The MHCP is intended to protect viable populations of native plant and animal species and their habitats, and each of the participating jurisdictions in the program is required to prepare a subarea plan in order to implement the MHCP within its jurisdictional boundaries. The City has prepared a Draft Subarea Plan (City of Escondido 2001), but the Plan has not been adopted. The City's Draft Subarea Plan identifies the project site as developed and disturbed land and does not identify it for preservation. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, and impacts would be less than significant.

V. CULTURAL RESOURCES. Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 (or conflict with applicable historic thresholds specified in City of Escondido Zoning Code Article 47)?

No Impact. The project site is completely developed and has been previously graded for development of the existing shopping center. The site consists of a paved parking lot and ornamental landscaping and does not contain any structures or other historic resources. Due to the lack of any structures on the project site in addition to its disturbed nature, no impact to historical resources would occur.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation. The project site is completely developed and has been previously graded for development of the existing shopping center and parking lot. However, excavation during construction would have the potential to unearth unknown or previously undisturbed archaeological resources, which would represent a significant impact (Impact CUL-1). Implementation of MM-CUL-1 through MM-CUL-10 as requested by the San Luis Rey Band of Mission Indians and Sycuan Band of the Kumeyaay Nation during tribal consultation would reduce impacts to archaeological resources to a level less than significant.

MM-CUL-1: The City of Escondido Planning Division (City) recommends the applicant enter into a Tribal Cultural Resource Treatment and Monitoring Agreement (also known as a pre-excavation agreement) with a tribe that is traditionally and culturally affiliated with the Project Location (TCA Tribe) prior to issuance of a grading permit. The purposes of the agreement are (1) to provide the applicant with clear expectations regarding tribal cultural resources, and (2) to formalize protocols and procedures between them. Applicant/Owner and the TCA Tribe for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, grading, and all other ground-disturbing activities.

MM-CUL-2: Prior to issuance of a grading permit, the applicant shall provide written verification to the City that a qualified archaeologist and a Native American monitor associated with a TCA Tribe have been retained to implement the monitoring program. The archaeologist shall be responsible for coordinating with the Native American monitor. This verification shall be presented to the City in a letter from the project archaeologist that confirms the selected Native

American monitor is associated with a TCA Tribe. The City, prior to any pre-construction meeting, shall approve all persons involved in the monitoring program.

MM-CUL-3: The qualified archaeologist and a Native American monitor shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program.

MM-CUL-4: During the initial demolition, site grading, excavation, or disturbance of the ground surface, the qualified archaeologist and the Native American monitor shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and any discoveries of tribal cultural resources as defined in California Public Resources Code Section 21074. Archaeological and Native American monitoring will be discontinued when the depth of grading and soil conditions no longer retain the potential to contain cultural deposits. The qualified archaeologist, in consultation with the Native American monitor, shall be responsible for determining the duration and frequency of monitoring.

MM-CUL-5: In the event that previously-unidentified tribal cultural resources are discovered, the qualified archaeologist and the Native American monitor shall have the authority to temporarily divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. Isolates and clearly non-significant deposits shall be minimally documented in the field and collected so the monitored grading can proceed.

MM-CUL-6: If a potentially significant tribal cultural resource is discovered, the archaeologist shall notify the City of said discovery. The qualified archaeologist, in consultation with the City, the TCA Tribe and the Native American monitor, shall determine the significance of the discovered resource. A recommendation for the tribal cultural resource's treatment and disposition shall be made by the qualified archaeologist in consultation with the TCA Tribe and the Native American monitor and be submitted to the City for review and approval.

MM-CUL-7: If a potentially significant tribal cultural resources and/or unique archaeological resource is discovered, the avoidance and/or preservation of the significant tribal cultural resource and/or unique archaeological resource must first be considered and evaluated as required by CEQA. Where any significant tribal cultural resources and/or unique archaeological resources have been discovered and avoidance and/or preservation measures are deemed to be infeasible by the City, then a research design and data recovery program to mitigate impacts shall be prepared by the qualified archaeologist (using professional archaeological methods), in consultation with the TCA Tribe and the Native American monitor, and shall be subject to approval by the City. The archaeological monitor, in consultation with the Native American monitor, shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Before construction activities are allowed to resume in the affected area, the research design and data recovery program activities must be concluded to the satisfaction of the City.

MM-CUL-8: As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office. Determination of whether the remains are human shall be conducted on-site and in situ where they were discovered by a forensic anthropologist, unless the forensic anthropologist and the Native American monitor agree to remove the remains to an off-site location for examination. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition. A temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains in accordance with California Public Resources Code section 5097.98. The Native American remains shall be kept in-situ, or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a Native American monitor.

MM-CUL-9: If the qualified archaeologist elects to collect any tribal cultural resources, the Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the qualified Archaeologist does not collect the cultural resources that are unearthened during the ground disturbing activities, the Native American monitor, may at their discretion, collect said resources and provide them to the TCA Tribe for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions. Any tribal cultural resources collected by the qualified archaeologist shall be repatriated to the TCA Tribe. Should the TCA Tribe or other traditionally and culturally affiliated tribe decline the collection, the collection shall be curated at the San Diego Archaeological Center. All other resources determined by the qualified archaeologist, in consultation with the Native American monitor, to not be tribal cultural resources, shall be curated at the San Diego Archaeological Center.

MM-CUL-10: Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusion of the archaeological monitoring program and any data recovery program on the project site shall be submitted by the qualified archaeologist to the City. The Native American monitor shall be responsible for providing any notes or comments to the qualified archaeologist in a timely manner to be submitted with the report. The report will include California Department of Parks and Recreation Primary and Archaeological Site Forms for any newly discovered resources.

- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Impacts to paleontological resources typically occur during grading activities (excavation) associated with project construction on previously undisturbed land, or redevelopment where much deeper grading or excavation is proposed into the underlying bedrock. Figure 4.5-2 of the City's General Plan Final Environmental Impact Report (EIR) shows that the project site is underlain by Landslide Deposits, Holocene and Pleistocene, which are identified as having moderate potential to contain paleontological fossils (City of Escondido 2012b). However, the project site was subject to grading and excavation during construction of the existing shopping center, and buried paleontological resources would have been discovered during these previous construction activities. Furthermore, project construction would not require much deeper grading into the underlying bedrock than occurred during construction of the existing overall shopping center. Therefore, impacts related to paleontological resources would be less than significant.

- d. Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. No dedicated cemetery or human remains are known to be present on-site. In the unlikely event that remains are located on-site, the project would be handled in accordance with procedures of the Public Resources Code Section 5097.98, which detail specific procedures for the proper treatment and disposition of human remains (MM-CUL-8). Therefore, impacts to human remains would be less than significant.

VI. GEOLOGY AND SOILS. Would the project:

- a. Expose people or structures to potentially 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.

Less Than Significant Impact. Review of the City's General Plan EIR determined that there are no known Alquist-Priolo Earthquake Fault Zones or other faults identified within the City (City of Escondido 2012b). Therefore, the risk of earthquake ground rupture is low, and impacts related to the exposure of people or structures to rupture of a known earthquake fault would be less than significant.

- ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is located in a seismically active southern California region and is located approximately 16 miles from the Elsinore Fault. The most significant seismic hazard at the site is shaking caused by an earthquake occurring on a nearby or distant active fault. However, the project site is not considered to possess a significantly greater seismic risk than that of the surrounding area. Conformance with the California Building Code (CBC) guidelines that are currently adopted by the City would ensure that potential impacts related to strong seismic shaking would be less than significant.

- iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Figure VI-6 of the City General Plan Community Protection Element shows that the project site is not located within an identified liquefaction hazard area. Conformance with the CBC guidelines that are currently adopted by the City would ensure that potential impacts related to ground failure would be less than significant.

- iv. Landslides?

No Impact. The project site and surrounding area is generally flat and consists of urban development. Figure VI-6 of the City General Plan Community Protection Element shows that the project site is not located near any slopes greater than 25 percent nor is it located within an area identified as having soil subject to landslide. No impact would occur.

- b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The project site is relatively flat and primarily consists of a paved parking lot. The project would include grading and construction activities as well as landscaping. As indicated below under Section IX, Hydrology and Water Quality, the project would implement Best Management Practices (BMPs) during construction and operation in compliance with regulations. Therefore, implementation of the project would not result in substantial soil erosion or the loss of topsoil, and impacts would be less than significant.

- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. Figure VI-6 of the City General Plan Community Protection Element shows that the project site is not located near any slopes greater than 25 percent nor is it located within an area identified as having soil

subject to landslide. Figure VI-6 of the City General Plan Community Protection Element shows that the project site is not located within an identified liquefaction hazard area. Figure 4.6-5 of the City's General Plan Final EIR shows that the project site is not located within an area identified as having expansive soils (City of Escondido 2012b). Conformance with the CBC guidelines that are currently adopted by the City would ensure that potential impacts related to soil stability would be less than significant.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Figure 4.6-5 of the City's General Plan Final EIR shows that the project site is not located within an area identified as having expansive soils (City of Escondido 2012b). Conformance with the CBC guidelines that are currently adopted by the City would ensure that potential impacts related to expansive soil would be less than significant.

- 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?

No Impact. The project would connect with the existing City wastewater and sewer system and would not use septic tanks or an alternative wastewater disposal system. No impact would occur.

VII. GREENHOUSE GAS EMISSIONS. Would the project:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (or conflict with applicable greenhouse gas emissions thresholds specified in City of Escondido Zoning Code Article 47)?

Less Than Significant Impact. Increases in concentrations of greenhouse gas (GHG) emissions generated by human activities result in global climate change impacts. GHGs include carbon dioxide (CO₂), methane (CH₄), NO_x, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Common activities that generate GHGs include vehicular travel, electricity use, natural gas use, water use, and waste generation.

Global climate change could indirectly result in physical environmental impacts related to: extreme heat days; higher concentrations, frequency and duration of air pollution; an increase in wildfires; more intense coastal storms; sea level rise; impacts to water supply and water quality through reduced snowpack and saltwater influx; public health impacts; impacts to near-shore marine ecosystems; reduced quantity and quality of agricultural products; pest population increases, and altered natural ecosystems and biodiversity. Various regulations and policies have been adopted globally, federally, and on a state level to address GHG emissions and associated climate change impacts.

The City has prepared the Escondido Climate Action Plan (E-CAP) demonstrating how the City would reduce GHG emissions. The E-CAP establishes a screening threshold level of 2,500 metric tons of CO₂ equivalent (MT CO₂E) per year for identifying projects that require a project-specific technical analysis to quantify and mitigate project emissions (City of Escondido 2013). The City has determined that new development projects emitting less than 2,500 MT CO₂E annual GHG would not contribute considerably to cumulative climate change impacts. For projects that exceed the 2,500 MT CO₂E screening threshold, further analysis with respect to the City's GHG Guidance is required.

GHG emissions associated with the project include construction (off-road vehicles), mobile (on-road vehicles), energy (electricity and natural gas), area (landscape maintenance equipment), water and wastewater, and solid waste. GHG emissions associated with construction and operation of the project were calculated using the CalEEMod program.

Table 3 summarizes the total project GHG emissions.

Table 3 Worst-case Project Greenhouse Gas Emissions (MT CO ₂ E per Year)	
Emission Source	Project GHG Emissions
Vehicles	434
Energy Use	35
Area Sources	0
Water Use	2
Solid Waste Disposal	8
Construction	3
TOTAL	482
NOTE: CalEEMod GHG emission calculation output is provided as Appendix B.	

As shown in Table 3, the project would result in a total emission of 482 MT CO₂E annually. This is less than the identified 2,500 MT CO₂E screening threshold adopted by the City. As the project would not exceed the 2,500 MT CO₂E screening threshold for GHG emissions, GHG impacts associated with the project would be less than significant.

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?

Less Than Significant Impact. AB 32 codified the 2020 goal of reducing statewide GHG emissions to 1990 levels and launched the Climate Change Scoping Plan that outlined the reduction measures needed to reach these targets. Following the state's adopted AB 32 GHG reduction target, the City set a goal to reduce emissions back to 1990 levels by the year 2020. The City's E-CAP was prepared to demonstrate how this would be achieved. The E-CAP's target goal is to reduce GHG emissions by 15 percent below existing levels by 2020 (City of Escondido 2013). The E-CAP includes GHG inventories for 2010 and GHG forecasts for 2020 and 2035. The E-CAP identifies local measures to reduce transportation, energy, area source, water, solid waste, and construction emissions in 2020. Local GHG reductions would come from improvements to residential and commercial building energy efficiency (45.8 percent), revised land use policies, increased public transportation (33.9 percent), and implementation of a waste disposal program (18.1 percent).

As the project would generate emissions below the screening threshold of 2,500 MT CO₂E per year, it would not conflict with implementation of the E-CAP or interfere with the City's ability to achieve the GHG reduction goals outlined in the E-CAP, nor would it conflict with the AB 32 mandate for reducing GHG emissions at the state level.

Executive Order (EO) S-3-05 establishes an executive policy of reducing GHG emissions to 80 percent below 1990 levels by 2050. Consistent with this policy, the legislature adopted AB 32, which codifies a GHG emissions reduction target of 1990 emission levels by 2020, and Senate Bill (SB) 32, which codifies a GHG emissions reduction target of 40 percent below 1990 emission levels by 2030. The 2050 emission reduction target of EO S-3-05 has not been codified by the Legislature.

The 2,500 MT CO₂E threshold is based on the 90th percentile capture rate concept. Following rationale presented in California Air Pollution Control Officers Association Guidance (California Air Pollution Control Officers Association 2008), aggregate emissions from all projects with individual annual emissions that do not exceed the 90th percentile capture rate, would not impede achievement of the state reduction targets and would therefore be less than cumulatively considerable.

Further, the project's 2020 emissions represent the maximum emissions inventory for the project, as project emissions would continue to decline from 2020 through at least 2050 due to regulatory requirements. Given the reasonably anticipated decline in project emissions, due to existing regulatory programs, once the project is fully constructed and operational, the project emissions would continue to decline in line with the GHG reductions needed to achieve the 2030 GHG emissions reduction target and the EO's horizon-year (2050) goals. Therefore, the project would not conflict with the long-term GHG policy goals of the state. As such, the project's impacts with respect to the state's 2020 and 2030 targets, or the state's post-2030 GHG emissions goals under EO S-3-05 would be less than significant.

The project would not conflict with any state plan, policy, or regulation aimed at reducing GHG emissions from land use and development. Impacts would be less than significant.

VIII. 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?

Less Than Significant Impact. Project construction activities may involve the use of lubricating oils, paints, solvents, and other materials. Operation and maintenance of the project may involve other regulated common hazardous materials, although acutely hazardous materials would not be used. Project activities during construction and operation would be undertaken in compliance with applicable federal, state, and local regulations pertaining to the proper use, transport, and disposal of hazardous materials, and impacts would be less than significant.

- 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?

Less Than Significant Impact. See response provided for Section VIII. a). Impacts would be less than significant.

- c. 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 Impact. Center City High School is located approximately 0.25 mile southeast of the project site. However, the use and handling of hazardous materials during construction and operation would be conducted consistent with all applicable regulations (see Section VIII. a), above). Therefore, impacts related to hazardous emissions within 0.25 mile of a school would be less than significant.

- 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?

Less Than Significant Impact. An environmental database record search was completed for the project site and all surrounding areas within a 0.25-mile buffer using the GeoTracker and EnviroStor databases. The project site and structures immediately adjacent structures were not identified as having hazardous materials in either database. The GeoTracker database, which is the State Water Resources Control Board data management system for managing sites that impact groundwater, identified two open cases within 0.25 mile of the project site. The property at 135 S. Quince Street approximately 0.25 mile southwest of the project site is identified as a leaking underground storage tank site, but is listed as eligible for closure as of November 6, 2016. The property at 128 N. Broadway located approximately 0.25 mile northeast of the project site is identified as a leaking underground storage tank site and is listed as an open site assessment. However, the project site would not be affected by potential contaminants at this site due to the distance to the property and the fact that any contamination present would be handled under the appropriate regulatory oversight and ultimately remediated. The EnviroStor database maintained by the California Department of Toxic Substances Control that provides a list of hazardous substance release sites did not identify any open cases within 0.25 mile of the project site. Therefore, impacts related to hazardous materials sites would be less than significant.

- 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 safety hazard for people residing or working in the project area?

No Impact. The project site is not located within 2 miles of a private or public airstrip. The nearest public airport is McClellan-Palomar Airport, which is located approximately 10 miles to the west. The nearest private airstrip is Lake Wohlford Resort Airport, which is located approximately 6 miles to the northeast. The project site is not located within any airport land use compatibility plan. No impact would occur.

- f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. See response provided in VIII. e). No impact would occur.

- g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

No Impact. Figure VI-1 of the General Plan Community Protection Element identifies three roadways adjacent to the project site and the existing shopping center as emergency evacuation routes: Valley Parkway, Centre City Parkway, and Escondido Boulevard as evacuation routes. However, the project would not physically alter these existing evacuation routes, nor would it conflict with the goals and policies of the General Plan Community Protection Element. Therefore, the project would not impair or physically interfere with emergency response or evacuation plans. No impact would occur.

- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. Figure VI-6 of the City General Plan Community Protection Element identifies the project site as having a moderate wildfire risk. The project site is located in an urbanized environment and is not bordered by any undeveloped lands that could be susceptible to wildland fires. Furthermore, the project would comply with City Fire Department standards. Therefore, impacts related to the exposure of people or structures to wildfire risk would be less than significant.

IX. HYDROLOGY AND WATER QUALITY. Would the project:

- a. Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Florenz Engineering, Inc. prepared a Storm Water Quality Management Plan for the project site (Appendix C). The project site is located in the Escondido Creek Hydrologic Area (904.50), in the Carlsbad Hydrologic Unit (904). Storm water from the project site drains into Escondido Creek and ultimately into the Pacific Ocean. Escondido Creek is listed on the 303(d) list for the following pollutants: Dichlorodiphenyltrichloroet, manganese, phosphate, selenium, sulfates, and total dissolved solids. The project would decrease the amount of runoff entering Escondido Creek by increasing the total amount of permeable surface on the project site from 4,765 square feet to 7,127 square feet, due to an increase in landscaped areas.

To address the potential pollutants of concern, the project would implement construction and post-construction BMPs in compliance with the City and Regional Water Quality Control Board (RWQCB) regulations. Typical construction BMPs are anticipated to include silt fencing, gravel bag barriers, street sweeping, solid waste management, stabilized construction entrance/exits, water conservation practices, and spill prevention and control. The project would be required to comply with the drainage and water quality regulations in place at the time of construction. The project would also include operational BMPs by constructing two on-site biofiltration basins in order to remove pollutants from runoff. Additionally, the proposed structure would include roof gutters and downspouts that would direct runoff to the two on-site biofiltration basins. Implementation of these BMPs, along with regulatory compliance, would preclude any violations of applicable

standards and discharge regulations. Therefore, the project would not violate any water quality standards or waste discharge requirements, and impacts would be less than significant.

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The project would obtain its water supply from the Escondido Water and Wastewater Division and would not use groundwater supply for any purpose. Furthermore, the project would increase the amount of permeable surface on the project site from 4,765 square feet to 7,127 square feet due to an increase in landscaped areas. Therefore, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. No impact would occur.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial/increased erosion or siltation on- or off-site?

Less Than Significant Impact. There are no natural hydrologic features on the project site such as watercourses, seeps, springs, or wetlands. Existing drainage on the project site sheet flows from the westerly higher areas of the parking lot to an existing catch basin located at the southern end of the project site. Flows are then conveyed via an underground piping system to an existing underground City storm drain located in East Valley Parkway. Construction BMPs would be implemented for the project in compliance with regulations, as detailed in response IX. a).

Project grading would create a boundary condition that that would prevent runoff from other portions of the existing shopping center from entering the project site. Runoff from the project site would be routed to two on-site biofiltration basins that would be connected by pipe to an existing on-site storm drain that flows to an existing City storm drain. Redirection of flows from other portions of the existing shopping center and introduction of the two onsite biofiltration basins would reduce the peak 100-year storm event flow rate from 3.49 cubic feet per second (cfs) to 3.38 cfs (Appendix D). Therefore, the project would not substantially alter the drainage pattern of the site or the surrounding area in a manner that could result in substantial erosion, and impacts would be less than significant.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. As discussed in response to IX. c), there are no natural hydrologic features on the project site and the project would reduce the peak 100-year storm event flow rate from 3.49 cubic cfs to 3.38 cfs. Therefore, the project would not alter the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that would result in flooding. No impact would occur.

- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

No Impact. As discussed in response to IX. c), there are no natural hydrologic features on the project site and the project would reduce the peak 100-year storm event flow rate from 3.49 cubic cfs to 3.38 cfs. Therefore, the project would not exceed capacity of storm water drainage systems or provide substantial sources of polluted runoff. No impact would occur.

- f. Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303 (d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired? Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. As discussed in responses to IX. a), Escondido Creek is listed as an impaired water body on the Clean Water Section 303(d) list. Standard BMPs would be implemented during construction and post-construction in compliance with the City and RWQCB regulations to adequately control and treat pollutants. The project would introduce two onsite biofiltration basins that would filter pollutants and decrease flow velocity before the runoff is released off-site. Therefore, the project would not result in an increase in any pollutant for which the water body is already impaired, exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

- g. Otherwise substantially degrade water quality?

Less Than Significant Impact. The project would comply with all storm water quality standards during and after construction and would implement appropriate BMPs to capture and treat pollutants, including two permanent on-site biofiltration basins. Therefore, the project would not substantially degrade water quality, and impacts would be less than significant.

- h. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The project site is not located within the 100-year floodplain and does not propose housing. No impact would occur.

- i. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The project site is not located within the 100-year floodplain. No impact would occur.

- j. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. See response provided in IX. h). The project would not expose people or structures to a significant flooding hazard. The project site is located within the Lake Wohlford Dam Failure Inundation Area and the Dixon Lake Dam Failure Inundation Area. A catastrophic dam failure at either of these facilities would likely result in extensive downstream flooding of Escondido Creek. Regular county, state, and federal inspections of the dams are conducted to ensure the safety and integrity of structures and to minimize risks of dam failure and flooding. Therefore, flooding risks, including flooding as a result of the failure of a levee or dam, would be less than significant.

- k. Inundation by seiche, tsunami, or mudflow?

No Impact. The risk associated with tsunami is negligible due to the project site's elevation above sea level and distance of approximately 14 miles from the Pacific Ocean. There would be no risk associated with seiche because the project site is not located near a lake or other large body of water. There would be no risk associated with mudflow because the project site and surrounding area is generally flat and consists of urban development. No impact would occur.

X. LAND USE PLANNING. Would the project:

- a. Physically divide an established community?

No Impact. The project site is located within the CCU District of the Downtown Specific Planning Area and consists of paved parking and ornamental landscaping associated with an existing shopping center. The project site is surrounded by other commercial uses associated with the existing shopping center and other urbanized development within the Downtown Specific Planning Area. The project would be constructed entirely within an existing commercial center and would not physically impact any of the existing uses within the shopping center or other surrounding properties. The project would not create any new land use barriers or otherwise divide or disrupt the physical arrangement of the surrounding established community. No impact would occur.

- b. 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, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The project site is located within the CCU District of the Downtown Specific Planning Area. The project site is within an existing shopping center which is developed with a variety of commercial uses similar to the project, including an existing Starbucks coffee shop. The Starbucks coffee shop proposed under the project is a permitted use in the Downtown Specific Plan and would be consistent with the growth anticipated by the City General Plan. However, the drive-through component of the project is currently prohibited within the Downtown Specific Plan. Consequently, the project would require a SPA to allow drive-throughs to be permitted within the CCU and GT districts of the Downtown Specific Plan. Approval of the SPA would avoid any land use designation conflicts with the Downtown Specific Plan. Should future drive-through establishments be developed under the SPA within the CCU and GT districts, impacts related to aesthetics would be minimized through appropriate landscape screening. Cumulative noise impacts associated with future drive-through establishments would be minimized through compliance with the Noise Abatement and Control Ordinance and General Plan Community Protection Element noise policies that would be applied during project level discretionary reviews associated with future drive-through establishments. Additionally, the project would not conflict with the "Guiding Principles" for the Downtown Specific Plan. Therefore, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project, and impacts would be less than significant.

- c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less Than Significant Impact. See responses provided in IV. f). The City's Draft Subarea Plan, which has not been adopted, identifies the project site as Developed and Disturbed Land and it is not planned for preservation. Therefore, impacts would be less than significant.

XI. 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?

No Impact. The City's General Plan does not identify the project site as an existing or former extraction site. The project site consists of paved parking and ornamental landscaping associated with an existing shopping center and is surrounded by other urbanized development within the Downtown Specific Planning Area. Consequently, mineral resource extraction would be infeasible due to the site's zoning and land use designation, the relatively small property size, and the urbanized nature of the project site and surrounding land uses. Therefore, implementation of the project would not result in the loss of a known local, regional, or state mineral resource. No impact would occur.

- 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?

No Impact. See response provided in XI. a). No impact would occur.

XII. NOISE. Would the project result in:

- a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (or conflict with applicable noise thresholds specified in City of Escondido Zoning Code Article 47)?

Less Than Significant Impact.

Construction Noise

Sections 17-234 and 17-238 of the City's Noise Ordinance provide regulations for construction equipment and grading activities. The applicable limits are expressed in terms of average equivalent A-weighted decibels (dB(A) L_{eq}) which is the equivalent steady-state noise level in a stated period of time that is calculated by averaging the acoustic energy over a time period; when no period is specified, a 1-hour period is assumed.

Section 17-234 (Construction Equipment)

Except for emergency work, the following applies to all construction equipment operating in the City:

- a. It shall be unlawful for any person, including the City of Escondido, to operate construction equipment at any construction site, except on Monday through Friday during a week between the hours of 7:00 a.m. and 6:00 p.m. and on Saturdays between the hours of 9:00 a.m. and 5:00 p.m., and provided that the operation of such construction equipment complies with the requirements of subsection (c) of this section.
- b. It shall be unlawful for any person, including the City of Escondido, to operate construction equipment at any construction site on Sundays and on days designated by the President, Governor, or City Council as public holidays.
- c. No construction equipment or combination of equipment, regardless of age or date of acquisition, shall be operated so as to cause noise in excess of a one-hour average sound level limit of 75 dB at any time, unless a variance has been obtained in advance from the City Manager.

Section 17-238 (Grading)

- a. It shall be unlawful for any person, including the City of Escondido, to do any authorized grading at any construction site, except on Mondays through Fridays during a week between the hours of 7:00 a.m. and 6:00 p.m. and, provided a variance has been obtained in advance from the City Manager, on Saturdays from 10:00 a.m. to 5:00 p.m.
- b. For the purpose of this section, "grading" shall include, but not be limited to, compacting, drilling, rock crushing or splitting, bulldozing, clearing, dredging, digging, filling and blasting.
- c. In addition, any equipment used for grading shall not be operated so as to cause noise in excess of a one-hour sound level limit of 75 dB at any time when measured at or within the property lines of any property which is developed and used in whole or in part for residential purposes, unless a variance has been obtained in advance from the City Manager.

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, building construction, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove existing pavement.

A variety of noise-generating equipment would be used during the construction phase of the project, such as excavators, backhoes, front-end loaders, and concrete saws. Construction equipment with a diesel engine typically generates maximum noise levels from 80 to 90 dB(A) L_{eq} at a distance of 50 feet (Federal Highway Administration 2006). Table 4 summarizes typical construction equipment noise levels.

During excavation, grading, and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for non-equipment tasks, such as measurement. Although maximum noise levels may be 85 to 90 dB(A) at a distance of 50 feet, hourly average noise levels would be lower when taking into account the equipment usage factors. For the project, the loudest phase of construction would include dozers, loaders, and excavators. Construction noise levels were calculated based on all three pieces of equipment being active simultaneously. Hourly average noise levels would be 82 dB(A) L_{eq} at 50 feet, or a sound power level of approximately 114 dB(A) from the center of construction activity when assessing the loudest pieces of equipment working simultaneously.

Equipment	Noise Level at 50 Feet [dB(A) L_{eq}]	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Blasting	94	1%
Chain Saw	85	20%
Clam Shovel	93	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 kilovolt amps or less)	70	50%
Generator (more than 25 kilovolt amps)	82	50%
Grader	85	40%
Hydra Break Ram	90	10%
Impact Pile Driver (diesel or drop)	95	20%
Insitu Soil Sampling Rig	84	20%
Jackhammer	85	20%
Mounted Impact Hammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Roller	74	40%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%
Vibratory Pile Driver	95	20%
SOURCE: Federal Highway Administration (FHWA) 2006. dB(A) L_{eq} = average equivalent A-weighted decibels		

Construction noise is considered a point source and would attenuate at approximately 6 dB(A) for every doubling of distance. Noise level predictions and contour mapping were developed using noise modeling software, SoundPlan Essential, version 3.0 (Navcon Engineering 2015). To reflect the nature of grading and construction activities, equipment was modeled as an area source distributed over the project footprint. Construction contours are shown in Figure 5.

The project site is surrounded by commercial uses. There are no residential uses located immediately adjacent to the project site. The nearest residential uses are located at the intersection of Second Avenue and Orange Street approximately 850 feet south of the project site, north of the existing shopping center, approximately 1,000 feet north of the project site, and along North Broadway approximately 1,400 feet east of the project site. Construction noise levels would attenuate to less than 75 dB(A) L_{eq} at these distances. As shown in Figure 5, construction noise levels would not exceed 75 dB(A) L_{eq} beyond the existing shopping center. As construction activities would comply with the City Municipal Code Sections 17-234 and 117-238, temporary increases in noise levels from construction activities would be less than significant.

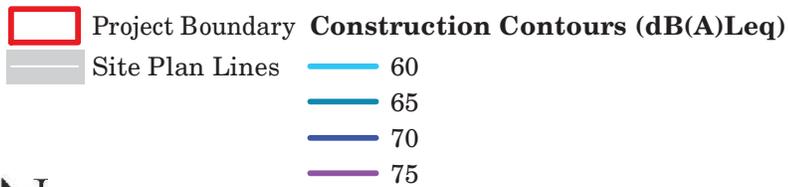
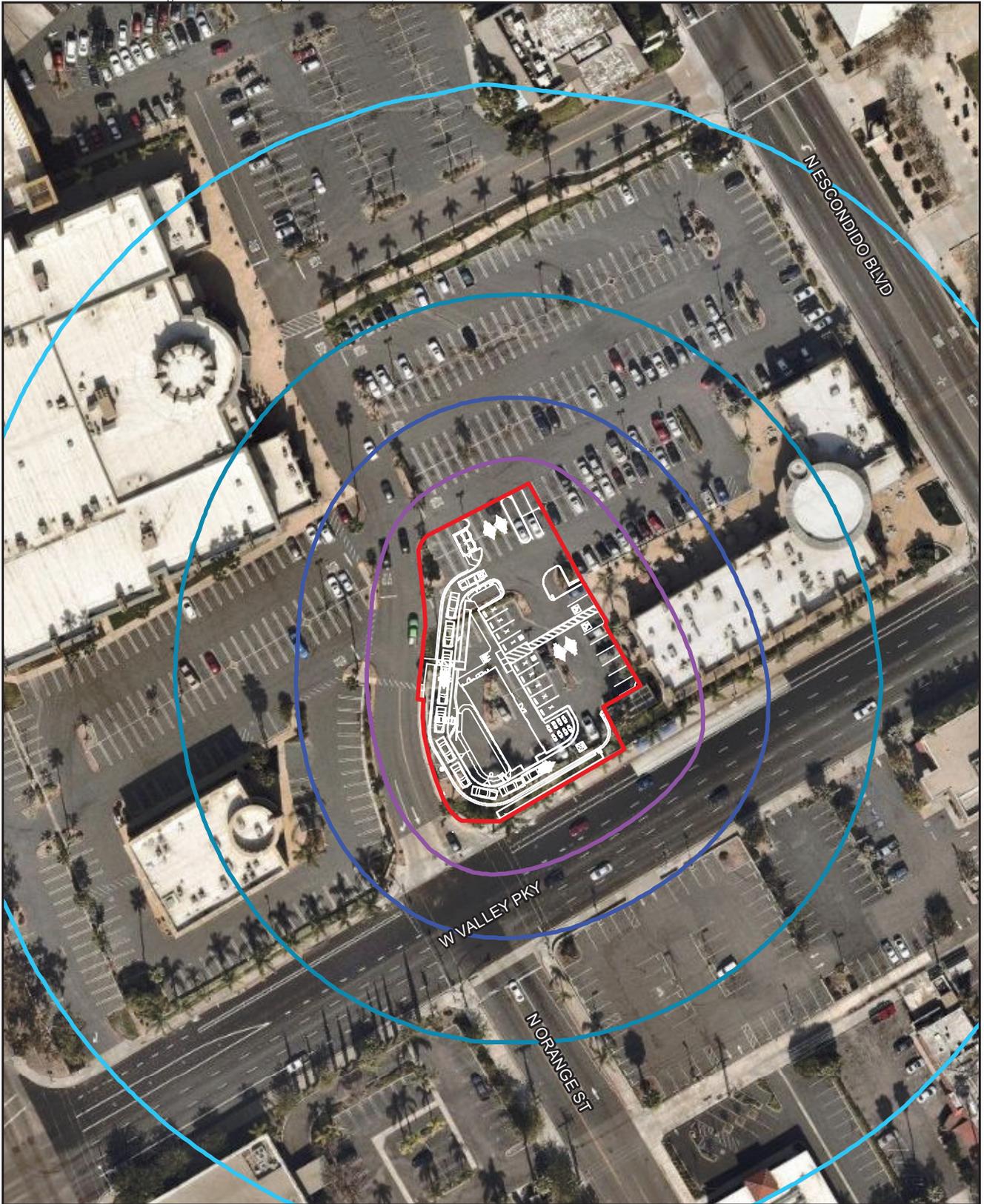


FIGURE 5

Construction Noise Contours

Traffic Noise

The City General Plan Community Protection Element states that exterior noise levels for projects that would increase the noise levels 5 dB(A) or greater would have a significant impact and would require mitigation. The project would increase traffic volumes on the surrounding roadway network including North Escondido Boulevard and West Valley Parkway. Based on the Focused Transportation Study, the project would result in the generation of 1,235 average daily driveway trips. The increase in noise due to the addition of project traffic on surrounding roadways was calculated by comparing the traffic noise levels in the existing and the existing with project conditions. The results are summarized in Table 5, below. As shown, the project would result in a less than 1 dB(A) increase in traffic noise over the existing condition along the studied roadway segments. A change in noise level of 3 dB(A) is considered a barely perceptible amount (California Department of Transportation 2013), and a change in noise level of 5 dB(A) would require mitigation as indicated in the City's General Plan. Because the project would not result in a 5 dB(A) or greater increase in noise levels, traffic noise impacts would be less than significant.

Table 5
Traffic Noise Level with and without Project and Ambient Noise Increases

Roadway	Segment	Existing		Existing with Project		CNEL Increase
		ADT	CNEL at 50 Feet	ADT	CNEL at 50 Feet	
North Escondido Boulevard	West Valley Parkway to Shopping Center	13,612	68.1	13,819	68.2	0.1
West Valley Parkway	West of Shopping Center	18,284	68.7	18,512	68.8	0.1
	Shopping Center to North Escondido Boulevard	17,660	68.6	17,888	68.6	0.0

SOURCE: Noise calculations are provided in Appendix E. Traffic volumes obtained from the Focus Traffic Study contained in Appendix F.
ADT = Average Daily Traffic; CNEL = Community Noise Equivalent Level

On-site Generated Noise

The Noise Abatement and Control Ordinance establishes prohibitions for disturbing, excessive, or offensive noise, and provisions such as sound level limits for the purpose of securing and promoting the public health, comfort, safety, peace, and quiet for its citizens. City exterior sound level limits are the allowable noise levels at any point on or beyond the boundaries of the property on which the sound is produced and corresponding times of day for each zoning designation. The exterior noise level limits between the project site and the adjacent commercial uses is 60 dB(A) L_{eq} between 7 a.m. and 10 p.m. and 55 dB(A) L_{eq} between 10 p.m. and 7 a.m. As discussed, there are no residential uses located adjacent to the project site.

The primary noise sources on-site would be heating, ventilation, and air conditioning (HVAC) equipment, and the drive-through speakers. These noise sources are described below:

- HVAC Equipment. The project would include roof-mounted HVAC units. Property line noise levels due to HVAC equipment were modeled assuming a 6-ton HVAC unit (Trane Model T/YSC072ED) would be located on the roof. Based on review of manufacturer specifications for the sample units, a representative noise level for a 6-ton unit would be a sound power level of 96 dB. This is approximately equal to a sound pressure level of 85 dB(A) L_{eq} at 3.28 feet. For the daytime hours, the unit was modeled at full capacity. For the nighttime hours, it was assumed that the unit would operate a maximum of 50 percent of the time, or an average of 30 minutes an hour.
- Drive-through. The project includes a drive-through that wraps around the western and southern sides of the building. The drive-through speakers were modeled as a point source 4 feet high, calibrated to 61.2 dB(A) L_{eq} at 10 feet, and operational 50 percent of the daytime and 20 percent of the nighttime, based on measurements and observations taken at a McDonalds restaurant (Michael Brandman Associates 2013).

In order to determine if on-site operational noise levels would exceed City noise standards at the property line, five noise receivers were modeled at the adjacent commercial uses and property lines. Noise levels due to on-site sources were modeled using SoundPLAN (Navcon Engineering, Inc. 2015). Modeled receivers and modeled on-site noise sources during the daytime are shown in Figure 6 and during the nighttime are shown in Figure 7. Modeled data is included in Appendix E. The results are summarized in Table 6.

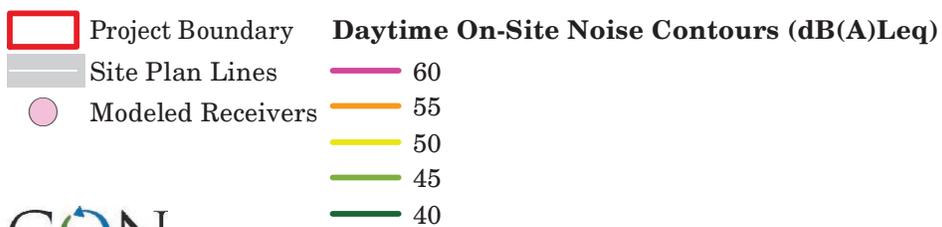
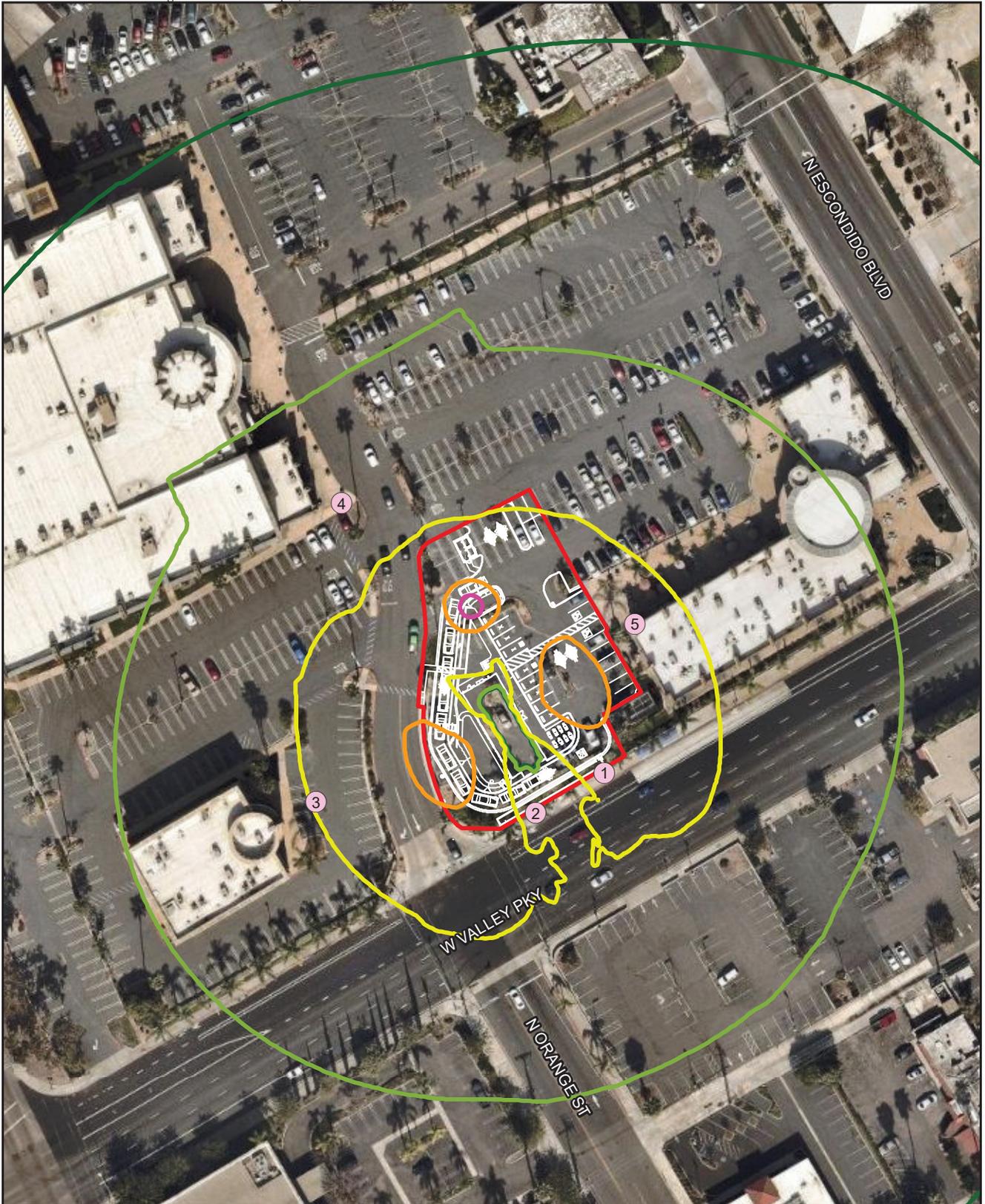


FIGURE 6

Daytime On-Site Generated Noise Contours

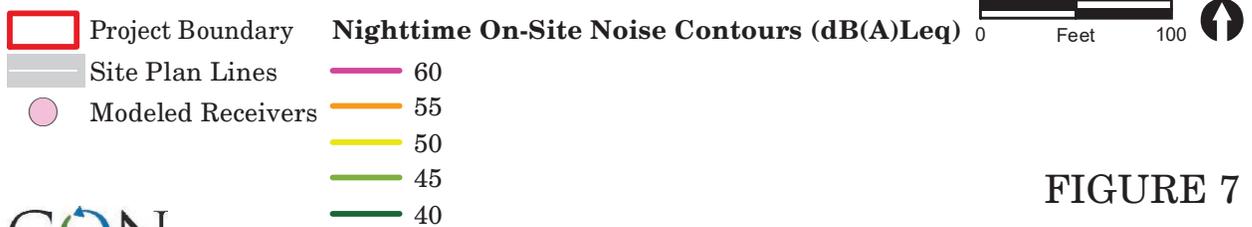
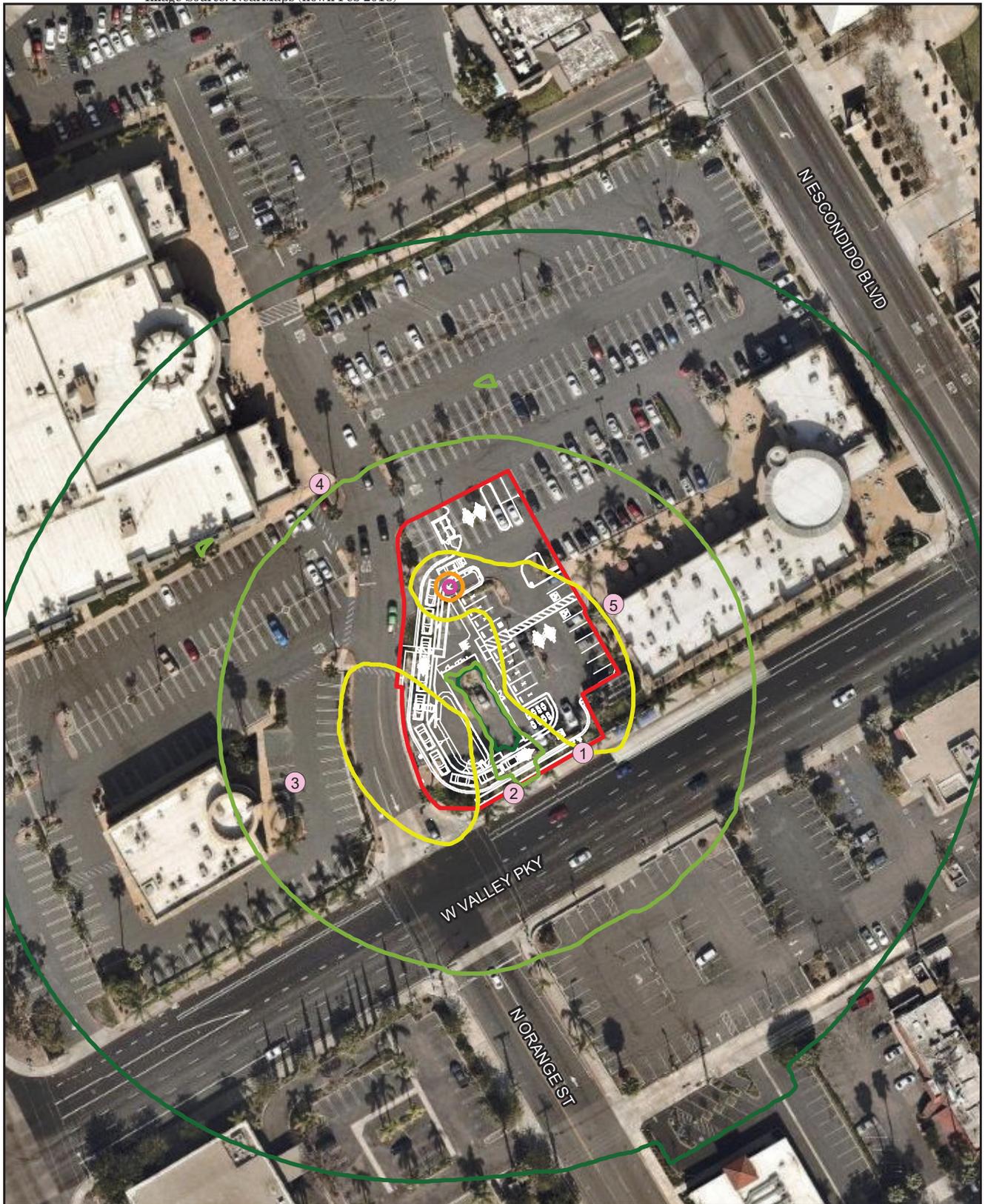


FIGURE 7

Nighttime On-Site Generated Noise Contours

Table 6 On-site Generated Noise Levels [dB(A) L _{eq}]			
Receiver	Daytime Noise Level	Nighttime Noise Level	Noise Level Limit Daytime/Nighttime
1	53	50	60/55
2	49	46	60/55
3	50	47	60/55
4	48	45	60/55
5	52	49	60/55

As shown, on-site generated noise levels would not exceed the applicable Noise Abatement and Control Ordinance limits.

The proposed SPA would allow potential future development of drive-through establishments within the CCU District of the Downtown Specific Plan area with issuance of a CUP. This could result in future traffic and operational noise sources associated with traffic noise, operation of HVAC units and drive-through speakers. However, cumulative noise impacts associated with future drive-through establishments would be minimized through compliance with the Noise Abatement and Control Ordinance and General Plan Community Protection Element noise policies that would be applied during project level discretionary reviews associated with future drive-through establishments. Thus, potential direct and cumulative noise impacts would be less than significant.

- b. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The project does not propose any commercial-type uses that would generate groundborne vibration or noise. In general, commercial land uses generally do not use equipment that would blast or pile drive (i.e., construction of railways/freeways or mining activities). Construction activities including site preparation and construction activities would use standard equipment such as loaders, backhoes, graders, scrapers, forklifts, and rollers that would not generate significant ground-borne vibration or noise. Impacts would be less than significant.

- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Refer to the analysis provided in XII. a). Impacts would be less than significant.

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Refer to the analysis provided in XII. a). Impacts would be less than significant.

- 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 expose people residing or working in the project area to excessive noise levels?

No Impact. The project site lies outside of the noise contours for airports in the region and would not expose people to excessive noise levels. No noise impacts due to aircraft noise would occur.

- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site lies well outside the noise contours for any airports in the region and would not expose people to excessive noise levels. No noise impacts due to aircraft noise would occur.

XIII. 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)?

No Impact. The project would not induce population growth, either directly or indirectly. The project is limited to the construction of a Starbucks coffee shop with a drive-through and does not include any housing that could increase the population of Escondido. The project would not extend any existing roads or expand existing infrastructure facilities, and it is anticipated that short-term construction jobs and long-term employment jobs would be filled by members of the existing population. No impact would occur.

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. There are no housing units on-site. No existing housing would be displaced, and no impact would occur.

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. There are no housing units on-site. No persons would be displaced, and no impact would occur.

XIV. PUBLIC SERVICES. Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services (or conflict with applicable fire and emergency response time thresholds specified in City of Escondido Zoning Code Article 47):

- i. Fire protection?

Less Than Significant Impact. Fire protection services would be provided by the Escondido Fire Department. Fire Station #1 is located approximately 0.2 mile west of the project site at 310 North Quince Street. This facility houses one paramedic fire engine, one truck company, one brush engine, two ambulances, and one battalion chief. The project would incrementally increase the need for service in the area by increasing the amount of commercial use within the existing shopping center. However, this increase in demand has been accounted for in the General Plan and would not result in the need for new or altered facilities. Consistent with the Citywide Facilities Plan, this increase would be offset by the payment of Public Facilities Fees at the time of building permit issuance. In addition, the project would be subject to fire and building review to ensure that the development is in compliance with access and safety standards. Therefore, the project would not require the construction of new fire protection facilities, and impacts would be less than significant.

- li. Police protection?

Less Than Significant Impact. Police services would be provided from the Police and Fire Headquarters Building located at 1163 North Centre City Parkway, located approximately 1.1 mile north of the project site. The project would incrementally increase the need for additional police service by increasing the amount of commercial use on the project site compared to the existing condition. This increase in demand has been accounted for in the General Plan and would not result in the need for new or altered facilities. Consistent with the Citywide Facilities Plan, this increase would be set off by the payment of Public Facilities Fees at the time of building permit issuance. Therefore, the project would not require the construction of new police protection facilities, and impacts would be less than significant.

- iii. Schools?

No Impact. The project site is within the Escondido Union School District and the Escondido Union High School District. As a commercial use, no student enrollment would be generated by the project. No impact would occur.

- iv. Parks?

No Impact. As a commercial use, the project would not result in population growth that would increase the demand for, or use of, local parks. The project would be in conformance with Article 18B of Chapter 6 of the Escondido Municipal Code, which establishes the public facility fees for the City. This article requires that all new residential or nonresidential development pay a fee for the purpose of assuring that the public facility standards established by the City are met with respect to the additional needs created by such development. No impact would occur.

- v. Other public facilities?

Less Than Significant Impact. The project would connect to Escondido Water and Wastewater Division and would result in some increase in water demand and wastewater generation. This increase in demand has been accounted for in the General Plan and would not result in the need for new or altered facilities. Water connection fees and wastewater connection fees would be paid to set off any potential impacts to these services upon issuance of a building permit. The project would be in conformance with Article 18B of Chapter 6 of the Municipal Code, which establishes the public facility fees for the City. Public facilities fees paid at the time of building permit issuance would contribute to and set off any increase in demand for public services or facilities. As the project would not require the construction of new facilities, impacts would be less than significant.

XV. RECREATION. Would the project:

- a. 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?

No Impact. As a commercial use, the project would not result in population growth that would increase the use of neighborhood parks, regional parks, or other recreational facilities. No impact would occur.

- b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The project does not include any recreation facilities, nor would it result in population growth necessitating the construction or expansion of recreational facilities. No impact would occur.

XVI. TRANSPORTATION/TRAFFIC. Would the project:

- a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit (or conflict with applicable traffic thresholds specified in City of Escondido Zoning Code Article 47)?

Less Than Significant Impact. The following impact analysis is based on the Focused Transportation Study prepared for the project by Urban Systems Associates, Inc. (Appendix F). Based on the City of Escondido Traffic Impact Analysis Guidelines, “a Traffic Impact Analysis (TIA) must be prepared for any project that generates and adds more than 2 percent of the average daily trips (ADT) for level of service (LOS) C to any street segment in the preliminary study area identified by the City staff.” The project would not exceed this threshold (500 ADT) on any street segment. Additionally, the project would not exceed the peak hour intersection trigger points contained in the Guidelines. Nevertheless, after consultation with City staff, it was determined that a Focused Transportation Study evaluating project access points and surrounding streets should be prepared for the existing and existing with project scenario, which would provide a conservative analysis meeting City requirements.

The project site is currently developed as a paved parking lot and ornamental landscaping and does not generate trips under the existing condition; therefore, the proposed use would generate traffic at the site as well as trips on the existing roadway network. The project would generate a total project ADT of 1,235 driveway trips with 86 a.m. (43 in/43 out) peak hour trips and 86 p.m. (43 in/43 out) peak hour trips.

Existing With Project Conditions

Street Segments

The following street segments were analyzed in the Existing With Project Conditions:

- West Valley Parkway (West of Shopping Center)
- West Valley Parkway (between Shopping Center and North Escondido Boulevard)
- North Escondido Boulevard (between West Valley Parkway and Shopping Center)

Road segment classifications and cross sections were based on the City General Plan Circulation Element. For this analysis, street classification thresholds were based on the City of Escondido Proposed Level of Service Standards Street Segments Average Daily Trip Thresholds, found in the City of Escondido Traffic Impact Analysis Guidelines (City of Escondido 2013).

As shown in Table 7, all street segments operate at acceptable LOS B under the Existing Condition. With the addition of project traffic, all roadway segments would continue to operate at LOS B, and the increase in the volume to capacity ratio would be 0.006 for all street segments. Therefore, the project would not decrease LOS on any of the potentially affected street segments, and impacts would be less than significant.

Road	Segment	Cap	Class.	Existing			Existing With Project			ΔV/C	Is this Impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
North Escondido Boulevard	West Valley Parkway to Shopping Center	34,200	4-C	B	13,612	0.40	B	13,819	0.40	0.006	No
West Valley Parkway	West of Shopping Center	37,500	5-C	B	18,284	0.49	B	18,512	0.49	0.006	No
	Shopping Center to North Escondido Boulevard	37,500	5-C	B	17,660	0.47	B	17,888	0.48	0.006	

LOS = Level of Service; Class. = Classification; V/C = Volume to Capacity Ratio; ΔV/C = Change in V/C ratio;
4-C = 4-Lane Collector; 5-C = 5-Lane Collector

Intersections

The following intersections were analyzed in the Existing With Project Conditions:

- North Escondido Boulevard at Shopping Center
- North Escondido Boulevard at West Valley Parkway
- West Valley Parkway at Shopping Center
- Centre City Parkway at West Valley Parkway

The average delay and LOS at the study intersections in the AM and PM peak hour were analyzed using a software package called Synchro, which is an application of the Highway Capacity Manual methodology. As shown in Table 8, all intersections operate at LOS D or better under the Existing Condition. With the addition of project traffic, all intersections would continue to operate at the same LOS D or better, with each intersection operating at the same LOS ratings as under the Existing Condition. Therefore, the project would not decrease LOS on any of the potentially affected intersections, and impacts would be less than significant.

Number	Intersection	Existing				Existing With Project (Buildout)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S?	PM Peak Hour		Δ	S?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	North Escondido Boulevard at Shopping Center	4.0	A	10.4	B	5.6	A	1.6	No	11.5	B	1.1	No
2	North Escondido Boulevard at West Valley Parkway	33.0	C	36.9	D	33.5	C	0.5	No	37.9	D	1.0	No
3	West Valley Parkway at Shopping Center	27.4	C	30.0	C	29.4	C	2.0	No	30.6	C	0.6	No
4	West Valley Parkway at Centre City Parkway	36.1	D	32.2	C	39.8	D	3.7	No	32.3	C	0.1	No

LOS = Level of Service; Δ = change; S = significant

- b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. See the response provided in XVI a). The project would not reduce LOS for any potentially affected street segment or intersection. Therefore, the project would not conflict with level of service, congestion management, or other standards established by the City, and impacts would be less than significant.

- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. As discussed in response to XIII. a), the project would not induce population growth, either directly or indirectly, and therefore would not generate an increase in travel demand. The nearest public airport is McClellan-Palomar Airport, which is located approximately 10 miles to the west. The nearest private airstrip is Lake Wohlford Resort Airport, which is located approximately 6 miles to the northeast. The project site is not located within any airport land use compatibility plan and would not affect air traffic patterns. No impact would occur.

- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project would not affect West Valley Parkway, and the drive-through has been designed consistent with City specifications and standards. Any future drive-through proposed within the Specific Plan area would be required to comply with City specifications and standards for safe access. Therefore, the project would not substantially increase hazards due to a design feature or incompatible use. No impact would occur.

- e. Result in inadequate emergency access?

No Impact. The project would not affect West Valley Parkway and has been designed consistent with City municipal code safety standards. Therefore, the project would not result in inadequate emergency access to or from the project site. No impact would occur.

- f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. A bus stop is located adjacent to the project site on West Valley Parkway. The West Valley Parkway and North Escondido Boulevard bus stop services Lines 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 371, 372, 388, and 389. Additionally, the Escondido Transit Center is located roughly 0.19 mile west on West Valley Parkway. Pedestrian access to and from the project is currently provided via sidewalks on both sides of North Escondido Boulevard as well as West Valley Parkway. Crosswalks are located on all legs of the intersection of West Valley Parkway at North Escondido Boulevard. At the intersection of West Valley Parkway and the existing shopping center, crosswalks are provided on all legs. At the intersection of North Escondido Boulevard at the existing shopping center, crosswalks are provided on all legs except for the north leg. Sidewalks and crosswalks are also provided within the existing shopping center itself. Bike lanes do not currently exist on North Escondido Boulevard or West Valley Parkway. The project would be constructed entirely within the designated project site and would not physically impact the existing bus stop on West Valley Parkway or any of the existing sidewalks. Therefore, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. No impact would occur.

XVII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- 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 §5020.1(k)?

Less Than Significant With Mitigation. The City initiated consultation with the Native American Tribes pursuant to Public Resources Code Section 21080.3.1 consistent with AB 52. Tribes who are traditionally and culturally affiliated with the geographic area of the project were invited to consult regarding potential impacts to tribal cultural resources. Additionally, the City initiated consultation consistent with SB 18, which requires local governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.

The City received responses to the tribal consultation letter from seven tribes. The Pala Tribal Historic Preservation Office and the Inaja-Cosmit Band of Mission Indians did not request further consultation on the project. The Campo Band of Mission Indians, Rincon Band of Luiseño Indians, and Pauma Band of Luiseño Indians initially requested consultation on the project. The City subsequently contacted all four tribes to fulfill their requests for further consultation. During this subsequent consultation, all three tribes determined that they did not have any concerns on the project and that further consultation was not necessary. The San Luis Rey Band of Mission Indians responded to the tribal consultation letter and requested consultation. The City fulfilled this tribal consultation request by meeting with the San Luis Rey Band of Mission Indians on July 12, 2017. The City subsequently provided the San Luis Rey Band of Mission Indians with potential mitigation measures for cultural resources, which the Tribe requested to be included in this MND with a letter sent on January 8, 2018. These mitigation measures are included as MM-CUL-1 through MM-CUL-10 in Section V. b) above.

The Sycuan Band of the Kumeyaay Nation submitted a response to the tribal consultation letter on July 17, 2017 requesting that an archaeologist and qualified Kumeyaay Cultural Monitor be present during all ground-disturbing activities. Implementation of MM-CUL-1 through MM-CUL-10 would satisfy this request.

The project site consists of paved parking and ornamental landscaping associated with an existing shopping center and is located in an urbanized environment. No Tribal cultural resources were documented on-site during tribal consultation. However excavation during construction would have the potential to unearth unknown or previously undisturbed tribal cultural resources (TCR-1). Implementation of MM-CUL-1 through MM-CUL-10 would ensure that the project would not cause a substantial adverse change to a resource 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), which would reduce impacts to a level less than significant.

- 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 subdivision (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.

Less Than Significant With Mitigation. As discussed in response to XVII. a), no Tribal cultural resources were documented on-site during tribal consultation. However, excavation during construction would have the potential to unearth unknown or previously undisturbed Tribal cultural resources. Implementation of MM-CUL-1 through MM-CUL-10 would ensure that the project would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 5024.1(c), which would reduce impacts to a level less than significant.

XVIII. UTILITIES AND SERVICE SYSTEMS. Would the project:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The project would result in an incremental increase in demand for wastewater treatment. All wastewater would be treated consistent with applicable RWQCB treatment requirements at the Hale Avenue Resource Recovery Facility. Therefore, the project would not exceed applicable RWQCB wastewater treatment requirements, and impacts would be less than significant.

- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project would result in an incremental increase in demand water for wastewater treatment. However, the project would be consistent with growth anticipated by the City General Plan, and would not create unanticipated water or wastewater treatment demand.

All wastewater would be treated at the Hale Avenue Resource Recovery Facility, which would have adequate capacity to treat flows associated with the project. Therefore, the project would not require construction or expansion of water or wastewater treatment facilities, and impacts would be less than significant.

- c. Require, or result in, the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project includes construction of two biofiltration basins that would reduce the peak 100-year storm event flow rate from 3.49 cfs to 3.38 cfs (see Section IX. c)). Impacts associated with the construction of these biofiltration basins have been considered throughout the Initial Study/Negative Declaration, and have been determined to be less than significant.

- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. Regional water planning documents use zoning and land use designations to determine water demand and to ultimately determine the entitlements needed to provide adequate water supply. The project land use would be consistent with that allowed by the General Plan and, thus, the anticipated water use based on the planned commercial use has been considered in water supply planning documents (e.g., City Urban Water Management Plan), which plan for future water supplies and take into consideration the potential for future drought conditions. Water demand from landscaping would comply with the City's Water Efficient Landscape Regulations (Chapter 33, Article 62 of Municipal Code), which would ensure landscape water efficiency is maximized and low water plants are used. Based on the consistency of the project use with planned land uses, the project would not trigger the need for new entitlements, and impacts would be less than significant.

- e. 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?

Less Than Significant Impact. Refer to XVIII. a). The project's incremental increase in demand for wastewater treatment would not exceed current City wastewater capacity based on the consistency of the proposed use with planned land uses that are considered in the City's wastewater capacity planning. The project would connect to existing wastewater infrastructure. Therefore, the project would not exceed existing wastewater treatment capacity, and impacts would be less than significant.

- f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Project construction would generate solid waste that would be disposed of at regional landfills. The project would minimize construction waste by recycling construction waste when possible. Operational waste would be collected by the Escondido Disposal, Inc. and disposed of at regional landfills. The project would not result in a need for new or expanded solid waste facilities off-site, and impacts related to solid waste disposal would be less than significant.

- g. Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Numerous federal, state, and local regulations exist that are related to solid waste. These include (1) California Integrated Waste Management Agency, which regulates the management of solid waste within the state; (2) Non-Exclusive Solid Waste Management Agreement, which regulates waste collection in a market-driven business; and (3) the San Diego Integrated Waste Management Plan, which presents strategies to recycle, as well as assist with the siting of solid waste disposal facilities. The project would comply with all regulations related to solid waste such as the California Integrated Waste Management Act and City recycling programs. No impact would occur.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

- a. Does the project have the potential to 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, 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?

Less Than Significant With Mitigation. As described in Section IV above, the project site consists primarily of paved parking and ornamental landscaping associated with an existing shopping center. Vegetation on the project site is limited to ornamental landscaping that is not designated as sensitive plant species and does not provide habitat for designated sensitive species. Similarly, the project site does not possess any riparian habitat or communities, nor any wetlands, wetland buffer areas, or non-wetland waters of the U.S. Therefore, no impacts to sensitive species, riparian habitat, or wetlands would occur. As described in Section V, above, the project would not impact any historical resources, and implementation of MM-CUL-1 through MM-CUL-10 would reduce impacts on prehistoric resources to a level less than significant.

- 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.)

Less Than Significant With Mitigation. Impacts associated with cultural resources and tribal cultural resources would be mitigated to a level less than significant. All other project impacts would be less than significant without mitigation. Consequently, the project would not result in any cumulative impacts on the environment.

- c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. As described in Sections III, VIII, and XII above, the project would not result in any substantial adverse direct or indirect impacts to human beings related to air quality, hazards and hazardous materials, and noise.

- d. Where deficiencies exist relative to the City's General Plan Quality of Life Standards, does the project result in deficiencies that exceed the levels identified in the Environmental Quality Regulations (City of Escondido Zoning Code Article 47 Section 33-924(a))?

Less Than Significant With Mitigation. Impacts associated with cultural resources and tribal cultural resources would be mitigated to a level less than significant. All other project impacts would be less than significant without mitigation. Consequently, the project would not result in deficiencies relative to the City's General Plan Quality of Life Standards or deficiencies that exceed the levels identified in the Environmental Quality Regulations (City of Escondido Zoning Code Article 47 Section 33-924(a)).

Material Used in Preparation of This Analysis

Appendices

- A: Air Quality CalEEMod Emission Calculation Output, RECON Environmental, Inc., November 10, 2017
- B: Greenhouse Gas CalEEMod Emission Calculation Output, RECON Environmental, Inc., November 10, 2017
- C: Storm Water Quality Management Plan For Starbucks Escondido, Florenz Engineering, Inc., February 21, 2018
- D: Preliminary Hydrology Study For Starbucks, Florenz Engineering, Inc., February 20, 2018
- E: Noise Model Data, RECON Environmental, Inc., April 2, 2018
- F: Signature Pavilion 350 W. Valley Parkway Focused Transportation Study, Urban Systems Associates, Inc., March 14, 2018

Figures

- Figure 1: Regional Location
- Figure 2: Project Location on Aerial Photograph
- Figure 3: Site Plan
- Figure 4: Landscape Concept Plan
- Figure 5: Construction Noise Contours
- Figure 6: Daytime On-Site Generated Noise Contours
- Figure 7: Nighttime On-Site Generated Noise Contours

Sources of Information

- Bay Area Air Quality Management District
 - 2010 California Environmental Quality Act Air Quality Guidelines. May.
- California Air Pollution Control Officers Association (CAPCOA)
 - 2008 CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January.
 - 2017 California Emissions Estimator model (CalEEMod). User's Guide Version 2016.3.2 October.
- California Air Resources Board (CARB)
 - 2005 Air Quality and Land Use Handbook: A Community Health Perspective. California Air Resources Board. April.
- California Department of Transportation (Caltrans)
 - 2013 Technical Noise Supplement. November.
- Escondido, City of
 - 2001 City of Escondido Draft Subarea Plan. June.
 - 2012a City of Escondido General Plan. May 23.
 - 2012b City of Escondido General Plan Environmental Impact Report. April 23.
 - 2013 City of Escondido Adopted Climate Action Plan. December 4.
- Federal Highway Administration (FHWA)
 - 2006 Roadway Construction Noise Model. FHWA-HEP-05-054, SOT-VNTSC-FHWA-05-01. Final Report. January 2006.
- Michael Brandman Associates
 - 2013 Final Environmental Impact Report – Foxglove Shopping Center Project. SCH No. 2011051031. City of Madera. February 1, 2013.
- Navcon Engineering, Inc.
 - 2015 SoundPLAN Essential version 3.0.
- San Diego Air Pollution Control District
 - 1992 1991/1992 Regional Air Quality Strategies. Air Pollution Control District. June.
- San Diego, County of
 - 2007 Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality. Land Use and Environment Group. March 19.

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: Starbucks Drive Through, Escondido, CA 92025

PROJECT DESCRIPTION: The project includes two components. The first is an application for an Amendment to the Downtown Specific Plan to allow drive-through restaurants within the Centre City Urban (CCU) and Gateway Transit (GT) districts, which is currently prohibited. The second component of the project is to allow the construction of a 1,900-square-foot Starbucks coffee shop with drive-through, through the issuance of a Conditional Use Permit (CUP). The proposed Specific Plan Amendment would allow potential future development of drive-through establishments within the CCU and GT districts of the Downtown Specific Plan area with issuance of a CUP. The new 1,900-square-foot coffee shop would include landscaping along the project perimeter, drive-through services, and parking islands. Upon issuance of a CUP and completion of the project, the existing Starbucks franchise operating at 320 West Valley Parkway would relocate to the new facility. The vacated commercial property at 320 West Valley Parkway would remain vacant or be leased to another permitted business or land use activity.

APPROVAL BODY/DATE: City Council, June 22, 2018

CONTACT: Darren Parker, Associate Planner

PHONE NUMBER: 760-839-4553

Impact	Mitigation Measure	Location in Document	Responsible Party	Certified Completion	Comments
Potential impact to unknown subsurface archaeological resources	<p>MM-CUL-1: The City of Escondido Planning Division (City) recommends the applicant enter into a Tribal Cultural Resource Treatment and Monitoring Agreement (also known as a pre-excavation agreement) with a tribe that is traditionally and culturally affiliated with the Project Location (TCA Tribe) prior to issuance of a grading permit. The purposes of the agreement are (1) to provide the applicant with clear expectations regarding tribal cultural resources, and (2) to formalize protocols and procedures between them. Applicant/Owner and the TCA Tribe for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, grading, and all other ground-disturbing activities.</p> <p>MM-CUL-2: Prior to issuance of a grading permit, the applicant shall provide written verification to the City that a qualified archaeologist and a Native American monitor associated with a TCA Tribe have been retained to implement the monitoring program. The</p>	Section V. b), Cultural Resources	Applicant		

Impact	Mitigation Measure	Location in Document	Responsible Party	Certified Completion	Comments
	<p>archaeologist shall be responsible for coordinating with the Native American monitor. This verification shall be presented to the City in a letter from the project archaeologist that confirms the selected Native American monitor is associated with a TCA Tribe. The City, prior to any pre-construction meeting, shall approve all persons involved in the monitoring program.</p> <p>MM-CUL-3: The qualified archaeologist and a Native American monitor shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program.</p> <p>MM-CUL-4: During the initial demolition, site grading, excavation, or disturbance of the ground surface, the qualified archaeologist and the Native American monitor shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and any discoveries of tribal cultural resources as defined in California Public Resources Code Section 21074. Archaeological and Native American monitoring will be discontinued when the depth of grading and soil conditions no longer retain the potential to contain cultural deposits. The qualified archaeologist, in consultation with the Native American monitor, shall be responsible for determining the duration and frequency of monitoring.</p> <p>MM-CUL-5: In the event that previously-unidentified tribal cultural resources are discovered, the qualified archaeologist and the Native American monitor shall have the authority to temporarily divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. Isolates and clearly non-significant deposits shall be minimally documented in the field and collected so the monitored grading can proceed.</p> <p>MM-CUL-6: If a potentially significant tribal cultural resource is discovered, the archaeologist shall notify the City of said discovery. The qualified archaeologist, in consultation with the City, the TCA Tribe and the</p>				

Impact	Mitigation Measure	Location in Document	Responsible Party	Certified Completion	Comments
	<p>Native American monitor, shall determine the significance of the discovered resource. A recommendation for the tribal cultural resource's treatment and disposition shall be made by the qualified archaeologist in consultation with the TCA Tribe and the Native American monitor and be submitted to the City for review and approval.</p> <p>MM-CUL-7: If a potentially significant tribal cultural resources and/or unique archaeological resource is discovered, the avoidance and/or preservation of the significant tribal cultural resource and/or unique archaeological resource must first be considered and evaluated as required by CEQA. Where any significant tribal cultural resources and/or unique archaeological resources have been discovered and avoidance and/or preservation measures are deemed to be infeasible by the City, then a research design and data recovery program to mitigate impacts shall be prepared by the qualified archaeologist (using professional archaeological methods), in consultation with the TCA Tribe and the Native American monitor, and shall be subject to approval by the City. The archaeological monitor, in consultation with the Native American monitor, shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Before construction activities are allowed to resume in the affected area, the research design and data recovery program activities must be concluded to the satisfaction of the City.</p> <p>MM-CUL-8: As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office. Determination of whether the remains are human shall be conducted on-site and in situ where they were discovered by a forensic anthropologist, unless the forensic anthropologist and the Native American monitor agree to remove the remains to an off-site location for examination. No further excavation</p>				

Impact	Mitigation Measure	Location in Document	Responsible Party	Certified Completion	Comments
	<p>or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition. A temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains in accordance with California Public Resources Code section 5097.98. The Native American remains shall be kept in-situ, or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a Native American monitor.</p> <p>MM-CUL-9: If the qualified archaeologist elects to collect any tribal cultural resources, the Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the Native American monitor, may at their discretion, collect said resources and provide them to the TCA Tribe for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions. Any tribal cultural resources collected by the qualified archaeologist shall be repatriated to the TCA Tribe. Should the TCA Tribe or other traditionally and culturally affiliated tribe decline the collection, the collection shall be curated at the San Diego Archaeological Center. All other resources determined by the qualified archaeologist, in consultation with the Native American monitor, to not be tribal cultural resources, shall be curated at the San Diego Archaeological Center.</p> <p>MM-CUL-10: Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and</p>				

Impact	Mitigation Measure	Location in Document	Responsible Party	Certified Completion	Comments
	<p>conclusion of the archaeological monitoring program and any data recovery program on the project site shall be submitted by the qualified archaeologist to the City. The Native American monitor shall be responsible for providing any notes or comments to the qualified archaeologist in a timely manner to be submitted with the report. The report will include California Department of Parks and Recreation Primary and Archaeological Site Forms for any newly discovered resources.</p>				

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

8688 Escondido Starbucks
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	1.90	1000sqft	1.00	1,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	519.91	CH4 Intensity (lb/MW hr)	0.021	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

Project Characteristics - RPS - SDG&E currently at 35.2%

CalEEMod accounts for 10.2%

Additional reduction applied

(519.91, 0.021, 0.004)

Land Use - 1,900 square foot building

Construction Phase -

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - 650 trips/ksf

5.7 mile trip length

Area Coating - SDAPCD Rule 67.0.1

Energy Use -

Water And Wastewater - CalGreen 20% decrease in indoor water use (461,371.24)

Waste Mitigation -

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblLandUse	LotAcreage	0.04	1.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	519.91
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	5.70
tblVehicleTrips	CNW_TL	7.30	5.70
tblVehicleTrips	CW_TL	9.50	5.70
tblVehicleTrips	WD_TR	496.12	650.00
tblWater	IndoorWaterUseRate	576,714.05	461,371.24

2.0 Emissions Summary

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004
Energy	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266
Mobile	1.7526	5.9179	13.3021	0.0285	2.1202	0.0320	2.1523	0.5667	0.0300	0.5967		2,892.6895	2,892.6895	0.2234		2,898.2732
Total	1.8085	6.0069	13.3770	0.0290	2.1202	0.0388	2.1590	0.5667	0.0368	0.6035		2,999.4818	2,999.4818	0.2254	1.9600e-003	3,005.7002

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004
Energy	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266
Mobile	1.7526	5.9179	13.3021	0.0285	2.1202	0.0320	2.1523	0.5667	0.0300	0.5967		2,892.6895	2,892.6895	0.2234		2,898.2732
Total	1.8085	6.0069	13.3770	0.0290	2.1202	0.0388	2.1590	0.5667	0.0368	0.6035		2,999.4818	2,999.4818	0.2254	1.9600e-003	3,005.7002

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2018	1/15/2018	5	1	
2	Grading	Grading	1/16/2018	1/17/2018	5	2	
3	Building Construction	Building Construction	1/18/2018	6/6/2018	5	100	
4	Paving	Paving	6/7/2018	6/13/2018	5	5	
5	Architectural Coating	Architectural Coating	6/14/2018	6/20/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,850; Non-Residential Outdoor: 950; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.363 0	1,735.363 0	0.5402		1,748.869 0
Total	1.8061	20.7472	8.0808	0.0172	5.7996	0.9523	6.7518	2.9537	0.8761	3.8298		1,735.363 0	1,735.363 0	0.5402		1,748.869 0

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446
Total	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	1.8061	20.7472	8.0808	0.0172	5.7996	0.9523	6.7518	2.9537	0.8761	3.8298	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446
Total	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
Total	1.4972	17.0666	6.7630	0.0141	4.9143	0.7947	5.7090	2.5256	0.7311	3.2568		1,421.2605	1,421.2605	0.4425		1,432.3219

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446
Total	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
Total	1.4972	17.0666	6.7630	0.0141	4.9143	0.7947	5.7090	2.5256	0.7311	3.2568	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446
Total	0.0385	0.0275	0.2598	6.8000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.4000e-004	0.0179		67.3862	67.3862	2.3400e-003		67.4446

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8100e-003	3.4400e-003	0.0325	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4233	8.4233	2.9000e-004		8.4306
Total	4.8100e-003	3.4400e-003	0.0325	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4233	8.4233	2.9000e-004		8.4306

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8100e-003	3.4400e-003	0.0325	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4233	8.4233	2.9000e-004		8.4306
Total	4.8100e-003	3.4400e-003	0.0325	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4233	8.4233	2.9000e-004		8.4306

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0625	0.0448	0.4221	1.1000e-003	0.1068	7.7000e-004	0.1076	0.0283	7.1000e-004	0.0290		109.5026	109.5026	3.7900e-003		109.5974
Total	0.0625	0.0448	0.4221	1.1000e-003	0.1068	7.7000e-004	0.1076	0.0283	7.1000e-004	0.0290		109.5026	109.5026	3.7900e-003		109.5974

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0625	0.0448	0.4221	1.1000e-003	0.1068	7.7000e-004	0.1076	0.0283	7.1000e-004	0.0290		109.5026	109.5026	3.7900e-003		109.5974
Total	0.0625	0.0448	0.4221	1.1000e-003	0.1068	7.7000e-004	0.1076	0.0283	7.1000e-004	0.0290		109.5026	109.5026	3.7900e-003		109.5974

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	4.2616	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	4.2616	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7526	5.9179	13.3021	0.0285	2.1202	0.0320	2.1523	0.5667	0.0300	0.5967		2,892.6895	2,892.6895	0.2234		2,898.2732
Unmitigated	1.7526	5.9179	13.3021	0.0285	2.1202	0.0320	2.1523	0.5667	0.0300	0.5967		2,892.6895	2,892.6895	0.2234		2,898.2732

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,235.00	1,371.86	1031.17	893,118	893,118
Total	1,235.00	1,371.86	1,031.17	893,118	893,118

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	5.70	5.70	5.70	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266
NaturalGas Unmitigated	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	907.732	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266
Total		9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	0.907732	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266
Total		9.7900e-003	0.0890	0.0748	5.3000e-004		6.7600e-003	6.7600e-003		6.7600e-003	6.7600e-003		106.7919	106.7919	2.0500e-003	1.9600e-003	107.4266

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004
Unmitigated	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004
Total	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004
Total	0.0461	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.2000e-004	4.2000e-004	0.0000		4.4000e-004

7.0 Water Detail

8688 Escondido Starbucks - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

8688 Escondido Starbucks
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	1.90	1000sqft	1.00	1,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	519.91	CH4 Intensity (lb/MW hr)	0.021	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Project Characteristics - RPS - SDG&E currently at 35.2%

CalEEMod accounts for 10.2%

Additional reduction applied

(519.91, 0.021, 0.004)

Land Use - 1,900 square foot building

Construction Phase -

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - 650 trips/ksf

5.7 mile trip length

Area Coating - SDAPCD Rule 67.0.1

Energy Use -

Water And Wastewater - CalGreen 20% decrease in indoor water use (461,371.24)

Waste Mitigation -

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblLandUse	LotAcreage	0.04	1.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	519.91
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	5.70
tblVehicleTrips	CNW_TL	7.30	5.70
tblVehicleTrips	CW_TL	9.50	5.70
tblVehicleTrips	WD_TR	496.12	650.00
tblWater	IndoorWaterUseRate	576,714.05	461,371.24

2.0 Emissions Summary

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	0.5597	0.5597
2	4-1-2018	6-30-2018	0.5238	0.5238
		Highest	0.5597	0.5597

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Energy	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	35.0210	35.0210	1.0400e-003	4.6000e-004	35.1833
Mobile	0.2746	0.9696	2.0830	4.6900e-003	0.3366	5.1400e-003	0.3418	0.0902	4.8100e-003	0.0950	0.0000	433.0102	433.0102	0.0320	0.0000	433.8100
Waste						0.0000	0.0000		0.0000	0.0000	4.4435	0.0000	4.4435	0.2626	0.0000	11.0085
Water						0.0000	0.0000		0.0000	0.0000	0.1464	1.5132	1.6596	0.0151	3.7000e-004	2.1462
Total	0.2848	0.9858	2.0967	4.7900e-003	0.3366	6.3700e-003	0.3430	0.0902	6.0400e-003	0.0962	4.5898	469.5444	474.1343	0.3107	8.3000e-004	482.1480

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Energy	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	35.0210	35.0210	1.0400e-003	4.6000e-004	35.1833
Mobile	0.2746	0.9696	2.0830	4.6900e-003	0.3366	5.1400e-003	0.3418	0.0902	4.8100e-003	0.0950	0.0000	433.0102	433.0102	0.0320	0.0000	433.8100
Waste						0.0000	0.0000		0.0000	0.0000	3.3326	0.0000	3.3326	0.1970	0.0000	8.2564
Water						0.0000	0.0000		0.0000	0.0000	0.1464	1.5132	1.6596	0.0151	3.7000e-004	2.1462
Total	0.2848	0.9858	2.0967	4.7900e-003	0.3366	6.3700e-003	0.3430	0.0902	6.0400e-003	0.0962	3.4790	469.5444	473.0234	0.2451	8.3000e-004	479.3959

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.20	0.00	0.23	21.13	0.00	0.57

3.0 Construction Detail

Construction Phase

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2018	1/15/2018	5	1	
2	Grading	Grading	1/16/2018	1/17/2018	5	2	
3	Building Construction	Building Construction	1/18/2018	6/6/2018	5	100	
4	Paving	Paving	6/7/2018	6/13/2018	5	5	
5	Architectural Coating	Architectural Coating	6/14/2018	6/20/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,850; Non-Residential Outdoor: 950; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-003	0.0000	2.9000e-003	1.4800e-003	0.0000	1.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0104	4.0400e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933
Total	9.0000e-004	0.0104	4.0400e-003	1.0000e-005	2.9000e-003	4.8000e-004	3.3800e-003	1.4800e-003	4.4000e-004	1.9200e-003	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309
Total	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-003	0.0000	2.9000e-003	1.4800e-003	0.0000	1.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0104	4.0400e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933
Total	9.0000e-004	0.0104	4.0400e-003	1.0000e-005	2.9000e-003	4.8000e-004	3.3800e-003	1.4800e-003	4.4000e-004	1.9200e-003	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309
Total	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.9100e-003	0.0000	4.9100e-003	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-003	0.0171	6.7600e-003	1.0000e-005		7.9000e-004	7.9000e-004		7.3000e-004	7.3000e-004	0.0000	1.2894	1.2894	4.0000e-004	0.0000	1.2994
Total	1.5000e-003	0.0171	6.7600e-003	1.0000e-005	4.9100e-003	7.9000e-004	5.7000e-003	2.5300e-003	7.3000e-004	3.2600e-003	0.0000	1.2894	1.2894	4.0000e-004	0.0000	1.2994

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618
Total	3.0000e-005	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.9100e-003	0.0000	4.9100e-003	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-003	0.0171	6.7600e-003	1.0000e-005		7.9000e-004	7.9000e-004		7.3000e-004	7.3000e-004	0.0000	1.2893	1.2893	4.0000e-004	0.0000	1.2994
Total	1.5000e-003	0.0171	6.7600e-003	1.0000e-005	4.9100e-003	7.9000e-004	5.7000e-003	2.5300e-003	7.3000e-004	3.2600e-003	0.0000	1.2893	1.2893	4.0000e-004	0.0000	1.2994

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618
Total	3.0000e-005	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1296	0.8714	0.6938	1.1000e-003		0.0529	0.0529		0.0511	0.0511	0.0000	92.1173	92.1173	0.0185	0.0000	92.5809
Total	0.1296	0.8714	0.6938	1.1000e-003		0.0529	0.0529		0.0511	0.0511	0.0000	92.1173	92.1173	0.0185	0.0000	92.5809

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	1.6200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3859	0.3859	1.0000e-005	0.0000	0.3862
Total	2.1000e-004	1.7000e-004	1.6200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3859	0.3859	1.0000e-005	0.0000	0.3862

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1296	0.8714	0.6938	1.1000e-003		0.0529	0.0529		0.0511	0.0511	0.0000	92.1172	92.1172	0.0185	0.0000	92.5808
Total	0.1296	0.8714	0.6938	1.1000e-003		0.0529	0.0529		0.0511	0.0511	0.0000	92.1172	92.1172	0.0185	0.0000	92.5808

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	1.6200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3859	0.3859	1.0000e-005	0.0000	0.3862
Total	2.1000e-004	1.7000e-004	1.6200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3859	0.3859	1.0000e-005	0.0000	0.3862

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5500e-003	0.0261	0.0225	3.0000e-005		1.5200e-003	1.5200e-003		1.4000e-003	1.4000e-003	0.0000	3.0537	3.0537	9.3000e-004	0.0000	3.0770
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5500e-003	0.0261	0.0225	3.0000e-005		1.5200e-003	1.5200e-003		1.4000e-003	1.4000e-003	0.0000	3.0537	3.0537	9.3000e-004	0.0000	3.0770

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510
Total	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5500e-003	0.0261	0.0225	3.0000e-005		1.5200e-003	1.5200e-003		1.4000e-003	1.4000e-003	0.0000	3.0537	3.0537	9.3000e-004	0.0000	3.0770
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5500e-003	0.0261	0.0225	3.0000e-005		1.5200e-003	1.5200e-003		1.4000e-003	1.4000e-003	0.0000	3.0537	3.0537	9.3000e-004	0.0000	3.0770

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510
Total	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	0.0107	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	0.0107	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2746	0.9696	2.0830	4.6900e-003	0.3366	5.1400e-003	0.3418	0.0902	4.8100e-003	0.0950	0.0000	433.0102	433.0102	0.0320	0.0000	433.8100
Unmitigated	0.2746	0.9696	2.0830	4.6900e-003	0.3366	5.1400e-003	0.3418	0.0902	4.8100e-003	0.0950	0.0000	433.0102	433.0102	0.0320	0.0000	433.8100

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,235.00	1,371.86	1031.17	893,118	893,118
Total	1,235.00	1,371.86	1,031.17	893,118	893,118

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	5.70	5.70	5.70	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.3404	17.3404	7.0000e-004	1.3000e-004	17.3976
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.3404	17.3404	7.0000e-004	1.3000e-004	17.3976
NaturalGas Mitigated	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857
NaturalGas Unmitigated	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857

8688 Escondido Starbucks - San Diego County APCD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	331322	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857
Total		1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	331322	1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857
Total		1.7900e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6806	17.6806	3.4000e-004	3.2000e-004	17.7857

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	73530	17.3404	7.0000e-004	1.3000e-004	17.3976
Total		17.3404	7.0000e-004	1.3000e-004	17.3976

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	73530	17.3404	7.0000e-004	1.3000e-004	17.3976
Total		17.3404	7.0000e-004	1.3000e-004	17.3976

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	8.4100e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.6596	0.0151	3.7000e-004	2.1462
Unmitigated	1.6596	0.0151	3.7000e-004	2.1462

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.461371 / 0.0368115	1.6596	0.0151	3.7000e-004	2.1462
Total		1.6596	0.0151	3.7000e-004	2.1462

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.461371 / 0.0368115	1.6596	0.0151	3.7000e-004	2.1462
Total		1.6596	0.0151	3.7000e-004	2.1462

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.3326	0.1970	0.0000	8.2564
Unmitigated	4.4435	0.2626	0.0000	11.0085

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	21.89	4.4435	0.2626	0.0000	11.0085
Total		4.4435	0.2626	0.0000	11.0085

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	16.4175	3.3326	0.1970	0.0000	8.2564
Total		3.3326	0.1970	0.0000	8.2564

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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**City of Escondido
PRIORITY DEVELOPMENT PROJECT (PDP} SWQMP**

**STARBUCKS ESCONDIDO
[INSERT RECORD ID (PERMIT) NUMBERS]**

**350 W. VALLEY PARKWAY
ESCONDIDO, CA. 92025**

**ASSESSOR'S PARCEL NUMBER(S):
229-332-44-00**

ENGINEER OF WORK:

DENNIS FURMAN RCE 32391

PREPARED FOR:

SEA PROPERTY MANAGEMENT CO.
1333 CAMINO DEL RIO SOUTH
SAN DIEGO, CA. 92108
(619) 297-3900

PDP SWQMP PREPARED BY:

FLOREZ ENGINEERING INC.
11440 W. BARNARDO COURT
SAN DIEGO. CA. 92127
(858) 386-8836

DATE OF SWQMP:
FEBRUARY 23, 2017

PLANS PREPARED BY:

FLOREZ ENGINEERING INC.
11440 W. BARNARDO COURT
SAN DIEGO. CA. 92127
(858) 386-8836

SWQMP APPROVED BY:
[FOR CITY STAFF ONLY]

APPROVAL DATE: 2/21/2018

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

TABLE OF CONTENTS

TABLE OF CONTENTS	iii
ATTACHMENTS	iv
ACRONYMS	iv
PDP SWQMP PREPARER'S CERTIFICATION PAGE	v
SUBMITTAL RECORD	vii
PROJECT VICINITY MAP	viii
Step 1: Project type determination (Standard or Priority Development Project) (Form I-2a)..	1
Step 1.1: Storm Water Quality Management Plan requirements	4
Step 1.2: Exception to PDP definitions	4
Step 2: Construction Storm Water BMPs.....	5
Step 3: City of Escondido PDP SWQMP Site Information Checklist (Form I-2a).....	6
Step 3.1: Description of Existing Site Condition.....	6
Step 3.2: Description of Existing Site Drainage Patterns.....	7
Step 3.3: Description of Proposed Site Development.....	8
Step 3.4: Description of Proposed Site Drainage Patterns.....	9
Step 3.5: Potential Pollutant Source Areas.....	10
Step 3.6: Identification and Narrative of Receiving Water and Pollutants of Concern	11
Step 3.7: Hydromodification Management Requirements.....	12
Step 3.7.1: Critical Coarse Sediment Yield Areas*	13
Step 3.7.2: Flow Control for Post-Project Runoff*	14
Step 3.8: Other Site Requirements and Constraints.....	15
Step 4: Source Control BMP Checklist (Form I-2b).....	16
Step 5: Site Design BMP Checklist (Form I-2c)	18
Step 6: PDP Structural BMPs (Form 1-3)	20
Step 6.1: Description of structural BMP strategy	20
Step 6.2: Structural BMP Checklist.....	22
Step 6.3: Offsite Alternative Compliance Participation Form.....	23

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

ATTACHMENTS

Attachment 1: Backup for PDP Pollutant Control BMPs

Attachment 1a: Form 1-4, Storm Water Pollutant Control Worksheet Calculations

Attachment 1b: Form 1-5, Categorization of Infiltration Feasibility Condition

Attachment 1c: Form 1-6, Factor of Safety and Design Infiltration Rate Worksheet

Attachment 1d: Drainage Management Area (DMA) Exhibit

Attachment 1e: Individual Structural BMP DMA Mapbook

Attachment 2: Backup for PDP Hydromodification Control Measures

Attachment 2a: Flow Control Facility Design

Attachment 2b: Hydromodification Management Exhibit

Attachment 2c: Management of Critical Coarse Sediment Yield Areas

Attachment 2d: Geomorphic Assessment of Receiving Channels (optional)

Attachment 2e: Vector Control Plan (if applicable)

Attachment 3: Structural BMP Maintenance Plan

Attachment 3a: Structural BMP Maintenance Thresholds and Actions

Attachment 3b: Draft Maintenance Agreements/ Notifications (when applicable)

Attachment 4: City of Escondido PDP Structural BMP Verification

Attachment 5: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

ACP	Alternative Compliance Project
APN	Assessor's Parcel Number
BMP	Best Management Practice
OMA	Drainage Management Area
EOW	Engineer of Work
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWDM	Storm Water Design Manual
SWQMP	Storm Water Quality Management Plan
WMM	Watershed Management Area Analysis
WQIP	Water Quality Improvement Plan

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

PDP SWQMP PREPARER'S CERTIFICATION PAGE

Project Name: [Insert Project Name]

Permit Application Number: [Insert Permit Application Number]

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Escondido Storm Water Design Manual, which is a design manual for compliance with the City of Escondido Municipal Code (Chapter 22, Article 2) and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100) requirements for storm water management.

I have read and understand that the City of Escondido has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the Storm Water Design Manual. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWQMP by City staff is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

Engineer of Work's Signature, PE Number & Expiration Date

DENNIS FURMAN

FLOREZ ENGINEERING INC.

Date

Engineer's Seal:

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Preliminary Design / Planning / CEQA

Submittal Number			Date	Summary of Changes
1				Initial Submittal
2				First PC
3				
4				

Final Design

Submittal Number	Date	Summary of Changes
1		Initial Submittal
2		
3		
4		

Plan Changes

Submittal Number	Date	Summary of Changes
1		Initial Submittal
2		
3		
4		

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

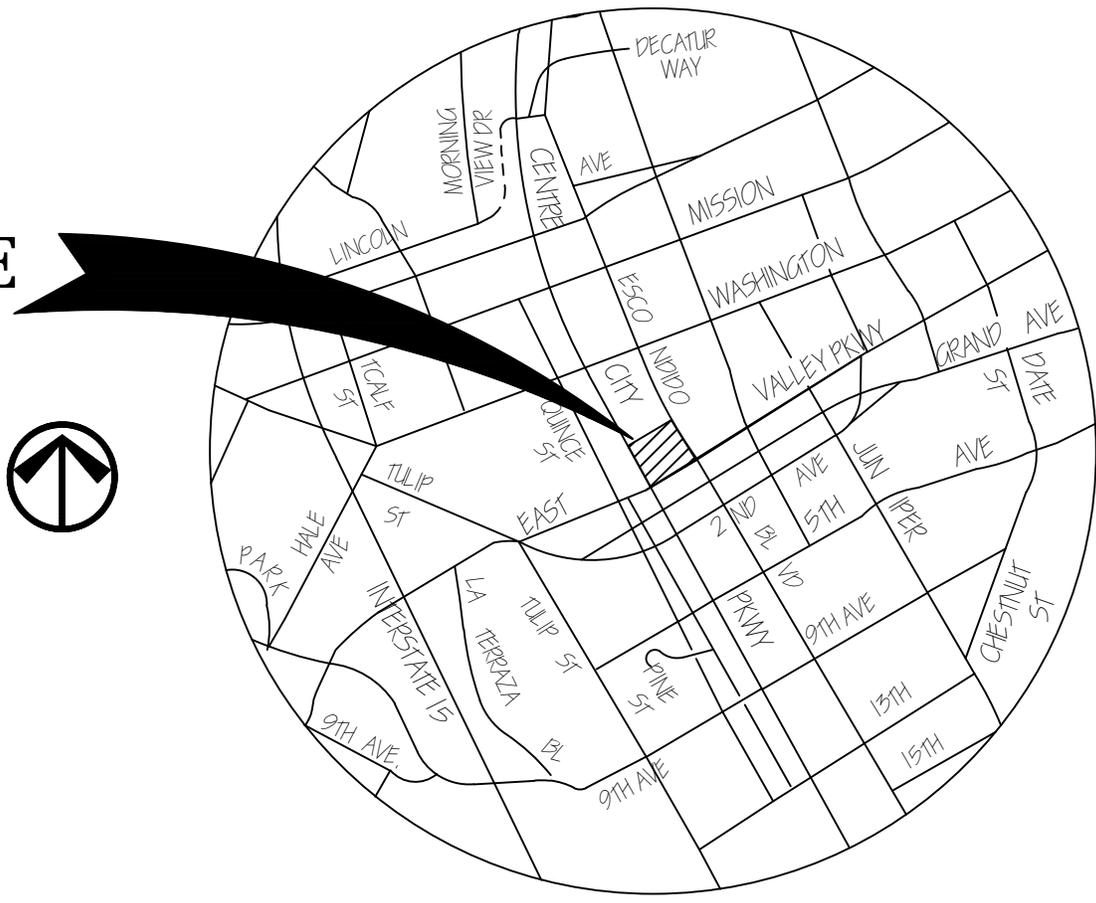
PROJECT VICINITY MAP

Project Name: [Insert Project Name]

Record ID: [Insert Record ID or Permit Application Number]

[Insert Project Vicinity Map here]

SITE



T.B.M. PAGE 1129, E-3

VICINITY MAP
NOT TO SCALE

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 1: Project type determination (Standard or Priority Development Project) (Form 1-2a)

Project Summary Information	
Project Name	Starbucks, Escondido
Project Address	330 W. VALLEY PARKWAY
Assessor's Parcel Number(s)	229-332-44-00
Permit Application Number	
Project Watershed (Hydrologic Unit)	Select One: <input checked="" type="checkbox"/> Carlsbad 904 <input type="checkbox"/> San Diequito 905
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	NA Acres (_____ Square Feet)
Area to be disturbed by the project (Project Area)	<u>0.428</u> Acres (18,643 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	<u>0.2643</u> Acres (11,516 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	<u>0.164</u> Acres (7,127 Square Feet)
Note: Proposed Impervious Area+ Proposed Pervious Area= Area to be Disturbed by the Project. This is much less than the Parcel Area.	
Confirmation of Priority Development Project Determination	
The project is (select one): <input type="checkbox"/> New Development <input checked="" type="checkbox"/> Redevelopment ¹	
The total proposed newly created or replaced impervious area is: 11,516 SF	

¹ Redevelopment is defined as: The creation and/or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include routine maintenance activities, such as trenching and resurfacing associated with utility work; pavement grinding; resurfacing existing roadways; new sidewalks construction; pedestrian ramps; or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Solar energy farms that are not also one of the categories listed in Step 2b of Table 1-1. City staff must also determine that appropriate BMPs are provided to mitigate for downstream impacts due to significant changes to the existing hydrology

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Is the project in any of the following categories, (a) through (f)?			
Yes <input type="radio"/>	No <input checked="" type="radio"/>	(a)	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes <input checked="" type="radio"/>	No <input type="radio"/>	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes <input checked="" type="radio"/>	No <input type="radio"/>	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: <ul style="list-style-type: none"> (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes <input type="radio"/>	No <input checked="" type="radio"/>	(d)	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). <i>Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.</i>
Yes <input type="radio"/>	No <input checked="" type="radio"/>	(e)	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: <ul style="list-style-type: none"> (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Yes <input type="radio"/>	No <input checked="" type="radio"/>	(e)	<p>New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses:</p> <ul style="list-style-type: none"> (iii) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (iv) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
Yes <input type="radio"/>	No <input checked="" type="radio"/>	(f)	<p>New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction.</p> <p style="text-align: center;"><i>Note: See Storm Water Design Manual Section 1.4.2 for additional guidance.</i></p>

Does the project meet the definition of one or more of the Priority Development Project categories (a) through (f) listed above?

No - the project is not a Priority Development Project (Standard Project).

Yes - the project is a Priority Development Project (PDP).

Further guidance may be found in Chapter 1 and Table 1-2 of the Storm Water Design Manual.

The following is for **redevelopment PDPs only**:

The area of existing (pre-project) impervious area at the project site is:	14,877 ft ² (A)
The total proposed newly created or replaced impervious area is	9,842 ft ² (B)
Percent impervious surface created or replaced (B/A)*100:	66 %

The percent impervious surface created or replaced is (select one based on the above calculation):

less than or equal to fifty percent (50%) - **only newly created or replaced impervious areas are considered a PDP and subject to stormwater requirements**

OR

greater than fifty percent (50%) - **the entire project site is considered a PDP and subject to stormwater requirements**

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 1.1: Storm Water Quality Management Plan requirements

Step	Answer	Progression
<p>Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions?</p> <p>To answer this item, complete Step 1 Project Type Determination Checklist on Pages 1 and 2, and see PDP exemption information below. For further guidance, see Section 1.4 of the Storm Water Design Manual <i>in its entirety</i>.</p>	<input type="radio"/> Standard Project	Standard <u>Project</u> requirements apply, including Standard Project SWQMP. Complete Form 1-1.
	<input checked="" type="radio"/> PDP	Standard and PDP requirements apply, including PDP SWQMP. Complete Form 1-1.
	<input type="radio"/> PDP with ACP	If participating in offsite alternative compliance, complete Step 6.3 and an ACP SWQMP.
	<input type="radio"/> PDP Exemption	Go to Step 1.2 below.

Step 1.2: Exemption to PDP definitions

<p>Is the project exempt from PDP definitions based on either of the following:</p> <p><input type="radio"/> Projects that are only new or retrofit paved sidewalks, bicycle lanes, or trails that meet the following criteria:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Designed and constructed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas; OR <input type="checkbox"/> Designed and constructed to be hydraulically disconnected from paved streets or roads [i.e., runoff from the new improvement does not drain directly onto paved streets or roads]; OR <input type="checkbox"/> Designed and constructed with permeable pavements or surfaces in accordance with County of San Diego Green Streets Infrastructure; <p><input type="radio"/> Projects that are only retrofitting or redeveloping existing paved alleys, streets or roads that are designed and constructed in accordance with the City of Escondido Guidance on Green Infrastructure.</p>	If so:
	<p>Standard Project</p> <p>Requirements apply, AND <u>any additional requirements specific to the type of project.</u></p>
	<p>City concurrence with the exemption is required. <i>Provide discussion and list any additional requirements below in this form.</i></p>
	Complete Green Streets PDP Exempt SWQMP.
<p><i>Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:</i></p>	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 2: Construction Storm WaterBMPs

Construction storm water BMPs shall be shown on the Grading Plan and (if applicable) included in the Storm Water Pollution Prevention Plan (SWPPP).

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3: City of Escondido PDP SWQMP Site Information Checklist (Form 1-2a)

Step 3.1: Description of Existing Site Condition

<p>Current Status of the Site (select all that apply):</p> <p><input checked="" type="checkbox"/> Existing development</p> <p><input type="checkbox"/> Previously graded but not built out</p> <p><input type="checkbox"/> Demolition completed without new construction</p> <p><input type="checkbox"/> Agricultural or other non-impervious use</p> <p><input type="checkbox"/> Vacant, undeveloped/natural</p> <p><i>Description / Additional Information:</i></p>									
<p>Existing Land Cover Includes (select all that apply and provide each area on site):</p> <table><tr><td><input type="checkbox"/> Vegetative Cover</td><td>Acres</td><td>(Square Feet)</td></tr><tr><td><input checked="" type="checkbox"/> Non-Vegetated Pervious Areas</td><td>0.109 Acres</td><td>(4,766 Square Feet)</td></tr><tr><td><input checked="" type="checkbox"/> Impervious Areas</td><td>0.342 Acres</td><td>(14,877 Square Feet)</td></tr></table> <p><i>Description / Additional Information:</i></p>	<input type="checkbox"/> Vegetative Cover	Acres	(Square Feet)	<input checked="" type="checkbox"/> Non-Vegetated Pervious Areas	0.109 Acres	(4,766 Square Feet)	<input checked="" type="checkbox"/> Impervious Areas	0.342 Acres	(14,877 Square Feet)
<input type="checkbox"/> Vegetative Cover	Acres	(Square Feet)							
<input checked="" type="checkbox"/> Non-Vegetated Pervious Areas	0.109 Acres	(4,766 Square Feet)							
<input checked="" type="checkbox"/> Impervious Areas	0.342 Acres	(14,877 Square Feet)							
<p>Underlying Soil belongs to Hydrologic Soil Group (select all that apply):</p> <p><input type="checkbox"/> NRCS Type A</p> <p><input type="checkbox"/> NRCS Type B</p> <p><input type="checkbox"/> NRCS Type C</p> <p><input checked="" type="checkbox"/> NRCS Type D</p>									
<p>Approximate Depth to Groundwater (GW) (or N/A for no infiltration BMPs): N.A.</p> <p><input type="checkbox"/> GW Depth < 5 feet</p> <p><input type="checkbox"/> 5 feet < GW Depth < 10 feet</p> <p><input type="checkbox"/> 10 feet < GW Depth < 20 feet</p> <p><input type="checkbox"/> GW Depth > 20 feet</p>									
<p>Existing Natural Hydrologic Features (select all that apply):</p> <p><input type="checkbox"/> Watercourses</p> <p><input type="checkbox"/> Seeps</p> <p><input type="checkbox"/> Springs</p> <p><input type="checkbox"/> Wetlands</p> <p><input checked="" type="checkbox"/> None</p> <p><input type="checkbox"/> Other</p> <p><i>Description / Additional Information:</i></p>									

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.2: Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

- (1) Whether existing drainage conveyance is natural or urban;
- (2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;
- (3) Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and
- (4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

The existing runoff sheet flows from the westerly higher areas of the parking lot down to an existing catch basin located at the sites south end. Flows are then conveyed via an underground piping system to an existing underground public storm drain located in East Valley Parkway.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.3: Description of Proposed Site Development

<p><i>Project Description I Proposed Land Use and/or Activities:</i></p> <p>The project proposes the construction of a new 1-story, 1,898 sq.ft retail building and associated surface improvements such as new parking areas, private storm drain structures, landscaped areas, retaining walls and parking lot lighting fixtures.</p>
<p><i>List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):</i></p> <p>The existing development site area is about 76% impervious, after development the site impervious percentage will be approximately 62%, due to an increase in landscaped areas.</p>
<p><i>List/describe proposed pervious features of the project (e.g., landscape areas):</i></p> <p><i>The proposed development will increase the pervious area by 150%</i></p>
<p>Does the project include grading and changes to site topography?</p> <p><input checked="" type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><i>Description I Additional Information:</i></p>

Insert acreage or square feet for the different land cover types in the table below:

Change in Land Cover Type Summary			
Land Cover Type	Existing (acres or ft ²)	Proposed (acres or ft ²)	Percent Change
Vegetation			
Pervious (non-vegetated)	4,765 ft ²	7,127 ft ²	150%
Impervious	14,876 ft ²	11,516 ft ²	77%

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.4: Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

Yes

No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

The site will be graded to create boundary condition that will not allow runoff from areas not included in the redevelopment site from entering the redevelopment site. The runoff from the redevelopment site will be routed to two Bio-Infiltration basins sized for HMP. Runoff from DMA # 1 will surface flow to a spillway into BMP # 1 from the drive through lane. Runoff from DMA # 2 will surface flow to a drop inlet which is then conveyed by pipe to BMP # 2.. HMP metered BMP out-flows from BMP # 1 and 2 will be conveyed by pipe to an existing onsite storm drain that flows to an existing City infrastructure storm drain.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.5: Potential Pollutant Source Areas

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply).

- On-site storm drain inlets
- Interior floor drains and elevator shaft sump pumps
- Interior parking garages
- Need for future indoor & structural pest control
- Landscape/Outdoor Pesticide Use
- Pools, spas, ponds, decorative fountains, and other water features
- Food service
- Refuse areas
- Industrial processes
- Outdoor storage of equipment or materials
- Vehicle and Equipment Cleaning
- Vehicle/Equipment Repair and Maintenance
- Fuel Dispensing Areas
- Loading Docks
- Fire Sprinkler Test Water
- Miscellaneous Drain or Wash Water
- Plazas, sidewalks, and parking lots
- Other (provide description)

Description / Additional Information:

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP



PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.6: Identification and Narrative of Receiving Water and Pollutants of Concern

Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable):

The site connects to the city storm drain infrastructure that discharges to Escondido Creek, approximate 1,500 feet away. The creek is concrete lines for the 1.9 miles to the city limits. The next 14 miles to the pacific ocean is a natural creek meandering through rural and urbanized areas.

List any 303(d) impaired water bodies² within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
Escondido Creek	DDT, manganese, phosphate, selenium, sulfates and TDS.	No defined TMDLs

Identification of Project Site Pollutants*

*Identification of project site pollutants below is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs. Note the project must also participate in an alternative compliance program (unless prior lawful approval to meet earlier PDP requirements is demonstrated).

Identify pollutants expected from the project site based on all proposed use(s) of the site (see Storm Water Design Manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Anticipated from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment		X	
Nutrients		X	
Heavy Metals	X		
Organic Compounds		X	
Trash & Debris		X	
Oxygen Demanding Substances		X	
Oil & Grease		X	
Bacteria & Viruses		X	
Pesticides		X	

² The current list of Section 303(d) impaired water bodies can be found at http://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/#impaired

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.7: Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the Storm Water Design Manual)?

Yes, hydromodification management requirements for flow control and preservation of critical coarse sediment yield areas are applicable.

No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA³ for the watershed in which the project resides.

Description I Additional Information (to be provided if a 'No' answer has been selected above):

³The Watershed Management Area Analysis (WMM) is an optional element for inclusion in the Water Quality Improvement Plans (WQIPs) described in the 2013 MS4 Permit [Provision B.3.b.(4)]. It is available online at the Project Clean Water website:

http://www.projectcleanwater.org/index.php?option=com_content&view=article&id=248

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.7.1: Critical Coarse Sediment Yield Areas*

***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMM, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

Yes

No, no critical coarse sediment yield areas to be protected based on WMM maps

If yes, have any of the optional analyses presented in Section 6.2 of the manual been performed?

6.2.1 Verification of GLUs (classification that provides an estimate of sediment yield based on geology, hillslope, and land cover) Onsite

6.2.2 Downstream Systems Sensitivity to Coarse Sediment

6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite

No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMM maps

If optional analyses were performed, what is the final result?

No critical coarse sediment yield areas to be protected based on verification of GLUs onsite.

Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 8 of the SWQMP.

Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Flow Control for Post-Project Runoff*

<p>*This Section only required if hydromodification management requirements apply</p> <p><i>List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.</i></p> <p><i>The POC is the connection of the outlet pipe from the onsite HMP basins to the City storm drain.</i></p>
<p>Has a geomorphic assessment been performed for the receiving channel(s)?</p> <p><input checked="" type="checkbox"/> No, the low flow threshold is 0.5Q2 (default low flow threshold)</p> <p><input type="checkbox"/> Yes, the result is the low flow threshold is 0.1Q2</p> <p><input type="checkbox"/> Yes, the result is the low flow threshold is 0.3Q2</p> <p><input type="checkbox"/> Yes, the result is the low flow threshold is 0.5Q2</p> <p><i>Excerpt from the City of Escondido storm water design manual page 6-13:</i></p> <p>Escondido Creek – The majority of Escondido Creek has been stabilized by concrete for over 40 years. A recent study dated June 26, 2013 concluded that there is a low susceptibility to hydromodification immediately downstream of the concrete channel. This geomorphic assessment allows projects that discharge into the concrete-lined portion of the Escondido Creek to use 0.5Q2 as the low flow threshold. The erosion susceptibility will need to be re-evaluated for downstream segments if, for example, a new grade point is installed.</p> <p><i>Discussion I Additional Information: (optional)</i></p>

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 3.8: Other Site Requirements and Constraints

When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

No known City codes or policies would prevent or effect the implementation of the proposed Bio-infiltration basins.

Optional Additional Information or Continuation of Previous Sections As Needed

This space provided for additional information or continuation of information from previous sections as needed.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 4: Source Control BMP Checklist (Form 1-2b)

Source Control BMPs			
<p>All development projects must implement source control BMPs 4.2.1 through 4.2.6 where applicable and feasible. See Chapter 4.2 and Appendix E of the City Storm Water Design Manual for information to implement source control BMPs shown in this checklist. The following checklists serve as guides only. Mark what elements are included in your project. See Storm Water Design Manual Chapter 4 and Appendix E for more information on determining appropriate BMPs for your project.</p> <p>Answer each category below pursuant to the following:</p> <ul style="list-style-type: none"> • "Yes" means the project will implement the source control BMP as described in Chapter 4.2 and/or Appendix E of the City Storm Water Design Manual. Discussion / justification is not required. • "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided. • "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion/ justification must be provided. 			
Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	<input checked="" type="checkbox"/> X Yes	<input type="checkbox"/> O No	<input type="checkbox"/> O N/A
<input type="checkbox"/> D Direct irrigation water away from impervious surfaces <input type="checkbox"/> D Direct vehicle wash water away from impervious surfaces <input type="checkbox"/> D Other: _____			
<i>Discussion / justification if SC-1 not implemented:</i>			
SC-2 Storm Drain Stenciling or Signage	<input checked="" type="checkbox"/> X Yes	<input type="checkbox"/> O No	<input type="checkbox"/> O N/A
<input type="checkbox"/> D Stencil or stamp storm drains with anti-dumping message <input type="checkbox"/> D Post signs prohibiting illegal dumping <input type="checkbox"/> D Other			
<i>Discussion / justification if SC-2 not implemented:</i>			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> O Yes	<input type="checkbox"/> O No	<input checked="" type="checkbox"/> X N/A
<input type="checkbox"/> D Store materials inside a covered enclosure <input type="checkbox"/> D Direct runoff from downspouts and roofs away from storage areas <input type="checkbox"/> D Other			
<i>Discussion / justification if SC-3 not implemented:</i>			
<i>All stored materials are indoors.</i>			

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<p><input type="checkbox"/> Locate work area away from storm drains or catch basins Work over impermeable surfaces where spills and pollutants can be captured and removed</p> <p><input type="checkbox"/> removed</p> <p><i>Discussion / justification if SC-4 not implemented:</i></p> <p><i>All stored material is indoors.</i></p>			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<p><input type="checkbox"/> Locate trash containers in a roofed, walled enclosure</p> <p><input type="checkbox"/> Locate trash containers away from storm drains</p> <p><i>Discussion / justification if SC-5 not implemented:</i></p>			
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below):			
<input checked="" type="checkbox"/> A. On-site storm drain inlets	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<input checked="" type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> C. Interior parking garages	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> D. Need for future indoor & structural pest control	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> E. Landscape/outdoor pesticide use	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<input checked="" type="checkbox"/> F. Pools, spas, ponds, fountains, and other water features	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> G. Food service	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<input checked="" type="checkbox"/> H. Refuse areas	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<input checked="" type="checkbox"/> I. Industrial processes	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> J. Outdoor storage of equipment or materials	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> K. Vehicle and equipment cleaning	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> L. Vehicle/equipment repair and maintenance	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> M. Fuel dispensing areas	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> N. Loading docks	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> O. Fire sprinkler test water	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<input checked="" type="checkbox"/> P. Miscellaneous drain or wash water	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input checked="" type="checkbox"/> Q. Plazas, sidewalks, and parking lots	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<p><i>Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for <u>all</u> "No" answers shown above.</i></p>			

Note: Show all source control measures described above that are included in design capture volume calculations in the plan sheets of Attachment 5.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 5: Site Design BMP Checklist (Form 1-2c)

Site Design BMPs	
<p>All development projects must implement site design BMPs SD-A through SD-H where applicable and feasible. See Chapter 4.3 and Appendix E of the City Storm Water Design Manual for information to implement site design BMPs shown in this checklist. The following checklists serve as guides only. Mark what elements are included in your project. See Storm Water Design Manual Chapter 4 and Appendix E for more information on determining appropriate BMPs for your project.</p> <p>Answer each category below pursuant to the following:</p> <ul style="list-style-type: none"> • "Yes" means the project will implement the site design BMP as described in Chapter 4.3 and/or Appendix E of the City Storm Water Design Manual. Discussion / justification is not required. • "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided. • "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion/ justification must be provided. 	
Site Design Requirement	Applied?
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
<ul style="list-style-type: none"> o Maintain existing drainage patterns <p><i>Discussion / justification if SD-1 not implemented: The site does not exhibit any natural drainage paths such as rivers, creeks, draws or natural swales. The site was graded flat in the past and the "flatness" will be preserved.</i></p>	
SD-2 Conserve Natural Areas, Soils, and Vegetation	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
<ul style="list-style-type: none"> o Preserve trees (see Zoning Code Art. 55 Grading & Erosion Control; Art. 62 Landscape Regulations) o Avoid sensitive areas such as wetlands and waterways <p><i>Discussion / justification if SD-2 not implemented: The site does not exhibit any trees, wetlands or waterway</i></p>	
SD-3 Minimize Impervious Area	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
<ul style="list-style-type: none"> o Install parking and driving aisles to minimum width required to meet standards <p><i>Discussion / justification if SD-3 not implemented: Impervious area minimized enough to allow space for the Bio-Retention Basins.</i></p>	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

SD-4 Minimize Soil Compaction	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<p><input type="checkbox"/> Avoid compaction in planned landscaped spaces</p> <p><input type="checkbox"/> Till and amend soil for improved infiltration capacity</p> <p><i>Discussion / justification if SD-4 not implemented:</i></p> <p><i>Landscaped areas and Bio-Retention Basins will have minimal compaction</i></p>			
SD-5 Impervious Area Dispersion	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<p><input type="checkbox"/> Drain rooftops, roads or sidewalks into adjacent landscape areas</p> <p><input type="checkbox"/> Drain impervious surfaces through pervious areas</p> <p><i>Discussion / justification if SD-5 not implemented:</i></p> <p><i>Run-off flows to and is dispersed over the surface of Bio-Retention basins</i></p>			
SD-6 Runoff Collection	<input type="radio"/> Yes		
<i>Discussion / justification if SD-6 not implemented:</i>	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<i>Run-off is not discharged directly to a MS4</i>			
SD-7 Landscaping with Native or Drought Tolerant Species			
<i>Discussion / justification if SD-7 not implemented:</i>	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
<i>Bio-Retention Basins will incorporate native species of plants and trees.</i>			
SD-8 HarvestinQ and UsinQ Precipitation			
<i>Discussion / justification if SD-8 not implemented:</i>	<input type="radio"/> Yes	<input checked="" type="radio"/> No	<input type="radio"/> N/A
<i>Harvesting only makes sense in an wetter environment like the med-west that has small and consistent rain storm intervals .</i>			

Note: Show all site design measures described above that are included in design capture volume calculations in the plan sheets of Attachment 5.

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 6: PDP Structural BMPs {Form 1-3}

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the Storm Water Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the Storm Water Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the City at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 8.2.3.2 of the Storm Water Design Manual). PDP structural BMPs must be maintained into perpetuity, and the City must confirm the maintenance (see Section 7 of the Storm Water Design Manual).

Use this section to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (Step 6.2) for each structural BMP within the project (copy the BMP summary information sheet [Step 6.2] as many times as needed to provide summary information for each individual structural BMP).

Step 6.1: Description of structural BMP strategy

Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the Storm Water Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate. At the end of this discussion provide a summary of all the structural BMPs within the project including the type and number.

The project will build on a parking lot that is 78 percent impervious having a runoff coefficient of 0.98 and build a building and associated drive through lane and parking stalls that will decrease the runoff coefficient to 0.81. The amount of source control to treat the runoff from this much impervious area will require Bio-infiltration basins. The site grading plan has established the drainage patterns that will direct the appropriate runoff area to a correspondingly sized Bio-infiltration Basin for treatment before discharging to the Municipal storm drain system (MS4) in West Valley Parkway. The Bio-infiltration Basins will also be sized to function as Hydromodification flow control BMP's

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Description of structural BMP strategy continued
(Page reserved for continuation of description of general strategy for structural BMP implementation at the site)

(Continued from previous page)

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 6.2: Structural BMP Checklist

(Copy this page as needed to provide information for each individual proposed structural BMP)	
Structural BMP ID No. BMP # 1	
Construction Plan Sheet No. Pri-Lim GP Exhibit	
Type of structural BMP: <input type="radio"/> Retention by harvest and use (HU-1) <input type="radio"/> Retention by infiltration basin (INF-1) <input checked="" type="radio"/> Retention by bioretention (INF-2) <input type="radio"/> Retention by permeable pavement (INF-3) <input type="radio"/> Partial retention by biofiltration with partial retention (PR-1) <input checked="" type="radio"/> Biofiltration (BF-1) <input type="radio"/> Biofiltration with Nutrient Sensitive Media Design (BF-2) <input type="radio"/> Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F <input type="radio"/> Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) <input type="radio"/> Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) <input type="radio"/> Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) <input type="radio"/> Detention pond or vault for hydromodification management <input type="radio"/> Other (describe in discussion section below)	
Purpose: <input type="radio"/> Pollutant control only <input type="radio"/> Hydromodification control only <input checked="" type="radio"/> Combined pollutant control and hydromodification control <input type="radio"/> Pre-treatment/forebay for another structural BMP <input type="radio"/> Other (describe in discussion section below)	
Who will certify construction of this BMP ? Provide name and contact information for the party responsible to sign BMP verification forms (See Section 8.2.3.2 of the Storm Water Design Manual)	The engineer of work will certify the construction and operation of the BMP's
Who will be the final owner of this BMP?	<input type="radio"/> HOA <input type="radio"/> Property Owner <input type="radio"/> City <input checked="" type="radio"/> Other: Starbuck Franchise owner.
Who will maintain this BMP into perpetuity?	<input type="radio"/> HOA <input type="radio"/> Property Owner <input type="radio"/> City <input checked="" type="radio"/> Other: Starbuck Franchise owner.
What Category (1-4) is the Structural BMP? Refer to the Category definitions in Section 7.3 of the SW DM. Attach the appropriate maintenance agreement in Attachment 3.	
<i>Discussion (as needed):</i> <i>(Continue on subsequent pages as necessary)</i>	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 6.2: Structural BMP Checklist

(Copy this page as needed to provide information for each individual proposed structural BMP)	
Structural BMP ID No. BMP # 2	
Construction Plan Sheet No. Pri-Lim GP Exhibit	
<p>Type of structural BMP:</p> <p><input type="radio"/> Retention by harvest and use (HU-1)</p> <p><input type="radio"/> Retention by infiltration basin (INF-1)</p> <p><input checked="" type="radio"/> Retention by bioretention (INF-2)</p> <p><input type="radio"/> Retention by permeable pavement (INF-3)</p> <p><input type="radio"/> Partial retention by biofiltration with partial retention (PR-1)</p> <p><input checked="" type="radio"/> Biofiltration (BF-1)</p> <p><input type="radio"/> Biofiltration with Nutrient Sensitive Media Design (BF-2)</p> <p><input type="radio"/> Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F</p> <p><input type="radio"/> Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)</p> <p><input type="radio"/> Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)</p> <p><input type="radio"/> Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)</p> <p><input type="radio"/> Detention pond or vault for hydromodification management</p> <p><input type="radio"/> Other (describe in discussion section below)</p>	
<p>Purpose:</p> <p><input type="radio"/> Pollutant control only</p> <p><input type="radio"/> Hydromodification control only</p> <p><input checked="" type="radio"/> Combined pollutant control and hydromodification control</p> <p><input type="radio"/> Pre-treatment/forebay for another structural BMP</p> <p><input type="radio"/> Other (describe in discussion section below)</p>	
<p>Who will certify construction of this BMP?</p> <p>Provide name and contact information for the party responsible to sign BMP verification forms (See Section 8.2.3.2 of the Storm Water Design Manual)</p>	<p>The engineer of work will certify the construction and operation of the BMP's</p>
<p>Who will be the final owner of this BMP?</p>	<p><input type="radio"/> HOA <input type="radio"/> Property Owner <input type="radio"/> City</p> <p><input checked="" type="radio"/> Other: Starbuck Franchise owner.</p>
<p>Who will maintain this BMP into perpetuity?</p>	<p><input type="radio"/> HOA <input type="radio"/> Property Owner <input type="radio"/> City</p> <p><input checked="" type="radio"/> Other: Starbuck Franchise owner.</p>
<p>What Category (1-4) is the Structural BMP?</p> <p>Refer to the Category definitions in Section 7.3 of the SW DM. Attach the appropriate maintenance agreement in Attachment 3.</p>	
<p><i>Discussion (as needed):</i></p> <p><i>(Continue on subsequent pages as necessary)</i></p>	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Step 6.3: Offsite Alternative Compliance Participation Form

THIS FORM IS NOT APPLICABLE AT THIS TIME: An Alternative Compliance Program is under consideration by the City of Escondido.	
PDP INFORMATION	
Record ID:	
Assessor's Parcel Number(s) [APN(s)]	229-332-44-00
What are your PDP Pollutant Control Debits? *See Attachment 1 of the PDP SWQMP	
What are your PDP HMP Debits? (if applicable) *See Attachment 2 of the PDP SWQMP	
ACP Information	
Record ID:	
Assessor's Parcel Number(s) [APN(s)]	
Project Owner/Address	
What are your ACP Pollutant Control Credits? *See Attachment 1 of the ACP SWQMP	
What are your ACP HMP Debits? (if applicable) *See Attachment 2 of the ACP SWQMP	
Is your ACP in the same watershed as your PDP? DYes DNo	Will your ACP project be completed prior to the completion of the PDP? DYes DNo
Does your ACP account for all Deficits generated by the PDP? DYes D No (PDP and/or ACP must be redesigned to account for all deficits generated by the PDP.)	What is the difference between your PDP debits and ACP Credits? *(ACP Credits -Total PDP Debits= Total Earned Credits) _____

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

ATTACHMENT 1

BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	Storm Water Pollutant Control Worksheet Calculations -Worksheet B.2-1 (Required) -Worksheet B.3-1 (Form 1-4) (optional) -Worksheet B.4-1 (if applicable) -Worksheet B.5-1 (if applicable) -Worksheet B.5-2 (if applicable) -Worksheet B.5-3 (if applicable) -Worksheet B.6-1 (if applicable) -Summary Worksheet (optional)	<input checked="" type="checkbox"/> Included
Attachment 1b	Form 1-5, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and BMPs Refer to Appendices C and D of the Storm Water Design Manual to complete Form 1-5.	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Not included because the entire project will use harvest and use use BMPs)
Attachment 1c	Form 1-6, Factor of Safety and Design Infiltration Rate Worksheet (Required unless the project will use harvest and BMPs Refer to Appendices C and D of the Storm Water Design Manual to complete Form 1-6.	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Not included because the entire project will use harvest and use BMPs)
Attachment 1d	OMA Exhibit (Required) See OMA Exhibit Checklist on the back of this Attachment cover sheet.	<input type="checkbox"/> Included
Attachment 1e	Individual Structural BMP DMA Mapbook (Required) -Place each map on 8.5" x 11" paper. -Show at a minimum the DMA, Structural BMP, and any existing hydrologic features within the DMA.	<input checked="" type="checkbox"/> Included

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- X Underlying hydrologic soil group
- X Approximate depth to groundwater
- O Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- O Critical coarse sediment yield areas to be protected
- X Existing topography and impervious areas
- X Existing and proposed site drainage network and connections to drainage offsite
- X Proposed demolition
- X Proposed grading
- X Proposed impervious features
- X Proposed design features and surface treatments used to minimize imperviousness
- X Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- X Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Step 3.5)
- X Structural BMPs (identify location, structural BMP ID#, type of BMP, and size/detail)

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Worksheet B.2-1. DCV

<u>Design Capture Volume</u>		<u>Worksheet B-2.1</u>		
1	85 th percentile 24-hr storm depth from Figure B.1-1	d=	0.54	inches
2	Area tributary to BMP (s)	A=	DMA#1 0.29 DMA#2 0.129	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	DMA#1 0.71 DMA#2 0.86	unitless
4	Street trees volume reduction	TCV=	N.A.	cubic-feet
5	Rain barrels volume reduction	RCV=	N.A.	cubic-feet
6	Calculate DCV = (3630 x C x d x A) - TCV - RCV	DCV=	BMP#1= 403 BMP#2= 217	cubic-feet

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Categorization of Infiltration Feasibility Condition		Form I-5	
<p>Part 1 - Full Infiltration Feasibility Screening Criteria</p> <p>Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?</p>			
Criteria	Screening Question	Yes	No
	<p>Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.</p>		X
<p>Provide basis:</p> <p>Hydrological soil group class "D" does not provide enough infiltration to make infiltration practical.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability.</p>			
2	<p>Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.</p>	X	
<p>Provide basis:</p> <p>Even though soil group is not practical for greater infiltration.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability.</p>			

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Form 1-5

Criteria	Screening Question	Yes	No
3	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	X	
<p>Provide basis:</p> <p>Not allowed by soil group</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability.</p>			
4	Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	X	
<p>Provide basis:</p> <p>Although not allowed by soil group</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability.</p>			
Part 1 Result*	<p>If all answers to rows 1 - 4 are "Yes" a full infiltration design is potentially feasible. The feasibility screening category is Full Infiltration</p> <p>If any answer from row 1-4 is "No", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2</p>		NO

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Form 1-5

Part 2 - Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	<p>Do soil and geologic conditions allow for infiltration in any appreciable rate or volume? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.</p>		X
<p>Provide basis:</p> <p>Not allowed by soil group.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
6	<p>Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.</p>		X
<p>Provide basis:</p> <p>Not allowed by soil group.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Form 1-5

Criteria	Screening Question	Yes	No
7	<p>Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.</p>		X
<p>Provide basis:</p> <p>Not allowed by soil group.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
8	<p>Can infiltration be allowed without violating downstream water rights? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.</p>		
<p>Provide basis:</p> <p>Not allowed by soil group.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/ data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
<p>Part2 Result*</p>	<p>If all answers from row 5-8 are yes then partial infiltration design is potentially feasible. The feasibility screening category is Partial Infiltration.</p> <p>If any answer from row 5-8 is no, then infiltration of any volume is considered to be infeasible within the drainage area. The feasibility screening category is No Infiltration.</p>	YES	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Form I-5 Certification

The Geotechnical Engineer certifies they completed Form I-5 except Criteria 4 & 8 (see Appendix C.4.3).

Professional Geotechnical Engineer's Printed Name:

Professional Geotechnical Engineer's Signed Name:

Date: _____

[SEAL]

The Project Design Engineer certifies they completed Criteria 4 & 8 (see Appendix C.4.4).

Professional Project Design Engineer's Printed Name:

Professional Project Design Engineer's Signed Name:

Date: _____

[SEAL]

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Factor of Safety and Design Infiltration Rate Worksheet			Form I-6		
No Infiltration					
Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) $p = w \times v$
A	Suitability Assessment	Soil assessment methods	0.25		
		Predominant soil texture	0.25		
		Site soil variability	0.25		
		Depth to groundwater impervious layer <i>I</i>	0.25		
		Suitability Assessment Safety Factor, SA= LP			
B	Design	Level of pretreatment/ expected sediment loads	0.5		
		Redundancy/ resiliency	0.25		
		Compaction during construction	0.25		
		Design Safety Factor, SB= LP			
Combined Safety Factor, $S_{total} = SA \times SB$					
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)					
Design Infiltration Rate, in/hr, $K_{design} = K_{observed} / S_{total}$					
Supporting Data					
Briefly describe infiltration test and provide reference to test forms:					

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

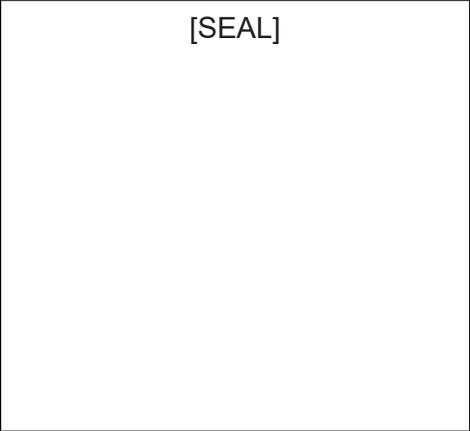
Factor of Safety and Design Infiltration Rate Worksheet	Form I-6 Certification
--	---------------------------

The Geotechnical Engineer certifies they completed Form I-6 (see Appendix C.4.3).

Professional Geotechnical Engineer's Printed Name:

Professional Geotechnical Engineer's Signed Name:

Date: _____



PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

ATTACHMENT 2

BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

D Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 2a	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the Storm Water Design Manual	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Submitted as separate stand-alone document
Attachment 2b	Hydromodification Management Exhibit (Required)	<input checked="" type="checkbox"/> Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2c	Management of Critical Coarse Sediment Yield Areas See Section 6.2 and Appendix H of the Storm Water Design Manual.	<input type="checkbox"/> Exhibit depicting onsite and/or upstream sources of critical coarse sediment as mapped by Regional or Jurisdictional approaches outlined in Appendix H.1 AND , <input type="checkbox"/> Demonstration that the project effectively avoids and bypasses sources of mapped critical coarse sediment per approaches outlined in Appendix H.2 and H.3. OR, <input checked="" type="checkbox"/> Demonstration that project does not generate a net impact on the receiving water per approaches outlined in Appendix H.4.
Attachment 2d	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the Storm Water Design Manual.	<input checked="" type="checkbox"/> performed By City, see page 6-13 SWDM <input type="checkbox"/> Included <input type="checkbox"/> Submitted as separate stand-
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	<input type="checkbox"/> Included <input type="checkbox"/> Not required because BMPs will drain in less than 96 hours

Appendix G: Guidance for Continuous Simulation and Hydromodification Management Sizing Factors

Worksheet G.2-1: Sizing Factor Worksheet

Site Information			
Project Name:	Escondido Starbucks	Hydrologic Unit	904
Project Applicant:	John Rumsey	Rain Gauge:	Oceanside
Jurisdiction:	City of Escondido	Total Project Area:	18,223 SF
Assessor's Parcel Number:	229-33-245	Low Flow Threshold:	0.1Q₂
BMP Name:	BMP 2	BMP Type:	BIOFILTRATION

Areas Draining to BMP						Sizing Factors		Minimum BMP Size	
DMA Name	Area (sf)	Soil Type	Slope	Post Project Surface Type	Runoff Factor (From Table G.2-1)	Surface Area	Volume	Surface Area (sf)	Volume (cf)
HARDSCAPE	6,156	D	FLAT	IMPERVIOUS	1	.070	NA	431	
LANDSCAPING	3,913	D	FLAT	PERVIOUS	.1	.070	NA	27	
BIOBASIN	655	D	FLAT	PERVIOUS	1	.070	NA	46	
ROOF	1,898	D	FLAT	IMPERVIOUS	1	.070	NA	133	
Total DMA Area	12,622								
							Minimum BMP Size*	637	
							Proposed BMP Size*	655	

*Minimum BMP Size = Total of rows above.

*Proposed BMP Size ≥ Minimum BMP size.

BMP Sizing Spreadsheet V2.0			
Project Name:	Starbucks - Escondido	Hydrologic Unit:	904
Project Applicant:	John Rumsey	Rain Gauge:	Oceanside
Jurisdiction:	Escondido	Total Project Area:	18,222
Parcel (APN):	229-33-245	Low Flow Threshold:	0.5Q2
BMP Name	BMP 1	BMP Type:	Biofiltration w/ Impermeable Liner

DMA Name	Rain Gauge	Pre-developed Condition			Q ₂ Sizing Factor (cfs/ac)	DMA Area (ac)	Orifice Flow - %Q ₂ (cfs)	Orifice Area (in ²)
		Soil Type	Cover	Slope				
ROOF	Oceanside	D	Scrub	Flat	0.175	0.044	0.004	0.09
PAVEMENT	Oceanside	D	Scrub	Flat	0.175	0.141	0.012	0.30
BIO-BASIN	Oceanside	D	Scrub	Flat	0.175	0.015	0.001	0.03
LANDSCAPING	Oceanside	D	Scrub	Flat	0.175	0.090	0.008	0.19
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					

0.025	0.62	0.89
Tot. Allowable Orifice Flow (cfs)	Tot. Allowable Orifice Area (in ²)	Max Orifice Diameter (in)

0.025	0.62	0.89
Actual Orifice Flow (cfs)	Actual Orifice Area (in ²)	Selected Orifice Diameter (in)

Drawdown (Hrs)	7.1
----------------	-----

Appendix G: Guidance for Continuous Simulation and Hydromodification Management Sizing Factors

Worksheet G.2-1: Sizing Factor Worksheet

Site Information			
Project Name:	Escondido Starbucks	Hydrologic Unit	904
Project Applicant:	John Rumsey	Rain Gauge:	Oceanside
Jurisdiction:	City of Escondido	Total Project Area:	18,224 SF
Assessor's Parcel Number:	229-33-245	Low Flow Threshold:	0.1Q ₂
BMP Name:	BMP 2	BMP Type:	BIOFILTRATION

Areas Draining to BMP						Sizing Factors		Minimum BMP Size	
DMA Name	Area (sf)	Soil Type	Slope	Post Project Surface Type	Runoff Factor (From Table G.2-1)	Surface Area	Volume	Surface Area (sf)	Volume (cf)
HARDSCAPE	4,859	D	FLAT	IMPERVIOUS	.9	.070	NA	306	
LANDSCAPING	376	D	FLAT	PERVIOUS	.1	.070	NA	3	
BIOBASIN	366	D	FLAT	PERVIOUS	1	.070	NA	25	
Total DMA Area	5,601								
							Minimum BMP Size*	334	
							Proposed BMP Size*	366	

*Minimum BMP Size = Total of rows above.

*Proposed BMP Size ≥ Minimum BMP size.

BMP Sizing Spreadsheet V2.0			
Project Name:	Starbucks - Escondido	Hydrologic Unit:	904
Project Applicant:	John Rumsey	Rain Gauge:	Oceanside
Jurisdiction:	Escondido	Total Project Area:	18,224
Parcel (APN):	229-33-245	Low Flow Threshold:	0.5Q2
BMP Name	BMP 2	BMP Type:	Biofiltration w/ Partial Retention & Biofiltration w/o Impermeable Liner

DMA Name	Rain Gauge	Pre-developed Condition			Q ₂ Sizing Factor (cfs/ac)	DMA Area (ac)	Orifice Flow - %Q ₂ (cfs)	Orifice Area (in ²)
		Soil Type	Cover	Slope				
		D	Scrub	Flat				
PAVEMENT	Oceanside	D	Scrub	Flat	0.175	0.112	0.010	0.24
BIO-BASIN	Oceanside	D	Scrub	Flat	0.175	0.008	0.001	0.02
LANDSCAPING	Oceanside	D	Scrub	Flat	0.175	0.009	0.001	0.02
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					
			Scrub					

0.011	0.27	0.59
Tot. Allowable Orifice Flow (cfs)	Tot. Allowable Orifice Area (in ²)	Max Orifice Diameter (in)

0.011	0.27	0.59
Actual Orifice Flow (cfs)	Actual Orifice Area (in ²)	Selected Orifice Diameter (in)

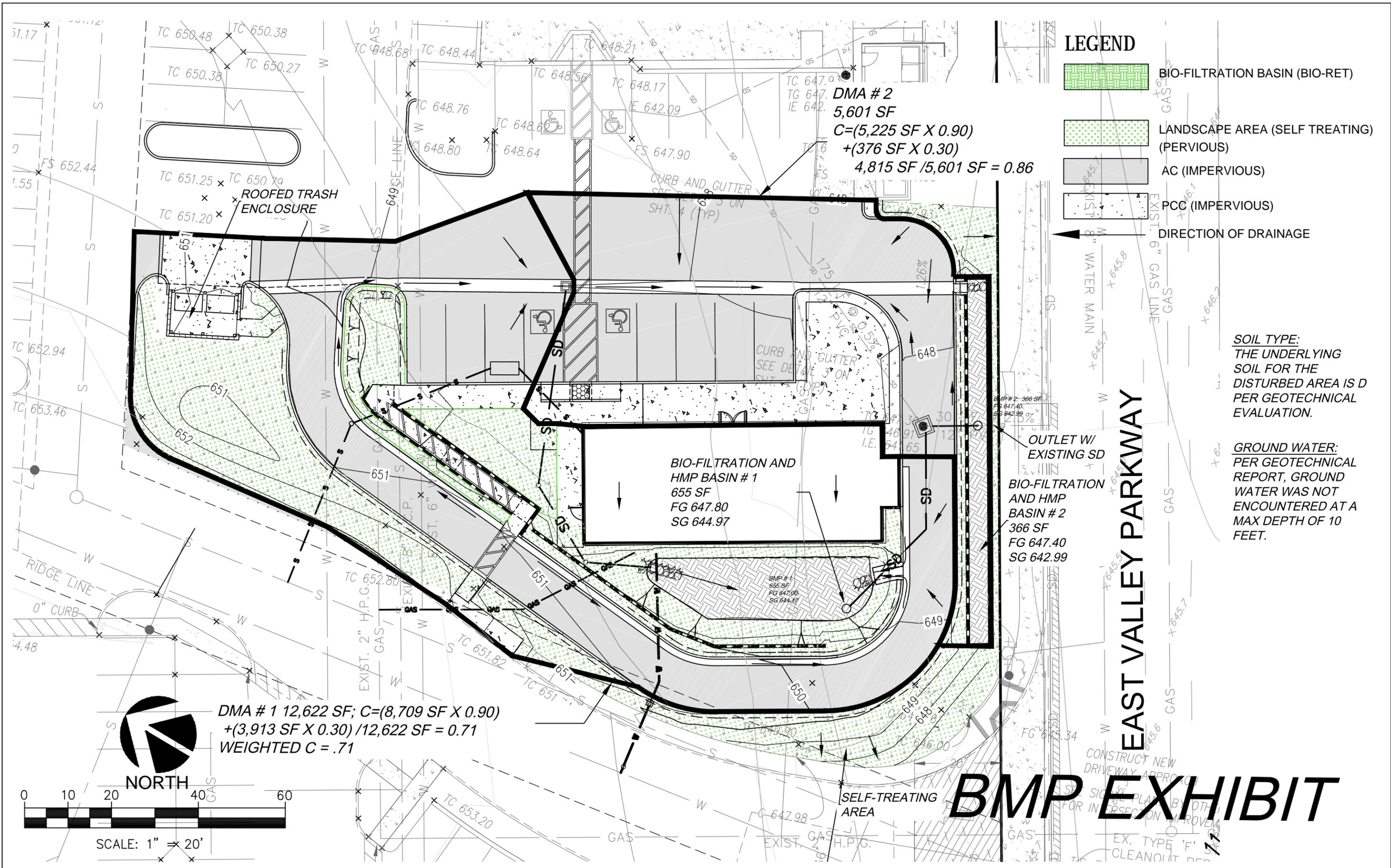
Drawdown (Hrs)	4.5
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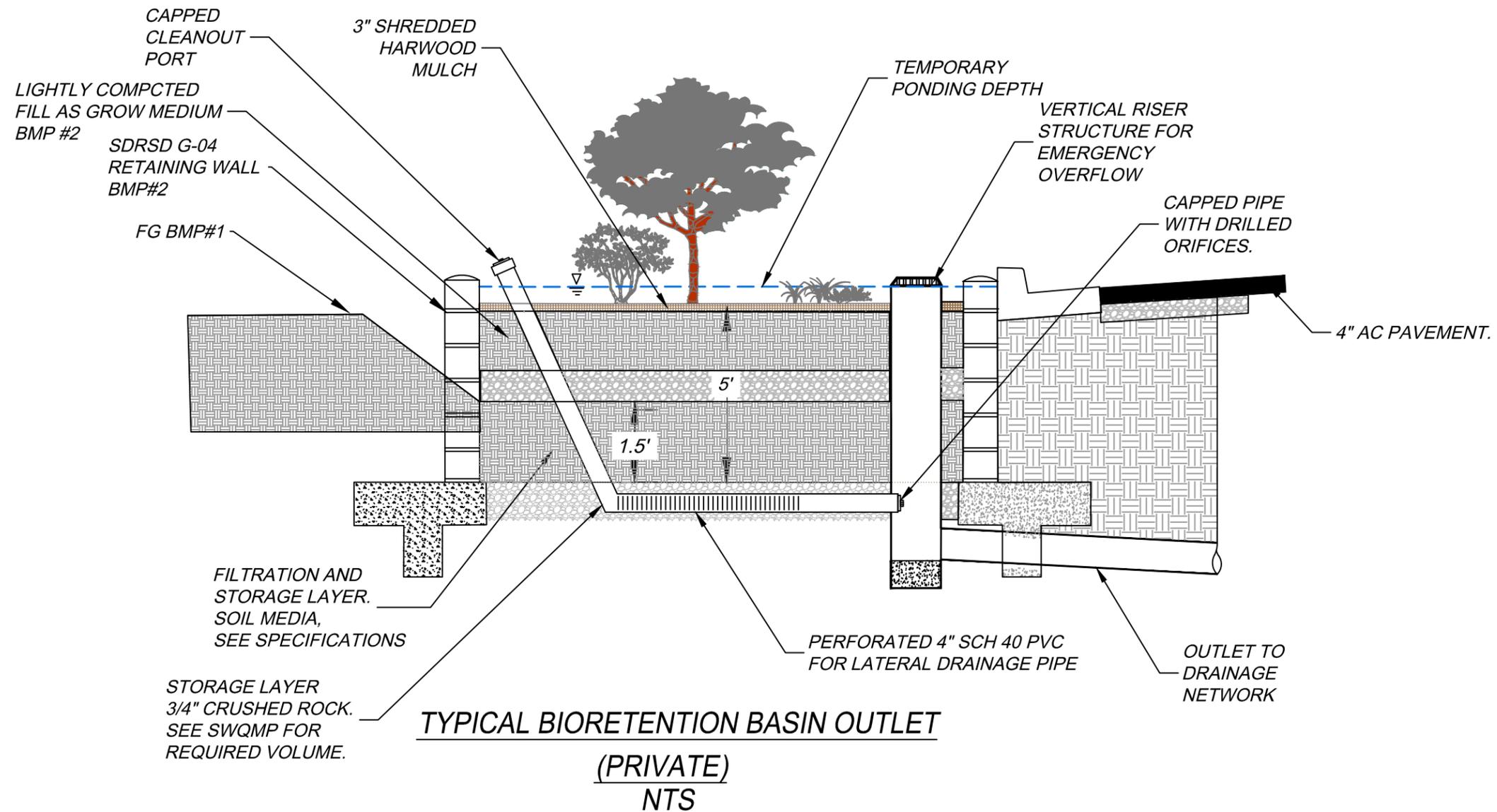
PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- X Underlying hydrologic soil group
- X Approximate depth to groundwater
- X Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- X Critical coarse sediment yield areas to be protected
- X Existing topography
- X Existing and proposed site drainage network and connections to drainage offsite
- X Proposed grading
- X Proposed impervious features
- X Proposed design features and surface treatments used to minimize imperviousness
- X Point(s) of Compliance (POC) for Hydromodification Management
- X Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- X Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)





CUT OUT WALL OF RISER PIPE AND PASS ENOUGH PERFORATED DRAIN PIPE THROUGH WALL TO LOCATE CAP INSIDE OF RISER. AFFIX PIPE WITH WATER TIGHT BOND. CAP TO BE DRILLED FOR AN ORIFICE IN ACCORDANCE WITH WQTR BEFORE AFFIXING.
 BIO BASIN # 1: ORIFICE DIA. 0.50 INCH.(1/2 INCH)
 BIO BASIN # 2: ORIFICE DIA. 0.24 INCH.(3/8 INCH)

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

ATTACHMENT 3

Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Plan (Required)	X Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Storm Water Control Facilities Maintenance Agreement (SWCFMA) (when applicable)	O Included X Not Applicable

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

Attachment 3a must identify:

- Specific maintenance indicators and actions for proposed structural BMP(s). This must be based on Section 7.7 of the Storm Water Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
- How to access the structural BMP(s) to inspect and perform maintenance
- Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- Recommended equipment to perform maintenance
- When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For all Structural BMPs, Attachment 3b must include a draft maintenance agreement in the City's standard format (PDP applicant to contact City staff to obtain the current maintenance agreement forms or download from City's website).

STORMWATER BMP MAINTENANCE GUIDELINES

Maintenance Interval

The required maintenance interval for stormwater BMPs are often dependent upon the degree of pollutant loading from a particular drainage basin. BMP maintenance can best be broken into three categories: **inspection**, **routine maintenance**, and **major maintenance**. Though each BMP type has its own unique characteristics, **inspections** will generally consist of an assessment to assure its functionality and the general condition. **Routine maintenance** will generally consist of trash and vegetation removal, unclogging of drains, minor sediment removal and exchange of filter media where applicable. **Major maintenance** will be completed as required from inspections and generally consists of significant reconstruction due to failures in the BMP. Examples of Major Maintenance include dredging, excavation, removal of existing media, replacing fabric, replacing the under-drain, and reestablishment of vegetation. The following schedule is offered as a guideline for performing **Inspection** and **routine maintenance** for a range of BMP categories.

BMP	Inspection Frequency	Routine Maintenance Frequency
<i>Inspection Frequency key: A = annual; M=monthly; S=after major storms; Q=Quarterly; SA=Semi Annually</i>		
Bioretention Basin	A, S	2 x /year
Cartridge or Module Media Filtration Structures	SA	1 – 2 x /year
Catch Basin Inserts (long term)	Q	3 – 4 x /year
Dry Pond	M	3 – 4 x /year
Dry Wells	A	1 x /year
Filter Strips or Swales	M	2 – 3 x /year
Green Roofs	SA; S	2 – 3 x /year
Hydrodynamic or Gravity Separators	SA	1 – 2 x /year
Infiltration Trenches	A; S	2 – 3 x /year
Permeable Pavement	A	2 – 3 x /year
Rainwater Gardens	SA; S	2 – 3 x /year
Rainwater Harvesting	SA; S	2 – 3 x /year
Sand Filter	Q first year; SA after	1 – 2 x / year
Trash & Debris Screens	SA; S	2 – 3 x /year
Underground Storage Facilities	SA	1 x /year
Wetlands	SA	2 x /year
Wet Pond	Q	2 – 3 x /year

Above table developed by SWEMA as a general reference or guideline.

ESTIMATED MAINTENANCE COST

County of San Diego
Operation and Maintenance Costs for Treatment Control BMPs

BMP: Bioretention Area MAINTENANCE ACTIVITIES													
ROUTINE ACTION	MAINTENANCE INDICATOR	FIELD MEASUREMENT	MEASUREMENT FREQUENCY	MAINTENANCE ACTIVITY	Frequency (# of times per year)	Hours per Event	Average Labor Crew Size	Avg. (Pro-Rated) Labor Rate/Hr. (\$)	Equipment	Equipment Cost/Hour (\$)	Materials & Incidentals Cost or Disposal Cost/Event (\$)	Total cost per visit (\$)	Total cost per year (\$)
Vegetation Management for Aesthetics (optional)	Average vegetation height greater than 12-inches, emergence of trees or woody vegetation.	Visual observation and random measurements through out the side slope area	Annually, prior to start of wet season	Cut vegetation to an average height of 6-inches and remove trimmings. Remove any trees, or woody vegetation.	1.0	2.0	2	\$ 74.97	Utility Truck	\$ 14.39	\$ 50.00	\$ 379	\$ 379
Soil Repair	Evidence of erosion	Visual observation	Annually, prior to start of wet season	Reseed/revegetate barren spots prior to wet season.	1.0	4.0	2	\$ 74.97	Utility Truck	\$ 14.39	\$ 150.00	\$ 807	\$ 807
Standing Water	Standing water for more than 96 hrs	Visual observation	Annually, 96 hours after a target storm (0.60 in) event	Drain facility. Corrective action prior to wet season. Consult engineers if immediate solution is not evident.	1.0	1.0	2	\$ 74.97	Utility Truck	\$ 14.39		\$ 164	\$ 164
Trash and Debris	Trash and Debris present	Visual observation	Annually, prior to start of wet season	Remove and dispose of trash and debris	1.0	2.0	2	\$ 74.97	Utility Truck	\$ 14.39		\$ 329	\$ 329
Sediment Management	Sediment depth exceeds 10% of the facility design	Measure depth at apparent maximum and minimum accumulation of sediment. Calculate average depth	Annually, prior to start of wet season	Remove and properly dispose of sediment. Regrade if necessary. (expected every 2 years)	0.5	8.0	2	\$ 74.97	Utility Truck, 10-15 yd Truck, Backhoe	\$ 56.02	\$ 400.00	\$ 2,048	\$ 1,024
Underdrains	Evidence of Clogging	Visual Observation	Annually, prior to start of wet season	Corrective action prior to wet season. Consult engineers if immediate solution is not evident.	1.0	0.5	2	\$ 74.97	Utility Truck	\$ 14.39		\$ 82	\$ 82
General Maintenance Inspection	Inlet structures, outlet structures, side slopes or other features damaged, significant erosion, burrows, emergence of trees or woody vegetation, graffiti or vandalism, fence damage, etc.	Visual observation	Annually, prior to start of wet season	Corrective action prior to wet season. Consult engineers if immediate solution is not evident.	1.0	1.0	2	\$ 74.97	Utility Truck	\$ 14.39		\$ 164	\$ 164
Reporting					1.0	3.0	1	\$ 74.97				\$ 225	\$ 225
Average Annual Total						32.0							\$ 3,174

Labor Rate	\$74.97/hr
------------	------------

Small Bioretention (500 sf)	32.0	\$ 3,174
Medium Bioretention (2000 sf)	44.0	\$ 4,078
Large Bioretention (4000 sf)	68.0	\$ 5,877

Equipment	Equipment Cost
Utility Truck	\$14.39/hr
10-15 yd truck	\$28.77/hr
Backhoe	\$13.36/hr
Vector	\$62.70/hr
Sweeper	\$123.26/hr

**PRIVATE TREATMENT CONTROL BMP
OPERATION AND MAINTENANCE VERIFICATION FORM
BIORETENTION FACILITIES, VEGETATED SWALES & HIGHER RATE
BIOFILTERS-SIDE 2**

This guide sheet provides general indicators for maintenance only and for a wide array of treatment control BMPs. Your developer prepared maintenance plans specifically for your treatment control BMP as an appendix to the Stormwater Management Plan. Also, if you have a manufactured structure, please refer to the manufacturer’s maintenance instructions.

Biofilters include the following :

- Vegetated Filter Strip/Swale** **Bioswale** **Bioretention Facility** **Planter Boxes**
 Manufactured Higher-Flow-Rate Biofilters, such as Tree-Pit-Style Units.

Routine maintenance is needed to ensure that flow is unobstructed, that erosion is prevented, and that soils are held together by plant roots and are biologically active. Typical maintenance consists of the following:

Bioretention BMPs Inspection and Maintenance Checklist	
Typical Maintenance Indicators	Typical Maintenance Actions
Accumulation of sediment (over 2 inches deep or covers vegetation), litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation. Confirm that soil is not clogging and that the area drains after a storm event. Till or replace soil as necessary.
Poor vegetation establishment	Ensure vegetation is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary (if less than 3 inches deep), remove fallen leaves and debris, prune large shrubs or trees, and mow turf areas.
Overgrown vegetation—woody vegetation not part of design is present and grass excessively tall (greater than 10 inches)	Mow or trim as appropriate, but not less than the design height of the vegetation (typically 4-6 inches for grass). Confirm that irrigation is adequate and not excessive and that sprays do not directly enter overflow grates. Replace dead plants and remove noxious and invasive weeds.
Erosion due to concentrated irrigation flow	Repair/re-seed eroded areas and adjust the irrigation.
Erosion due to concentrated stormwater runoff flow	Repair/re-seed eroded areas and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or re-grading where necessary. Remove obstructions and sediment accumulations so water disperses.
Standing water (BMP not draining) . If mosquito larvae are present and persistent, contact the San Diego County Vector Control Program at (858) 694-2888. Mosquito larvicides should be applied only when absolutely necessary and then only by a licensed individual or contractor.	Where there is an underdrain, such as in planter boxes and manufactured biofilters, check the underdrain piping to make sure it is intact and unobstructed. Abate any potential vectors by filling holes in the ground in and around the biofilter facility and by insuring that there are no areas where water stands longer than 96 hours following a storm .
Obstructed inlet or outlet structure	Clear obstructions.
Damage to structural components such as weirs, inlet, or outlet structures	Repair or replace as applicable.
Before the wet season and after rain events: remove sediment and debris from screens and overflow drains and downspouts; ensure pumps are functioning, where applicable; check integrity of mosquito screens; and; check that covers are properly seated and locked.	Where cisterns are part of the system
For manufactured high-flow-rate biofilters, see manufacturer’s maintenance guidelines	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

ATTACHMENT 4

City of Escondido PDP Structural BMP Verification for Permitted Land Development Projects

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

City of Escondido Storm Water Structural BMP Verification Form Page 1 of 4 Project Summary Information	
Project Summary Information	
Project Name	
Record ID (e.g., grading/improvement plan number)	
Project Address	330 Valley Parkway
Assessor's Parcel Number(s) (APN(s))	229-332-44-00
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	
Maintenance Notification / Agreement No.	
Responsible Party for Construction Phase	
Developer's Name	SEA PROPERTY MANAGEMENT CO.
Address	1333 CAMINO DEL RIO SOUTH, S-310 SAN DIEGO, CA. 92108
Email Address	
Phone Number	
Engineer of Work	DENNIS FURMAN
Engineer's Phone Number	(858) 386-8836
Responsible Party for Ongoing Maintenance	
Owner's Name(s)*	DONT KNOW YET
Address	
Email Address	
Phone Number	
*Note: If a corporation or LLC, provide information for principal partner or Agent for Service of Process. If an HOA, provide information for the Board or property manager at time of project closeout.	

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

Checklist for Engineer of Work (EOW) to submit to Field Engineering:

- Copy of the final accepted SWQMP and any accepted addendum.
- Copy of the most current plan showing the Storm Water Structural BMP Table, plans/cross-section sheets of the Structural BMPs and the location of each verified as-built Structural BMP.
- Photograph of each Structural BMP.
- Photograph(s) of each Structural BMP during the construction process to illustrate proper construction.
- Copy of the approved Structural BMP maintenance agreement and associated security

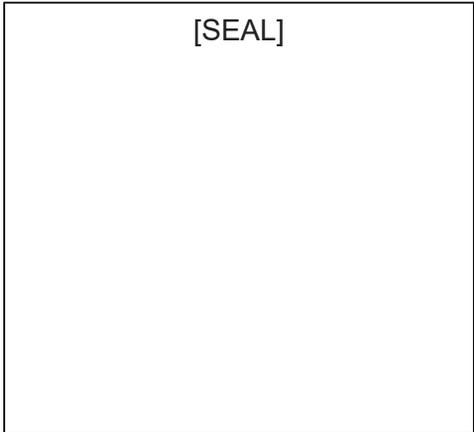
By signing below, I certify that the Structural BMP(s) for this project have been constructed and all BMPs are in substantial conformance with the approved plans and applicable regulations. I understand the City reserves the right to inspect the above BMPs to verify compliance with the approved plans and Storm Water Ordinance. Should it be determined that the BMPs were not constructed to plan or code, corrective actions may be necessary before permits can be closed.

Please sign your name and seal.

Professional Engineer's Printed Name:

Professional Engineer's Signed Name:

Date: _____



ATTACHMENT 5

Copy of Plan Sheets Showing Permanent Storm Water BMPs, Source Control, and Site Design

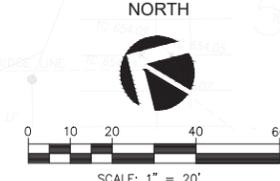
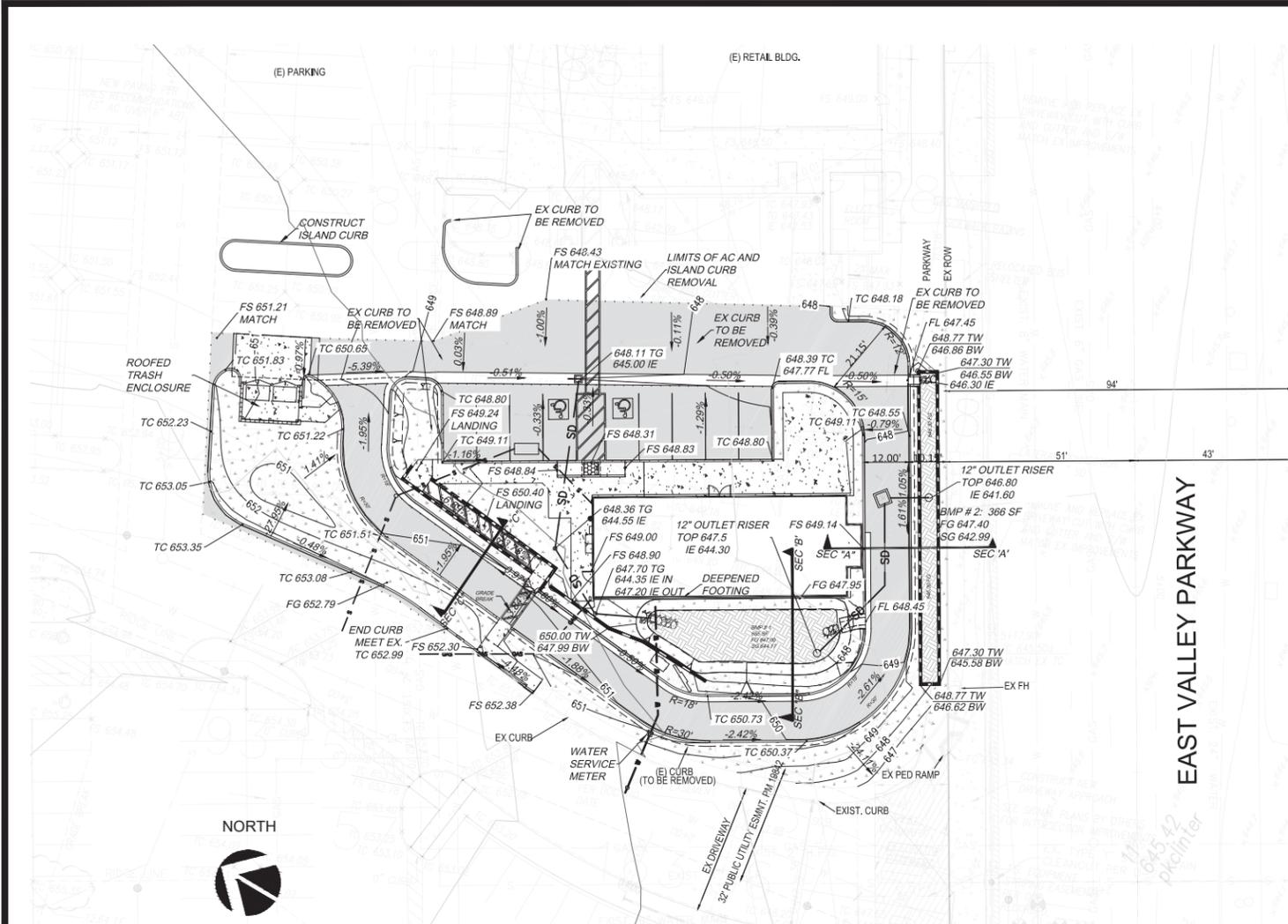
This is the cover sheet for Attachment 5.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

- Structural BMP(s) with ID numbers matching Step 6 Summary of PDP Structural BMPs
- The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- Details and specifications for construction of structural BMP(s)
- Signage indicating the location and boundary of structural BMP(s) as required by City staff
- How to access the structural BMP(s) to inspect and perform maintenance
- Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- Recommended equipment to perform maintenance
- When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- All BMPs must be fully dimensioned on the plans
- When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number must be provided. Photocopies of general brochures are not acceptable.
- Include all source control and site design measures described in Steps 4 and 5 of the SWQMP. Can be included as a separate exhibit as necessary.

***Note: Plan sheets included in this attachment can be full size or half size.**



SCOPE OF WORK:
 THE INTERIOR WORK IN THESE "COMMERCIAL DEVELOPMENT PLANS" SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
 -CONSTRUCTION OF NEW 1-STORY, 4,940 SQ. FT. (MAX.) RETAIL PAD BLDG.
 -PARKING LOT MODIFICATIONS TO ACCOMMODATE NEW PAD BLDG.

APN: 229-332-44-00 **SITE AREA:** 282,660 SF (NET) **SITE ADDRESS:** 350 W. VALLEY PARKWAY ESCONDIDO, CA 92025

LEGAL DESCRIPTION:
 PARCEL 4 PER MAP ALONG WITH PARCEL C AND PORTION OF PARCEL D OF

TOPOGRAPHY SOURCE:
 AERIAL TOPO BY PHOTO GEODETIC CORP., DATED 5/10/02

BENCH MARK:
 DESCRIPTION: CHISELED MARKER ON TOP OF CURB, ON SOUTHEAST CORNER OF ORANGE STREET AND VALLEY PARKWAY AT THE SOUTHERLY BEGINNING OF CURB RETURN
 BENCH MARK NO. 360-A ELEVATION 645.12 NVG '29

APPLICANT:
 SEA PROPERTY MANAGEMENT COMPANY
 1333 CAMINO DEL RIO SOUTH, SUITE 310
 SAN DIEGO, CA 92108
 619.297.3900

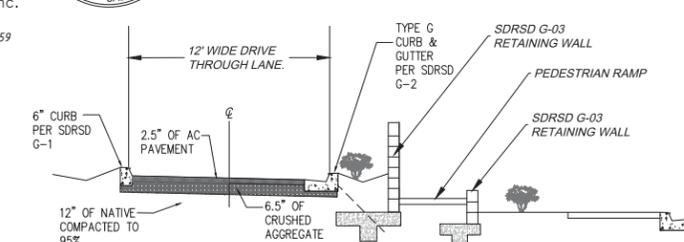
CERTIFICATION AND DECLARATION OF RESPONSIBLE CHARGE:
 I HEREBY DECLARE THAT I AM THE ENGINEER FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THIS SUBMITTAL AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE.

ENGINEER OF WORK:
Frank Florez 02/08/17
 FRANK FLOREZ PE R.C.E. 55555 EXPIRES ON 12/31/18 DATE

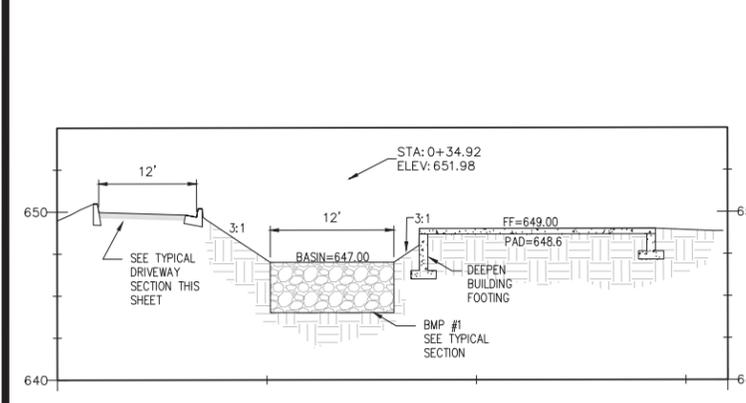
Florez Engineering, Inc.
 Civil Engineering & Planning •
 11440 W. BERNARDO CT, STE 159
 SAN DIEGO CA, 92127
 (858) 229-2493



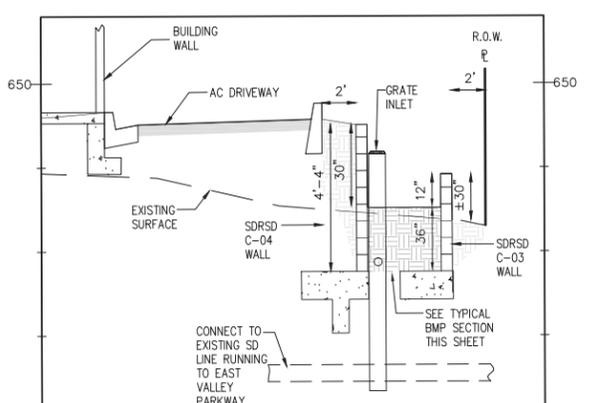
DESCRIPTION	STD. DWG.	SYMBOL
PROPERTY LINE		PL
LOT LINE		
EXISTING WATER LINE		W
EXISTING SEWER		S
EXISTING GAS LINE		G
EXISTING STORM DRAIN		SD
EXISTING GROUND CONTOURS		440
EXISTING SPOT ELEVATION		98.0
PROPOSED GROUND CONTOURS		440
CONCRETE SIDEWALK		
ADA ROUTE	C-3,3-4	
RETAINING WALL BY SEPARATE PERMIT.	G-1	
6" CURB, PRIVATE ONSITE.	G-2	
6" CURB AND GUTTER, PRIVATE ONSITE.	G-2 TYPE G	
PVT FIRE MAIN	FM	
PVT STORM DRAIN		
PVT. SD. C.O. OF WYE END.		
WATER SERVICE	W	
SEWER LATERAL	S	
GAS SERVICE	GAS	
FINISH SURFACE		FS 400.50
FINISH GRADE ELEVATION		FG 400.50
TOP OF CURB ELEVATION		TC 400.50
SURFACE GRADE		-2.50%
DIRECTION OF DRAINAGE		



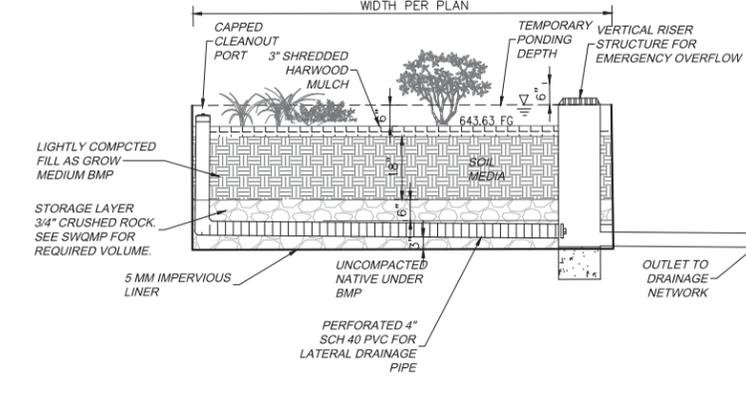
SECTION C-C DRIVEWAY SECTION
 SCALE: NTS



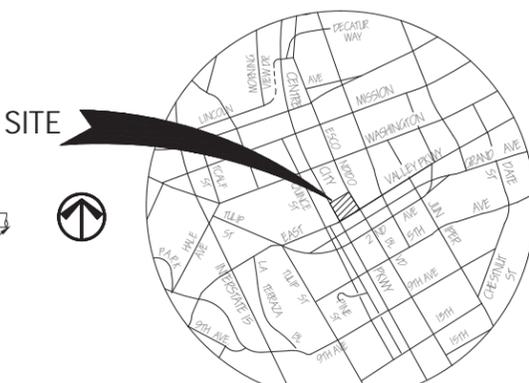
SECTION A-A BMP #1
 SCALE: 1"=10'
 VERTICAL EXAGGERATION 2:1



SECTION B-B BMP #2
 SCALE: 1"=5'
 VERTICAL EXAGGERATION 2:1



TYPICAL BMP SECTION
 SCALE: NTS



T.B.M. PAGE 1129, E-3
 VICINITY MAP NOT TO SCALE

MPA ARCHITECTS INC.
 3578 30th Street
 San Diego, CA 92104
 V. 619.236.0595
 F. 619.236.0557
 www.mpa-architects.com
 MEMBER AMERICAN INSTITUTE OF ARCHITECTS

CLIENT
SEA PROPERTY MANAGEMENT Co.
 1333 CAMINO DEL RIO SOUTH, SUITE 310
 SAN DIEGO, CA 92108
 F. 619.297.3900
 V. 619.497.2808

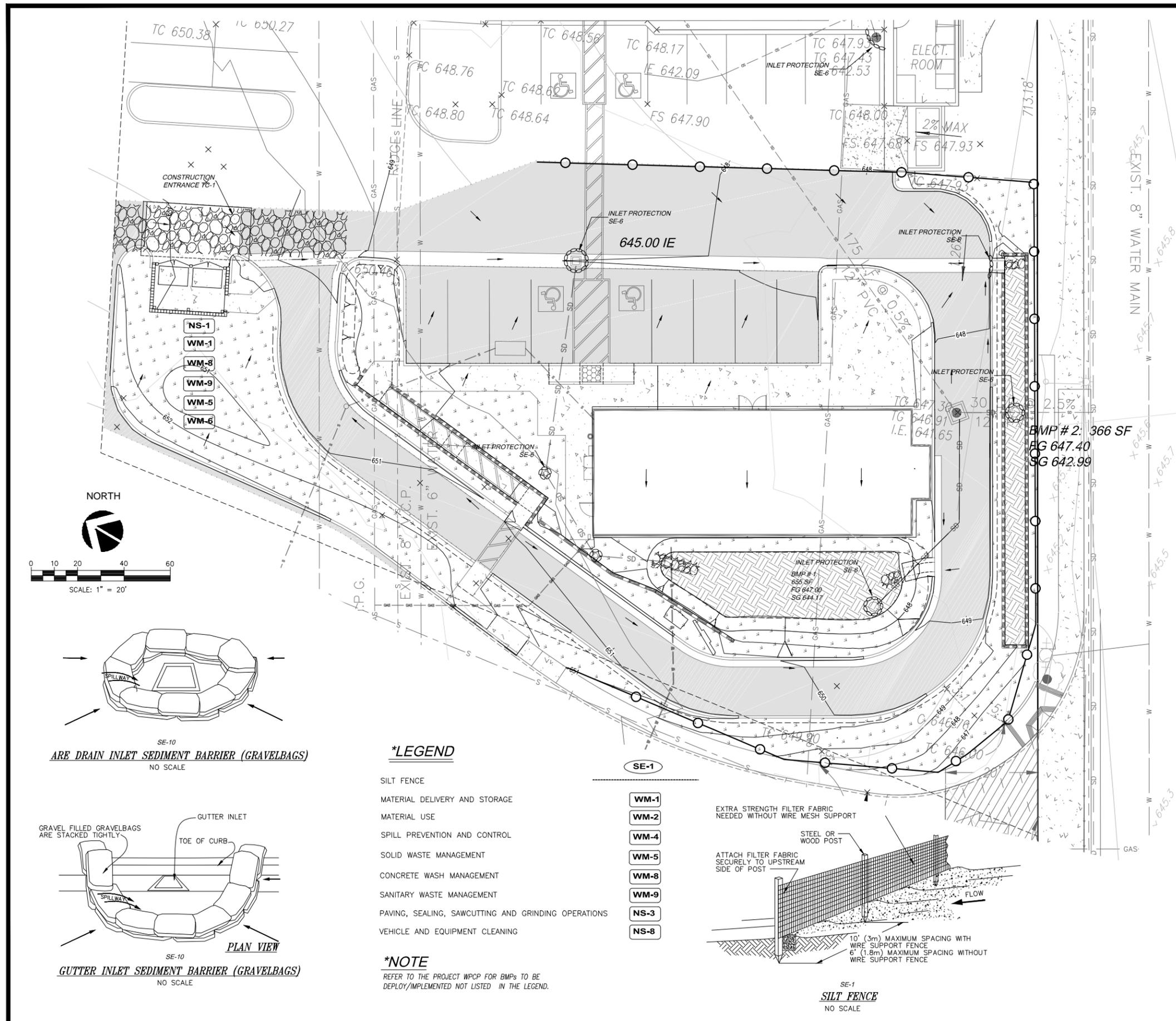
PROJECT
GRADING AND EROSION CONTROL PLAN SIGNATURE PAVILION
 350 W. VALLEY PARKWAY
 ESCONDIDO, CA 92025

REVISIONS		
NO.	DESCRIPTION	DATE

SHEET TITLE
CIVIL PLAN

DATE: 02/08/17 SCALE: AS NOTED
 DRAWN BY: FF DATE:
 CHECKED BY: SHEET NUMBER:
 PROJECT NO: **C1**

Drawing Name: C:\Users\William\Dropbox\Esccondido\DRF ENG\GP\STRBUK PRI-LIM GP.dwg
 Last Opened: Apr 09, 2016 - 2:54pm by: William



STORM WATER QUALITY NOTES/CONSTRUCTION BMP'S

1. THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE PERMIT, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD. http://www.swrcb.ca.gov/water_issues/programs/stormwater AND THE CITY OF SAN DIEGO LAND DEVELOPMENT CODE. <http://www.sandiego.gov/development-services/industry/stormwater.html>
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ALL SILT AND MUD ON ADJACENT STREET(S) DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONSTRUCTION ACTIVITY, AT THE END OF EACH WORK DAY, OR AFTER A STORM EVENT THAT CAUSES A BREACH IN INSTALLED CONSTRUCTION BMP'S WHICH MAY COMPROMISE STORM WATER QUALITY WITHIN ANY STREET(S). A STABILIZED CONSTRUCTION EXIT MAY BE REQUIRED TO PREVENT CONSTRUCTION VEHICLES OR EQUIPMENT FROM TRACKING MUD OR SILT ONTO THE STREET.
3. ALL STOCKPILES OF SOIL AND/OR BUILDING MATERIALS THAT ARE INTENDED TO BE LEFT FOR A PERIOD GREATER THAN SEVEN CALENDAR DAYS ARE TO BE COVERED. ALL REMOVABLE BMP DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN FIVE DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
4. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSE THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS WHICH ARE TO BE POURED IN PLACE ON SITE.
5. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER AFTER EACH RUN-OFF PRODUCING RAINFALL OR AFTER ANY MATERIAL BREACH IN EFFECTIVENESS.
6. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.
7. THE STORAGE OF ALL CONSTRUCTION MATERIALS AND EQUIPMENT MUST BE PROTECTED AGAINST ANY POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.

THIS PROJECT PROPOSES POST-CONSTRUCTION BEST MANAGEMENT PRACTICES AND LID MEASURES REQUIRED UNDER THE CITY OF SAN DIEGO STORM WATER MANAGEMENT, AND DISCHARGE CONTROL ORDINANCE (SECTION 43.03).

* DOWNPOUT FILTER - HIGH EFFICIENCY WATER QUALITY TREATMENT FOR ROOF RUNOFF
 * PERMEABLE SURFACE - RUNOFF FILTRATION FOR WATER QUALITY TREATMENT FOR PARKING AREA

POST-CONSTRUCTION BMP'S

BMP LEGEND

- DOWN SPOUT FILTER
- ▨ PERVIOUS AREAS

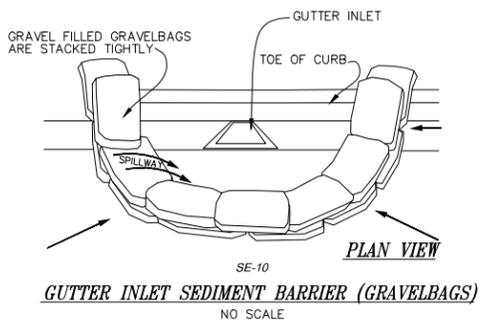
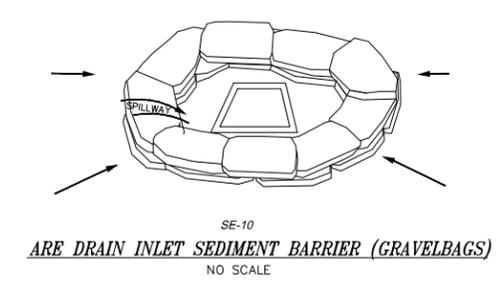
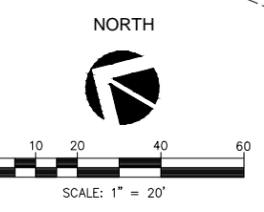
CERTIFICATION AND DECLARATION OF RESPONSIBLE CHARGE:

I HEREBY DECLARE THAT I AM THE ENGINEER FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THIS SUBMITTAL AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE.

ENGINEER OF WORK:
 Frank Florez 02/08/17
 FRANK FLOREZ PE, R.C.E. 55555 EXPIRES ON 12/31/18 DATE



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 • Civil Engineering & Planning •
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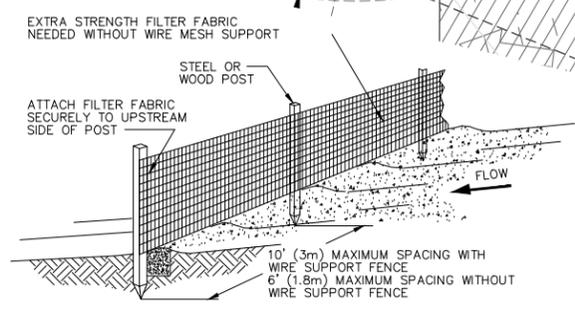


***LEGEND**

- SILT FENCE
- MATERIAL DELIVERY AND STORAGE
- MATERIAL USE
- SPILL PREVENTION AND CONTROL
- SOLID WASTE MANAGEMENT
- CONCRETE WASH MANAGEMENT
- SANITARY WASTE MANAGEMENT
- PAVING, SEALING, SAWCUTTING AND GRINDING OPERATIONS
- VEHICLE AND EQUIPMENT CLEANING

- SE-1
- WM-1
- WM-2
- WM-4
- WM-5
- WM-8
- WM-9
- NS-3
- NS-8

***NOTE**
 REFER TO THE PROJECT WPCP FOR BMP'S TO BE DEPLOY/IMPLEMENTED NOT LISTED IN THE LEGEND.



3578 30th Street
 San Diego, CA 92104
 V. 619.236.0595
 F. 619.236.0557
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SEA PROPERTY MANAGEMENT Co.
 1333 CAMINO DEL RIO SOUTH, SUITE 310
 SAN DIEGO, CA 92108
 V. 619.297.3900
 F. 619.497.2808

PROJECT

A PROPOSED COMMERCIAL DEVELOPMENT LOCATED AT:
DRAINAGE AND BMP PLAN
SIGNATURE PAVILION
 350 W. VALLEY PARKWAY
 ESCONDIDO, CA 92025

REVISIONS		
NO.	DESCRIPTION	DATE

SHEET TITLE

CIVIL PLAN

DATE: 02.08.17	SCALE: AS NOTED
DESIGNER: FF	REVISIONS:
DRAWN BY:	CHECKED BY:
PROJECT NO:	C2

PRIORITY DEVELOPMENT PROJECT (PDP) SWQMP

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**PRELIMINARY
HYDROLOGY STUDY
FOR
STARBUCKS
350 W. VALLEY PARKWAY
ESCONDIDO, CA. 92102**

Prepared For:

SEA PROPERTY MANAGEMENT CO.

1333 Camino Del Rio South

San Diego, Ca. 92108

(619) 297-3900

Prepared By:

Florez Engineering, Inc

11440 West Bernardo Ct. S-157

San Diego, CA 92127

(858) 229-2493

Original: 2/20/2018s

ENGINEER'S CERTIFICATION

This Drainage Study has been prepared by Dennis Furman, a Registered Civil Engineer in the State of California. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Dennis Furman
REGISTERED CIVIL ENGINEER

DATE

TABLE OF CONTENTS

PROJECT DISCRIBTION.....	1
SITE DISCRPTION.....	1
SCOPE AND PURPOSE.....	1
HYDROLOGIC METHODOLOGY	1
Pre and post development runoff.....	2
HYDROLOGIC ANALYSIS RESULTS.....	3

APPENDICES

APPENDIX A	HYDROLOGIC REFERENCE MATERIAL
APPENDIX B	HYDROLOGY MAPS

SITE DESCRIPTION

The site is located at 350 West Valley Parkway in Escondido Ca, 92025. (See attached vicinity map for project location and nearby streets).The site is located on the parking lot of a large shopping mall with other commercial buildings.

Runoff from the pre development site is all overland flow either flowing south towards Valley Parkway and a drop inlet at the edge of the parking lot or southeast to be intercepted by another drop inlet. Both drop inlets connect to a private storm drain that discharges to the City storm drain infrastructure in West Valley Parkway.

PROJECT DISCRPTION

The project proposes the construction of a Starbucks Coffee shop with a drive through lane and associated parking stalls. The project will implement storm water BMP's that will also function as Hydromodification Basins (HMP).

A Storm Water Quality Management Plan (SWQMP) under separate cover was prepared for this project dated February 23, 2017 which determined the HMP storage necessary to comply with the City HMP policy.

Although the project requires HMP implementation the project is not large enough to require a Section 401 or 404 permit from the Reginal Water Quality Control Board.

SCOPE AND PURPOSE

The scope of this preliminary study is to determine the pre-redevelopment and post development runoff and to estimate the ability of the HMP sized basins to attenuate the 100 year storm enough to comply with CEQA's requirement that the post developed storm water discharge from the site does not exceed the pre-developed discharge.

HYDROLOGIC METHODOLOGY

The Rational Method requires the determination of a storm duration. The drainage paths of the site have not been defined in detail at this preliminary stage. The calculation for the hydrologic runoff is therefore in accordance with the County of San Diego Hydrology Manual for a small single basin drainage shed utilizing the Rational Method equation. The time of concentration to determine the rainfall intensity index will be the initial area qualifying time of 5 minutes as required by the County Hydrology Manual. For the pre-development condition the site is analyzed as a single drainage area to establish a base line total runoff. The post-development condition divides the site into 2 drainage areas draining toward the 2 BMP basins. See the hydrology maps in appendix B.

It is assumed for this preliminary hydrology study that the designated drainage area will drain to the designated BMP's by whatever means is required. That may require roof gutters, down drain and drainage swales to be located appropriately. These features will be analyzed in detail in the final design process.

Because the project site is located on a relatively flat parking lot it effects the drainage outside the limits of the project construction. This offsite area is noted on the hydrology map and flows toward the second drop inlet as note in the SITE DESCRIPTION above. This offsite area is included in the total effected drainage area to maintain a comparative pre and post runoff quantity.

HYDROLOGICAL CALCULATIONS

The rainfall intensity (I) index can be determined using the equation from the Intensity- Duration Design Chart, Figure 3-2, taken from the San Diego County Hydrology Manual:

From:

$$I = 7.44P_6D^{-.645}$$

Where:

P_6 = 6-Hour Precipitation in inches = 3.3 inches as shown on the County 100 year isopluvial map.

D = Duration in minutes = 5 minutes.

$$I = 8.70 \text{ in/hr}$$

With the intensity the peak runoff can be calculated with the rational formula:

$$Q = CIA$$

C = *Runoff Coefficient.*

$C = (0.98 \times \text{impervious area}) + (0.35 \times \text{pervious area}) / \text{drainage area}.$

See hydrology map for runoff calculation.

FOR THE PRE-DEVELOPMENT CONDITION:

Effected drainage area has 2 basins each draining to a drop inlet.

Watersheds	Effective	Tc (min.)	Area (ac)	Basin
	C		Total	Q _{peak} (cfs)
Basin # 1	0.92	5.0	0.280	2.24
Basin # 2	0.91	5.0	0.148	1.17
Basin #3	0.35	5	0.029	0.08
Total	0.88	5.0	0.457	3.49

FOR THE POST-DEVELOPMENT CONDITION:

Effected drainage area has 2 basins draining to 2 Bio-Filtration Basins and 1 offsite basin draining to a drop inlet.

Watersheds	Effective C	Tc (min.)	I in/hr	Area (ac) Total	Basin In Q _{peak} (cfs)	Basin out Q _{peak} (cfs)
Bio-Filtr #1	0.78	5.0	8.69	0.290	1.98	
Bio-Filtr #2	0.94	5.0	8.69	0.129	1.05	
O/S Basin #3	0.98	5.0	8.69	0.041	0.35	
CEQA Compliance	0.85	5	8.69	0.457	3.38	

The assumed time of concentration for the three watersheds is the same at 5 minutes. Therefore an approximation of the total runoff from the effected drainage area is just the sum of the three. The summed peak 100 year post development runoff is 3.38 cfs which is less then the pre-development runoff of 3.49 cfs by 0.11 cfs. This reduction in runoff is attributed to a decrease in impervious surfaces.

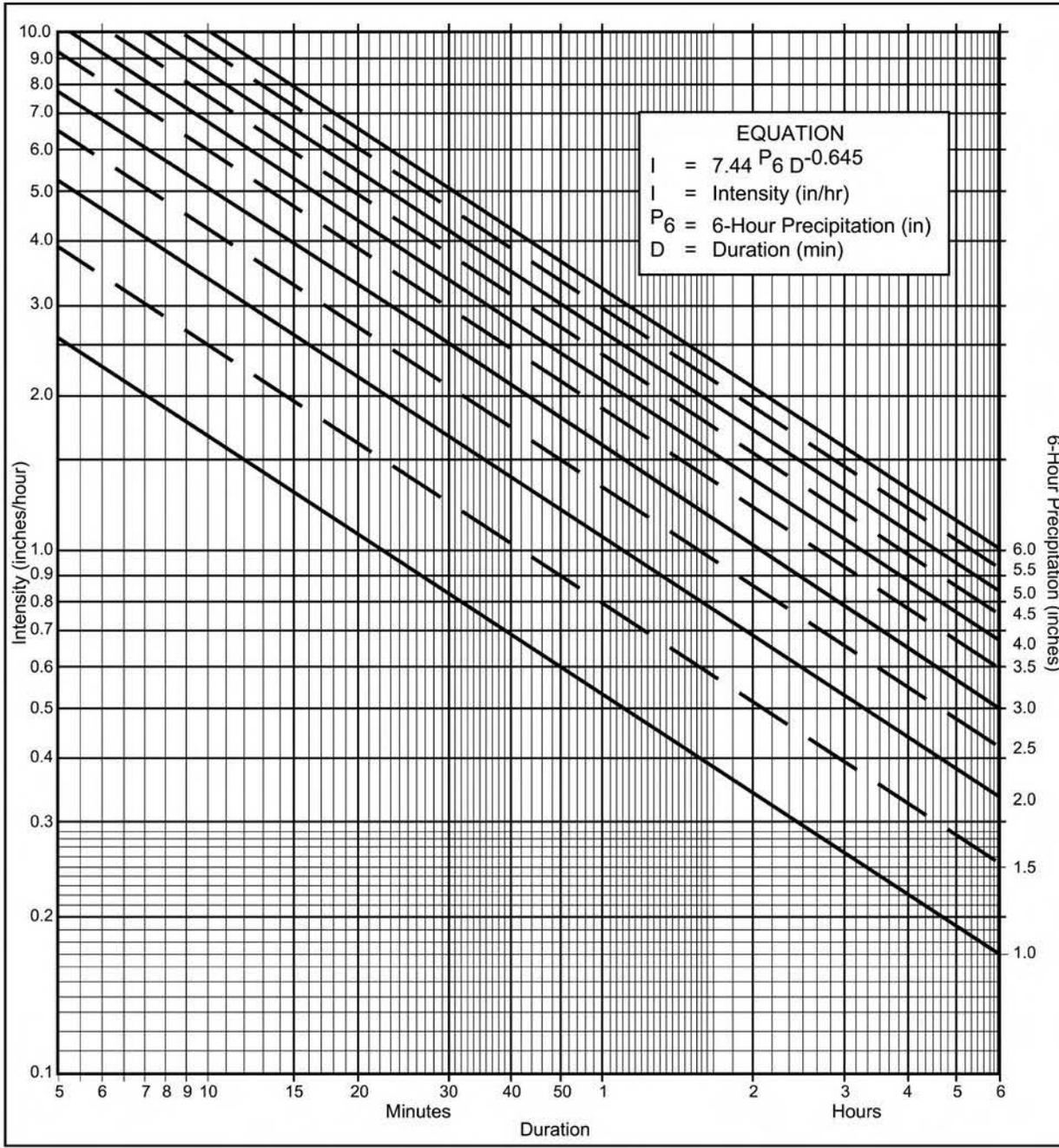
HYDROLOGIC SUMMERY

The different statistical storm events, 1, 10 and 100 year storms have a log rhythm relationship. The 1 year storm peak runoff is approximately 60 percent of a 10 year storm and a 10 year storm is approximately 60 percent of a 100 year storm. Therefore the 1 year storm is approximately 36 percent of a 100 year storm.

The post development 100 year storm discharge will be less than the pre development and therefore will not impact the downstream storm drain infrastructure. In fact, the reduction in the 100 year discharge will result in a measure of relief.

APPENDIX A

HYDROLOGY REFERENCE MATERIAL



Directions for Application:

- (1) From precipitation maps determine 6 hr and 24 hr amounts for the selected frequency. These maps are included in the County Hydrology Manual (10, 50, and 100 yr maps included in the Design and Procedure Manual).
- (2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicable to Desert).
- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency _____ year
- (b) $P_6 =$ _____ in., $P_{24} =$ _____, $\frac{P_6}{P_{24}} =$ _____ %⁽²⁾
- (c) Adjusted $P_6^{(2)} =$ _____ in.
- (d) $t_x =$ _____ min.
- (e) $I =$ _____ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

**Table 3-1
RUNOFF COEFFICIENTS FOR URBAN AREAS**

Land Use		Runoff Coefficient "C"				
		% IMPER.	Soil Type			
NRCS Elements	County Elements			A	B	C
Undisturbed Natural Terrain (Natural)	Permanent Open Space	0*	0.20	0.25	0.30	0.35
Low Density Residential (LDR)	Residential, 1.0 DU/A or less	10	0.27	0.32	0.36	0.41
Low Density Residential (LDR)	Residential, 2.0 DU/A or less	20	0.34	0.38	0.42	0.46
Low Density Residential (LDR)	Residential, 2.9 DU/A or less	25	0.38	0.41	0.45	0.49
Medium Density Residential (MDR)	Residential, 4.3 DU/A or less	30	0.41	0.45	0.48	0.52
Medium Density Residential (MDR)	Residential, 7.3 DU/A or less	40	0.48	0.51	0.54	0.57
Medium Density Residential (MDR)	Residential, 10.9 DU/A or less	45	0.52	0.54	0.57	0.60
Medium Density Residential (MDR)	Residential, 14.5 DU/A or less	50	0.55	0.58	0.60	0.63
High Density Residential (HDR)	Residential, 24.0 DU/A or less	65	0.66	0.67	0.69	0.71
High Density Residential (HDR)	Residential, 43.0 DU/A or less	80	0.76	0.77	0.78	0.79
Commercial/Industrial (N. Com)	Neighborhood Commercial	80	0.76	0.77	0.78	0.79
Commercial/Industrial (G. Com)	General Commercial	85	0.80	0.80	0.81	0.82
Commercial/Industrial (O.P. Com)	Office Professional/Commercial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (Limited I.)	Limited Industrial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (General I.)	General Industrial	95	0.87	0.87	0.87	0.87

*The values associated with 0% impervious may be used for direct calculation of the runoff coefficient as described in Section 3.1.2 (representing the pervious runoff coefficient, C_p , for the soil type), or for areas that will remain undisturbed in perpetuity. Justification must be given that the area will remain natural forever (e.g., the area is located in Cleveland National Forest).

DU/A = dwelling units per acre

NRCS = National Resources Conservation Service

Note that the Initial Time of Concentration should be reflective of the general land-use at the upstream end of a drainage basin. A single lot with an area of two or less acres does not have a significant effect where the drainage basin area is 20 to 600 acres.

Table 3-2 provides limits of the length (Maximum Length (L_M)) of sheet flow to be used in hydrology studies. Initial T_i values based on average C values for the Land Use Element are also included. These values can be used in planning and design applications as described below. Exceptions may be approved by the “Regulating Agency” when submitted with a detailed study.

Table 3-2

**MAXIMUM OVERLAND FLOW LENGTH (L_M)
 & INITIAL TIME OF CONCENTRATION (T_i)**

Element*	DU/ Acre	.5%		1%		2%		3%		5%		10%	
		L_M	T_i										
Natural		50	13.2	70	12.5	85	10.9	100	10.3	100	8.7	100	6.9
LDR	1	50	12.2	70	11.5	85	10.0	100	9.5	100	8.0	100	6.4
LDR	2	50	11.3	70	10.5	85	9.2	100	8.8	100	7.4	100	5.8
LDR	2.9	50	10.7	70	10.0	85	8.8	95	8.1	100	7.0	100	5.6
MDR	4.3	50	10.2	70	9.6	80	8.1	95	7.8	100	6.7	100	5.3
MDR	7.3	50	9.2	65	8.4	80	7.4	95	7.0	100	6.0	100	4.8
MDR	10.9	50	8.7	65	7.9	80	6.9	90	6.4	100	5.7	100	4.5
MDR	14.5	50	8.2	65	7.4	80	6.5	90	6.0	100	5.4	100	4.3
HDR	24	50	6.7	65	6.1	75	5.1	90	4.9	95	4.3	100	3.5
HDR	43	50	5.3	65	4.7	75	4.0	85	3.8	95	3.4	100	2.7
N. Com		50	5.3	60	4.5	75	4.0	85	3.8	95	3.4	100	2.7
G. Com		50	4.7	60	4.1	75	3.6	85	3.4	90	2.9	100	2.4
O.P./Com		50	4.2	60	3.7	70	3.1	80	2.9	90	2.6	100	2.2
Limited I.		50	4.2	60	3.7	70	3.1	80	2.9	90	2.6	100	2.2
General I.		50	3.7	60	3.2	70	2.7	80	2.6	90	2.3	100	1.9

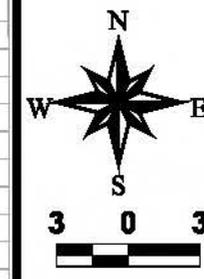
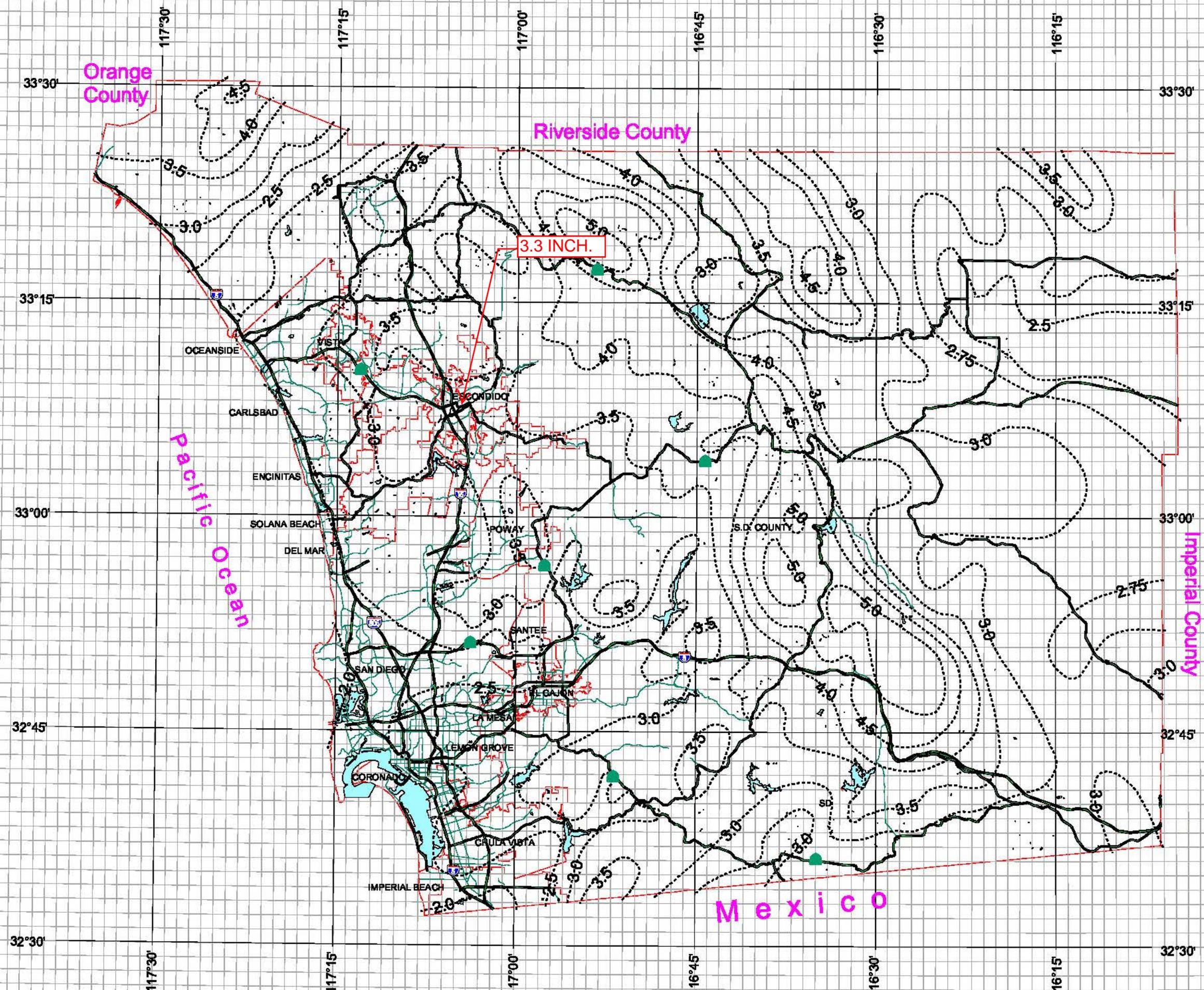
*See Table 3-1 for more detailed description

County of San Diego Hydrology Manual



Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours



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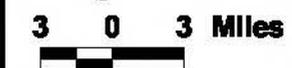
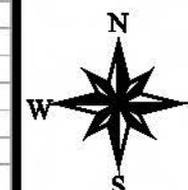
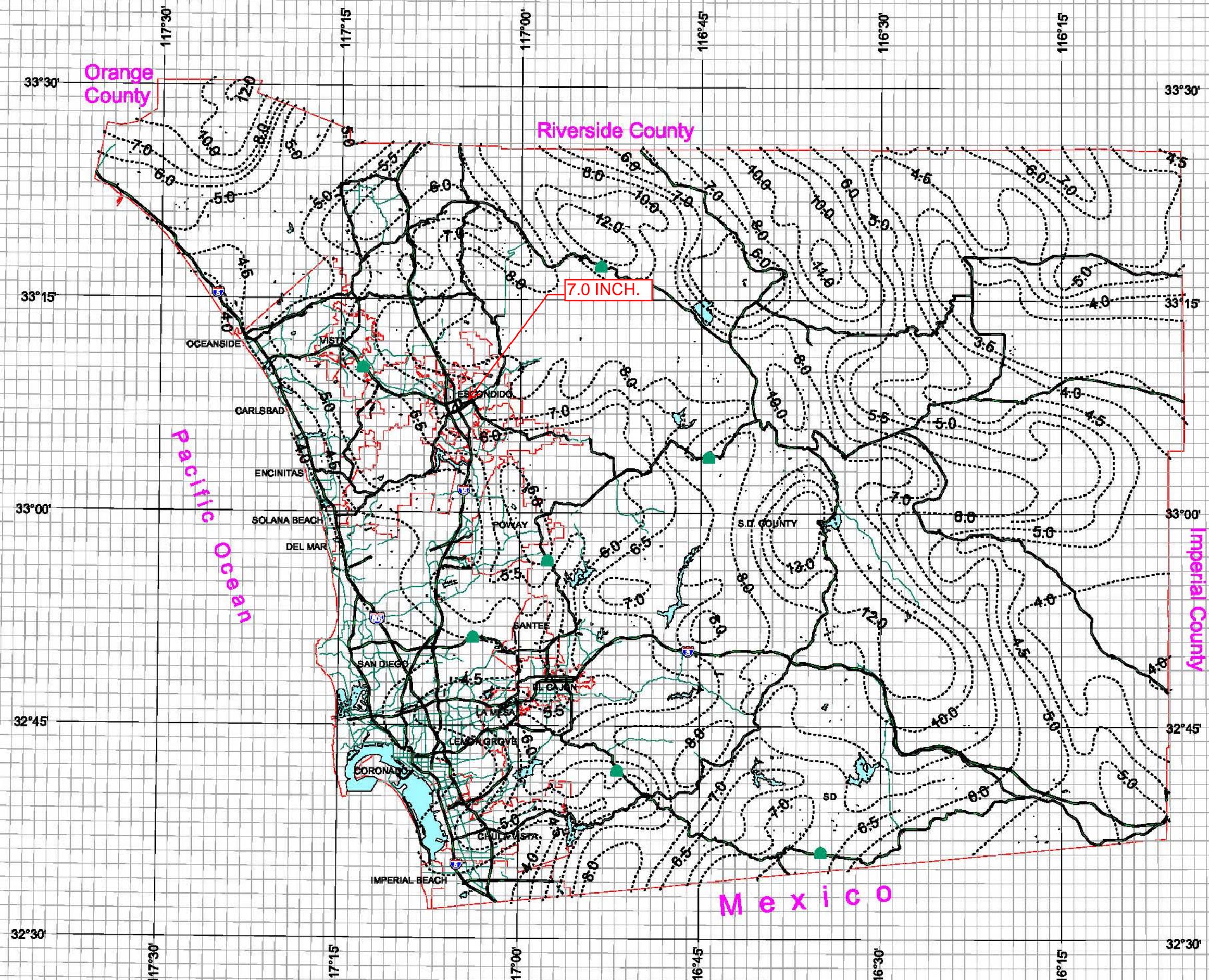
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County of San Diego Hydrology Manual



Rainfall Isophuvials

100 Year Rainfall Event - 24 Hours



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HYDROLOGIC SOILS GROUPE

ESCONDIDO

PROJECT
LOCATION



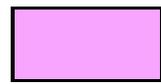
Soil Groups



Group A



Group B



Group C



Group D



Undetermined



Data Unavailable

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — San Diego County Area, California (CA638)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
FvD	Fallbrook-Vista sandy loams, 9 to 15 percent slopes	B	14.6	21.6%
OhE	Olivenhain cobbly loam, 9 to 30 percent slopes	D	33.7	49.8%
PfC	Placentia sandy loam, thick surface, 2 to 9 percent slopes	D	19.3	28.5%
Totals for Area of Interest			67.6	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

APPENDIX B

HYDROLOGY MAPS

BASIN # 2
 6,444 SF
 $C = (5,734 \text{ SF} \times 0.98) + (710 \text{ SF} \times 0.35)$
 $5,868 / 6,444 \text{ SF} = 0.91$

BASIN # 3 1,263 SF;
 $C = (1,263 \times 0.35) / 1263$
 $= 0.35$
WEIGHTED C = .35
Q = .08

PRE-BASIN # 1
 12,200 SF
 $C = (11,018 \text{ SF} \times 0.98) + (1,182 \text{ SF} \times 0.35)$
 $10,231 \text{ SF} / 12,200 \text{ SF} = 0.92$

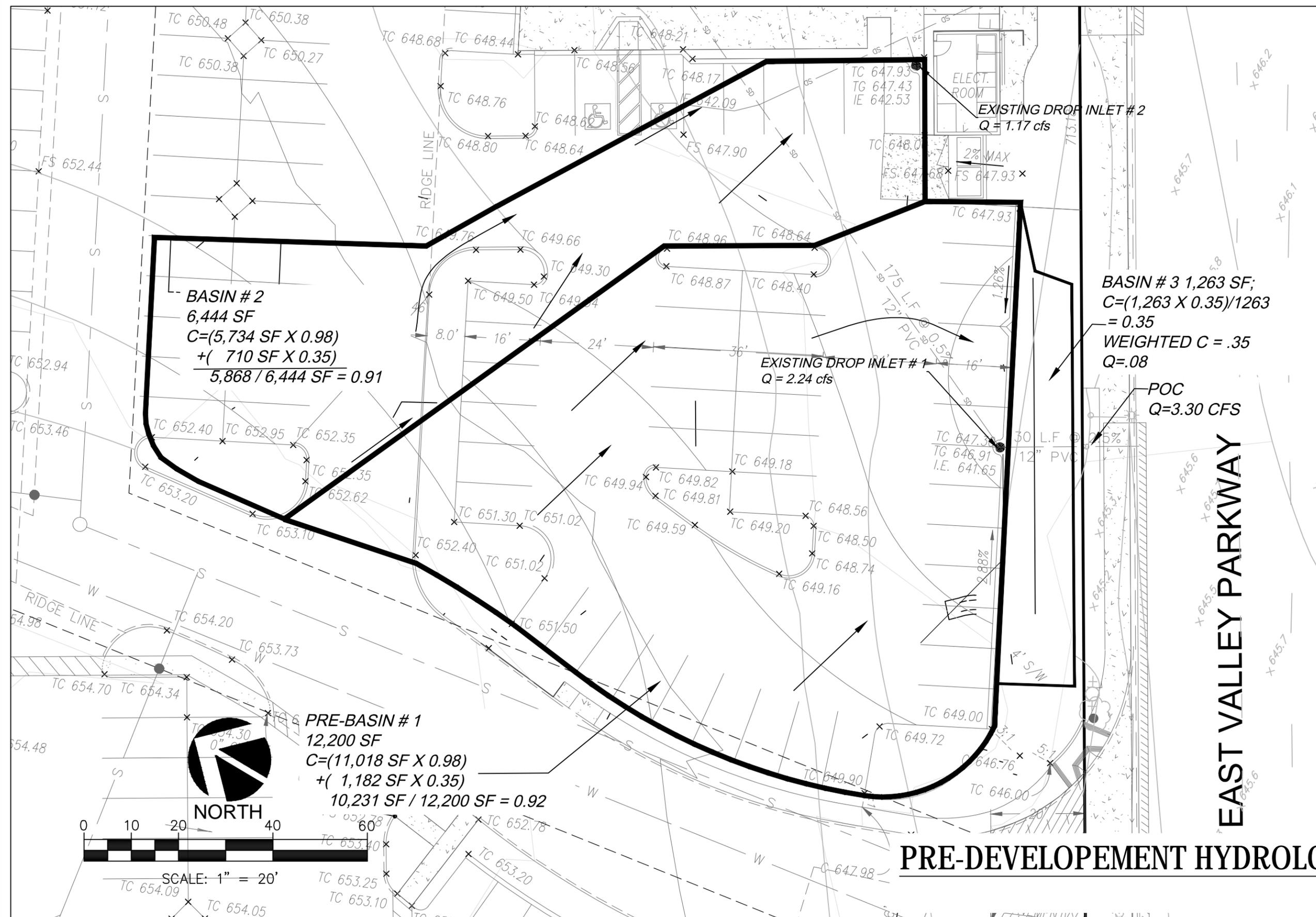
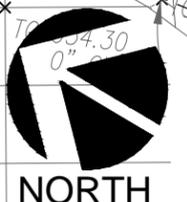
EXISTING DROP INLET # 2
 Q = 1.17 cfs

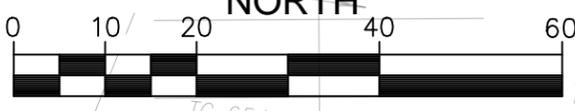
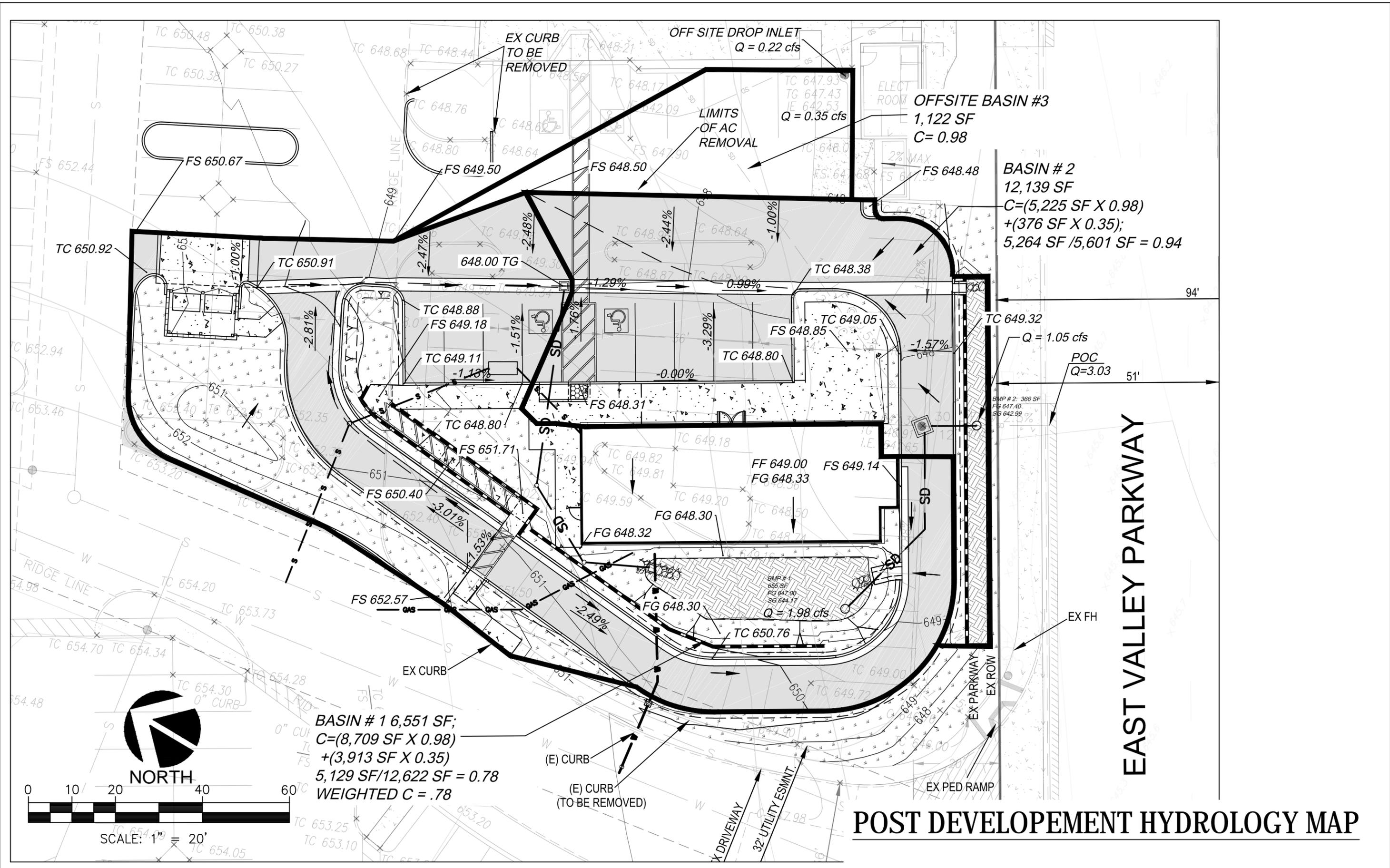
EXISTING DROP INLET # 1
 Q = 2.24 cfs

POC
 Q = 3.30 CFS

EAST VALLEY PARKWAY

PRE-DEVELOPEMENT HYDROLOGY MAP





SCALE: 1" = 20'

POST DEVELOPEMENT HYDROLOGY MAP

**FHWA RD-77-108
Traffic Noise Prediction Model**

Data Input Sheet

Project Name : Escondido Starnucks
Project Number : 8688
Modeled Condition : Existing with and without Project

Surface Refelction: CNEL
Assessment Metric: Hard
Peak ratio to ADT: 10.00
Traffic Desc. (Peak or ADT) : ADT

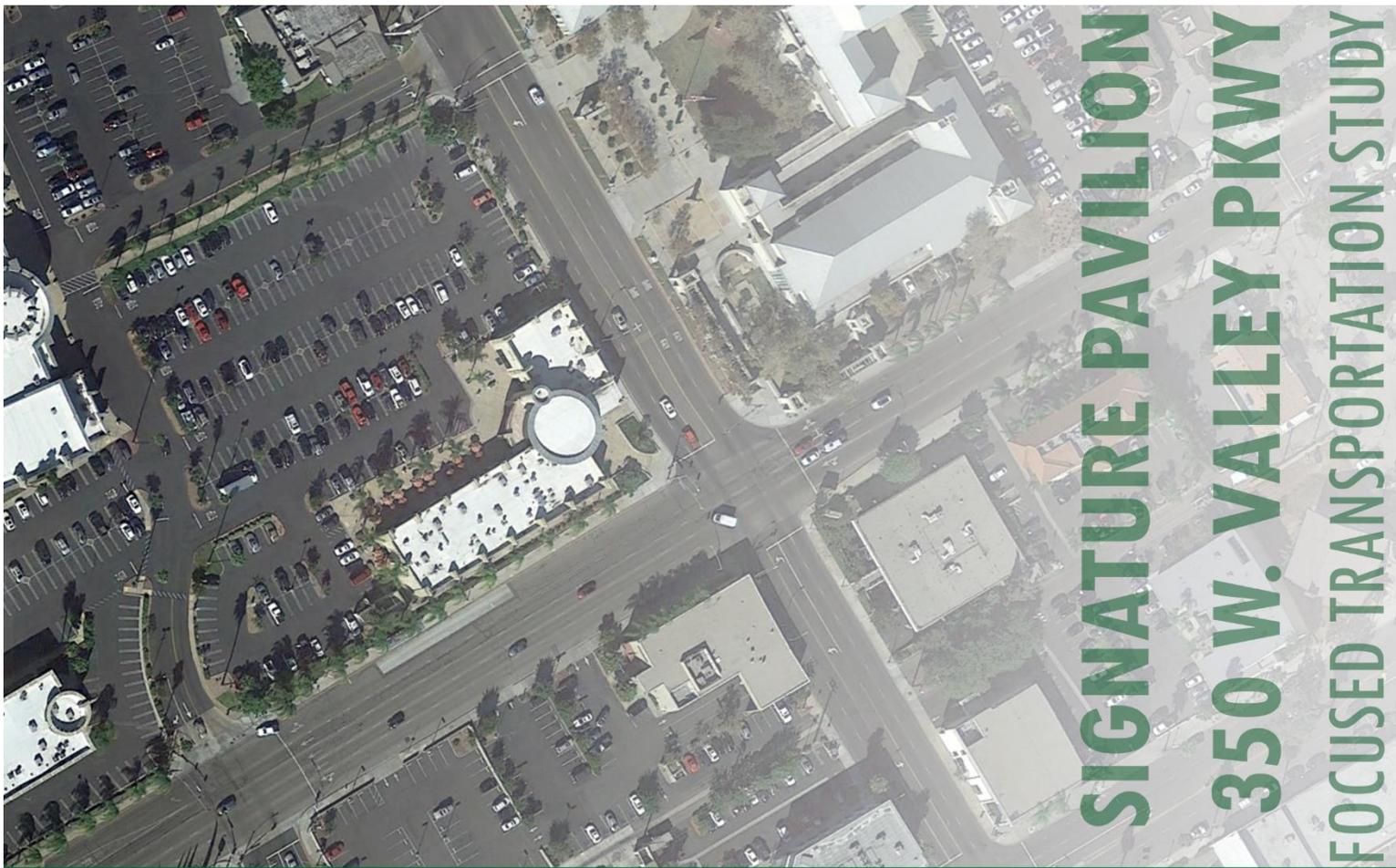
Segment	Roadway	Segment	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
EXISTING												
1	N. Escondido Boulevard	W. Valley Parkway to Signature Pavilion	13,612	35	50	95.00	3.00	2.00	80.00	10.00	10.00	
2	W. Valley Parkway	West of Signature Pavilion	18,284	30	50	95.00	3.00	2.00	80.00	10.00	10.00	
3	W. Valley Parkway	Signature Pavilion to N. Escondido Parkway	17,660	30	50	95.00	3.00	2.00	80.00	10.00	10.00	
EXISTING WITH PROJECT												
1	N. Escondido Boulevard	W. Valley Parkway to Signature Pavilion	13,819	35	50	95.00	3.00	2.00	80.00	10.00	10.00	
2	W. Valley Parkway	West of Signature Pavilion	18,512	30	50	95.00	3.00	2.00	80.00	10.00	10.00	
3	W. Valley Parkway	Signature Pavilion to N. Escondido Parkway	17,888	30	50	95.00	3.00	2.00	80.00	10.00	10.00	

**FHWA RD-77-108
Traffic Noise Prediction Model**

Predicted Noise Levels

Project Name : Escondido Starnucks
Project Number : 8688
Modeled Condition : Existing with and without Project
Assessment Metric: Hard

Segment	Roadway	Segment	Noise Levels, dBA Hard				Distance to Traffic Noise Level Contours, Feet					
			Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
EXISTING												
1	N. Escondido Boulevard	W. Valley Parkway to Signature Pavilion	65.2	59.9	63.3	68.1	10	32	102	323	1,021	3,228
2	W. Valley Parkway	West of Signature Pavilion	64.6	60.1	65.5	68.7	12	37	117	371	1,172	3,707
3	W. Valley Parkway	Signature Pavilion to N. Escondido Parkway	64.4	60.0	65.4	68.6	11	36	115	362	1,145	3,622
EXISTING WITH PROJECT												
1	N. Escondido Boulevard	W. Valley Parkway to Signature Pavilion	65.3	60.0	63.4	68.2	10	33	104	330	1,045	3,303
2	W. Valley Parkway	West of Signature Pavilion	64.6	60.2	65.6	68.8	12	38	120	379	1,199	3,793
3	W. Valley Parkway	Signature Pavilion to N. Escondido Parkway	64.5	60.0	65.4	68.6	11	36	115	362	1,145	3,622



SIGNATURE PAVILION 350 W. VALLEY PKWY FOCUSED TRANSPORTATION STUDY

**Prepared For: Sea Property Management Co.
and the City of Escondido**

Date: March 14, 2018
Project Number: 001117



 (858) 560-4911

 8451 Miralani Drive, Suite A
San Diego, CA 92126

 www.UrbanSystems.net

1.0 Introduction

Urban Systems Associates, Inc. has prepared a Focused Transportation Study for the proposed development of a drive-through fast food restaurant located within Escondido's Signature Pavilion shopping center at **350 West Valley Parkway**.

Study Purpose and Background

The purpose of this study is to examine potential traffic operation issues and impacts on the surrounding area as a direct result of the proposed project.

The existing site is currently undeveloped space within the Signature Pavilion shopping center. The proposed project will develop a 1,900 square foot (S.F.) drive-through fast food restaurant.

This development will be located at the center of the southern side of the Signature Pavilion. In terms of adjacent street segments, the proposed development will be bounded by West Valley Parkway to the south and North Escondido Boulevard to the east.

The planned development site is located south of State Route 78 and east of Interstate 15.

A site plan is provided in **Figure 1**.

Based on the *City of Escondido Traffic Impact Analysis Guidelines*, "a Traffic Impact Analysis (TIA) must be prepared for any project that generates and adds more than 2% of the ADT for LOS C to any street segment in the preliminary study area identified by the City staff". The proposed project would not exceed this threshold (500 ADT) on any street segment.

Additionally, the proposed project would not exceed the peak hour intersection trigger points contained in the Guidelines. Nevertheless, after consultation with City staff, it was determined that a Focused Transportation Study evaluating project access points and surrounding streets should be prepared for the existing and existing with project scenario. This would provide a conservative analysis meeting City of Escondido requirements.

Figure 2 shows the proposed project location, study area, study intersections and study street segments.

Table of Contents

1.0 Introduction.....Pg. 1

2.0 Proposed Project.....Pg. 4

3.0 Existing Conditions.....Pg. 8

4.0 Existing With Project.....Pg. 15

5.0 Project Access.....Pg. 20

6.0 Conclusion.....Pg. 20

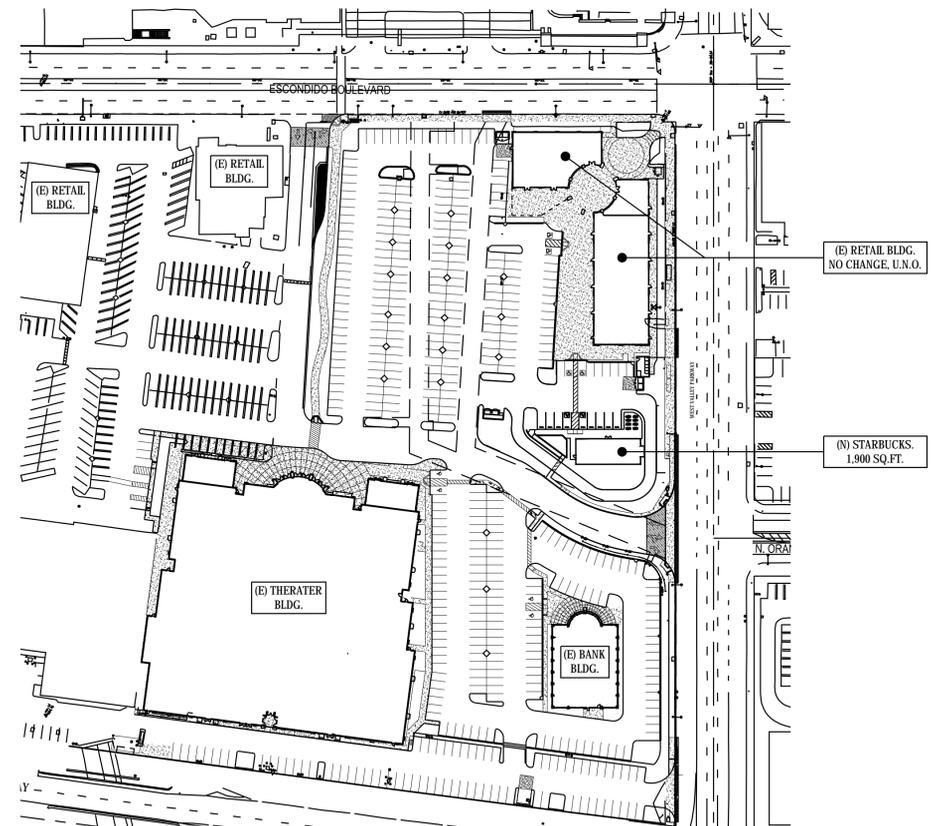
Figure 1: Project Site Plan

The project site plan is provided on the following page in 11"x17" format

A PROPOSED COMMERCIAL DEVELOPMENT LOCATED AT:

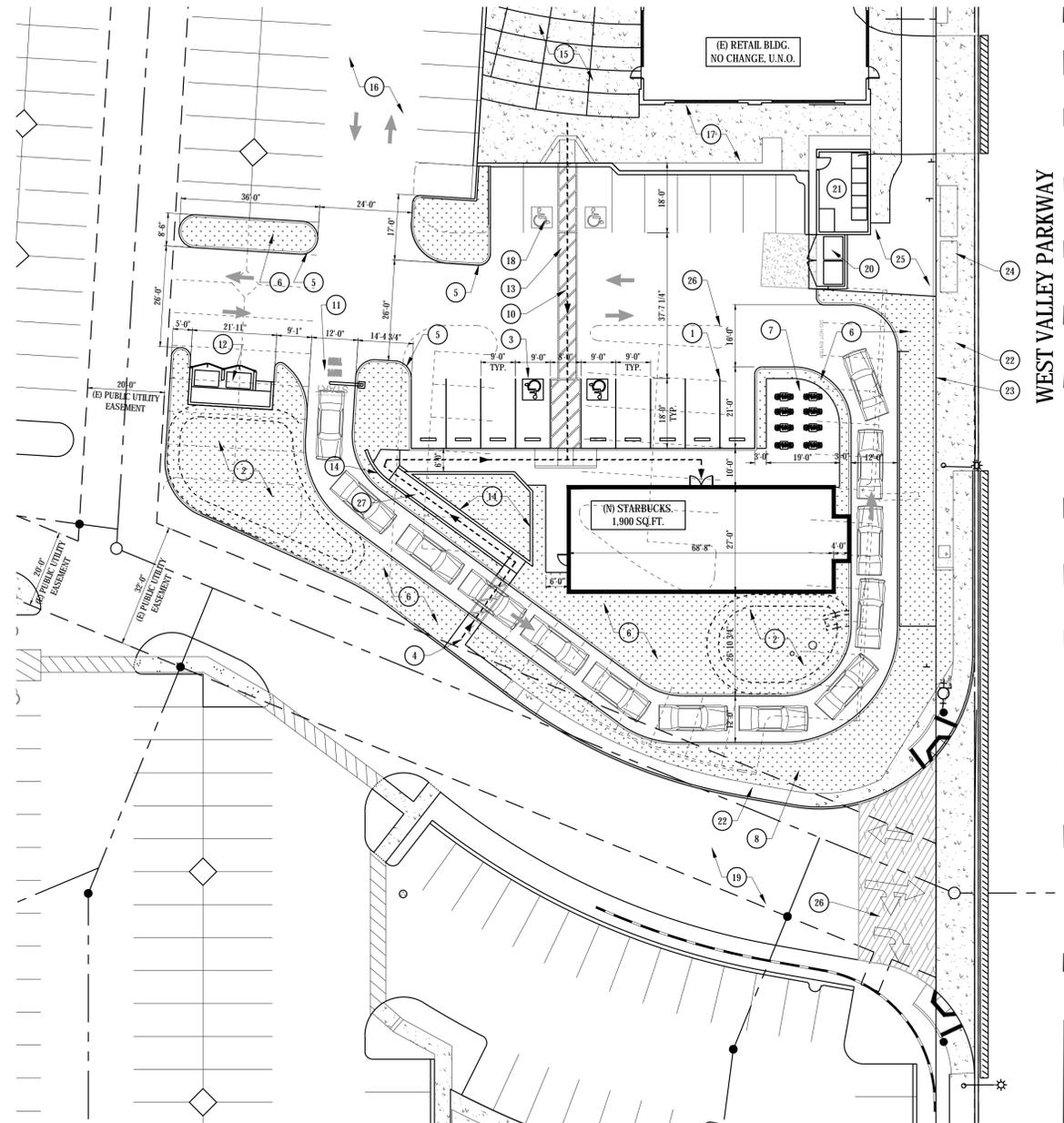
SIGNATURE PAVILION

350 W. VALLEY PARKWAY
ESCONDIDO, CA 92025



KEY SITE PLAN

A



PROPOSED PARTIAL SITE PLAN

C

SCOPE OF WORK

THE INTERIOR WORK IN THESE "COMMERCIAL DEVELOPMENT PLANS" SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

- CONSTRUCTION OF NEW 1-STORY, 1,900 SQ. FT. (MAX) PAD BLDG.
- PARKING LOT MODIFICATIONS TO ACCOMMODATE NEW PAD BLDG.

NOTE:

REFER TO PLANS FOR ADDITIONAL INFORMATION AND WORK TO BE PERFORMED UNDER THIS PERMIT

SITE ANALYSIS

TOTAL SITE ANALYSIS

SITE AREA	282,660 SQ. FT. (NET)
PROPOSED BUILDING AREA	1,900 SQ. FT. (MAX)
BUILDING USE	B - DRIVE THRU RESTAURANT
NUMBER OF STORES AND HEIGHT	1 STORY, 24' MAX HGT.
AREA SEPARATION WALLS	NONE
CONSTRUCTION TYPE	V-B
SPRINKLED	YES
LAND USE ZONE	CC

ASSESSOR'S PARCEL NUMBERS

229-332-44-00

LEGAL DESCRIPTION

PORTIONS OF PARCELS 2, 3, 4 OF ESCONDIDO TRACT 118, MAP No. 5702

PARKING ANALYSIS

BUILDING AREAS (SIGNATURE PAVILION) (Per City of Escondido Planning Dept.)

(a) TOTAL (E) COMMERCIAL AREA	101,985 SQ. FT.
(E) THEATER, SHOPS, BANK BLDG. (2 FLOORS)	98,385 SQ. FT.
(E) OUTDOOR DRING	1,200 SQ. FT.
(E) 2ND. FLOOR NOTANDA (OFFICE AREA)	2,400 SQ. FT.
(E) BANK BLDG. STORAGE BASEMENT	2,900 SQ. FT.
(c) PROPOSED RETAIL BUILDING	1,900 SQ. FT. (MAX)

PARKING SPACE ANALYSIS (SIGNATURE PAVILION)

(A) PARKING SPACES EXISTING	519 SPACES (511 STAND. + 08 HANDICAP)
(B) PARKING SPACES EXTRA *	44 SPACES (44 STAND.)
(C) TOTAL PARKING SPACES EXISTING (A+B)	563 SPACES (555 STAND. + 08 HANDICAP)
(D) PARKING SPACES REMOVED	55 SPACES (55 STAND.)
(E) PARKING SPACES ADDED	9 SPACES (7 STAND. + 2 HANDICAP)
(F) TOTAL PARKING PROVIDED (C+E-D)	517 SPACES (507 STAND. + 10 HANDICAP)
(G) TOTAL PARKING REQUIRED	524 SPACES
(a) = (101,985 SQ. FT. AT 1/200)	509,925 SPACES
(b) = (2,900 SQ. FT. AT 1/800)	3,625 SPACES
(c) = (1,900 SQ. FT. AT 1/200)	9.5 SPACES

* EXTRA SPACES FROM PLAZA CITY CENTER

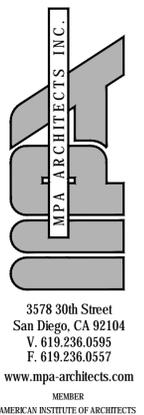
SITE NOTES

1. AT EVERY PRIMARY PUBLIC ENTRANCE, AND AT EVERY MAJOR FUNCTION AREA ALONG, OR LEADING TO, AN ACCESSIBLE ROUTE OF TRAVEL, THERE IS TO BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS ARE REQUIRED TO INDICATE THE DIRECTION OF ACCESSIBLE BUILDING ENTRANCES AND FACILITIES. PER SECTION 1117B.5.7 & 1127B.3
2. PRIOR TO SUBMITTING BIDS, GENERAL CONTRACTOR SHALL VISIT THIS SITE AND FIELD VERIFY ALL EXISTING FIELD CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY SHOULD ANY DISCREPANCIES BE DISCOVERED.
3. ALL PROPERTY LINES, EASEMENTS AND BUILDINGS, BOTH EXISTING AND PROPOSED, ARE SHOWN ON THIS SITE PLAN
4. ADDRESSES SHALL BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. ADDRESS NUMBER SHALL BE 4 INCHES IN HEIGHT AND OF CONTRASTING COLOR TO THEIR BACKGROUND
5. ELIMINATE ALL MEANS OF GAINING UNAUTHORIZED ACCESS TO BUILDING ROOFS (STAIRPIPPES, LADDERS, FENCES, LANDSCAPE, ETC.)
6. SECURE EXTERIOR ROOF ACCESS LADDERS, WHERE OCCURS, WITH LOCKED LADDERS COVERS
7. CONTRACTOR TO USE GRAFFITI RESISTANT PAINT OR ANTI-GRAFFITI COATINGS ON WALLS, BENCHES, LIGHT POLES, SIGNS, ETC.

CONSTRUCTION NOTES

1. (N) PARKING STALL, STRIPED PER CIVIL PLANS AND CITY OF ESCONDIDO STANDARDS
2. (N) BIORETENTION AREA PER CIVIL PLANS
3. (N) ACCESSIBLE HANDICAP SPACE, STRIPED AREA & RAMP
4. (N) ACCESSIBLE PATH OF TRAVEL FROM PUBLIC WAY
5. (N) CONC. CURB PER CIVIL PLANS AND CITY OF ESCONDIDO STANDARDS
6. (N) LANDSCAPED AREA
7. (N) HARDSCAPE AREA, TO MATCH EXISTING
8. VERIFY (E) OR PROVIDE (N) HANDICAP SIGNAGE
9. (N) CONCRETE SIDEWALK
10. (N) ACCESSIBLE PATH OF TRAVEL (DASHED LINE)
11. (N) DRIVE-THRU
12. (N) TRASH ENCLOSURE
13. (N) 48" WIDE STRIPED AREA
14. (N) RETAINING WALL PER CIVIL PLANS
15. (E) HARDSCAPE, NO CHANGE U.N.O.
16. (E) ASPHALT PARKING LOT AND DRIVE AISLES, NO CHANGE U.N.O.
17. (E) SIDEWALK / HARDSCAPE, NO CHANGE U.N.O.
18. (E) ACCESSIBLE HANDICAP SPACE, FOR MN. SPECIFICATIONS.
19. (E) DRIVEWAY AND CURBCUT, NO CHANGE U.N.O.
20. (E) TRASH ENCLOSURE, NO CHANGE U.N.O.
21. (E) ELECTRICAL ROOM TO REMAIN, NO CHANGE U.N.O.
22. (E) CONC. SIDEWALK
23. (E) RETAINING WALL
24. (E) BUS STOP
25. (E) DECORATIVE PAVEMENT
26. (E) CURB TO BE REMOVED
27. (N) ACCESSIBLE RAMP PER CIVIL PLANS

VICINITY MAP (no scale)



CLIENT
Sea Property Management, Co
1333 Camino del Rio South, Suite 310
San Diego, CA 92108
PH: (619) 297.3900 x 19

PROJECT
A PROPOSED COMMERCIAL DEVELOPMENT AT:
SIGNATURE PAVILION
350 W. VALLEY PARKWAY
ESCONDIDO, CA 92025

REVISIONS

NO.	DESCRIPTION	DATE

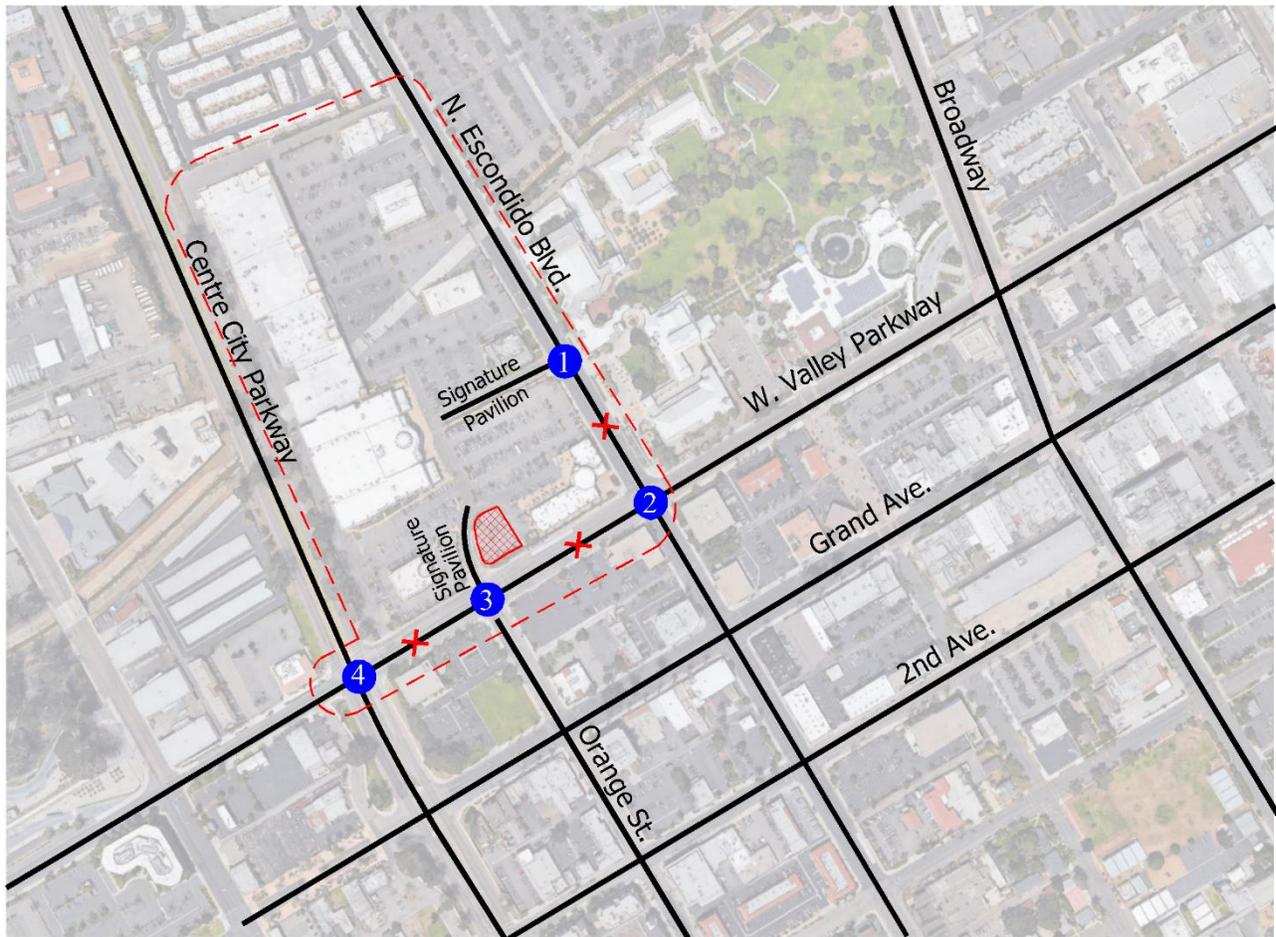
SHEET TITLE

SITE PLAN

DATE	11-29-16	SCALE	AS NOTED
DRAWN BY	CB	CHECKED BY	JR
CHECKED BY	JR	SHEET NUMBER	16142
PROJECT NO.	16142		

A1.0

Figure 2: Project Study Area



Legend

-  = Study Intersection
-  = Study Street Segment
-  = Proposed Project
-  = Study Area Boundary



2.0 Proposed Project

The proposed project will develop a 1,900 square foot (S.F.) drive-through fast food restaurant. The project is located west of North Escondido Boulevard and north of West Valley Parkway. The proposed project was analyzed using the *City of Escondido Traffic Impact Analysis Guideline*, dated October 10, 2013.

Trip Generation and Trip Distribution

Based on the location of the project, *SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates (2002)* were used for establishing a trip generation table. As shown in **Table 1**, the proposed 1,900 S.F. drive-through fast food restaurant is anticipated to generate a total project average daily traffic (ADT) of **1,235** driveway trips with **86 A.M. (43 In / 43 Out)** peak hour trips and **86 P.M. (43 In / 43 Out)** peak hour trips.

Trip distribution is the process of determining traffic percentage splits on the local roadway network. Based on recently attained traffic counts and existing travel patterns, trip distribution for the proposed project was developed. This distribution assumes a certain amount of out-of-direction travel since West Valley Parkway is a one-way road traveling in the westbound direction.

Figure 3 shows the proposed projects trip distribution at the driveways.

Figure 4 shows the proposed project distribution along the studied segments as well as Project Only ADT volumes.

Table 1: Trip Generation Table

Land Use	Intensity	Rate*	ADT	AM					PM				
				Peak%*	Vol.	In %	Out%	In	Out	Peak%*	Vol.	In %	Out%
Fast Food Restaurant (w/ drive-thru)	1.9 /KSF	650 /KSF	1,235	7%	86	50% : 50%	43	43	7%	86	50% : 50%	43	43
Total			1,235		86		43	43		86		43	43
With 12% Pass-By Reduction													
Fast Food Restaurant (w/ drive-thru)	1.9 /KSF	650 /KSF	1,087	7%	76	50% : 50%	38	38	7%	76	50% : 50%	38	38
Total			1,087		76		38	38		76		38	38

Source:

*Rates are used taken from SANDAG "(Not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", April 2002.

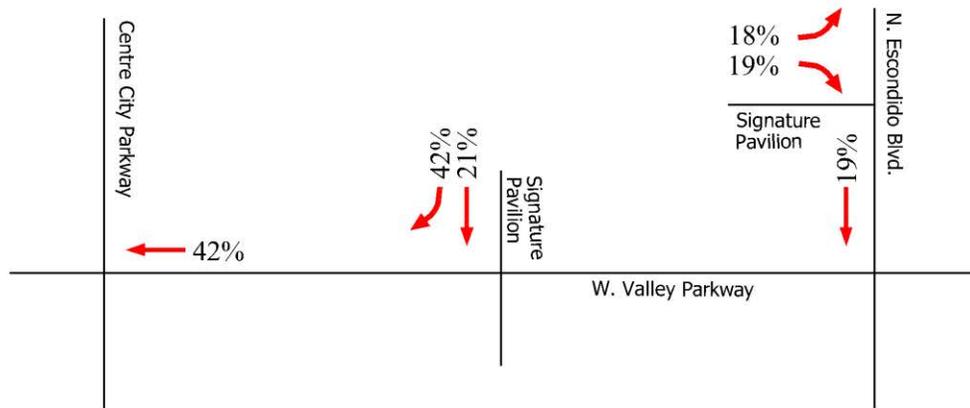
Note:

ADT= Average Daily Trips

KSF = 1,000 Square Feet

Figure 3: Project Distribution at Driveways

Outbound Distribution Percentages



Inbound Distribution Percentages

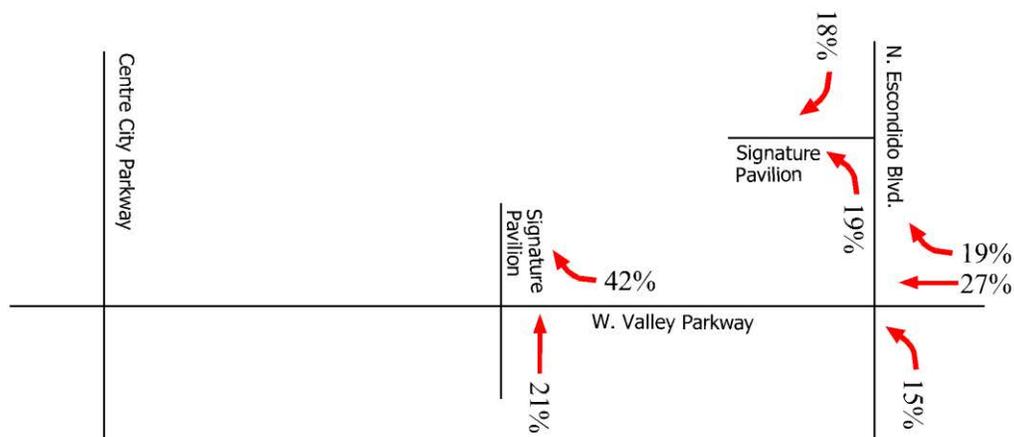
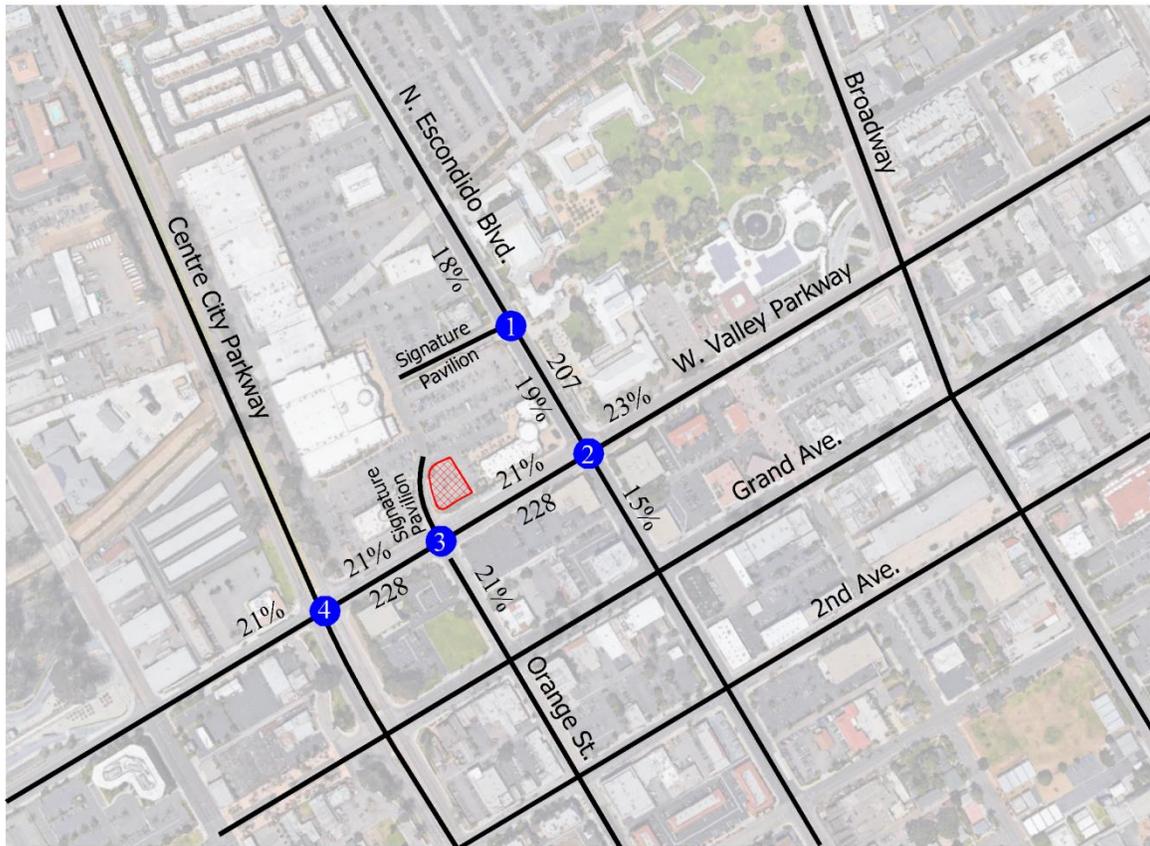


Figure 4: Project Distribution and Project Only Average Daily Traffic Volumes



Legend

= Study Intersection

= Proposed Project

XX,XXX = Average Daily Traffic Volume

XX% = Project Distribution Percentage



Note: A pass-by reduction of 12% has been applied to street segment volumes.

3.0 Existing Conditions

To analyze Existing conditions, traffic volumes were gathered on Thursday March 30, 2017. These volumes were evaluated to determine current operating conditions. Existing traffic counts are provided in **Appendix A**.

Street Segments

The following street segments were analyzed in the Existing and Existing With Project analysis:

- West Valley Parkway (West of Signature Pavilion)
- West Valley Parkway (between Signature Pavilion and North Escondido Boulevard)
- North Escondido Boulevard (between West Valley Parkway and Signature Pavilion)

See **Figure 5** for street classification graphics. Road segment classifications and cross sections are based on the City of Escondido General Plan Circulation Element, dated January 2013. A copy of the circulation element can be found in **Appendix A**.

Figure 6 displays the Existing ADT volumes for the study street segments.

For this analysis, street classification thresholds are based off of the *City of Escondido Proposed Level of Service Standards Street Segments Average Daily Trip Thresholds*, found in the *City of Escondido Traffic Impact Analysis Guideline*, dated October 10, 2013.

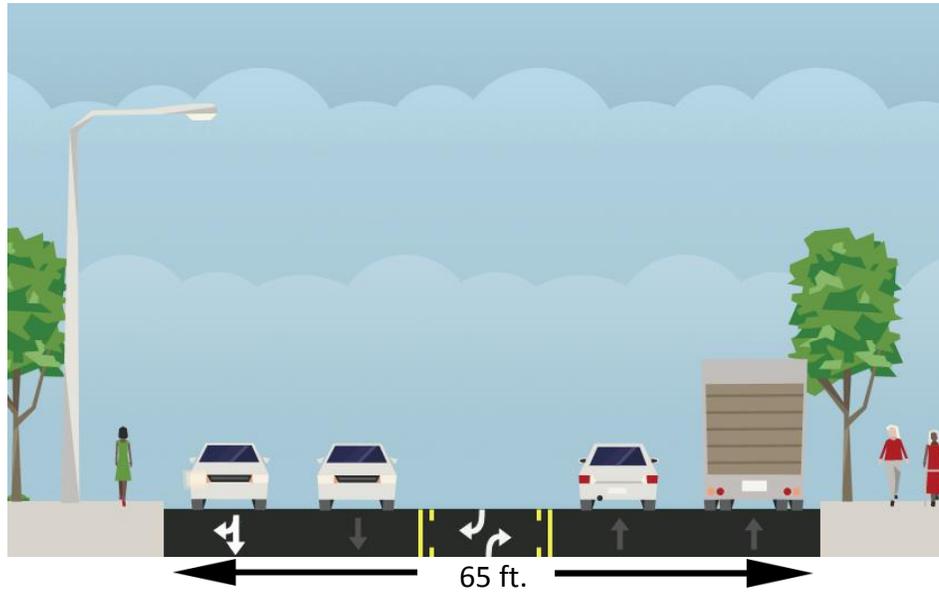
Street Classification	Lanes	Cross Sections	Level of Service				
			A	B	C	D	E
Prime Arterial	(8 lanes)	116/136 (NP)	23,800	37,800	51,800	62,300	70,000
	(6 lanes)	106/126 (NP)	20,400	32,400	44,400	53,400	60,000
Major Road	(6 lanes)	90/110 (NP)	17,000	27,000	37,000	44,500	50,000
	(4 lanes)	82/102 (NP)	12,600	20,000	27,400	32,900	37,000
Collector	(4 lanes)	64/84 (NP)	11,600	18,500	25,300	30,400	34,200
	(4 lanes)	(WP)	6,800	10,800	14,800	17,800	20,000
Local Collector	(2 lanes)	42/66 (NP)	5,100	8,100	11,100	13,400	15,000
		(WP)	3,400	5,400	7,400	8,900	10,000

Source: *City of Escondido Traffic Impact Analysis Guidelines*

Based on Existing volumes and the City's street classification thresholds, all study street segments are anticipated to operate at an acceptable level of service (LOS) D or better. See **Table 4** for the Existing street segment analysis.

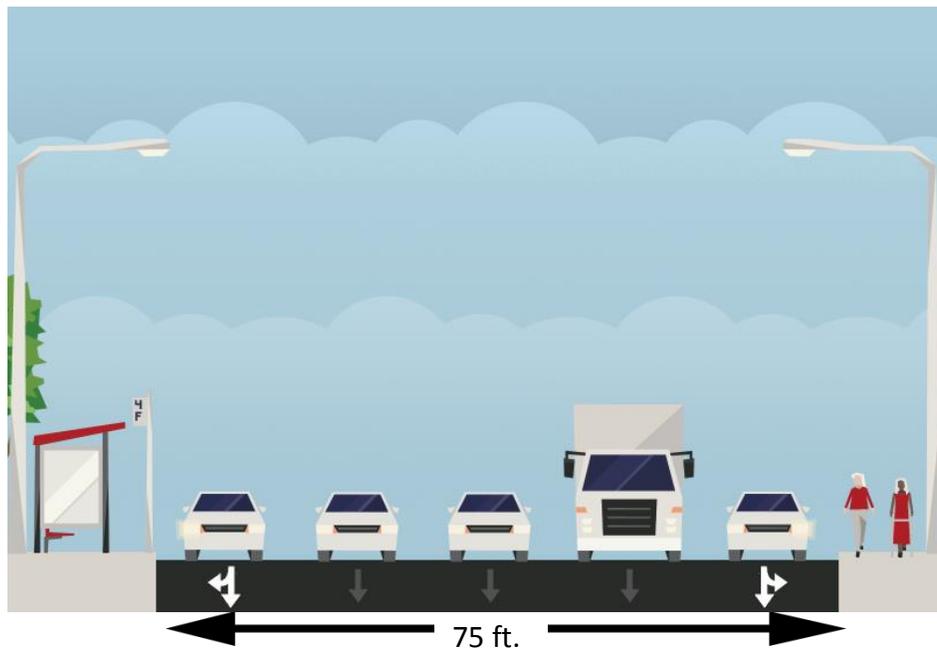
Figure 5: Street Classifications

North Escondido Boulevard



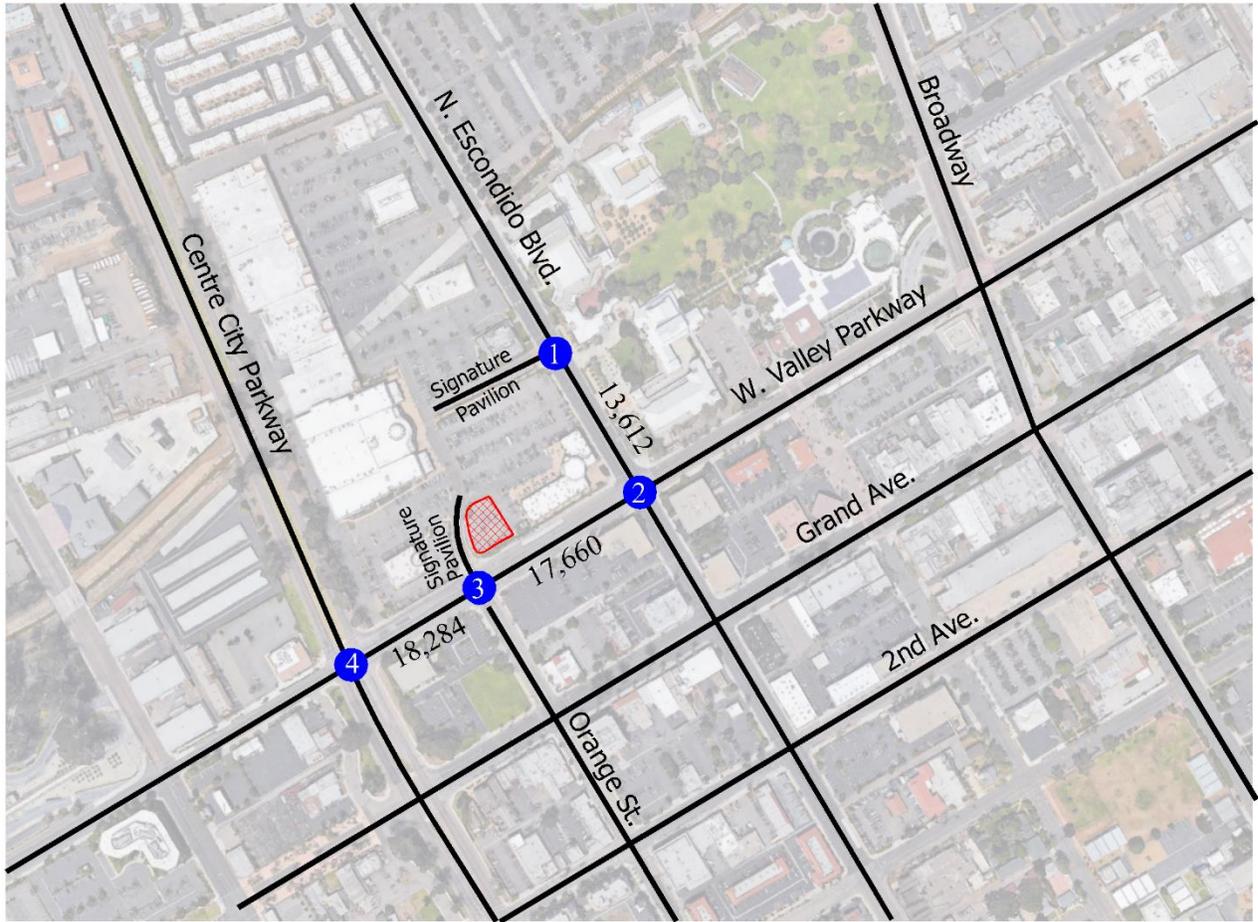
4 Lane Collector

West Valley Parkway



5 Lane Collector

Figure 6: Existing Average Daily Traffic Volumes



Legend

= Study Intersection

= Proposed Project

XX,XXX = Average Daily Traffic Volume



Table 4: Existing Street Segment LOS Summary

Road	Segment	Class.	Cap.	Volume	V/C	LOS
N. Escondido Blvd.	W. Valley Parkway to Signature Pavilion	4-C	34,200	13,612	0.40	B
W. Valley Parkway	West of Signature Pavilion	5-C	37,500	18,284	0.49	B
	Signature Pavilion to N. Escondido	5-C	37,500	17,660	0.47	B

Legend:

Class. = Functional Class

Count Date: March 30, 2017

Cap. = Capacity

LOS = Level of Service

4-C = 4-Lane Collector

5-C = 5 Lane Collector

Intersections

The following intersections were analyzed in this study for both Existing and Existing With Project conditions:

- North Escondido Boulevard at Signature Pavilion
- North Escondido Boulevard at West Valley Parkway
- West Valley Parkway at Signature Pavilion
- Centre City Parkway at West Valley Parkway

Existing peak hour traffic volumes at the studied intersections can be found in **Figure 6**. The average delay and level of service at the study intersections in the AM and PM peak hour were analyzed using a software package called *Synchro*, which is an application of the Highway Capacity Manual methodology. Refer to **Table 5** for the Existing intersection level of service analysis. As shown in the table, the study intersections currently operate at an acceptable LOS D or better in both the AM and PM peak hour setting. Refer to **Appendix B** for Existing Synchro worksheets.

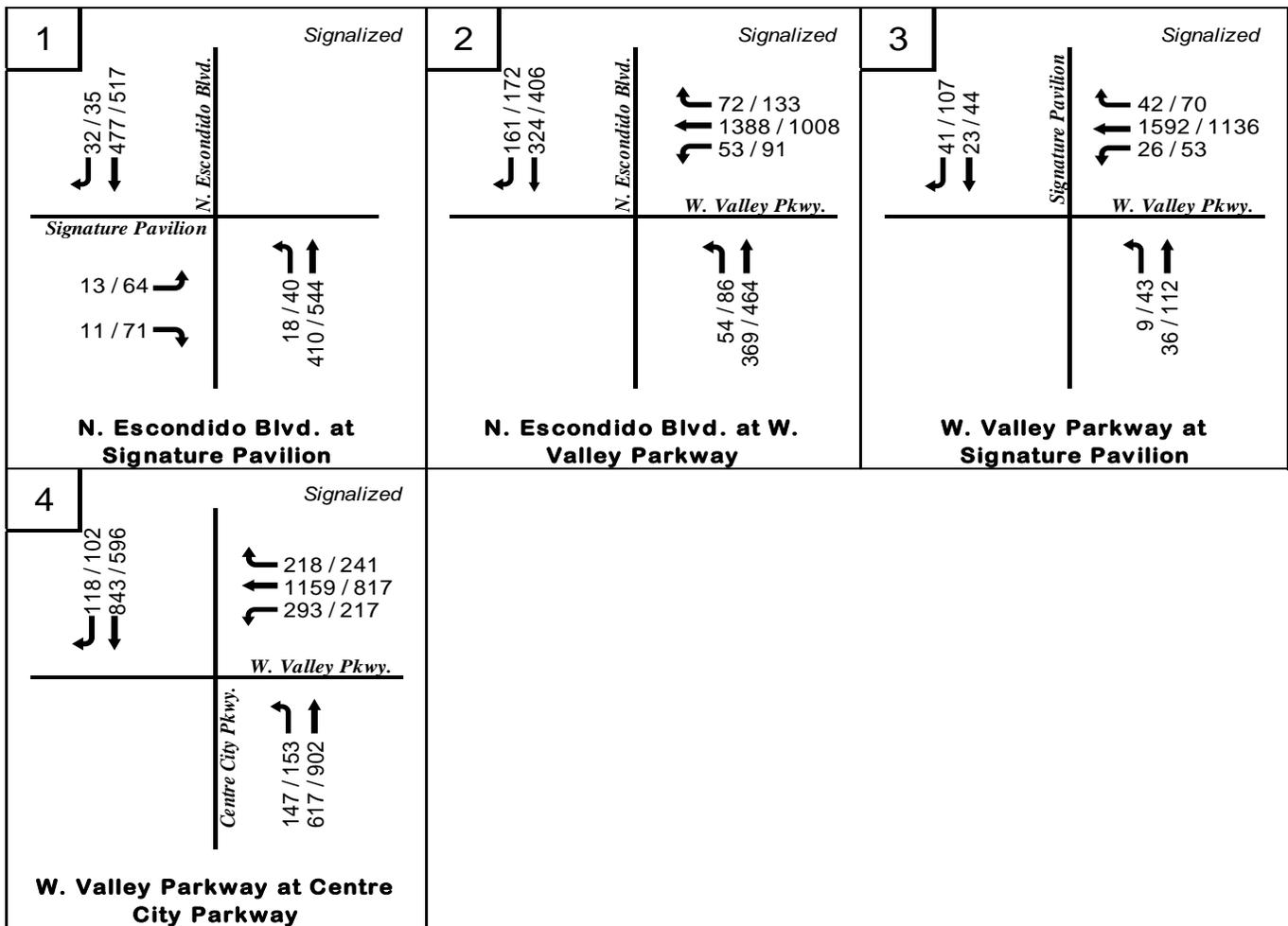
Table 5: Existing Intersection LOS Summary

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	N. Escondido Blvd. at Signature Pavilion	Signalized	4.0	A	10.4	B
2	N. Escondido Blvd. at W. Valley Parkway	Signalized	33.0	C	36.9	D
3	W. Valley Parkway at Signature Pavilion	Signalized	27.4	C	30.0	C
4	W. Valley Parkway at Centre City Parkway	Signalized	36.1	D	32.2	C

Notes:

LOS = Level of Service

Figure 6: Existing AM / PM Peak Hour Volumes



XX / XX = AM / PM Peak hour volumes

Transit

A bus stop is located adjacent to the proposed project site on West Valley Parkway. The West Valley Parkway & North Escondido Boulevard bus stop services Line 350, Line 351, Line 352, Line 353, Line 354, Line 355, Line 356, Line 357, Line 358, Line 359, Line 371, Line 372, Line 388, and Line 389. Additionally, the Escondido Transit Center is located roughly 0.19 miles west on West Valley Parkway. Transit information can be found in **Appendix C**.

Pedestrians

Pedestrian access to and from the proposed project is currently provided via sidewalks on both sides of North Escondido Boulevard as well as West Valley Parkway. Crosswalks are located on all legs of the intersection of West Valley Parkway at North Escondido Boulevard. At the intersection of West Valley Parkway and Signature Pavilion, crosswalks are provided on all legs. At the intersection of North Escondido Boulevard at Signature Pavilion, crosswalks are provided on all legs except for the north leg. Sidewalks and crosswalks are also provided within Escondido's Signature Pavilion itself.

Bicycles

Bike lanes do not currently exist on North Escondido Boulevard or West Valley Parkway.

4.0 Existing With Project Conditions

The Existing With Project traffic volumes were derived by adding the proposed project only traffic volumes with the Existing traffic volumes. This was done to determine if the addition of the proposed project would create any significant impacts.

Street Segments

Figure 7 displays the Existing With Project volumes for the study street segments. A 12% pass-by reduction has been applied to the Existing With Project street segment volumes.

Based on Existing With Project volumes and the City's street classification thresholds, all study street segments are anticipated to operate at an acceptable level of service (LOS) D or better. See **Table 6** for the Existing With Project street segment analysis. No mitigation is required at this time.

An Existing and Existing With Project street segment comparison can be found in **Table 7**.

Intersections

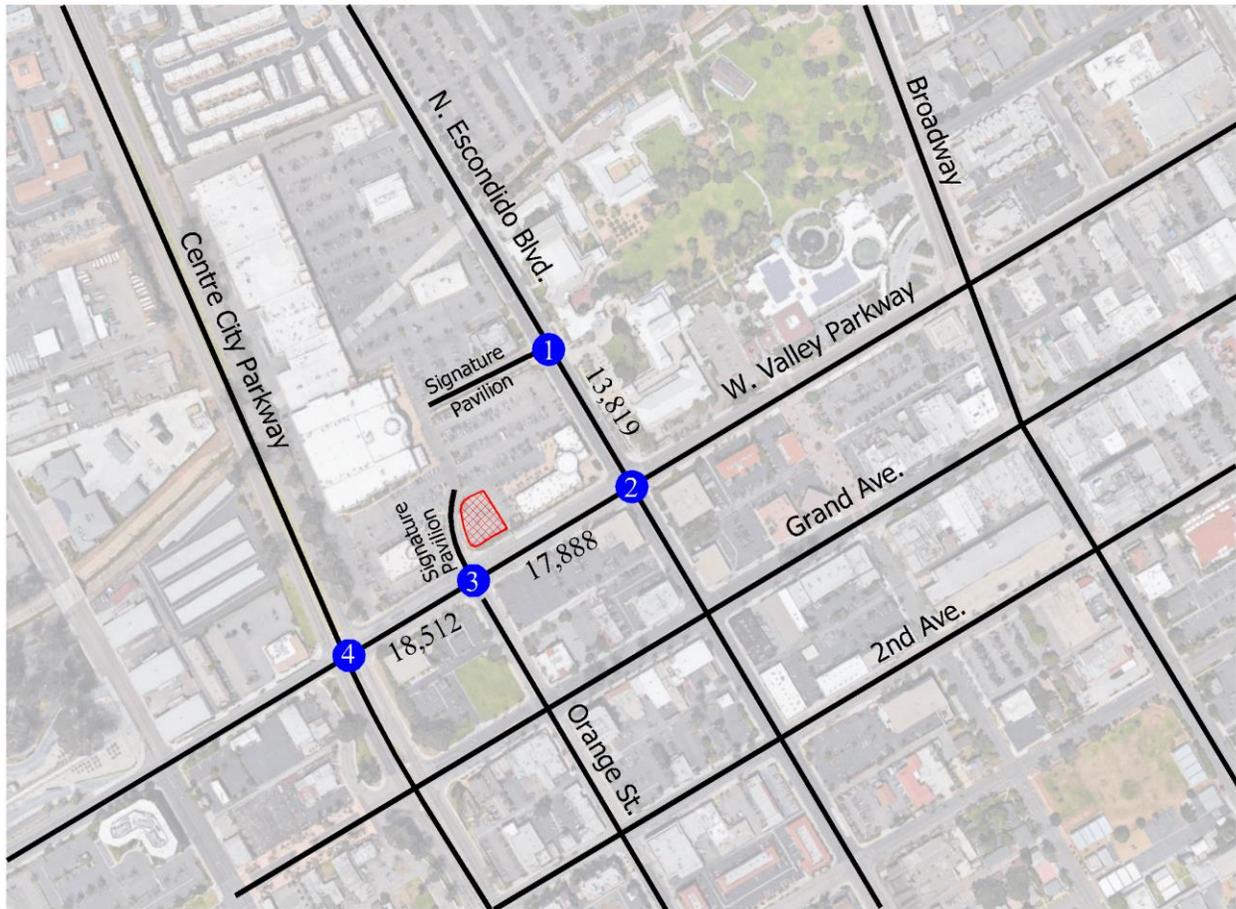
Existing With Project peak hour traffic volumes at the study intersections can be found in **Figure 8**. The Existing With Project intersection levels of service analysis can be found in **Table 8**. As shown in the table, the study intersections currently operate at an acceptable LOS D or better in both the AM and PM peak hour setting.

Table 9 displays the Existing and Existing With Project intersection LOS comparison.

No mitigation is required at this time.

See **Appendix D** for Existing With Project Synchro worksheets. In addition, queueing analysis worksheets are provided in **Appendix D**.

Figure 7: Existing With Project Average Daily Traffic Volumes



Legend

= Study Intersection

= Proposed Project

XX,XXX = Average Daily Traffic Volume



Note: A pass-by reduction of 12% has been applied to street segment volumes.

Table 6: Existing With Project Street Segment LOS Summary

Road	Segment	Class.	Cap.	Volume	V/C	LOS
N. Escondido Blvd.	W. Valley Parkway to Signature Pavilion	4-C	34,200	13,819	0.40	B
W. Valley Parkway	West of Signature Pavilion	5-C	37,500	18,512	0.49	B
	Signature Pavilion to N. Escondido	5-C	37,500	17,888	0.48	B

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

4-C = 4-Lane Collector

5-C = 5 Lane Collector

Table 7: Existing and Existing With Project Street Segment LOS Comparison

Road	Segment	Cap.	Class.	Existing			Existing + Project			Δ V/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
N. Escondido Blvd.	W. Valley Parkway to Signature Pavilion	34,200	4-C	B	13,612	0.40	B	13,819	0.40	0.006	<i>NO</i>
W. Valley Parkway	West of Signature Pavilion	37,500	5-C	B	18,284	0.49	B	18,512	0.49	0.006	<i>NO</i>
	Signature Pavilion to N. Escondido	37,500	5-C	B	17,660	0.47	B	17,888	0.48	0.006	<i>NO</i>

Legend:

LOS= Level of Service

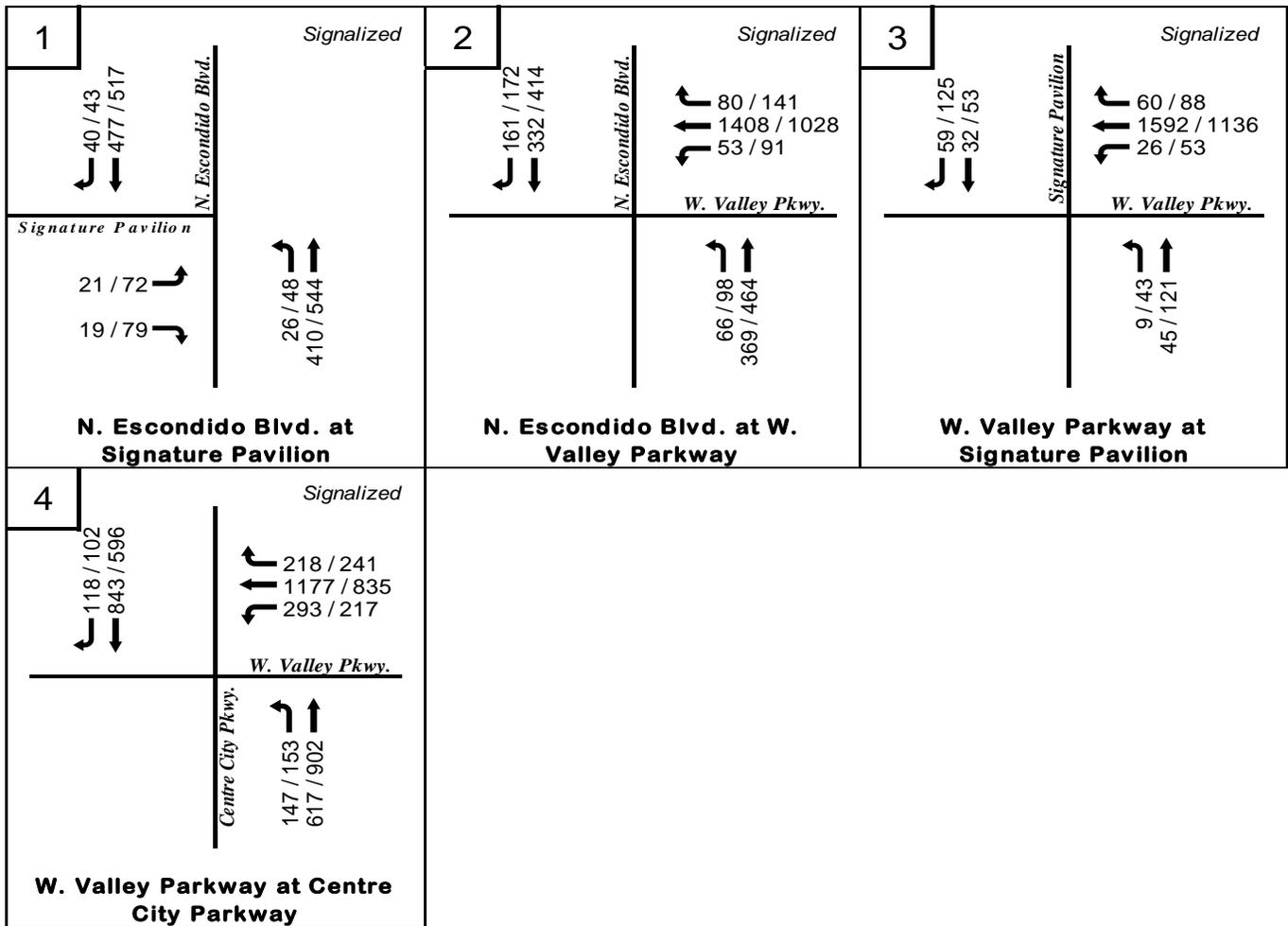
V/C= Volume to Capacity Ratio

 Δ V/C= Change in V/C ratio

4-C = 4-Lane Collector

5-C = 5 Lane Collector

Figure 8: Existing With Project AM / PM Peak Hour Volumes



XX / XX = AM / PM Peak hour volumes

Table 8: Existing With Project Intersection LOS Summary

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	N. Escondido Blvd. at Signature Pavilion	Signalized	5.6	A	11.5	B
2	N. Escondido Blvd. at W. Valley Parkway	Signalized	33.5	C	37.9	D
3	W. Valley Parkway at Signature Pavilion	Signalized	29.4	C	30.6	C
4	W. Valley Parkway at Centre City Parkway	Signalized	39.8	D	32.3	C

Notes:

Delay = seconds per vehicle

LOS = Level of Service

Table 9: Existing and Existing With Project Intersection LOS Comparison

#	Intersection	Existing				Existing + Project (Buildout)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	N. Escondido Blvd. at Signature Pavilion	4	A	10.4	B	5.6	A	1.6	No	11.5	B	1.1	No
2	N. Escondido Blvd. at W. Valley Parkway	33	C	36.9	D	33.5	C	0.5	No	37.9	D	1.0	No
3	W. Valley Parkway at Signature Pavilion	27.4	C	30	C	29.4	C	2.0	No	30.6	C	0.6	No
4	W. Valley Parkway at Centre City Parkway	36.1	D	32.2	C	39.8	D	3.7	No	32.3	C	0.1	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

5.0 Project Access

The proposed project has two (2) main access points that are located on the north side of West Valley Parkway and on the west side of North Escondido Boulevard. All project traffic will be distributed through these access points and will operate acceptably. As shown in **Table 8**.

6.0 Conclusion

The proposed project consists of 1,900 S.F. and is located within the Signature Pavilion center. The project is bounded by West Valley Parkway to the south and North Escondido Boulevard to the east.

Street Segments

Based on the analysis, the study street segments, along West Valley Parkway and North Escondido Boulevard, are anticipated to operate at an acceptable LOS D or better in both the Existing and Existing With Project scenarios.

Intersections

Based on the analysis, the study intersections located at Signature Pavilion and North Escondido Boulevard, North Escondido Boulevard and West Valley Parkway, Signature Pavilion and West Valley Parkway, and West Valley Parkway and Centre City Parkway are anticipated to operate at an acceptable LOS D or better for both AM and PM peak hours in the Existing and Existing With Project scenarios.

As shown, the study street segments and study intersections are not significantly impacted as result of the proposed project.

Appendix A

Existing Traffic Count Data and General Plan Circulation Element

THURSDAY - MARCH 30, 2017

CITY: ESCONDIDO

PROJECT: PTD17-0331-02

VALLEY PKWY - CENTRE CITY TO SIGNATURE PAVILIAN.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00				26	12:00				324		
00:15				11	12:15				321		
00:30				23	12:30				324		
00:45				7	67	67			325	1294	1294
01:00				15	13:00				283		
01:15				13	13:15				304		
01:30				16	13:30				306		
01:45				5	49	49			352	1245	1245
02:00				6	14:00				277		
02:15				14	14:15				303		
02:30				8	14:30				302		
02:45				12	40	40			301	1183	1183
03:00				8	15:00				348		
03:15				10	15:15				365		
03:30				10	15:30				338		
03:45				16	44	44			297	1348	1348
04:00				18	16:00				315		
04:15				22	16:15				305		
04:30				37	16:30				312		
04:45				45	122	122			269	1201	1201
05:00				58	17:00				366		
05:15				77	17:15				311		
05:30				99	17:30				344		
05:45				170	404	404			285	1306	1306
06:00				196	18:00				215		
06:15				235	18:15				239		
06:30				276	18:30				216		
06:45				344	1051	1051			218	888	888
07:00				331	19:00				198		
07:15				421	19:15				190		
07:30				405	19:30				176		
07:45				418	1575	1575			156	720	720
08:00				388	20:00				153		
08:15				362	20:15				160		
08:30				262	20:30				116		
08:45				255	1267	1267			109	538	538
09:00				210	21:00				111		
09:15				251	21:15				103		
09:30				233	21:30				103		
09:45				219	913	913			87	404	404
10:00				225	22:00				85		
10:15				232	22:15				52		
10:30				268	22:30				50		
10:45				263	988	988			49	236	236
11:00				314	23:00				47		
11:15				308	23:15				27		
11:30				310	23:30				24		
11:45				340	1272	1272			31	129	129

Total Vol. 7792 **7792** 10492 **10492**

Daily Totals				
NB	SB	EB	WB	Combined
			18284	18284

Split %	AM		PM	
	100.0%	42.6%	100.0%	57.4%
Peak Hour	07:15	07:15	14:45	14:45
Volume	1632	1632	1352	1352
P.H.F.	0.97	0.97	0.93	0.93

THURSDAY - MARCH 30, 2017

CITY: ESCONDIDO

PROJECT: PTD17-0331-02

VALLEY PKWY - SIGNATURE PAVILIAN TO TO ESCONDITO BL.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00				25	12:00				327		
00:15				7	12:15				306		
00:30				21	12:30				323		
00:45				5	58	58			299	1255	1255
01:00				14	13:00				274		
01:15				7	13:15				289		
01:30				13	13:30				289		
01:45				4	38	38			323	1175	1175
02:00				9	14:00				271		
02:15				11	14:15				288		
02:30				9	14:30				280		
02:45				10	39	39			279	1118	1118
03:00				8	15:00				349		
03:15				9	15:15				328		
03:30				11	15:30				284		
03:45				20	48	48			262	1223	1223
04:00				19	16:00				305		
04:15				17	16:15				284		
04:30				41	16:30				298		
04:45				47	124	124			278	1165	1165
05:00				57	17:00				352		
05:15				70	17:15				288		
05:30				104	17:30				339		
05:45				158	389	389			284	1263	1263
06:00				188	18:00				229		
06:15				264	18:15				226		
06:30				283	18:30				211		
06:45				331	1066	1066			192	858	858
07:00				325	19:00				168		
07:15				431	19:15				191		
07:30				405	19:30				159		
07:45				422	1583	1583			142	660	660
08:00				405	20:00				131		
08:15				362	20:15				137		
08:30				288	20:30				113		
08:45				255	1310	1310			90	471	471
09:00				219	21:00				101		
09:15				241	21:15				95		
09:30				218	21:30				79		
09:45				212	890	890			65	340	340
10:00				252	22:00				75		
10:15				231	22:15				52		
10:30				258	22:30				46		
10:45				273	1014	1014			43	216	216
11:00				310	23:00				44		
11:15				304	23:15				23		
11:30				302	23:30				20		
11:45				332	1248	1248			22	109	109

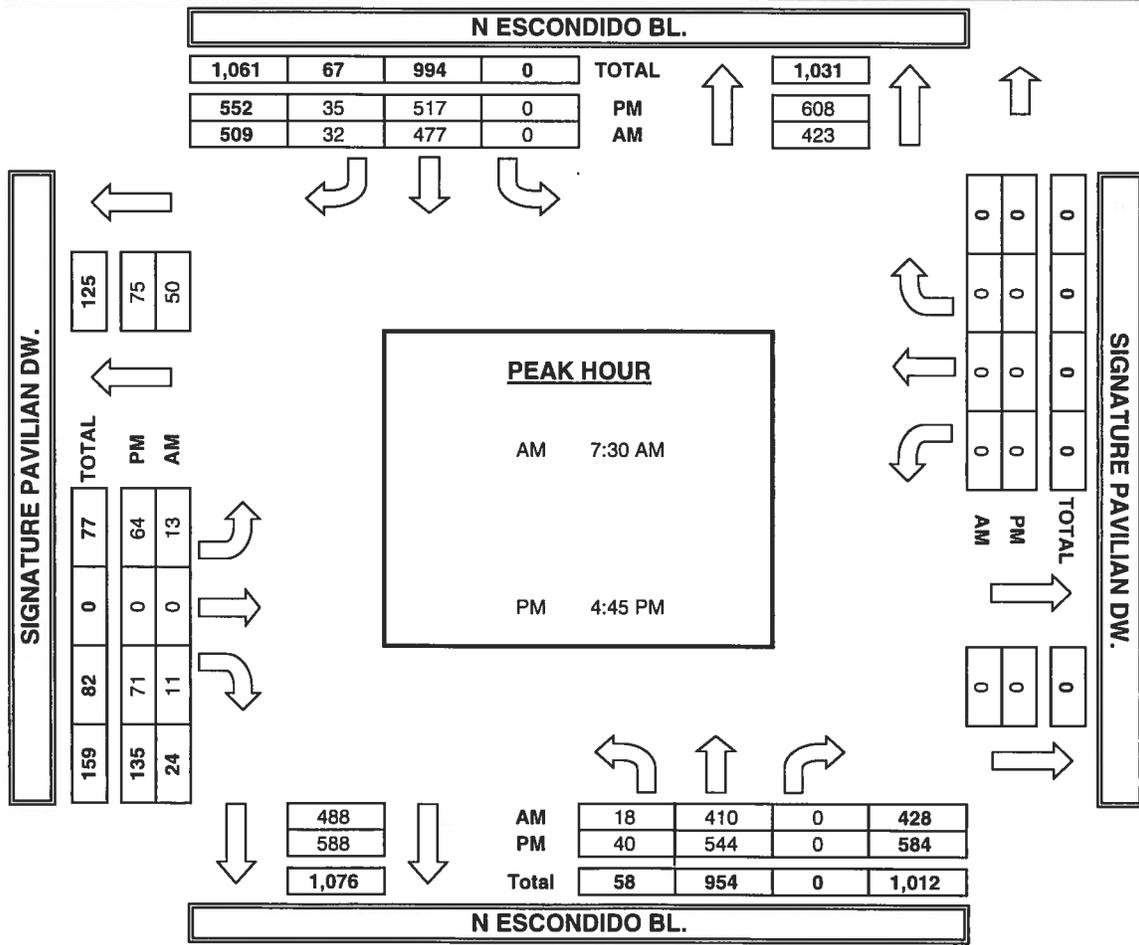
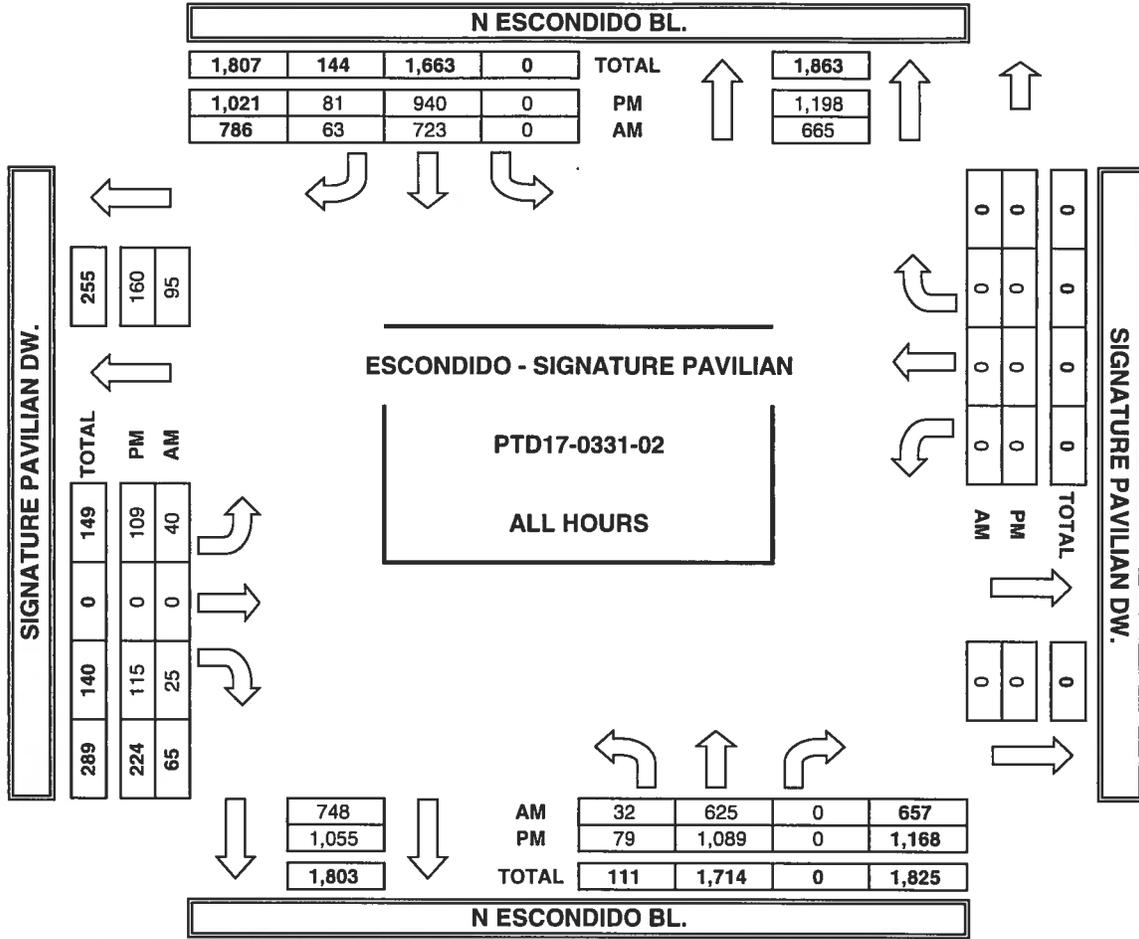
Total Vol. 7807 **7807** 9853 **9853**

Daily Totals			
NB	SB	EB	WB
			17660
			17660

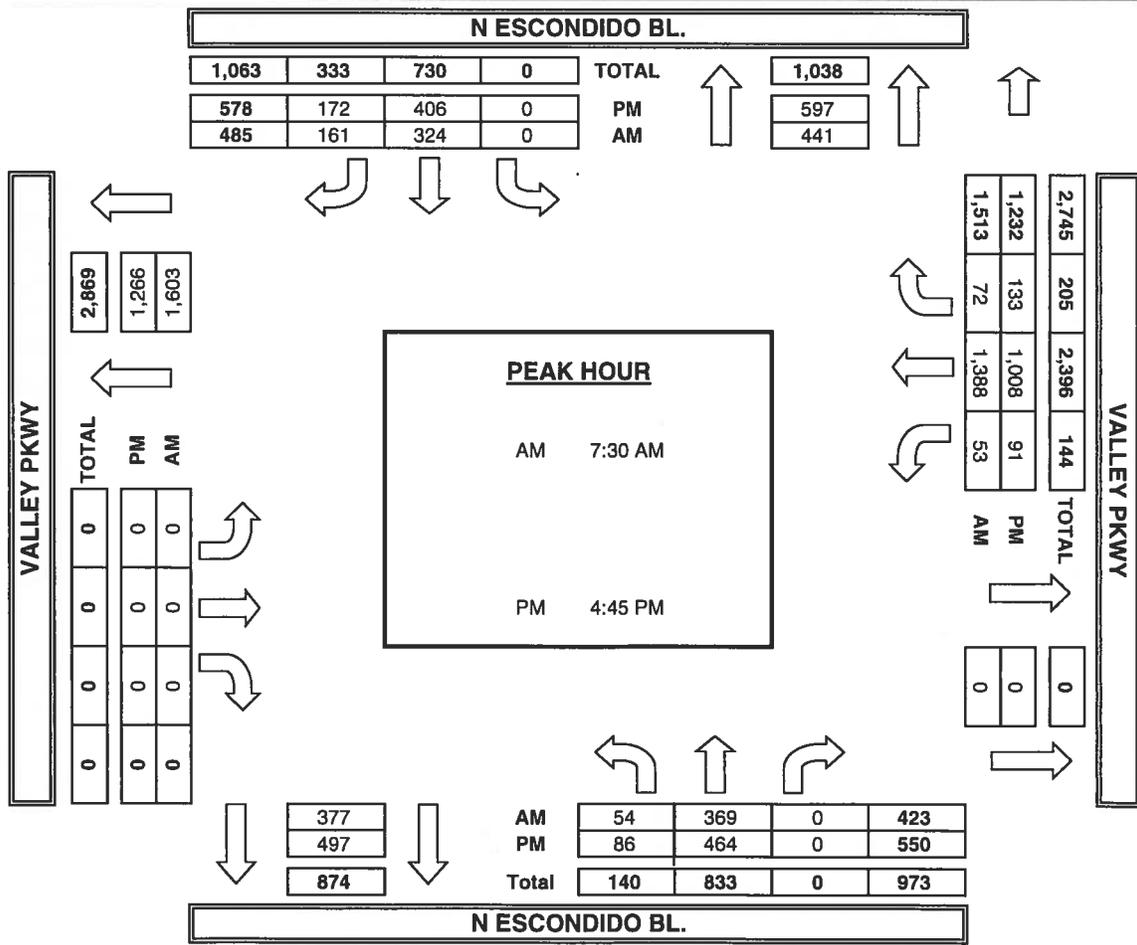
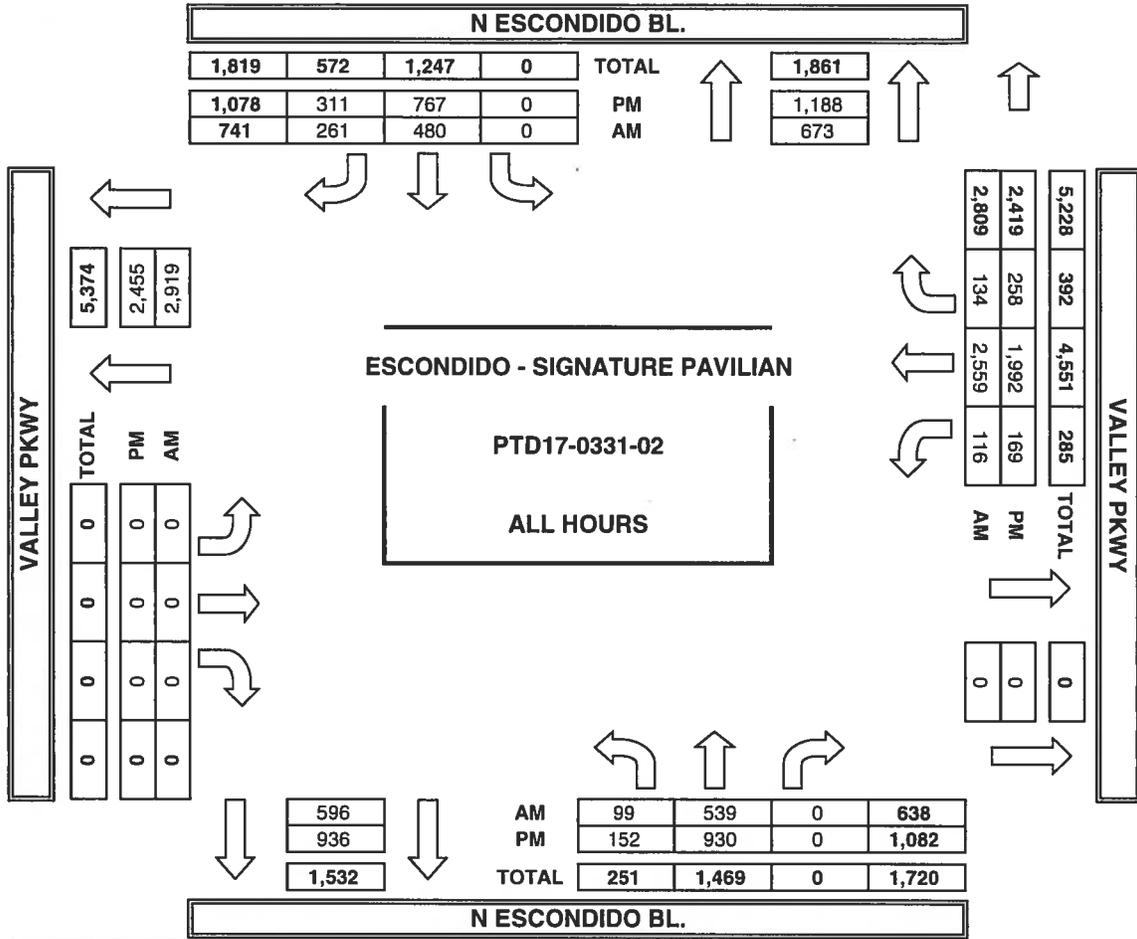
	AM		PM	
Split %	100.0%	44.2%	100.0%	55.8%
Peak Hour	07:15	07:15	17:00	17:00
Volume	1663	1663	1263	1263
P.H.F.	0.96	0.96	0.90	0.90

PACIFIC TECHNICAL DATA

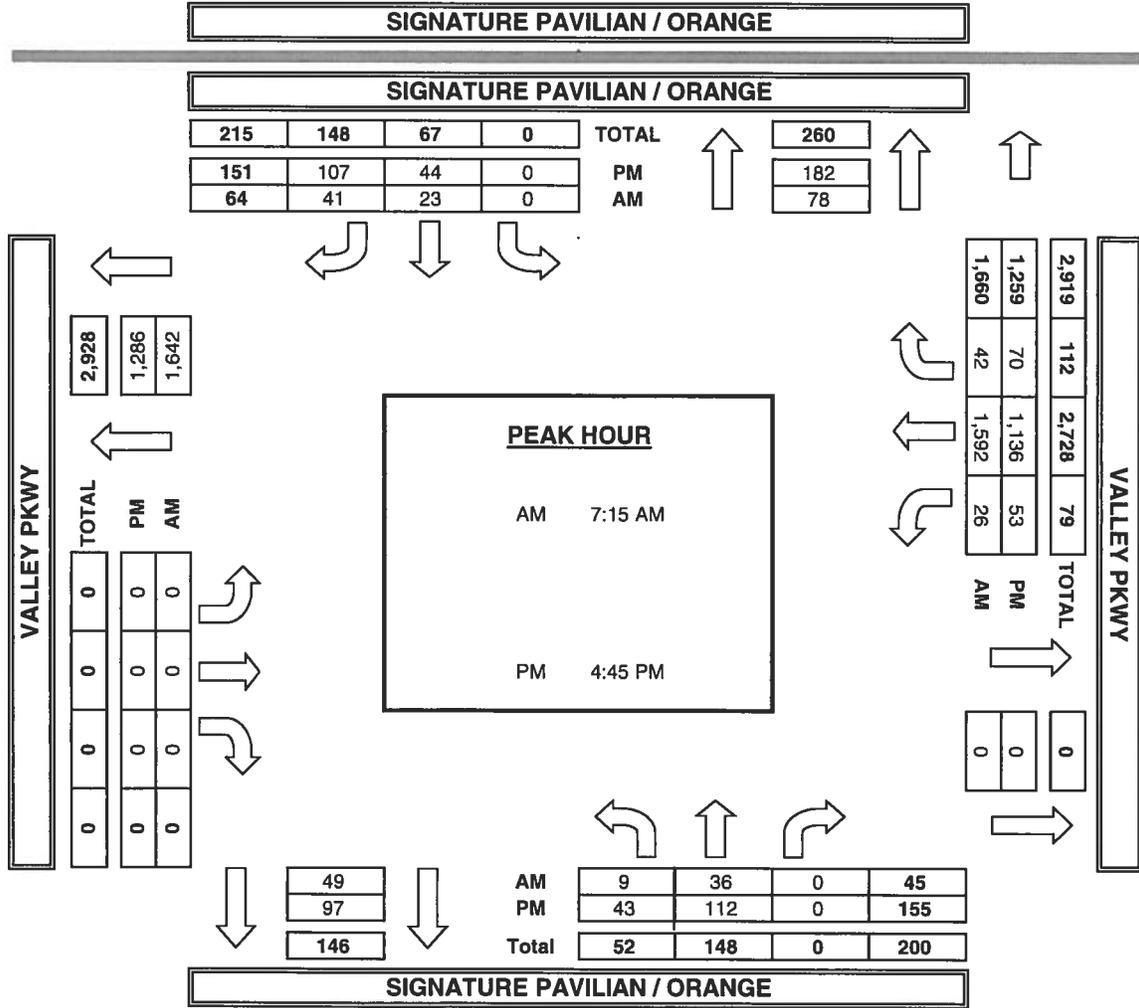
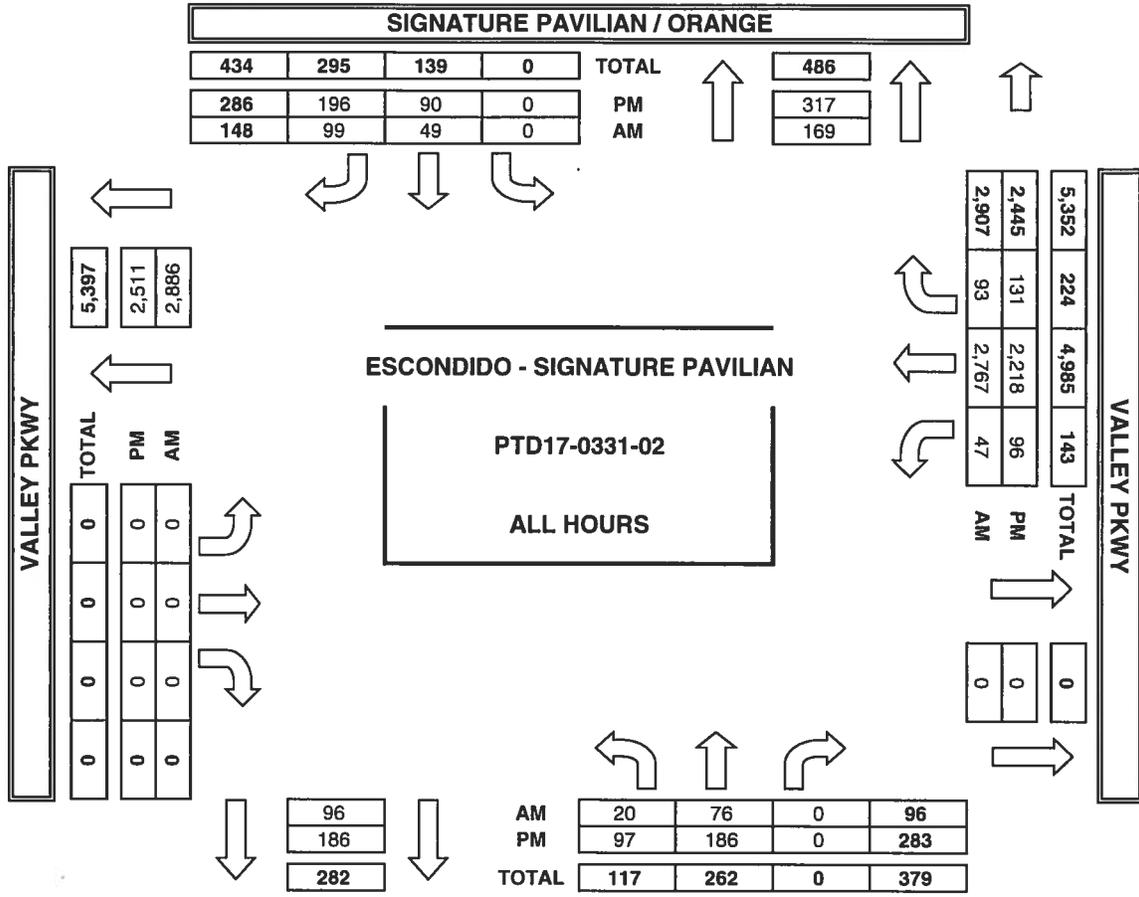
PACIFIC TECHNICAL DATA
TURNING MOVEMENT COUNTS



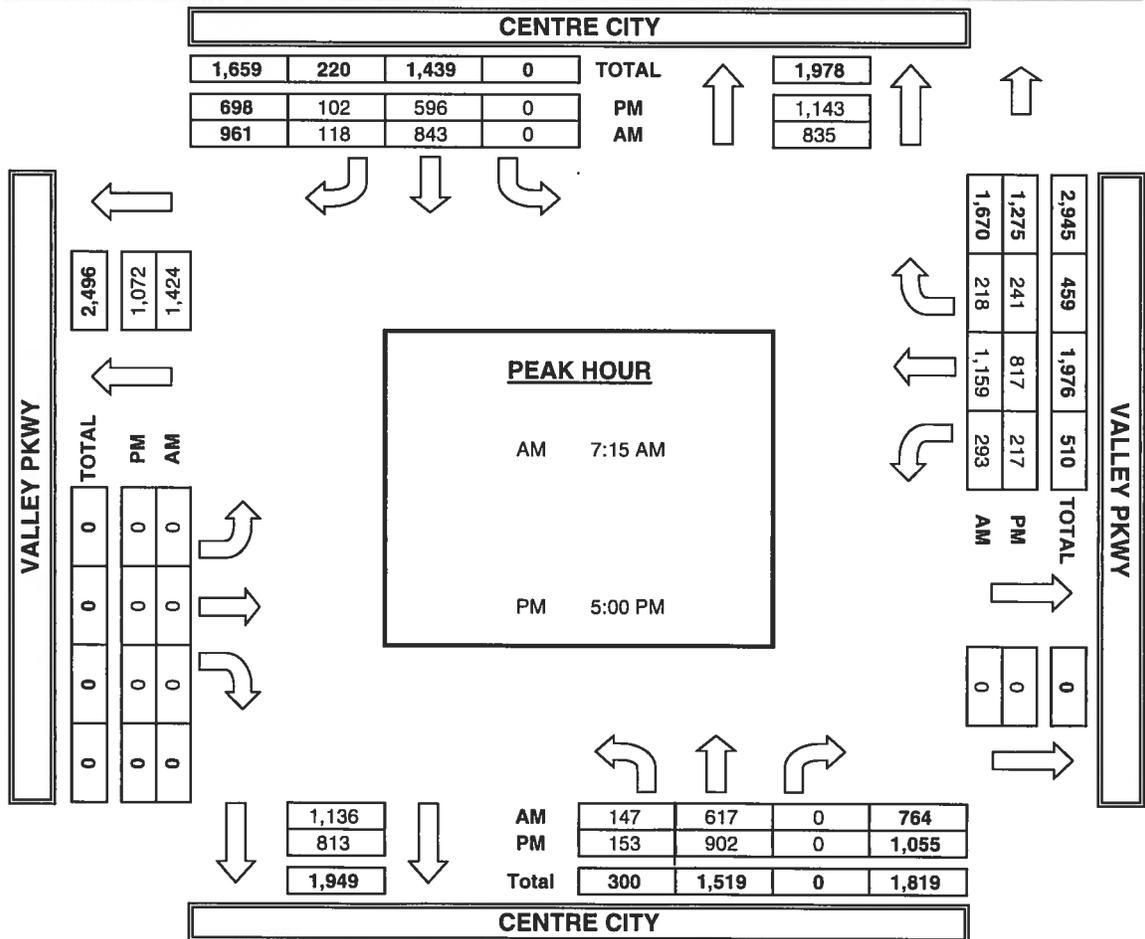
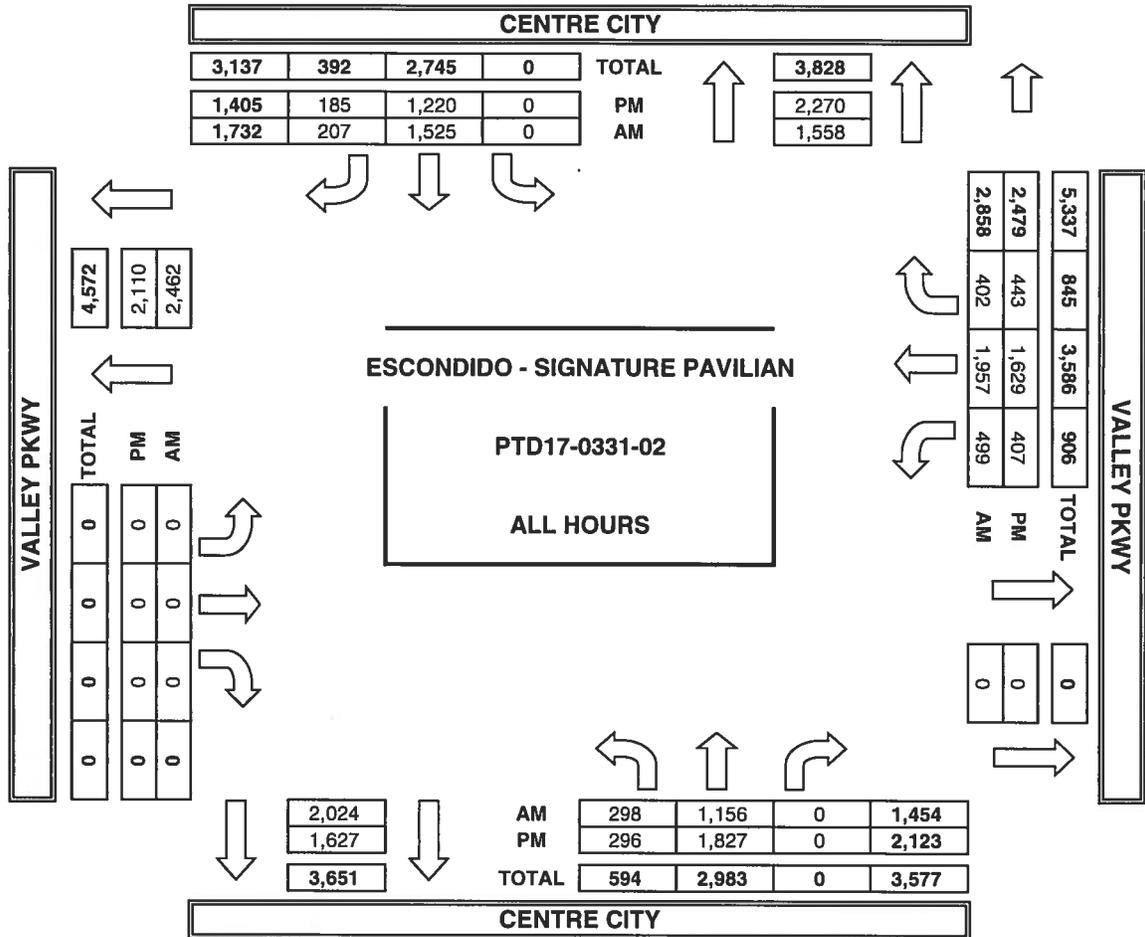
PACIFIC TECHNICAL DATA
TURNING MOVEMENT COUNTS

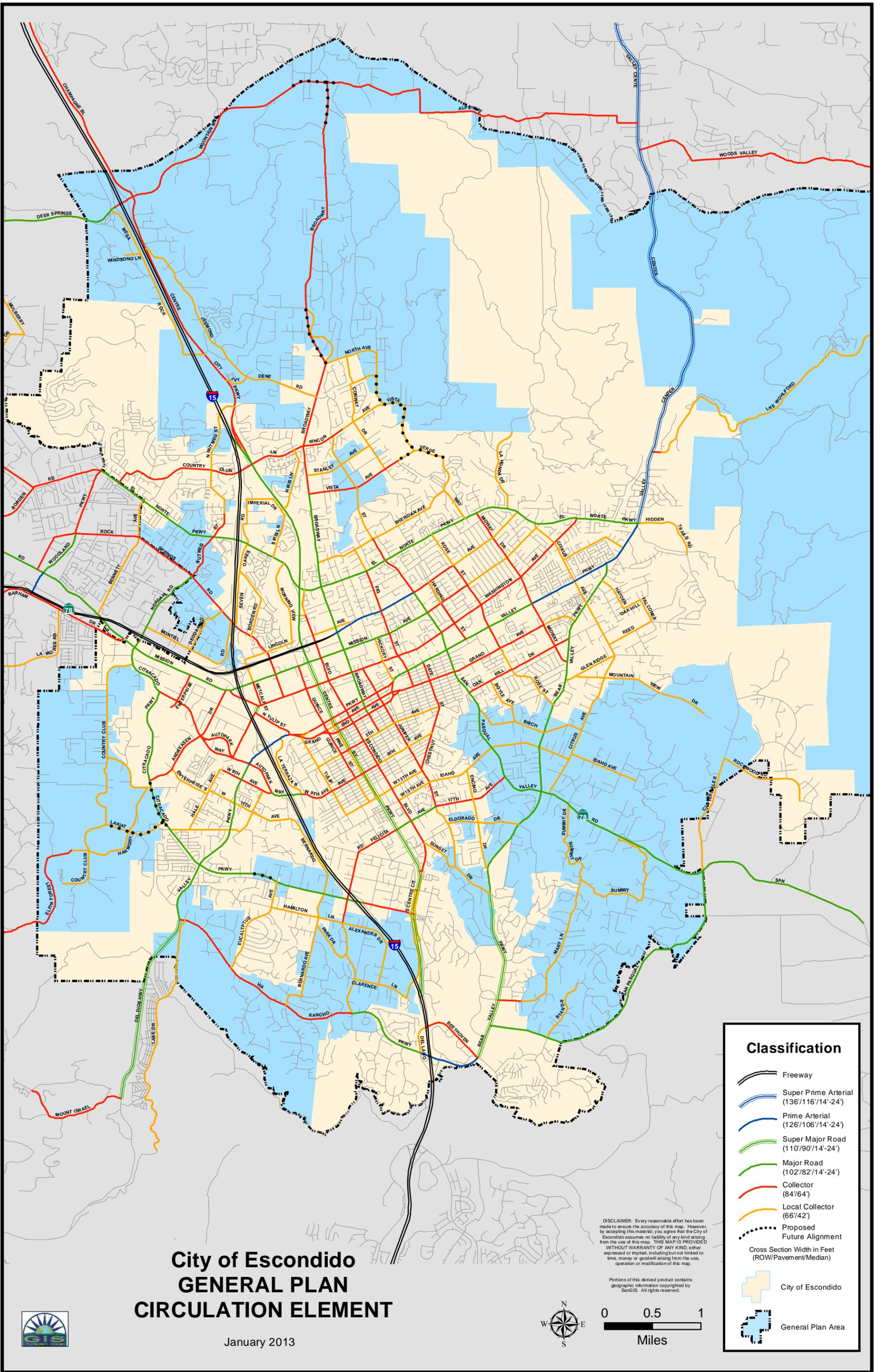


PACIFIC TECHNICAL DATA
TURNING MOVEMENT COUNTS



PACIFIC TECHNICAL DATA
TURNING MOVEMENT COUNTS





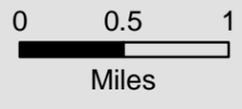
City of Escondido GENERAL PLAN CIRCULATION ELEMENT

January 2013



DISCLAIMER: Every reasonable effort has been made to ensure the accuracy of the map. However, by accepting this material, you agree that the City of Escondido assumes no liability of any kind arising from the use of this map. THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to time, money or good will arising from the use, operation or modification of this map.

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Classification

- Freeway
- Super Prime Arterial (136'/116'/14'-24')
- Prime Arterial (126'/106'/14'-24')
- Super Major Road (110'/90'/14'-24')
- Major Road (102'/82'/14'-24')
- Collector (84'/64')
- Local Collector (66'/42')
- Proposed Future Alignment

Cross Section Width in Feet (ROW/Pavement/Median)

- City of Escondido
- General Plan Area

Appendix B

Existing Synchro Worksheets

HCM 2010 Signalized Intersection Summary
 1: N. Escondido Blvd. & Signature Pavilion

Existing AM
 04/12/2017

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	13	11	18	410	477	32		
Future Volume (veh/h)	13	11	18	410	477	32		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	14	12	20	446	518	35		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	51	46	43	3186	2828	191		
Arrive On Green	0.03	0.03	0.02	0.90	0.84	0.84		
Sat Flow, veh/h	1774	1583	1774	3632	3450	226		
Grp Volume(v), veh/h	14	12	20	446	272	281		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1814		
Q Serve(g_s), s	0.9	0.9	1.3	1.7	3.4	3.5		
Cycle Q Clear(g_c), s	0.9	0.9	1.3	1.7	3.4	3.5		
Prop In Lane	1.00	1.00	1.00			0.12		
Lane Grp Cap(c), veh/h	51	46	43	3186	1491	1528		
V/C Ratio(X)	0.27	0.26	0.46	0.14	0.18	0.18		
Avail Cap(c_a), veh/h	325	290	266	3186	1491	1528		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00		
Uniform Delay (d), s/veh	57.0	57.0	57.8	0.7	1.8	1.8		
Incr Delay (d2), s/veh	2.1	2.2	2.7	0.1	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.5	0.8	0.7	0.8	1.8	1.8		
LnGrp Delay(d),s/veh	59.1	59.2	60.5	0.8	2.0	2.0		
LnGrp LOS	E	E	E	A	A	A		
Approach Vol, veh/h	26		466		553			
Approach Delay, s/veh	59.2		3.3		2.0			
Approach LOS	E		A		A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	2		4		5		6	
Phs Duration (G+Y+Rc), s	112.5		7.5		6.9		105.6	
Change Period (Y+Rc), s	4.5		4.0		4.0		4.5	
Max Green Setting (Gmax), s	89.5		22.0		18.0		67.5	
Max Q Clear Time (g_c+I1), s	3.7		2.9		3.3		5.5	
Green Ext Time (p_c), s	15.4		0.0		0.0		14.9	
Intersection Summary								
HCM 2010 Ctrl Delay			4.0					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 2: N. Escondido Blvd. & W. Valley Parkway

Existing AM
 04/12/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					←←←←		↖	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	53	1388	72	54	369	0	0	324	161
Future Volume (veh/h)	0	0	0	53	1388	72	54	369	0	0	324	161
Number				1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				58	1509	78	59	401	0	0	352	175
Adj No. of Lanes				0	4	0	1	2	0	0	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				99	2767	147	140	1209	0	0	512	249
Arrive On Green				0.44	0.44	0.44	0.08	0.34	0.00	0.00	0.07	0.07
Sat Flow, veh/h				225	6266	332	1774	3632	0	0	2365	1104
Grp Volume(v), veh/h				478	752	415	59	401	0	0	272	255
Grp Sat Flow(s),veh/h/ln				1852	1602	1767	1774	1770	0	0	1770	1606
Q Serve(g_s), s				23.3	20.6	20.6	3.8	10.1	0.0	0.0	18.0	18.6
Cycle Q Clear(g_c), s				23.3	20.6	20.6	3.8	10.1	0.0	0.0	18.0	18.6
Prop In Lane				0.12		0.19	1.00		0.00	0.00		0.69
Lane Grp Cap(c), veh/h				818	1415	780	140	1209	0	0	399	362
V/C Ratio(X)				0.58	0.53	0.53	0.42	0.33	0.00	0.00	0.68	0.70
Avail Cap(c_a), veh/h				818	1415	780	229	1681	0	0	546	495
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.99	0.99
Uniform Delay (d), s/veh				25.2	24.4	24.5	52.7	29.3	0.0	0.0	51.4	51.6
Incr Delay (d2), s/veh				3.0	1.4	2.6	0.7	0.1	0.0	0.0	0.8	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.5	9.4	10.6	1.9	5.0	0.0	0.0	8.9	8.4
LnGrp Delay(d),s/veh				28.2	25.9	27.0	53.4	29.4	0.0	0.0	52.1	52.9
LnGrp LOS				C	C	C	D	C			D	D
Approach Vol, veh/h					1645			460			527	
Approach Delay, s/veh					26.9			32.5			52.5	
Approach LOS					C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			14.0	32.0		58.0		46.0				
Change Period (Y+Rc), s			4.5	5.0		5.0		5.0				
Max Green Setting (Gmax), s			15.5	37.0		53.0		57.0				
Max Q Clear Time (g_c+l1), s			5.8	20.6		25.3		12.1				
Green Ext Time (p_c), s			0.0	3.8		8.9		4.5				
Intersection Summary												
HCM 2010 Ctrl Delay			33.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 3: W. Valley Parkway & Signature Pavilion

Existing AM
 04/12/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	26	1592	42	9	36	0	0	23	41
Future Volume (veh/h)	0	0	0	26	1592	42	9	36	0	0	23	41
Number				1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				28	1730	46	10	39	0	0	25	45
Adj No. of Lanes				0	5	0	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				74	4944	134	422	528	0	0	528	442
Arrive On Green				0.21	0.21	0.21	0.28	0.28	0.00	0.00	0.28	0.28
Sat Flow, veh/h				118	7858	213	1323	1863	0	0	1863	1559
Grp Volume(v), veh/h				439	975	390	10	39	0	0	25	45
Grp Sat Flow(s),veh/h/ln				1857	1509	1806	1323	1863	0	0	1863	1559
Q Serve(g_s), s				24.4	22.0	22.1	0.7	1.8	0.0	0.0	1.2	2.6
Cycle Q Clear(g_c), s				24.4	22.0	22.1	1.8	1.8	0.0	0.0	1.2	2.6
Prop In Lane				0.06		0.12	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1168	2848	1136	422	528	0	0	528	442
V/C Ratio(X)				0.38	0.34	0.34	0.02	0.07	0.00	0.00	0.05	0.10
Avail Cap(c_a), veh/h				1168	2848	1136	422	528	0	0	528	442
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.90	0.90	0.90	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.3	26.4	26.4	31.9	31.5	0.0	0.0	31.2	31.7
Incr Delay (d2), s/veh				0.8	0.3	0.7	0.1	0.3	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.8	9.3	11.3	0.3	1.0	0.0	0.0	0.6	1.2
LnGrp Delay(d),s/veh				28.1	26.7	27.1	32.0	31.7	0.0	0.0	31.4	32.2
LnGrp LOS				C	C	C	C	C			C	C
Approach Vol, veh/h					1804			49			70	
Approach Delay, s/veh					27.1			31.8			31.9	
Approach LOS					C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				39.0		81.0		39.0				
Change Period (Y+Rc), s				5.0		5.5		5.0				
Max Green Setting (Gmax), s				34.0		75.5		34.0				
Max Q Clear Time (g_c+I1), s				4.6		26.4		3.8				
Green Ext Time (p_c), s				0.4		23.7		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay					27.4							
HCM 2010 LOS					C							

HCM 2010 Signalized Intersection Summary
4: W. Valley Parkway & Centre City Parkway

Existing AM
04/12/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	293	1159	218	147	617	0	0	843	118
Future Volume (veh/h)	0	0	0	293	1159	218	147	617	0	0	843	118
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.88	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				318	1260	237	160	671	0	0	916	128
Adj No. of Lanes				1	3	1	2	2	0	0	3	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				708	2030	558	257	1773	0	0	1729	241
Arrive On Green				0.13	0.13	0.13	0.07	0.50	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1774	5085	1398	3442	3632	0	0	4665	626
Grp Volume(v), veh/h				318	1260	237	160	671	0	0	690	354
Grp Sat Flow(s),veh/h/ln				1774	1695	1398	1721	1770	0	0	1695	1733
Q Serve(g_s), s				19.9	28.1	18.7	5.4	14.0	0.0	0.0	18.9	19.0
Cycle Q Clear(g_c), s				19.9	28.1	18.7	5.4	14.0	0.0	0.0	18.9	19.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				708	2030	558	257	1773	0	0	1304	666
V/C Ratio(X)				0.45	0.62	0.42	0.62	0.38	0.00	0.00	0.53	0.53
Avail Cap(c_a), veh/h				708	2030	558	344	1773	0	0	1304	666
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.93	0.93	0.93	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				39.9	43.5	39.4	53.9	18.4	0.0	0.0	28.5	28.6
Incr Delay (d2), s/veh				1.9	1.3	2.2	1.8	0.6	0.0	0.0	1.5	3.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	13.5	15.0	2.6	7.0	0.0	0.0	9.1	9.6
LnGrp Delay(d),s/veh				41.8	44.9	41.6	55.7	19.1	0.0	0.0	30.1	31.6
LnGrp LOS				D	D	D	E	B			C	C
Approach Vol, veh/h					1815			831			1044	
Approach Delay, s/veh					43.9			26.1			30.6	
Approach LOS					D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		67.0		53.0	14.0	53.0						
Change Period (Y+Rc), s		6.9		5.1	5.0	6.9						
Max Green Setting (Gmax), s		60.1		47.9	12.0	43.1						
Max Q Clear Time (g_c+I1), s		16.0		30.1	7.4	21.0						
Green Ext Time (p_c), s		14.1		9.1	0.1	10.8						
Intersection Summary												
HCM 2010 Ctrl Delay											36.1	
HCM 2010 LOS											D	
Notes												

HCM 2010 Signalized Intersection Summary
 1: N. Escondido Blvd. & Signature Pavilion

Existing PM
 04/12/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	↶	↷	↶	↷	↷			
Traffic Volume (veh/h)	64	71	40	544	517	35		
Future Volume (veh/h)	64	71	40	544	517	35		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	70	77	43	591	562	38		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	118	105	68	3054	2654	179		
Arrive On Green	0.07	0.07	0.04	0.86	0.79	0.79		
Sat Flow, veh/h	1774	1583	1774	3632	3446	226		
Grp Volume(v), veh/h	70	77	43	591	296	304		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1810		
Q Serve(g_s), s	4.6	5.7	2.9	3.3	5.0	5.1		
Cycle Q Clear(g_c), s	4.6	5.7	2.9	3.3	5.0	5.1		
Prop In Lane	1.00	1.00	1.00			0.13		
Lane Grp Cap(c), veh/h	118	105	68	3054	1401	1432		
V/C Ratio(X)	0.59	0.73	0.64	0.19	0.21	0.21		
Avail Cap(c_a), veh/h	458	409	251	3054	1401	1432		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00		
Uniform Delay (d), s/veh	54.5	55.0	56.9	1.4	3.1	3.1		
Incr Delay (d2), s/veh	3.5	7.1	3.4	0.1	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	5.1	1.5	1.6	2.5	2.6		
LnGrp Delay(d),s/veh	58.0	62.1	60.3	1.5	3.5	3.5		
LnGrp LOS	E	E	E	A	A	A		
Approach Vol, veh/h	147			634	600			
Approach Delay, s/veh	60.1			5.5	3.5			
Approach LOS	E			A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		108.0		12.0	8.6	99.5		
Change Period (Y+Rc), s		4.5		4.0	4.0	4.5		
Max Green Setting (Gmax), s		80.5		31.0	17.0	59.5		
Max Q Clear Time (g_c+I1), s		5.3		7.7	4.9	7.1		
Green Ext Time (p_c), s		20.3		0.3	0.0	18.6		
Intersection Summary								
HCM 2010 Ctrl Delay			10.4					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
 2: N. Escondido Blvd. & W. Valley Parkway

Existing PM
 04/12/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	91	1008	133	86	464	0	0	406	172
Future Volume (veh/h)	0	0	0	91	1008	133	86	464	0	0	406	172
Number				1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.92
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				99	1096	145	93	504	0	0	441	187
Adj No. of Lanes				0	4	0	1	2	0	0	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				178	2111	284	155	1302	0	0	574	240
Arrive On Green				0.38	0.38	0.38	0.09	0.37	0.00	0.00	0.08	0.08
Sat Flow, veh/h				464	5507	741	1774	3632	0	0	2457	988
Grp Volume(v), veh/h				392	621	327	93	504	0	0	329	299
Grp Sat Flow(s),veh/h/ln				1840	1602	1669	1774	1770	0	0	1770	1582
Q Serve(g_s), s				20.1	17.8	18.0	6.1	12.6	0.0	0.0	21.8	22.3
Cycle Q Clear(g_c), s				20.1	17.8	18.0	6.1	12.6	0.0	0.0	21.8	22.3
Prop In Lane				0.25		0.44	1.00		0.00	0.00		0.62
Lane Grp Cap(c), veh/h				705	1228	640	155	1302	0	0	430	384
V/C Ratio(X)				0.56	0.51	0.51	0.60	0.39	0.00	0.00	0.76	0.78
Avail Cap(c_a), veh/h				705	1228	640	273	1888	0	0	605	541
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				29.0	28.3	28.4	52.7	28.0	0.0	0.0	51.8	52.0
Incr Delay (d2), s/veh				3.2	1.5	2.9	1.4	0.1	0.0	0.0	2.1	2.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.8	8.1	8.8	3.0	6.2	0.0	0.0	11.0	10.1
LnGrp Delay(d),s/veh				32.2	29.8	31.3	54.1	28.0	0.0	0.0	53.9	54.9
LnGrp LOS				C	C	C	D	C			D	D
Approach Vol, veh/h					1340			597			628	
Approach Delay, s/veh					30.8			32.1			54.4	
Approach LOS					C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			15.0	34.1		51.0		49.1				
Change Period (Y+Rc), s			4.5	5.0		5.0		5.0				
Max Green Setting (Gmax), s			18.5	41.0		46.0		64.0				
Max Q Clear Time (g_c+I1), s			8.1	24.3		22.1		14.6				
Green Ext Time (p_c), s			0.0	4.8		6.6		5.9				
Intersection Summary												
HCM 2010 Ctrl Delay			36.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 3: W. Valley Parkway & Signature Pavilion

Existing PM
 04/12/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	53	1136	70	43	112	0	0	44	107
Future Volume (veh/h)	0	0	0	53	1136	70	43	112	0	0	44	107
Number				1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	0.99		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				58	1235	76	47	122	0	0	48	116
Adj No. of Lanes				0	5	0	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				170	3890	242	504	714	0	0	714	602
Arrive On Green				0.17	0.17	0.17	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				321	7350	458	1210	1863	0	0	1863	1571
Grp Volume(v), veh/h				334	744	292	47	122	0	0	48	116
Grp Sat Flow(s),veh/h/ln				1847	1509	1756	1210	1863	0	0	1863	1571
Q Serve(g_s), s				19.0	17.2	17.4	3.1	5.2	0.0	0.0	2.0	5.9
Cycle Q Clear(g_c), s				19.0	17.2	17.4	5.0	5.2	0.0	0.0	2.0	5.9
Prop In Lane				0.17		0.26	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				977	2395	929	504	714	0	0	714	602
V/C Ratio(X)				0.34	0.31	0.31	0.09	0.17	0.00	0.00	0.07	0.19
Avail Cap(c_a), veh/h				977	2395	929	504	714	0	0	714	602
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.92	0.92	0.92	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				31.2	30.4	30.5	25.0	24.4	0.0	0.0	23.4	24.6
Incr Delay (d2), s/veh				0.9	0.3	0.8	0.4	0.5	0.0	0.0	0.2	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.0	7.3	8.7	1.1	2.8	0.0	0.0	1.0	2.7
LnGrp Delay(d),s/veh				32.1	30.7	31.3	25.4	24.9	0.0	0.0	23.6	25.3
LnGrp LOS				C	C	C	C	C			C	C
Approach Vol, veh/h					1369			169			164	
Approach Delay, s/veh					31.2			25.1			24.8	
Approach LOS					C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				51.0		69.0		51.0				
Change Period (Y+Rc), s				5.0		5.5		5.0				
Max Green Setting (Gmax), s				46.0		63.5		46.0				
Max Q Clear Time (g_c+I1), s				7.9		21.0		7.2				
Green Ext Time (p_c), s				1.2		15.2		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay					30.0							
HCM 2010 LOS					C							

HCM 2010 Signalized Intersection Summary
4: W. Valley Parkway & Centre City Parkway

Existing PM
04/12/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	217	817	241	153	902	0	0	596	102
Future Volume (veh/h)	0	0	0	217	817	241	153	902	0	0	596	102
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				236	888	262	166	949	0	0	648	111
Adj No. of Lanes				1	3	1	2	2	0	0	3	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				590	1691	480	257	2009	0	0	1975	334
Arrive On Green				0.11	0.11	0.11	0.07	0.57	0.00	0.00	0.45	0.45
Sat Flow, veh/h				1774	5085	1444	3442	3632	0	0	4546	740
Grp Volume(v), veh/h				236	888	262	166	949	0	0	500	259
Grp Sat Flow(s),veh/h/ln				1774	1695	1444	1721	1770	0	0	1695	1728
Q Serve(g_s), s				14.9	19.8	20.6	5.6	19.0	0.0	0.0	11.4	11.6
Cycle Q Clear(g_c), s				14.9	19.8	20.6	5.6	19.0	0.0	0.0	11.4	11.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				590	1691	480	257	2009	0	0	1529	780
V/C Ratio(X)				0.40	0.53	0.55	0.65	0.47	0.00	0.00	0.33	0.33
Avail Cap(c_a), veh/h				590	1691	480	402	2009	0	0	1529	780
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				0.95	0.95	0.95	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.3	44.5	44.8	54.0	15.3	0.0	0.0	21.2	21.3
Incr Delay (d2), s/veh				1.9	1.1	4.2	2.0	0.8	0.0	0.0	0.6	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.6	9.5	17.0	2.7	9.4	0.0	0.0	5.5	5.8
LnGrp Delay(d),s/veh				44.2	45.6	49.0	56.0	16.1	0.0	0.0	21.8	22.4
LnGrp LOS				D	D	D	E	B			C	C
Approach Vol, veh/h					1386			1115			759	
Approach Delay, s/veh					46.0			22.1			22.0	
Approach LOS					D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		75.0		45.0	14.0	61.0						
Change Period (Y+Rc), s		6.9		5.1	5.0	6.9						
Max Green Setting (Gmax), s		68.1		39.9	14.0	49.1						
Max Q Clear Time (g_c+I1), s		21.0		22.6	7.6	13.6						
Green Ext Time (p_c), s		14.5		6.4	0.2	13.4						
Intersection Summary												
HCM 2010 Ctrl Delay				32.2								
HCM 2010 LOS				C								
Notes												

Appendix C

Transit Information

350

Escondido to Del Lago Transit Station via Westfield North County Mall

M-F • SA • SU • H

Destinations/Destinos

- Connect to MTS 235 or 280 for service to San Diego
- Kit Carson Park

- L.R. Green School
- San Pasqual High School
- Bear Valley Middle School
- North County Mall



350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday				
Southbound to Westfield North County Mall				
Escondido Transit Center	Escondido Bl. & Felicita Ave.	Bear Valley Pkwy. & Kit Carson Pk.	Del Lago Transit Station	At Del Lago Transit Station Route 235: Departing to San Diego
1	2	3	4	Route 235
4:20	4:27	4:32	4:36	5:12 ^a
4:43	4:50	4:55	4:59	5:12
5:03	5:10	5:15	5:19	5:42
5:23	5:30	5:35	5:39	5:42
5:43	5:52	5:58	6:02	6:12
6:03	6:12	6:18	6:23	6:27
6:13	6:22	6:28	6:33	6:42
6:23	6:32	6:38	6:43	6:57
6:33	6:45	6:55	7:00	7:12
6:43	6:55	7:05	7:10	7:12
6:53	7:05	7:15	7:20	7:27
7:03	7:15	7:25	7:30	7:42
7:13	7:25	7:35	7:40	7:42
7:23	7:35	7:45	7:50	7:57
7:33	7:45	7:55	8:00	8:12
7:43	7:55	8:05	8:10	8:12
7:53	8:05	8:15	8:20	8:27
8:03	8:13	8:20	8:25	8:42
8:18	8:28	8:35	8:40	8:57
8:33	8:43	8:50	8:55	9:12
8:48	8:58	9:05	9:10	9:12
9:03	9:13	9:20	9:25	9:42
9:18	9:28	9:35	9:40	9:42
9:33	9:43	9:50	9:55	10:12
9:48	9:58	10:05	10:10	10:12
10:03	10:13	10:20	10:25	10:42
10:18	10:28	10:35	10:40	10:42
10:33	10:43	10:50	10:55	11:12
10:48	10:58	11:05	11:10	11:12
11:03	11:13	11:20	11:25	11:42

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.
Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Estas conexiones estan sujetas a cambios.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday				
Southbound to Westfield North County Mall				
Escondido Transit Center	Escondido Bl. & Felicita Ave.	Bear Valley Pkwy. & Kit Carson Pk.	Del Lago Transit Station	At Del Lago Transit Station Route 235: Departing to San Diego
1	2	3	4	Route 235
11:18	11:28	11:35	11:40	11:42
11:33	11:43	11:50	11:55	12:12p
11:48	11:58	12:05	12:10	12:12
12:03	12:13	12:20	12:25	12:42
12:18	12:28	12:35	12:40	12:42
12:33	12:43	12:50	12:55	1:12
12:48	12:58	1:05	1:10	1:12
1:03	1:13	1:20	1:25	1:42
1:18	1:28	1:35	1:40	1:42
1:33	1:43	1:50	1:55	2:12
1:48	1:58	2:05	2:10	2:12
2:03	2:13	2:20	2:25	2:42
2:18	2:28	2:35	2:40	2:57
2:33	2:44	2:52	2:57	3:12
2:48	2:59	3:07	3:12	3:27
3:05	3:16	3:24	3:29	3:42
3:17	3:28	3:36	3:41	3:42
3:28	3:39	3:47	3:52	3:57
3:39	3:49	3:55	4:00	4:12
3:51	4:01	4:07	4:12	4:12
4:03	4:13	4:19	4:24	4:27
4:18	4:28	4:34	4:39	4:42
4:33	4:43	4:49	4:54	4:57
4:48	4:58	5:04	5:09	5:12
5:03	5:13	5:19	5:24	5:27
5:18	5:28	5:34	5:39	5:42
5:33	5:43	5:49	5:54	5:57
5:48	5:58	6:04	6:09	6:12
6:03	6:13	6:19	6:24	6:27
6:23	6:33	6:39	6:44	6:42

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Estas conexiones estan sujetas a cambios.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday				
Southbound to Westfield North County Mall				
Escondido Transit Center	Escondido Bl. & Felicita Ave.	Bear Valley Pkwy. & Kit Carson Pk.	Del Lago Transit Station	At Del Lago Transit Station Route 235: Departing to San Diego
1	2	3	4	Route 235
6:40	6:50	6:56	7:01	7:27
7:03	7:13	7:19	7:24	7:27
7:33	7:42	7:48	7:53	7:57
8:03	8:12	8:18	8:23	8:27
8:33	8:41	8:47	8:51	8:56
9:03	9:11	9:17	9:21	9:26
9:33	9:41	9:47	9:51	9:56

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.
Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Estas conexiones estan sujetas a cambios.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday Northbound to Escondido				
At Del Lago Transit Station Route 235: Arriving from San Diego	Del Lago Transit Station	Bear Valley Pkwy. & Kit Carson Pk.	Escondido Bl. & Felicita Ave.	Escondido Transit Center
Route 235	4	3	2	1
-	4:40	4:44	4:50	4:57a
-	5:00	5:04	5:10	5:17
-	5:20	5:24	5:30	5:37
-	5:42	5:46	5:52	5:59
5:58	6:09	6:14	6:21	6:33
6:13	6:24	6:29	6:36	6:48
6:28	6:43	6:48	6:55	7:07
6:44	6:57	7:02	7:09	7:21
6:59	7:10	7:15	7:25	7:38
7:15	7:23	7:28	7:38	7:51
7:30	7:34	7:39	7:49	8:02
-	7:46	7:51	8:01	8:14
8:01	8:03	8:08	8:18	8:31
8:16	8:18	8:23	8:33	8:46
8:31	8:33	8:38	8:45	8:57
8:46	8:48	8:53	9:00	9:12
9:01	9:03	9:08	9:15	9:27
9:16	9:18	9:23	9:30	9:42
9:31	9:33	9:38	9:45	9:57
-	9:47	9:52	9:59	10:11
10:01	10:03	10:08	10:15	10:27
10:16	10:18	10:23	10:30	10:42
-	10:33	10:38	10:45	10:57
10:46	10:48	10:53	11:00	11:12
-	11:03	11:08	11:15	11:27
11:16	11:18	11:23	11:30	11:42
-	11:33	11:38	11:45	11:57
11:46	11:48	11:53	12:00	12:12p
-	12:03	12:08	12:15	12:27
12:16	12:18	12:23	12:30	12:42

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Estas conexiones estan sujetas a cambios.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday Northbound to Escondido				
At Del Lago Transit Station Route 235: Arriving from San Diego	Del Lago Transit Station	Bear Valley Pkwy. & Kit Carson Pk.	Escondido Bl. & Felicita Ave.	Escondido Transit Center
Route 235	4	3	2	1
-	12:33	12:38	12:45	12:57
12:46	12:48	12:53	1:00	1:12
-	1:03	1:08	1:15	1:27
1:16	1:18	1:23	1:30	1:42
-	1:33	1:39	1:48	2:01
-	1:48	1:54	2:03	2:16
1:48	*1:56	*2:02	*2:11	*2:24
1:48	2:03	2:09	2:18	2:31
-	*2:09	*2:15	*2:24	*2:37
-	2:14	2:20	2:29	2:42
2:18	**2:20	**2:26	**2:35	**2:48
2:18	2:26	2:32	2:41	2:54
-	**2:31	**2:38	**2:49	**3:05
-	2:39	2:46	2:57	3:13
-	2:48	2:55	3:06	3:22
2:48	2:57	3:04	3:15	3:31
-	**3:06	**3:13	**3:24	**3:40
-	3:14	3:21	3:32	3:48
3:19	**3:21	**3:28	**3:39	**3:55
3:19	3:29	3:36	3:47	4:03
3:34	3:37	3:43	3:52	4:06
-	3:45	3:51	4:00	4:14
3:50	3:53	3:59	4:08	4:22

* **Thursday only.**
Solamente el miércoles jueves.

** **Monday, Tuesday, Wednesday and Friday only.**
Lunes, martes, miércoles y viernes solamente.

Trips operate only when San Pasqual High School is open. Trip operates on school days in regular school year (not during summer school).

El transporte opera únicamente durante el período escolar de la preparatoria San Pasqual High School. El servicio opera en días escolares durante el año escolar regular (no durante la sesión escolar de verano).

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario de la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Estas conexiones estan sujetas a cambios.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday Northbound to Escondido				
At Del Lago Transit Station Route 235: Arriving from San Diego	Del Lago Transit Station	Bear Valley Pkwy. & Kit Carson Pk.	Escondido Bl. & Felicita Ave.	Escondido Transit Center
Route 235	4	3	2	1
-	4:03	4:09	4:18	4:32
4:05	4:18	4:24	4:33	4:47
4:20	4:33	4:39	4:47	5:01
4:35	4:48	4:54	5:02	5:16
4:50	5:03	5:09	5:17	5:29
5:05	5:18	5:24	5:32	5:44
5:20	5:33	5:39	5:47	5:59
5:50	5:53	5:59	6:07	6:19
6:05	6:13	6:19	6:27	6:39
6:20	6:33	6:38	6:45	6:57
6:50	6:53	6:58	7:05	7:17
7:05	7:13	7:18	7:25	7:37
7:17	7:33	7:38	7:45	7:57
7:48	8:04	8:09	8:16	8:27
8:11	8:34	8:39	8:45	8:55
8:41	9:04	9:09	9:15	9:25
9:11	9:34	9:38	9:44	9:51
10:38	10:40	10:44	10:50	10:57

**** Monday, Tuesday, Wednesday and Friday only.**
Lunes, martes, miércoles y viernes solamente.

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Horarios sujetos a condiciones de tráfico.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Saturday, Sunday & Holidays Southbound to Westfield North County Mall				
Escondido Transit Center	Escondido Bl. & Felicita Ave.	Bear Valley Pkwy. & Kit Carson Pk.	Del Lago Transit Station	At Del Lago Transit Station Route 235: Departing to San Diego
1	2	3	4	Route 235
6:03	6:12	6:17	6:23	6:40a
6:50	6:59	7:04	7:10	7:10
7:33	7:42	7:48	7:54	8:10
8:03	8:12	8:18	8:24	8:40
8:33	8:42	8:48	8:54	9:10
9:03	9:12	9:18	9:25	9:40
9:33	9:43	9:49	9:56	10:10
10:03	10:13	10:19	10:26	10:40
10:33	10:43	10:49	10:56	11:10
11:03	11:13	11:19	11:26	11:40
11:33	11:43	11:49	11:56	12:10p
12:03	12:13	12:19	12:26	12:40
12:33	12:43	12:49	12:56	1:10
1:03	1:13	1:19	1:26	1:40
1:33	1:43	1:49	1:56	2:10
2:03	2:13	2:19	2:26	2:40
2:33	2:43	2:49	2:56	3:10
3:03	3:13	3:19	3:26	3:40
3:33	3:43	3:49	3:56	4:10
4:03	4:13	4:19	4:26	4:40
4:33	4:43	4:49	4:56	5:10
5:03	5:12	5:18	5:25	5:40
5:33	5:42	5:48	5:55	6:10
6:03	6:12	6:18	6:24	6:40
6:33	6:42	6:48	6:54	7:10
7:03	7:12	7:18	7:24	7:40
7:33	7:42	7:48	7:54	8:10
8:33	8:42	8:48	8:54	9:09
9:33	9:41	9:46	9:52	10:09

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Horarios sujetos a condiciones de tráfico.

350

Escondido to Del Lago Transit Station via Westfield North County Mall

Bold denotes P.M. times/Horarios en negritas son en la tarde

Saturday, Sunday & Holidays

Northbound to Escondido

At Del Lago Transit Station Route 235: Arriving from San Diego	Del Lago Transit Station	Bear Valley Pkwy. & Kit Carson Pk.	Escondido Bl. & Felicita Ave.	Escondido Transit Center
Route 235	4	3	2	1
6:14	6:26	6:30	6:36	6:44 ^a
7:13	7:34	7:38	7:45	7:55
7:46	8:04	8:08	8:15	8:25
8:16	8:36	8:40	8:47	8:57
8:46	9:04	9:08	9:15	9:25
9:16	9:38	9:42	9:49	9:59
9:46	10:04	10:09	10:16	10:27
10:16	10:36	10:41	10:48	10:59
10:46	11:04	11:09	11:16	11:27
11:17	11:36	11:41	11:48	11:59
11:48	12:04	12:09	12:16	12:27^p
12:18	12:34	12:39	12:46	12:57
12:48	1:04	1:09	1:16	1:27
1:18	1:34	1:39	1:46	1:57
1:48	2:04	2:09	2:16	2:27
2:18	2:34	2:39	2:46	2:57
2:48	3:04	3:10	3:17	3:28
3:18	3:34	3:40	3:47	3:58
3:48	4:04	4:10	4:17	4:28
4:18	4:34	4:40	4:47	4:58
4:48	5:04	5:10	5:16	5:26
5:18	5:34	5:40	5:46	5:56
5:48	6:04	6:10	6:16	6:26
6:18	6:34	6:39	6:45	6:54
6:48	7:04	7:09	7:15	7:24
7:17	7:34	7:39	7:45	7:54
7:47	8:04	8:09	8:15	8:23
8:43	9:04	9:09	9:15	9:23
10:08	10:10	10:14	10:20	10:27

Route 235 Schedule: Route 235 connection times reflect MTS schedule effective January 25, 2015. These connections are subject to change.

Horario del la Ruta 235: Los horarios de la conexión con la Ruta 235 refleja los horarios de MTS a partir de 25 enero 2015. Horarios sujetos a condiciones de tráfico.

351/352 | Escondido Circulator

M-F • SA • SU • H

Destinations/Destinos

- Palomar College Escondido Branch
- Hidden Valley Middle School
- Orange Glen High School
- Palomar Health Downtown Campus
- Escondido Civic Center
- North County Inland Career Center

LEGEND/Leyenda

Map not to scale/Mapa no está a escala

- Route/Ruta
- Street/Calle
- Trips serving Orange Glen High School/
Los recorridos que proporcionan servicio a Orange Glen High School
- Time Point/Punto de Tiempo
- Landmark/Señal
- T Transfer/Transbordo
- ◆ SPRINTER Station/
Estaciones del SPRINTER



Escondido Transit Center
 305, 308, 350, 353, 354
 355/357, 356, 358/359,
 371, 388/389, MTS 235, 280,
 SPRINTER, Greyhound, RTA 217

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 351 Monday - Friday Grand Ave. then Washington Ave.					
Escondido Transit Center	Palomar Health Downtown Campus	Orange Glen High School	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	2	3	4	5	1
5:03	5:07	-	5:16	5:21	5:31 _a
5:33	5:37	-	5:46	5:51	6:01
6:03	6:08	-	6:18	6:25	6:36
6:23	6:28	-	6:38	6:45	6:56
6:43	6:48	-	6:58	7:05	7:16
7:03	7:09	7:25	7:32	7:42	7:55
7:23	7:29	-	7:41	7:48	8:01
7:43	7:49	-	8:01	8:08	8:21
8:03	8:09	-	8:19	8:25	8:37
8:23	8:29	-	8:39	8:45	8:57
8:43	8:49	-	8:59	9:05	9:17
9:03	9:09	-	9:19	9:25	9:37
9:23	9:29	-	9:39	9:45	9:57
9:43	9:51	-	10:01	10:07	10:20
10:03	10:11	-	10:21	10:27	10:40
10:23	10:31	-	10:41	10:47	11:00
10:43	10:51	-	11:01	11:07	11:20
11:03	11:11	-	11:21	11:27	11:40
11:23	11:31	-	11:41	11:47	12:00_p
11:43	11:51	-	12:01	12:07	12:20
12:03	12:11	-	12:21	12:27	12:40
12:23	12:31	-	12:41	12:47	1:00
12:43	12:51	-	1:01	1:07	1:20
1:03	1:11	-	1:21	1:27	1:40
1:23	1:31	-	1:41	1:47	2:00
1:43	1:51	-	2:01	2:07	2:20
2:03	2:11	-	2:21	2:27	2:40
2:23	2:31	-	2:41	2:47	3:00
2:43	2:51	3:06	3:13	3:22	3:35
3:03	3:11	-	3:21	3:27	3:40
3:23	3:31	-	3:41	3:47	4:00
3:43	3:51	-	4:02	4:09	4:22
4:03	4:11	-	4:22	4:29	4:42
4:23	4:31	-	4:42	4:49	5:02
4:43	4:50	-	5:01	5:08	5:19

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 351 Monday - Friday Grand Ave. then Washington Ave.					
Escondido Transit Center	Palomar Health Downtown Campus	Orange Glen High School	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	2	3	4	5	1
5:03	5:10	–	5:21	5:28	5:39
5:23	5:30	–	5:41	5:48	5:59
5:43	5:50	–	6:00	6:06	6:17
6:03	6:10	–	6:20	6:26	6:37
6:33	6:40	–	6:50	6:56	7:07
7:03	7:10	–	7:20	7:26	7:37
7:33	7:40	–	7:50	7:56	8:07
8:03	8:10	–	8:20	8:26	8:37
8:33	8:38	–	8:46	8:52	9:02
9:03	9:08	–	9:16	9:22	9:32
9:33	9:38	–	9:46	9:52	10:02
10:33	10:38	–	10:46	10:52	11:02

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 352 Monday - Friday Washington Ave. then Grand Ave.					
Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Orange Glen High School	Palomar Health Downtown Campus	Escondido Transit Center
1	5	4	3	2	1
3:55	4:04	4:10	–	4:19	4:23 ^a
5:18	5:28	5:34	–	5:44	5:50
5:48	5:58	6:04	–	6:14	6:20
6:13	6:23	6:29	–	6:39	6:45
6:33	6:43	6:49	–	6:59	7:05
6:50	7:00	7:07	7:14	7:31	7:37
7:07	7:18	7:25	7:32	7:49	7:55
7:33	7:44	7:51	–	8:01	8:07
7:53	8:04	8:11	–	8:21	8:27
8:13	8:24	8:30	–	8:40	8:47
8:33	8:44	8:50	–	9:00	9:07
8:53	9:04	9:10	–	9:20	9:27
9:13	9:25	9:31	–	9:41	9:48
9:33	9:45	9:51	–	10:01	10:08
9:53	10:05	10:11	–	10:21	10:28
10:13	10:25	10:31	–	10:41	10:48
10:33	10:45	10:51	–	11:01	11:08
10:53	11:05	11:11	–	11:21	11:28
11:13	11:25	11:31	–	11:41	11:49
11:33	11:45	11:51	–	12:01	12:09^p
11:53	12:05	12:11	–	12:21	12:29
12:13	12:26	12:32	–	12:42	12:50
12:33	12:46	12:52	–	1:02	1:10
12:53	1:06	1:12	–	1:22	1:30
1:13	1:26	1:32	–	1:42	1:50
1:33	1:46	1:52	–	2:02	2:10
1:53	2:06	2:12	–	2:22	2:30
2:18	2:32	2:38	–	2:48	2:56
2:33	2:47	2:54	3:02	3:21	3:29
2:53	3:07	3:13	–	3:23	3:31
3:13	3:27	3:33	–	3:43	3:51
3:33	3:47	3:53	–	4:03	4:11
3:53	4:07	4:13	–	4:23	4:31
4:13	4:27	4:33	–	4:42	4:50
4:33	4:47	4:53	–	5:02	5:10

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 352 Monday - Friday Washington Ave. then Grand Ave.					
Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Orange Glen High School	Palomar Health Downtown Campus	Escondido Transit Center
1	5	4	3	2	1
4:53	5:07	5:13	–	5:22	5:30
5:13	5:27	5:33	–	5:42	5:50
5:33	5:47	5:53	–	6:02	6:10
5:53	6:07	6:13	–	6:22	6:30
6:18	6:30	6:36	–	6:44	6:51
6:48	7:00	7:06	–	7:14	7:21
7:18	7:30	7:36	–	7:44	7:51
7:48	7:58	8:03	–	8:11	8:18
8:18	8:28	8:33	–	8:41	8:47
8:48	8:57	9:02	–	9:10	9:16
9:18	9:27	9:32	–	9:40	9:46

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 351 Saturday, Sunday & Holidays Grand Ave. then Washington Ave.				
Escondido Transit Center	Palomar Health Downtown Campus	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	2	4	5	1
7:05	7:11	7:19	7:25	7:36a
7:35	7:41	7:49	7:55	8:06
8:05	8:11	8:19	8:25	8:36
8:35	8:41	8:49	8:55	9:06
9:05	9:11	9:21	9:28	9:39
9:35	9:41	9:51	9:58	10:09
10:05	10:12	10:21	10:28	10:40
10:35	10:42	10:51	10:58	11:10
11:05	11:12	11:21	11:28	11:40
11:35	11:42	11:51	11:58	12:10p
12:05	12:12	12:21	12:28	12:40
12:35	12:42	12:51	12:58	1:10
1:05	1:12	1:21	1:28	1:40
1:35	1:42	1:51	1:58	2:10
2:05	2:12	2:21	2:28	2:39
2:35	2:42	2:51	2:58	3:09
3:05	3:12	3:21	3:28	3:39
3:35	3:42	3:51	3:58	4:09
4:05	4:12	4:21	4:28	4:38
4:35	4:42	4:51	4:58	5:08
5:05	5:12	5:21	5:28	5:38
5:35	5:41	5:50	5:57	6:07
6:05	6:11	6:20	6:27	6:37
6:35	6:41	6:50	6:56	7:06
7:35	7:41	7:50	7:56	8:06
8:35	8:40	8:48	8:54	9:04
9:35	9:40	9:48	-	-

351/352 | Escondido Circulator

Bold denotes P.M. times/Horarios en negritas son en la tarde

 352 Saturday, Sunday & Holidays Washington Ave. then Grand Ave.				
Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Palomar Health Downtown Campus	Escondido Transit Center
1	5	4	2	1
-	-	5:11	5:20	5:26a
-	-	6:11	6:20	6:26
6:50	7:00	7:06	7:15	7:21
7:20	7:30	7:36	7:45	7:51
7:50	7:59	8:05	8:14	8:20
8:20	8:29	8:35	8:44	8:50
8:50	8:59	9:05	9:14	9:20
9:20	9:29	9:34	9:45	9:52
9:50	9:59	10:04	10:15	10:22
10:20	10:29	10:34	10:45	10:52
10:50	10:59	11:04	11:15	11:22
11:20	11:31	11:37	11:47	11:54
11:50	12:01	12:07	12:17	12:24p
12:20	12:31	12:37	12:47	12:54
12:50	1:00	1:06	1:16	1:23
1:20	1:30	1:36	1:46	1:53
1:50	2:00	2:06	2:16	2:23
2:20	2:30	2:36	2:46	2:53
2:50	2:59	3:05	3:15	3:22
3:20	3:29	3:35	3:45	3:52
3:50	3:59	4:05	4:15	4:22
4:20	4:29	4:35	4:45	4:52
4:50	4:59	5:05	5:15	5:22
5:20	5:29	5:35	5:44	5:50
5:50	5:59	6:05	6:14	6:20
6:20	6:29	6:35	6:44	6:50
7:05	7:14	7:20	7:28	7:33
8:05	8:14	8:20	8:28	8:33
9:05	9:14	9:20	9:28	9:33

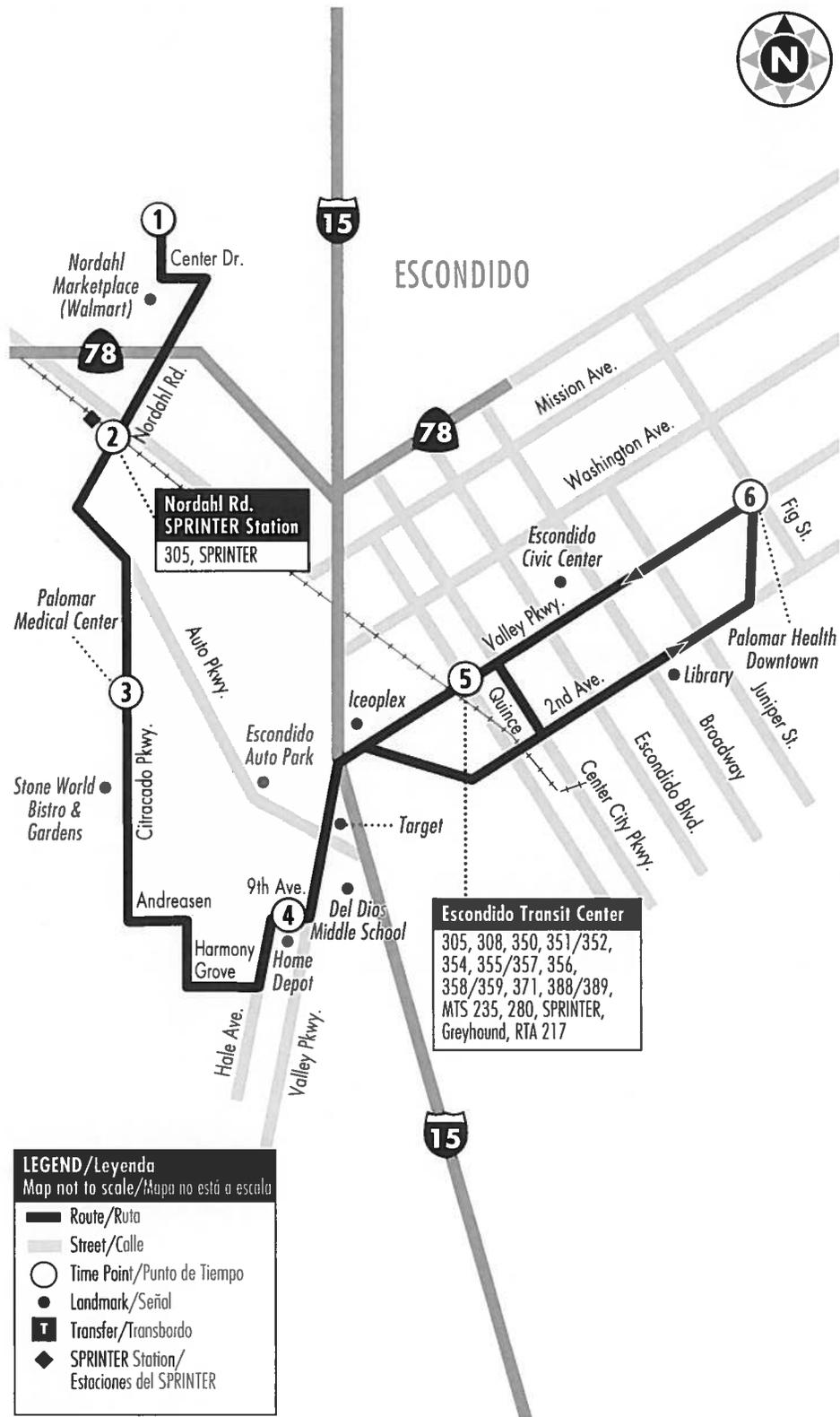
353

Palomar Medical Center to Nordahl Marketplace via Citracado Pkwy.

M-F • SA • SU • H

Destinations/Destinos

- Palomar Health Downtown Campus
- Palomar Medical Center
- Stone World Bistro & Gardens
- Nordahl Marketplace (Walmart)
- Del Dios Middle School
- Target



LEGEND/Leyenda
Map not to scale/Mapa no está a escala

- Route/Ruta
- Street/Calle
- Time Point/Punto de Tiempo
- Landmark/Señal
- Transfer/Transbordo
- SPRINTER Station/Estaciones del SPRINTER

353**Palomar Medical Center to Nordahl Marketplace
via Citracado Pkwy.****Bold denotes P.M. times/Horarios en negritas son en la tarde**

Monday - Friday					
Eastbound to Palomar Health Downtown					
Avenida Ricardo & Center Dr.	Auto Pkwy. & Mission Rd.	Palomar Medical Center	9th Ave. & Valley Pkwy.	Escondido Transit Center	Pennsylvania Ave. & Fig. St.
1	2	3	4	5	6
4:51	4:55	4:58	5:03	5:12	5:16a
5:21	5:26	5:29	5:34	5:43	5:47
5:51	5:56	5:59	6:04	6:13	6:17
6:21	6:26	6:29	6:34	6:43	6:47
6:49	6:54	6:57	7:02	7:11	7:15
7:19	7:24	7:27	7:32	7:41	7:45
7:49	7:54	7:57	8:02	8:11	8:15
8:21	8:26	8:29	8:34	8:44	8:49
8:51	8:56	8:59	9:04	9:14	9:19
9:21	9:26	9:29	9:34	9:44	9:49
9:51	9:56	9:59	10:04	10:14	10:19
10:21	10:26	10:29	10:34	10:44	10:49
10:51	10:56	10:59	11:04	11:14	11:19
11:21	11:26	11:29	11:34	11:44	11:49
11:51	11:56	11:59	12:04	12:14	12:19p
12:21	12:26	12:29	12:34	12:44	12:49
12:51	12:56	12:59	1:04	1:15	1:22
1:21	1:26	1:29	1:34	1:45	1:52
1:51	1:56	1:59	2:04	2:15	2:22
2:21	2:26	2:29	2:34	2:45	2:52
2:51	2:56	2:59	3:04	3:15	3:22
3:21	3:26	3:29	3:34	3:45	3:52
3:51	3:56	3:59	4:04	4:15	4:22
4:21	4:26	4:29	4:34	4:45	4:52
4:51	4:56	4:59	5:04	5:15	5:22
5:21	5:26	5:29	5:34	5:45	5:52
5:51	5:56	5:59	6:04	6:15	6:22
6:21	6:25	6:28	6:33	6:43	6:48
6:51	6:55	6:58	7:03	7:13	7:18
7:21	7:25	7:28	7:33	7:43	7:48
7:51	7:55	7:58	8:03	8:13	8:18
8:21	8:25	8:28	8:33	8:43	8:48
8:51	8:55	8:58	9:03	9:13	9:18

353**Palomar Medical Center to Nordahl Marketplace
via Citracado Pkwy.****Bold denotes P.M. times/Horarios en negritas son en la tarde**

Monday - Friday					
Westbound to Nordahl Marketplace					
Pennsylvania Ave. & Fig. St.	Escondido Transit Center	9th Ave. & Valley Pkwy.	Palomar Medical Center	Auto Pkwy. & Mission Rd.	Avenida Ricardo & Center Dr.
6	5	4	3	2	1
5:05	5:11	5:15	5:21	5:24	5:27 ^a
5:35	5:41	5:45	5:51	5:54	5:57
6:05	6:11	6:15	6:21	6:24	6:27
6:35	6:41	6:46	6:52	6:55	6:58
7:05	7:11	7:16	7:22	7:25	7:28
7:35	7:41	7:46	7:52	7:55	7:58
8:05	8:11	8:17	8:23	8:27	8:30
8:35	8:41	8:47	8:53	8:57	9:00
9:05	9:11	9:17	9:23	9:27	9:30
9:35	9:41	9:47	9:53	9:57	10:00
10:05	10:11	10:17	10:23	10:27	10:30
10:35	10:41	10:47	10:53	10:57	11:00
11:05	11:11	11:17	11:23	11:27	11:30
11:35	11:41	11:47	11:53	11:57	12:00p
12:05	12:11	12:17	12:23	12:27	12:30
12:35	12:41	12:47	12:53	12:57	1:00
1:05	1:12	1:18	1:24	1:28	1:31
1:35	1:42	1:48	1:54	1:58	2:01
2:05	2:12	2:18	2:24	2:28	2:31
2:35	2:42	2:48	2:54	2:58	3:01
3:05	3:12	3:18	3:24	3:28	3:31
3:35	3:42	3:48	3:54	3:58	4:01
4:05	4:12	4:18	4:24	4:28	4:31
4:35	4:42	4:48	4:54	4:58	5:01
5:05	5:11	5:17	5:23	5:27	5:30
5:35	5:41	5:47	5:53	5:57	6:00
6:05	6:11	6:16	6:22	6:26	6:29
6:35	6:41	6:46	6:52	6:55	6:58
7:05	7:11	7:16	7:22	7:25	7:28
7:35	7:41	7:46	7:52	7:55	7:58
8:05	8:11	8:16	8:22	8:25	8:28

353**Palomar Medical Center to Nordahl Marketplace
via Citracado Pkwy.**

Bold denotes P.M. times/Horarios en negritas son en la tarde

Saturday, Sunday & Holidays Eastbound to Palomar Health Downtown					
Avenida Ricardo & Center Dr.	Auto Pkwy. & Mission Rd.	Palomar Medical Center	9th Ave. & Valley Pkwy.	Escondido Transit Center	Pennsylvania Ave. & Fig. St.
1	2	3	4	5	6
6:25	6:29	6:32	6:37	6:45	6:50a
7:29	7:33	7:36	7:41	7:50	7:55
8:55	8:59	9:02	9:07	9:16	9:21
10:10	10:14	10:17	10:22	10:32	10:37
11:25	11:30	11:33	11:38	11:48	11:53
12:40	12:45	12:48	12:53	1:03	1:08p
1:55	2:00	2:03	2:08	2:18	2:23
3:10	3:16	3:19	3:24	3:34	3:39
4:26	4:32	4:35	4:40	4:50	4:55
5:40	5:46	5:49	5:54	6:03	6:08
6:56	7:01	7:04	7:09	7:18	7:23
8:10	8:15	8:18	8:23	8:32	8:37

Saturday, Sunday & Holidays Westbound to Nordahl Marketplace					
Pennsylvania Ave. & Fig. St.	Escondido Transit Center	9th Ave. & Valley Pkwy.	Palomar Medical Center	Auto Pkwy. & Mission Rd.	Avenida Ricardo & Center Dr.
6	5	4	3	2	1
7:03	7:09	7:14	7:20	7:24	7:28a
8:15	8:21	8:26	8:32	8:36	8:40
9:30	9:37	9:43	9:49	9:53	9:57
10:45	10:52	10:58	11:04	11:08	11:12
12:05	12:12	12:18	12:24	12:28	12:32p
1:15	1:22	1:28	1:34	1:38	1:42
2:30	2:39	2:45	2:51	2:55	2:59
3:45	3:54	4:00	4:06	4:10	4:14
5:00	5:09	5:15	5:21	5:25	5:29
6:15	6:24	6:30	6:36	6:40	6:44
7:30	7:39	7:44	7:50	7:54	7:58

354

Orange Glen High School via Mission, Lincoln, & Citrus

M-F • SA • SU • H

Destinations/Destinos

- Escondido Civic Center
- Hidden Valley Middle School
- Orange Glen High School

- Mission Middle School
- Palomar College Escondido Branch
- North County Inland Career Center

LEGEND/Leyenda

Map not to scale/Mapa no está a escala

- Route/Ruta
- Street/Calle
- Time Point/Punto de Tiempo
- Landmark/Señal
- Transfer/Transbordo
- SPRINTER Station/Estaciones del SPRINTER



Escondido Transit Center
 305, 308, 350, 351/352,
 353, 355/357, 356,
 358/359, 371, 388/389,
 MTS 235, 280, SPRINTER,
 Greyhound, RTA 217



354

Orange Glen High School via Mission, Lincoln, & Citrus

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday Eastbound to Orange Glen			
Escondido Transit Center	Mission Ave. & Fig St.	Washington Ave. & Midway Dr.	Orange Glen High School
1	2	3	4
-	-	5:16	5:22a
-	-	5:51	5:57
6:03	6:11	6:20	6:26
6:33	6:41	6:51	6:58
6:48	6:58	7:08	7:15
7:03	7:13	7:24	7:34
7:30	7:40	7:54	8:04
8:03	8:12	8:21	8:29
8:33	8:42	8:51	8:57
9:03	9:12	9:21	9:27
9:33	9:42	9:51	9:57
10:03	10:12	10:21	10:27
10:33	10:42	10:51	10:57
11:03	11:12	11:21	11:27
11:33	11:42	11:51	11:57
12:03	12:12	12:21	12:27p
12:33	12:42	12:51	12:57
1:03	1:13	1:22	1:28
1:33	1:43	1:54	2:00
2:03	2:13	2:24	2:30
2:30	2:40	2:51	2:59
3:03	3:13	3:24	3:32
3:33	3:44	3:55	4:02
4:03	4:14	4:25	4:32
4:33	4:44	4:54	5:01
5:03	5:14	5:24	5:31
5:33	5:44	5:54	6:01
6:03	6:12	6:22	6:29
6:33	6:42	6:51	6:58
7:03	7:11	7:20	7:27
7:35	7:43	7:52	7:58

Monday - Friday Westbound to Escondido			
Orange Glen High School	Washington Ave. & Midway Dr.	Mission Ave. & Fig St.	Escondido Transit Center
4	3	2	1
5:23	5:30	5:40	5:46a
5:58	6:06	6:17	6:23
6:28	6:37	6:48	6:55
6:59	7:09	7:22	7:30
7:35	7:46	7:58	8:06
8:05	8:14	8:26	8:34
8:30	8:39	8:50	8:58
8:58	9:06	9:17	9:25
9:28	9:36	9:47	9:56
9:58	10:06	10:17	10:26
10:28	10:36	10:47	10:56
10:58	11:06	11:16	11:25
11:28	11:36	11:46	11:56
11:58	12:07	12:18	12:28p
12:28	12:37	12:48	12:58
12:58	1:07	1:17	1:27
1:29	1:38	1:48	1:58
2:01	2:10	2:20	2:30
2:31	2:40	2:52	3:02
2:55	3:07	3:19	3:29
3:00	3:12	3:24	3:34
3:33	3:40	3:50	4:00
4:03	4:13	4:23	4:33
4:33	4:43	4:53	5:03
5:02	5:12	5:21	5:30
5:32	5:42	5:51	6:00
6:02	6:11	6:20	6:28
6:30	6:39	6:48	6:56
6:59	7:08	7:17	7:25
7:28	7:37	7:46	7:54
7:59	8:07	8:16	8:23

Trip operates on school days in regular school year (not during summer school).
El servicio opera en días escolares durante el año escolar regular (no durante la sesión escolar de verano).

354

Orange Glen High School via Mission, Lincoln, & Citrus

Bold denotes P.M. times/Horarios en negritas son en la tarde

Sat, Sun & Holidays Eastbound to Orange Glen			
Escondido Transit Center	Mission Ave. & Fig St.	Washington Ave. & Midway Dr.	Orange Glen High School
1	2	3	4
8:33	8:41	8:49	8:56a
9:33	9:41	9:49	9:56
10:33	10:41	10:49	10:56
11:33	11:42	11:51	11:58
12:33	12:42	12:51	12:59p
1:33	1:42	1:51	1:59
2:33	2:42	2:51	2:59
3:33	3:42	3:51	3:59
4:33	4:42	4:51	4:59
5:33	5:42	5:50	5:57

Sat, Sun & Holidays Westbound to Escondido			
Orange Glen High School	Washington Ave. & Midway Dr.	Mission Ave. & Fig St.	Escondido Transit Center
4	3	2	1
8:58	9:07	9:17	9:28a
9:58	10:07	10:17	10:28
10:58	11:07	11:17	11:28
11:59	12:08	12:18	12:29p
1:00	1:09	1:19	1:30
2:00	2:09	2:18	2:28
3:00	3:09	3:18	3:28
4:00	4:09	4:18	4:28
5:00	5:08	5:17	5:27
5:58	6:06	6:15	6:24

355/357 | El Norte Pkwy. & Valley Pkwy.

M-F • SA • SU • H

Destinations/Destinos

- Valley High School
- Escondido Charter High School
- Palomar Health Downtown Campus
- Palomar College Escondido Branch
- Kaiser Permanente
- YMCA
- North County Inland Career Center
- Escondido Senior Center

LEGEND/Leyenda

Map not to scale/Mapa no está a escala

- Route/Ruta
- Street/Calle
- Time Point/Punto de Tiempo
- Landmark/Señal
- T Transfer/Transbordo
- ◆ SPRINTER Station/Estaciones del SPRINTER



355/357 | El Norte Pkwy. & Valley Pkwy.

Bold denotes P.M. times/Horarios en negritas son en la tarde

 355 Monday - Friday Valley Pkwy. then El Norte Pkwy.				
Escondido Transit Center	Valley Pkwy. & Midway Dr.	El Norte Pkwy. & Valley Pkwy.	El Norte Pkwy. & N. Broadway	Escondido Transit Center
1	2	3	4	1
6:04	6:15	6:23	6:39	6:50a
7:04	7:17	7:25	7:41	7:52
7:44	8:00	8:07	8:23	8:34
8:44	8:59	9:06	9:19	9:29
10:04	10:19	10:26	10:38	10:48
11:04	11:19	11:26	11:38	11:48
12:04	12:20	12:27	12:39	12:49p
12:59	1:15	1:22	1:34	1:44
1:51	2:07	2:14	2:26	2:37
3:04	3:21	3:28	3:40	3:53
4:04	4:22	4:29	4:41	4:51
5:04	5:23	5:31	5:45	5:55
6:04	6:21	6:29	6:44	6:55
7:04	7:19	7:26	7:43	7:54
8:04	8:18	8:25	8:42	8:53

 357 Monday - Friday El Norte Pkwy. then Valley Pkwy.				
Escondido Transit Center	El Norte Pkwy. & N. Broadway	El Norte Pkwy. & Valley Pkwy.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
1	4	3	2	1
6:34	6:45	6:58	7:06	7:15a
7:34	7:45	7:58	8:06	8:15
8:34	8:45	8:58	9:05	9:15
9:34	9:45	9:58	10:05	10:15
10:34	10:45	10:58	11:05	11:15
11:34	11:45	11:57	12:04	12:16p
12:34	12:45	12:57	1:04	1:16
1:34	1:45	1:57	2:04	2:18
2:34	2:47	3:00	3:07	3:21
3:34	3:46	3:58	4:05	4:18
4:34	4:46	4:58	5:05	5:18
5:34	5:46	5:58	6:05	6:18

355/357 | El Norte Pkwy. & Valley Pkwy.

Bold denotes P.M. times/Horarios en negritas son en la tarde

 355 Saturday, Sunday & Holidays Valley Pkwy. then El Norte Pkwy.				
Escondido Transit Center	Valley Pkwy. & Midway Dr.	El Norte Pkwy. & Valley Pkwy.	El Norte Pkwy. & N. Broadway	Escondido Transit Center
1	2	3	4	1
6:35	6:45	6:52	7:08	7:20a
8:35	8:45	8:52	9:08	9:20
10:35	10:45	10:52	11:08	11:20
12:35	12:45	12:52	1:08	1:20p
2:35	2:45	2:52	3:08	3:20
4:35	4:45	4:52	5:08	5:20
6:35	6:45	6:52	7:08	7:20

 357 Saturday, Sunday & Holidays El Norte Pkwy. then Valley Pkwy.				
Escondido Transit Center	El Norte Pkwy. & N. Broadway	El Norte Pkwy. & Valley Pkwy.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
1	4	3	2	1
7:35	7:44	7:57	8:06	8:18a
9:35	9:44	9:57	10:06	10:18
11:35	11:44	11:57	12:06	12:18p
1:35	1:44	1:57	2:06	2:18
3:35	3:44	3:57	4:06	4:18
5:35	5:44	5:57	6:06	6:18
7:35	7:44	7:57	8:06	8:18

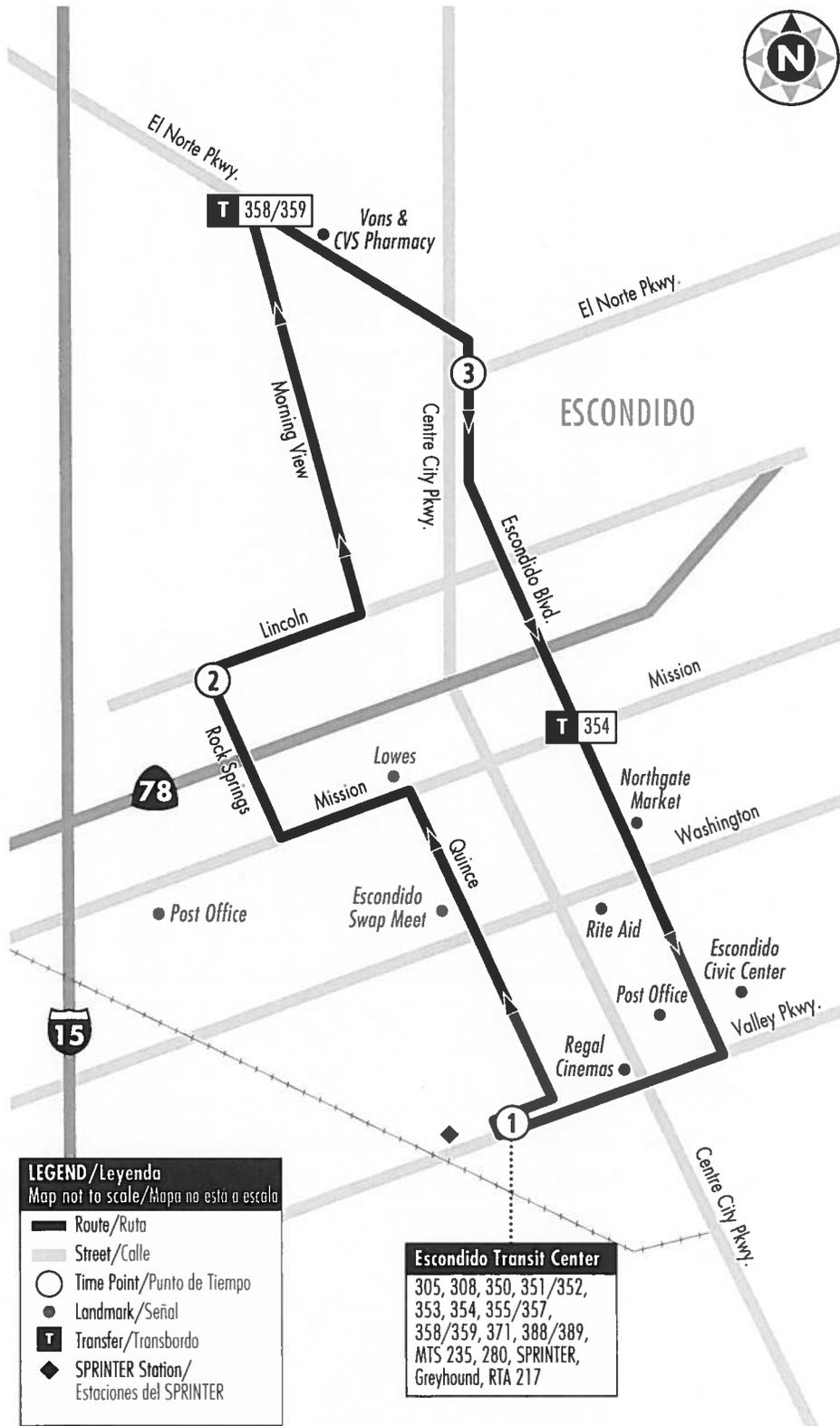
356

Morning View Dr., El Norte Pkwy. & Escondido Blvd.

M-F • SA • SU • H

Destinations/Destinos
 • Escondido Civic Center
 • Regal Cinemas

• Escondido Swap Meet
 • Vons
 • Northgate Market



356**Morning View Dr., El Norte Pkwy.
& Escondido Blvd.****Bold denotes P.M. times/Horarios en negritas son en la tarde**

Monday - Friday Morning View Dr. then Escondido Blvd.			
Escondido Transit Center	Lincoln Ave. & Rock Springs Rd.	Escondido Bl. & El Norte Pkwy.	Escondido Transit Centerl
1	2	3	1
5:03	5:08	5:15	5:21 _a
5:33	5:38	5:45	5:51
6:03	6:08	6:15	6:21
6:33	6:39	6:47	6:55
7:03	7:09	7:17	7:25
7:33	7:39	7:47	7:55
8:03	8:09	8:17	8:25
8:33	8:39	8:47	8:55
9:03	9:09	9:18	9:27
9:33	9:39	9:48	9:57
10:03	10:09	10:18	10:27
10:33	10:40	10:49	10:58
11:03	11:10	11:19	11:28
11:33	11:40	11:49	11:58
12:03	12:10	12:19	12:28_p
12:35	12:41	12:49	12:59
1:03	1:09	1:17	1:27
1:33	1:39	1:47	1:57
2:03	2:09	2:17	2:27
2:33	2:39	2:47	2:57
3:03	3:09	3:17	3:27
3:33	3:39	3:47	3:57
4:03	4:09	4:17	4:27
4:33	4:39	4:47	4:57
5:03	5:09	5:17	5:26
5:33	5:39	5:47	5:56
6:03	6:09	6:17	6:26
6:33	6:39	6:46	6:54
7:03	7:09	7:16	7:24
7:33	7:38	7:44	7:52
8:03	8:08	8:14	8:22
8:33	8:38	8:44	8:52
9:03	9:08	9:14	9:22

Sat, Sun & Holidays Morning View Dr. then Escondido Blvd.			
Escondido Transit Center	Lincoln Ave. & Rock Springs Rd.	Escondido Bl. & El Norte Pkwy.	Escondido Transit Centerl
1	2	3	1
8:03	8:08	8:14	8:24 _a
8:33	8:38	8:44	8:54
9:03	9:08	9:14	9:24
9:33	9:38	9:44	9:54
10:06	10:11	10:17	10:27
10:33	10:38	10:44	10:54
11:03	11:08	11:14	11:24
11:33	11:38	11:44	11:54
12:06	12:11	12:17	12:27_p
12:33	12:38	12:44	12:54
1:03	1:08	1:14	1:24
1:33	1:38	1:44	1:54
2:06	2:11	2:17	2:27
2:33	2:38	2:44	2:54
3:03	3:08	3:14	3:24
3:33	3:38	3:44	3:54
4:06	4:11	4:17	4:27
4:33	4:38	4:44	4:54
5:03	5:08	5:14	5:24
5:33	5:38	5:44	5:54

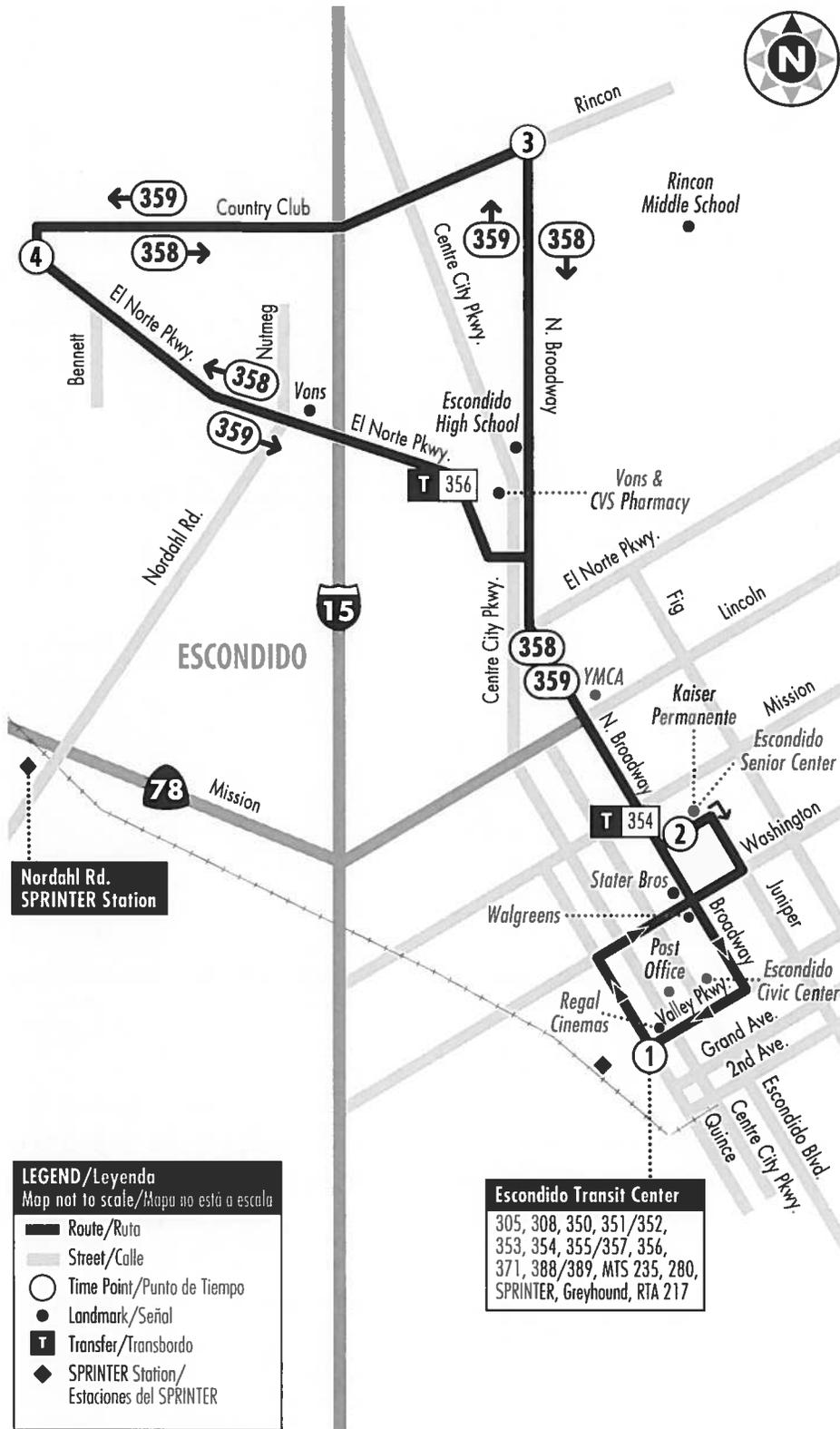
358/359 | N. Broadway, Country Club, & El Norte Pkwy.

M-F

Destinations/Destinos

- Escondido Civic Center
- Kaiser Permanente
- Regal Cinemas
- Escondido Senior Center

- Escondido High School
- YMCA
- Vons
- Stater Brothers



358/359 | N. Broadway, Country Club, & El Norte Pkwy.

Bold denotes P.M. times/Horarios en negritas son en la tarde

 358 Monday - Friday El Norte Pkwy. then N. Broadway					
Escondido Transit Center	N. Broadway & Park Ave.	El Norte Pkwy. & Country Club Ln.	Country Club Ln. & N. Broadway	Escondido Senior Center	Escondido Transit Center
1	2	4	3	2	1
6:03	6:07	6:19	6:26	6:39	6:47 _a
8:03	8:09	8:24	8:32	8:45	8:54
10:03	10:09	10:23	10:30	10:42	10:51
12:03	12:09	12:24	12:31	12:43	12:52_p
2:03	2:09	2:24	2:32	2:45	2:54
4:05	4:12	4:27	4:35	4:45	4:54
6:03	6:09	6:23	6:30	6:39	6:47
8:03	8:08	8:20	8:27	8:36	8:44

 359 Monday - Friday N. Broadway then El Norte Pkwy.					
Escondido Transit Center	N. Broadway & Park Ave.	Country Club Ln. & N. Broadway	El Norte Pkwy. & Country Club Ln.	Escondido Senior Center	Escondido Transit Center
1	2	3	4	2	1
5:03	5:07	5:15	5:22	5:35	5:43 _a
7:03	7:09	7:21	7:29	7:44	7:54
9:03	9:09	9:18	9:25	9:39	9:49
11:03	11:10	11:19	11:26	11:40	11:50
1:03	1:09	1:18	1:26	1:40	1:50_p
3:03	3:10	3:20	3:27	3:42	3:52
5:03	5:10	5:20	5:27	5:41	5:51
7:03	7:09	7:18	7:25	7:37	7:45

Route 358/359 does not operate on Saturdays, Sundays or holidays.
 La Ruta 358/359 no ofrece servicio sábados, domingos o días festivos.

371

Ramona FLEX Commuter • (855) 844-1454

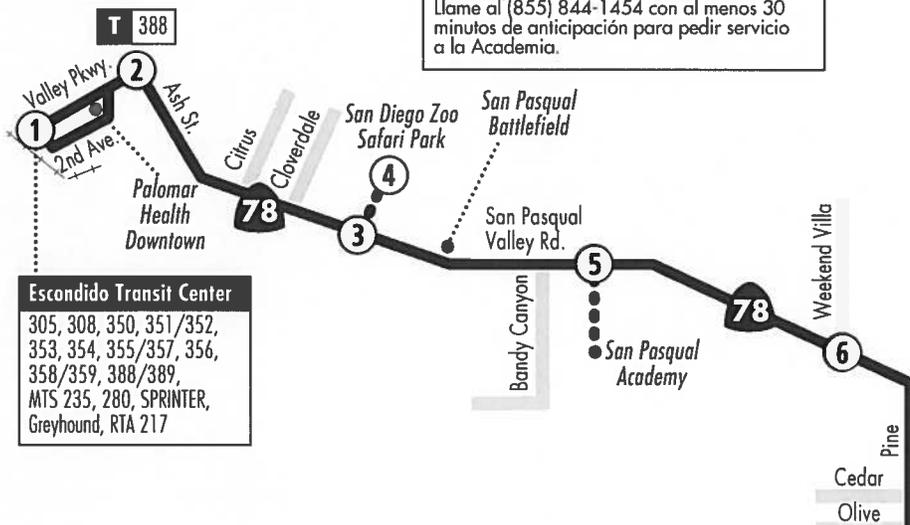
M-F

Destinations/Destinos

- Palomar Medical Center
- San Pasqual Academy
- San Diego Zoo Safari Park

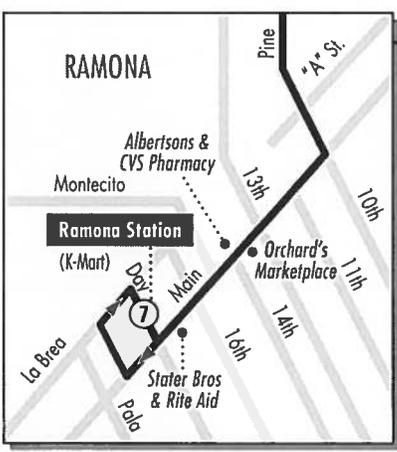


ESCONDIDO



Deviation of service to San Pasqual Academy by reservation. Call (855) 844-1454 at least 30 minutes in advance to request deviation to the Academy.
 371 La ruta se desvía a San Pasqual Academy sólo si se hace una reservación. Llame al (855) 844-1454 con al menos 30 minutos de anticipación para pedir servicio a la Academia.

Escondido Transit Center
 305, 308, 350, 351/352, 353, 354, 355/357, 356, 358/359, 388/389, MTS 235, 280, SPRINTER, Greyhound, RTA 217



RAMONA
Ramona Station
 MTS 891, 892

LEGEND/Leyenda
 Map not to scale/Mapa no está a escala

- Route/Ruta
- Street/Calle
- Time Point/Punto de Tiempo
- Landmark/Señal
- T Transfer/Transbordo
- ◆ SPRINTER Station/Estaciones del SPRINTER

371**Ramona FLEX Commuter • (855) 844-1454****Bold denotes P.M. times/Horarios en negritas son en la tarde**

Monday - Friday Escondido to Ramona						
Escondido Transit Center	Ash St. & Grand Ave.	Hwy. 78 & Safari Park	San Diego Zoo Safari Park	Hwy. 78 & San Pasqual Academy	Hwy. 78 & Weekend Villa Rd.	Ramona Station
1	2	3	4	5	6	7
5:45	5:53	6:02	–	6:06	6:14	6:22a
7:35	7:43	7:52	*–	8:05	8:14	8:22
2:15	2:23	2:32	–	2:40	2:49	2:57p
4:05	4:13	4:22	–	4:30	4:39	4:47
5:40	5:48	5:57	–	6:05	6:14	6:22

Monday - Friday Ramona to Escondido						
Ramona Station	Hwy. 78 & Weekend Villa Rd.	Hwy. 78 & San Pasqual Academy	San Diego Zoo Safari Park	Hwy. 78 & Safari Park	Ash St. & Grand Ave.	Escondido Transit Center
7	6	5	4	3	2	1
5:00	5:07	5:15	–	5:20	5:29	5:38a
6:30	6:38	6:48	–	6:55	7:04	7:13
8:30	8:38	8:48	–	8:55	9:04	9:13
3:05	3:13	3:21	3:32	–	3:43	3:52p
4:50	4:58	5:06	5:17	–	5:28	5:37

Ramona FLEX does not operate on Saturdays, Sundays or holidays.

Ramona FLEX no ofrece servicio sábados, domingos o días festivos.

- * **Trip will drop off at Safari Park only if passengers request to stop there.**
El pasajero puede pedir que el autobús haga parada en el Safari Park.

See Route 372 for midday weekday service between Ramona and Escondido.
Vea la Ruta 372 para el servicio de mediodía en días hábiles entre Ramona y Escondido.

Travel between Ramona and Escondido weekdays at scheduled times shown below, boarding at any bus stop. Reservations are accepted on a first come, first served basis. Reservations are not required for 371 FLEX except for trips originating or terminating at San Pasqual Academy. Reservations may be scheduled 7 days in advance 4:30 a.m. to 9:00 p.m., 7 days/week.

Fares

One-way fares are: \$5.00 Adult, \$2.50 Senior/Disabled/Medicare, RegionPlus Day Pass or any COASTER Monthly Pass (Adult, Youth, or Senior/Disabled/Medicare). These passes are not accepted on Route 372. Purchase book of 10 FLEX tickets at any Customer Service location.

Usted puede viajar entre Ramona y Escondido los días hábiles en las horas programadas que se muestran más abajo, abordando en cualquier parada de autobús. Se aceptan reservaciones de acuerdo al que llegue primero, se le atiende primero. No hace falta hacer reservaciones para el 371 FLEX a menos que el origen o destino del viaje sea la Academia San Pasqual. Se pueden hacer las reservaciones con 7 días de anticipación de 4:30 a.m. a 9:00 p.m., siete días de la semana.

Tarifas

Los pasajes sencillos cuestan: \$5.00 Adulto, \$2.50 Persona mayor/Discapacitada/Medicare, Pase Diario RegionPlus o cualquier pase mensual del COASTER (Adulto, Juvenil, o Persona mayor/Discapacitada/Medicare). Estos pases no se aceptan en la Ruta 372. Compre una libreta con diez boletos FLEX en cualquier ventanilla de Servicio a Clientes.

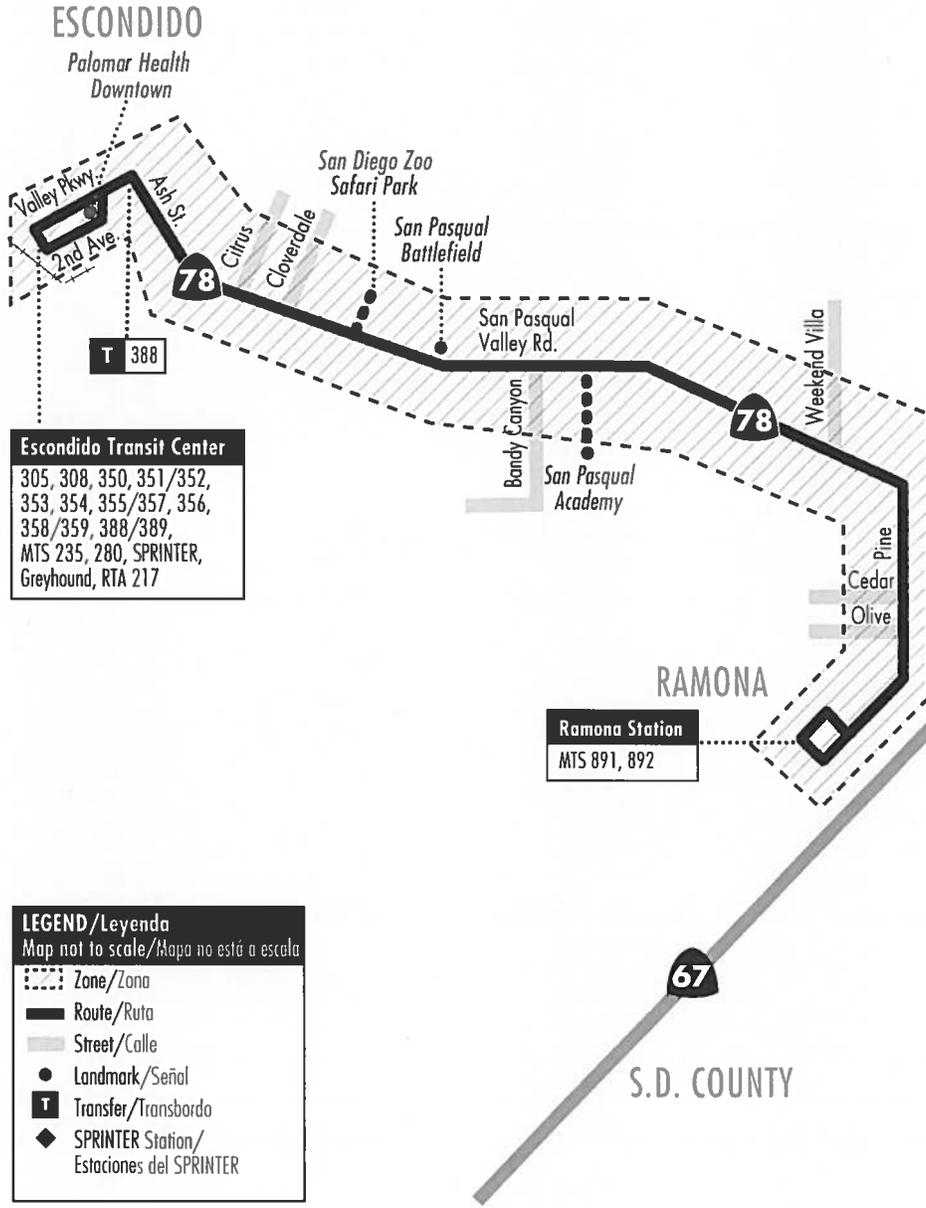
372

Ramona FLEX Midday • (855) 844-1454

M-F

Destinations/Destinos

- Palomar Medical Center
- San Pasqual Academy
- San Diego Zoo Safari Park



LEGEND/Leyenda
 Map not to scale/Mapa no está a escala

- Zone/Zona
- Route/Ruta
- Street/Calle
- Landmark/Señal
- Transfer/Transbordo
- SPRINTER Station/Estaciones del SPRINTER

Reserve a trip between Ramona and Escondido midday. Reservations are accepted on a first come, first served basis. This route is by reservation ONLY. It operates if a reservation is made at least 30 minutes in advance. Travel each weekday anywhere in the shaded area. Vehicle leaves Escondido bound for Ramona at 11:30 a.m., and leaves Ramona bound for Escondido at 1 p.m. Reservations may be scheduled 7 days in advance 4:30 a.m. to 9:00 p.m., 7 days/week.

Fares

One-way fare is \$10, or \$5 for Senior/Disabled/Medicare fare, paid to the driver (COASTER passes and RegionPlus Day Passes will not be accepted on Route 372). Escondido destinations include Escondido Transit Center, and street addresses along 2nd Avenue and Valley Parkway between the Escondido Transit Center and Ash Street. Call (855) 844-1454 at least 30 minutes in advance for reservation. You may call farther in advance on the same day or on a previous day. Purchase book of 10 FLEX tickets at any Customer Service location.

Reserve un recorrido entre Ramona y Escondido para mediodía. Se aceptan reservaciones de acuerdo al que llegue primero, se le atiende primero. Esta ruta SOLO con reservación previa. La reservación deberá hacerse con un mínimo de 30 minutos de antelación. Viaje entre semana a cualquier destino en el área sombreada. El vehículo sale de Escondido hacia Ramona a las 11:30 a.m., y sale de Ramona hacia Escondido a la 1 p.m. Se pueden hacer las reservaciones con 7 días de anticipación de 4:30 a.m. a 9:00 p.m., siete días de la semana.

Tarifas

El viaje sencillo cuesta \$10.00 o \$5.00 para Personas Mayores/ Discapacitadas/Medicare. Pague con el chofer. Pases del tren COASTER y Pases Diarios RegionPlus no serán aceptados en la Ruta 372. Los destinos de Escondido incluyen la Central de Transporte de Escondido, y domicilios de calle por las avenidas 2nd Avenue y Valley Parkway entre la Central de Transporte de Escondido y la calle Ash Street. Llame al (855) 844-1454 con al menos 30 minutos de anticipación para hacer su reservación. Usted podrá llamar con mayor anticipación el mismo día o en el día anterior. Compre una libreta con diez boletos FLEX en cualquier ventanilla de Servicio a Clientes.

Ramona FLEX does not operate on Saturdays, Sundays or holidays.
Ramona FLEX no ofrece servicio sábados, domingos o días festivos.

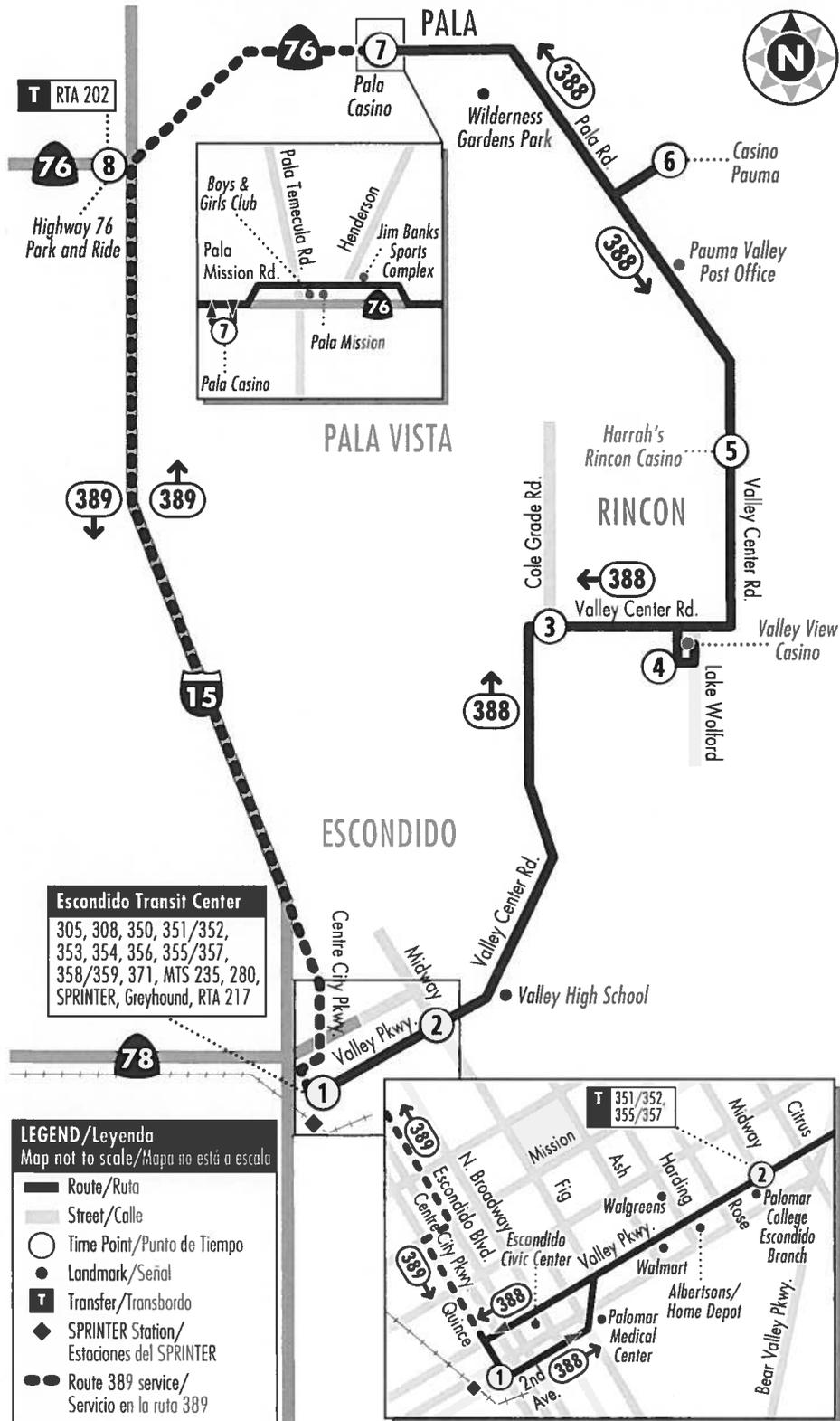
See also Route 371 for Ramona and Escondido service.
Vea también la Ruta 371 para el servicio de Ramona y Escondido.

388/389 Escondido to Pala

M-F • SA • SU • H

Destinations/Destinos

- Palomar College Escondido Branch
- Regal Cinemas
- Palomar Medical Center
- Harrah's Rincon Casino
- Pala Casino
- Casino Pauma
- Valley View Casino
- East Valley Community Center
- Highway 76 Park and Ride



388/389

Escondido to Pala

Bold denotes P.M. times/Horarios en negritas son en la tarde

388 Monday - Sunday Northbound to Pala via Valley Center						
Escondido Transit Center	Valley Pkwy. & Midway Dr.	Valley Center Rd. & Cole Grade Rd.	Valley View Casino	Harrah's Rincon Casino	Casino Pauma	Pala Casino
1	2	3	4	5	6	7
5:04	5:18	5:34	5:45	5:55	6:09	6:30 _a
7:04	7:18	7:39	7:50	8:01	8:15	8:36
9:04	9:18	9:35	9:47	9:59	10:16	10:37
11:04	11:21	11:40	11:53	12:05	12:22	12:43_p
1:04	1:22	1:41	1:54	2:05	2:23	2:43
3:04	3:23	3:43	3:55	4:06	4:24	4:44
5:04	5:23	5:43	5:55	6:06	6:24	6:44
7:04	7:21	7:40	7:53	8:03	8:20	8:41

388 Monday - Sunday Southbound to Escondido via Valley Center						
Pala Casino	Casino Pauma	Harrah's Rincon Casino	Valley View Casino	Valley Center Rd. & Cole Grade Rd.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
7	6	5	4	3	2	1
7:06	7:24	7:39	7:48	7:58	8:16	8:34 _a
9:06	9:24	9:39	9:48	9:58	10:16	10:34
11:06	11:24	11:39	11:48	11:58	12:16	12:34_p
1:08	1:26	1:41	1:50	2:00	2:18	2:38
3:06	3:25	3:42	3:51	4:01	4:20	4:39
5:03	5:20	5:35	5:44	5:53	6:13	6:32
7:04	7:21	7:36	7:45	7:54	8:14	8:33
8:59	9:16	9:30	9:39	9:48	10:08	10:24

Routes 388 and 389 are funded in part by a federal 5311(c) grant received by the Reservation Transportation Authority.

Las Rutas 388 y 389 están respaldadas en parte por un subsidio federal 5311(c) recibido por la Autoridad de Transporte de las Reservas Indígenas.

388/389 | Escondido to Pala

Bold denotes P.M. times/Horarios en negritas son en la tarde

389 Monday - Sunday Northbound to Pala via Interstate 15		
Escondido Transit Center	Highway 76 & Interstate 15	Pala Casino
1	8	7
6:03	6:31	6:53a
8:03	8:31	8:53
10:03	10:31	10:53
12:03	12:34	12:55p
2:03	2:32	2:53
4:03	4:33	4:52
6:03	6:33	6:51
8:03	8:32	8:52

389 Monday - Sunday Southbound to Escondido via Interstate 15		
Pala Casino	Highway 76 & Interstate 15	Escondido Transit Center
7	8	1
7:06	7:19	7:46a
9:06	9:18	9:45
11:06	11:19	11:47
1:08	1:21	1:48p
3:06	3:19	3:46
5:05	5:18	5:45
7:04	7:18	7:43
9:04	9:18	9:43

Routes 388 and 389 are funded in part by a federal 5311(c) grant received by the Reservation Transportation Authority.

Las Rutas 388 y 389 están respaldadas en parte por un subsidio federal 5311(c) recibido por la Autoridad de Transporte de las Reservas Indígenas.

Appendix D

Existing With Project Synchro Worksheets and Queueing Worksheets

HCM 6th Signalized Intersection Summary
 1: N. Escondido Blvd. & Signature Pavilion

Existing + Project AM
 03/13/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	19	26	410	477	40
Future Volume (veh/h)	21	19	26	410	477	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	21	28	446	518	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	69	61	54	3165	2740	227
Arrive On Green	0.04	0.04	0.03	0.89	0.83	0.83
Sat Flow, veh/h	1781	1585	1781	3647	3406	274
Grp Volume(v), veh/h	23	21	28	446	277	284
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1810
Q Serve(g_s), s	1.5	1.5	1.9	1.9	3.8	3.9
Cycle Q Clear(g_c), s	1.5	1.5	1.9	1.9	3.8	3.9
Prop In Lane	1.00	1.00	1.00			0.15
Lane Grp Cap(c), veh/h	69	61	54	3165	1470	1497
V/C Ratio(X)	0.34	0.34	0.52	0.14	0.19	0.19
Avail Cap(c_a), veh/h	386	343	252	3165	1470	1497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	56.2	56.2	57.3	0.8	2.1	2.1
Incr Delay (d2), s/veh	2.1	2.5	2.7	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.4	0.9	0.2	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.3	58.7	60.0	0.9	2.4	2.4
LnGrp LOS	E	E	E	A	A	A
Approach Vol, veh/h	44			474	561	
Approach Delay, s/veh	58.5			4.4	2.4	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		111.4		8.6	7.6	103.7
Change Period (Y+Rc), s		4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		85.5		26.0	17.0	64.5
Max Q Clear Time (g_c+I1), s		3.9		3.5	3.9	5.9
Green Ext Time (p_c), s		5.9		0.1	0.0	7.0
Intersection Summary						
HCM 6th Ctrl Delay			5.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 2: N. Escondido Blvd. & W. Valley Parkway

Existing + Project AM
 03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					← ↑ →		↖	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	53	1408	80	66	369	0	0	332	161
Future Volume (veh/h)	0	0	0	53	1408	80	66	369	0	0	332	161
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.72	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				58	1530	87	72	401	0	0	361	175
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				96	2712	158	148	1211	0	0	506	240
Arrive On Green				0.44	0.44	0.44	0.08	0.34	0.00	0.00	0.07	0.07
Sat Flow, veh/h				218	6141	358	1781	3647	0	0	2392	1090
Grp Volume(v), veh/h				496	780	399	72	401	0	0	277	259
Grp Sat Flow(s),veh/h/ln				1859	1609	1640	1781	1777	0	0	1777	1612
Q Serve(g_s), s				24.4	21.5	21.5	4.6	10.1	0.0	0.0	18.3	18.9
Cycle Q Clear(g_c), s				24.4	21.5	21.5	4.6	10.1	0.0	0.0	18.3	18.9
Prop In Lane				0.12		0.22	1.00		0.00	0.00		0.68
Lane Grp Cap(c), veh/h				821	1421	724	148	1211	0	0	391	354
V/C Ratio(X)				0.60	0.55	0.55	0.48	0.33	0.00	0.00	0.71	0.73
Avail Cap(c_a), veh/h				821	1421	724	230	1688	0	0	548	497
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.99	0.99
Uniform Delay (d), s/veh				25.5	24.7	24.7	52.5	29.4	0.0	0.0	51.9	52.2
Incr Delay (d2), s/veh				3.3	1.5	3.0	0.9	0.1	0.0	0.0	1.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.4	8.4	8.9	2.1	4.3	0.0	0.0	8.9	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.8	26.2	27.7	53.4	29.4	0.0	0.0	52.9	53.7
LnGrp LOS				C	C	C	D	C	A	A	D	D
Approach Vol, veh/h					1675			473			536	
Approach Delay, s/veh					27.3			33.1			53.3	
Approach LOS					C			C			D	
Timer - Assigned Phs				3	4	6	8					
Phs Duration (G+Y+Rc), s				14.5	31.4	58.0	45.9					
Change Period (Y+Rc), s				4.5	5.0	5.0	5.0					
Max Green Setting (Gmax), s				15.5	37.0	53.0	57.0					
Max Q Clear Time (g_c+I1), s				6.6	20.9	26.4	12.1					
Green Ext Time (p_c), s				0.0	2.0	9.2	1.9					
Intersection Summary												
HCM 6th Ctrl Delay				33.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 3: W. Valley Parkway & Signature Pavilion

Existing + Project AM
 03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑↑		↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	26	1592	60	9	45	0	0	32	59
Future Volume (veh/h)	0	0	0	26	1592	60	9	45	0	0	32	59
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				28	1730	65	10	49	0	0	35	64
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				70	4637	178	453	592	0	0	592	494
Arrive On Green				0.20	0.20	0.20	0.32	0.32	0.00	0.00	0.32	0.32
Sat Flow, veh/h				117	7783	298	1294	1870	0	0	1870	1561
Grp Volume(v), veh/h				445	988	390	10	49	0	0	35	64
Grp Sat Flow(s),veh/h/ln				1864	1515	1789	1294	1870	0	0	1870	1561
Q Serve(g_s), s				25.0	22.6	22.6	0.7	2.2	0.0	0.0	1.6	3.5
Cycle Q Clear(g_c), s				25.0	22.6	22.6	2.2	2.2	0.0	0.0	1.6	3.5
Prop In Lane				0.06		0.17	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1111	2708	1066	453	592	0	0	592	494
V/C Ratio(X)				0.40	0.36	0.37	0.02	0.08	0.00	0.00	0.06	0.13
Avail Cap(c_a), veh/h				1111	2708	1066	453	592	0	0	592	494
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.89	0.89	0.89	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				29.5	28.5	28.6	29.3	28.8	0.0	0.0	28.6	29.2
Incr Delay (d2), s/veh				1.0	0.3	0.9	0.1	0.3	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.8	9.2	11.1	0.2	1.0	0.0	0.0	0.7	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.5	28.9	29.4	29.4	29.0	0.0	0.0	28.7	29.8
LnGrp LOS				C	C	C	C	C	A	A	C	C
Approach Vol, veh/h					1823			59			99	
Approach Delay, s/veh					29.4			29.1			29.4	
Approach LOS					C			C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				43.0		77.0		43.0				
Change Period (Y+Rc), s				5.0		5.5		5.0				
Max Green Setting (Gmax), s				38.0		71.5		38.0				
Max Q Clear Time (g_c+I1), s				5.5		27.0		4.2				
Green Ext Time (p_c), s				0.3		23.0		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				29.4								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
4: W. Valley Parkway & Centre City Parkway

Existing + Project AM
03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘	↗↗↗	↗	↘↘	↗↗			↗↗↗	
Traffic Volume (veh/h)	0	0	0	293	1177	218	147	617	0	0	843	118
Future Volume (veh/h)	0	0	0	293	1177	218	147	617	0	0	843	118
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				318	1239	237	160	671	0	0	916	128
Peak Hour Factor				0.92	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				963	3035	780	258	1276	0	0	1096	152
Arrive On Green				0.18	0.18	0.18	0.07	0.36	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	5611	1443	3456	3647	0	0	4680	628
Grp Volume(v), veh/h				318	1239	237	160	671	0	0	690	354
Grp Sat Flow(s),veh/h/ln				1781	1870	1443	1728	1777	0	0	1702	1735
Q Serve(g_s), s				18.7	23.5	17.1	5.4	17.9	0.0	0.0	23.1	23.3
Cycle Q Clear(g_c), s				18.7	23.5	17.1	5.4	17.9	0.0	0.0	23.1	23.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				963	3035	780	258	1276	0	0	827	421
V/C Ratio(X)				0.33	0.41	0.30	0.62	0.53	0.00	0.00	0.83	0.84
Avail Cap(c_a), veh/h				963	3035	780	346	1276	0	0	827	421
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.92	0.92	0.92	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.3	32.3	29.7	53.9	30.4	0.0	0.0	43.1	43.2
Incr Delay (d2), s/veh				0.8	0.4	0.9	1.8	1.6	0.0	0.0	9.7	17.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.2	11.9	14.6	2.4	7.9	0.0	0.0	10.8	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				31.2	32.7	30.6	55.7	31.9	0.0	0.0	52.9	61.1
LnGrp LOS				C	C	C	E	C	A	A	D	E
Approach Vol, veh/h				1794			831			1044		
Approach Delay, s/veh				32.1			36.5			55.7		
Approach LOS				C			D			E		
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		50.0		70.0	14.0	36.0						
Change Period (Y+Rc), s		6.9		5.1	5.0	6.9						
Max Green Setting (Gmax), s		43.1		64.9	12.0	26.1						
Max Q Clear Time (g_c+1), s		19.9		25.5	7.4	25.3						
Green Ext Time (p_c), s		4.0		12.1	0.1	0.5						
Intersection Summary												
HCM 6th Ctrl Delay				39.8								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 1: N. Escondido Blvd. & Signature Pavilion

Existing + Project PM
 03/13/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	72	79	48	544	517	43
Future Volume (veh/h)	72	79	48	544	517	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	86	52	591	562	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	129	115	73	3045	2586	216
Arrive On Green	0.07	0.07	0.04	0.86	0.78	0.78
Sat Flow, veh/h	1781	1585	1781	3647	3399	276
Grp Volume(v), veh/h	78	86	52	591	301	308
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1805
Q Serve(g_s), s	5.1	6.4	3.5	3.4	5.3	5.4
Cycle Q Clear(g_c), s	5.1	6.4	3.5	3.4	5.3	5.4
Prop In Lane	1.00	1.00	1.00			0.15
Lane Grp Cap(c), veh/h	129	115	73	3045	1390	1412
V/C Ratio(X)	0.61	0.75	0.71	0.19	0.22	0.22
Avail Cap(c_a), veh/h	460	409	282	3045	1390	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	54.0	54.6	56.8	1.5	3.4	3.4
Incr Delay (d2), s/veh	3.4	7.1	4.3	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.7	1.6	0.7	1.7	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.4	61.7	61.1	1.6	3.8	3.8
LnGrp LOS	E	E	E	A	A	A
Approach Vol, veh/h	164			643	609	
Approach Delay, s/veh	59.6			6.4	3.8	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.3		12.7	8.9	98.4
Change Period (Y+Rc), s		4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		80.5		31.0	19.0	57.5
Max Q Clear Time (g_c+I1), s		5.4		8.4	5.5	7.4
Green Ext Time (p_c), s		8.3		0.3	0.0	7.6
Intersection Summary						
HCM 6th Ctrl Delay			11.5			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary
 2: N. Escondido Blvd. & W. Valley Parkway

Existing + Project PM
 03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑		↖	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	91	1028	141	98	464	0	0	414	172
Future Volume (veh/h)	0	0	0	91	1028	141	98	464	0	0	414	172
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.92
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				99	1117	153	107	504	0	0	450	187
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				171	2065	288	159	1300	0	0	571	234
Arrive On Green				0.38	0.38	0.38	0.09	0.37	0.00	0.00	0.08	0.08
Sat Flow, veh/h				456	5507	767	1781	3647	0	0	2480	978
Grp Volume(v), veh/h				401	635	332	107	504	0	0	334	303
Grp Sat Flow(s),veh/h/ln				1848	1609	1665	1781	1777	0	0	1777	1588
Q Serve(g_s), s				20.8	18.5	18.7	7.0	12.6	0.0	0.0	22.1	22.5
Cycle Q Clear(g_c), s				20.8	18.5	18.7	7.0	12.6	0.0	0.0	22.1	22.5
Prop In Lane				0.25		0.46	1.00		0.00	0.00		0.62
Lane Grp Cap(c), veh/h				693	1206	625	159	1300	0	0	425	380
V/C Ratio(X)				0.58	0.53	0.53	0.67	0.39	0.00	0.00	0.78	0.80
Avail Cap(c_a), veh/h				693	1206	625	289	1925	0	0	607	542
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				29.9	29.2	29.3	53.0	28.1	0.0	0.0	52.2	52.4
Incr Delay (d2), s/veh				3.5	1.6	3.2	1.9	0.1	0.0	0.0	2.5	3.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.9	7.4	8.0	3.2	5.4	0.0	0.0	10.9	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.5	30.9	32.5	54.8	28.2	0.0	0.0	54.8	55.8
LnGrp LOS				C	C	C	D	C	A	A	D	E
Approach Vol, veh/h					1369			611			637	
Approach Delay, s/veh					32.0			32.9			55.3	
Approach LOS					C			C			E	
Timer - Assigned Phs				3	4	6	8					
Phs Duration (G+Y+Rc), s				15.2	33.7	50.0	48.9					
Change Period (Y+Rc), s				4.5	5.0	5.0	5.0					
Max Green Setting (Gmax), s				19.5	41.0	45.0	65.0					
Max Q Clear Time (g_c+I1), s				9.0	24.5	22.8	14.6					
Green Ext Time (p_c), s				0.0	2.5	6.6	2.5					
Intersection Summary												
HCM 6th Ctrl Delay				37.9								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 3: W. Valley Parkway & Signature Pavilion

Existing + Project PM
 03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					TTTT		T	T			T	T
Traffic Volume (veh/h)	0	0	0	53	1136	88	43	121	0	0	53	125
Future Volume (veh/h)	0	0	0	53	1136	88	43	121	0	0	53	125
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	0.99		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				58	1235	96	47	132	0	0	58	136
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				162	3715	292	510	748	0	0	748	629
Arrive On Green				0.17	0.17	0.17	0.40	0.40	0.00	0.00	0.40	0.40
Sat Flow, veh/h				317	7248	569	1183	1870	0	0	1870	1573
Grp Volume(v), veh/h				340	757	293	47	132	0	0	58	136
Grp Sat Flow(s),veh/h/ln				1855	1515	1735	1183	1870	0	0	1870	1573
Q Serve(g_s), s				19.4	17.6	17.8	3.1	5.5	0.0	0.0	2.3	6.8
Cycle Q Clear(g_c), s				19.4	17.6	17.8	5.4	5.5	0.0	0.0	2.3	6.8
Prop In Lane				0.17		0.33	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				950	2329	889	510	748	0	0	748	629
V/C Ratio(X)				0.36	0.32	0.33	0.09	0.18	0.00	0.00	0.08	0.22
Avail Cap(c_a), veh/h				950	2329	889	510	748	0	0	748	629
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.91	0.91	0.91	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				32.4	31.6	31.7	24.0	23.2	0.0	0.0	22.3	23.6
Incr Delay (d2), s/veh				1.0	0.3	0.9	0.4	0.5	0.0	0.0	0.2	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.9	7.2	8.5	0.9	2.5	0.0	0.0	1.1	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.3	31.9	32.6	24.3	23.8	0.0	0.0	22.5	24.4
LnGrp LOS				C	C	C	C	C	A	A	C	C
Approach Vol, veh/h					1389			179			194	
Approach Delay, s/veh					32.4			23.9			23.9	
Approach LOS					C			C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				53.0		67.0		53.0				
Change Period (Y+Rc), s				5.0		5.5		5.0				
Max Green Setting (Gmax), s				48.0		61.5		48.0				
Max Q Clear Time (g_c+I1), s				8.8		21.4		7.5				
Green Ext Time (p_c), s				0.6		15.2		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				30.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 4: W. Valley Parkway & Centre City Parkway

Existing + Project PM

03/13/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↑↑↑	↗	↖	↑↑			↑↑↑	
Traffic Volume (veh/h)	0	0	0	217	835	241	153	902	0	0	596	102
Future Volume (veh/h)	0	0	0	217	835	241	153	902	0	0	596	102
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				236	908	262	166	949	0	0	648	111
Peak Hour Factor				0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				592	1698	481	258	2017	0	0	1982	335
Arrive On Green				0.11	0.11	0.11	0.07	0.57	0.00	0.00	0.45	0.45
Sat Flow, veh/h				1781	5106	1445	3456	3647	0	0	4562	743
Grp Volume(v), veh/h				236	908	262	166	949	0	0	500	259
Grp Sat Flow(s),veh/h/ln				1781	1702	1445	1728	1777	0	0	1702	1733
Q Serve(g_s), s				14.8	20.2	20.6	5.6	18.9	0.0	0.0	11.3	11.6
Cycle Q Clear(g_c), s				14.8	20.2	20.6	5.6	18.9	0.0	0.0	11.3	11.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				592	1698	481	258	2017	0	0	1536	782
V/C Ratio(X)				0.40	0.53	0.55	0.64	0.47	0.00	0.00	0.33	0.33
Avail Cap(c_a), veh/h				592	1698	481	403	2017	0	0	1536	782
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.95	0.95	0.95	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.2	44.6	44.8	54.0	15.3	0.0	0.0	21.2	21.3
Incr Delay (d2), s/veh				1.9	1.2	4.2	2.0	0.8	0.0	0.0	0.6	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	9.4	17.1	2.5	7.7	0.0	0.0	4.6	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.1	45.8	49.0	56.0	16.1	0.0	0.0	21.8	22.4
LnGrp LOS				D	D	D	E	B	A	A	C	C
Approach Vol, veh/h					1406			1115			759	
Approach Delay, s/veh					46.1			22.0			22.0	
Approach LOS					D			C			C	
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		75.0		45.0	14.0	61.0						
Change Period (Y+Rc), s		6.9		5.1	5.0	6.9						
Max Green Setting (Gmax), s		68.1		39.9	14.0	49.1						
Max Q Clear Time (g_c+I1), s		20.9		22.6	7.6	13.6						
Green Ext Time (p_c), s		6.9		6.5	0.2	4.7						
Intersection Summary												
HCM 6th Ctrl Delay				32.3								
HCM 6th LOS				C								

Queues
4: W. Valley Parkway & Centre City Parkway

Existing + Project AM
03/13/2018



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	318	1239	237	160	671	1044
v/c Ratio	0.33	0.41	0.30	0.54	0.53	0.90
Control Delay	16.3	17.0	13.5	59.1	32.3	55.5
Queue Delay	0.8	0.3	0.0	0.0	0.0	0.0
Total Delay	17.0	17.4	13.5	59.1	32.3	55.5
Queue Length 50th (ft)	195	264	124	62	214	284
Queue Length 95th (ft)	287	314	204	96	273	#382
Internal Link Dist (ft)		333			279	572
Turn Bay Length (ft)						
Base Capacity (vph)	953	3022	780	343	1271	1162
Starvation Cap Reductn	362	1062	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.63	0.30	0.47	0.53	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: W. Valley Parkway & Centre City Parkway

Existing + Project PM
03/13/2018



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	236	908	262	166	949	759
v/c Ratio	0.40	0.54	0.47	0.53	0.47	0.35
Control Delay	38.0	39.1	31.2	58.2	16.3	22.3
Queue Delay	0.0	0.9	0.5	0.0	0.0	0.0
Total Delay	38.0	40.0	31.7	58.2	16.3	22.3
Queue Length 50th (ft)	176	249	150	64	217	133
Queue Length 95th (ft)	254	294	229	98	269	174
Internal Link Dist (ft)		333			279	572
Turn Bay Length (ft)						
Base Capacity (vph)	586	1690	557	400	2008	2175
Starvation Cap Reductn	0	467	83	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.74	0.55	0.41	0.47	0.35

Intersection Summary