CITY OF SACRAMENTO COMMUNITY DEVELOPMENT DEPARTMENT



WoodSpring Suites Hotel Project

Modified Initial Study/15183 Checklist

February 2025



1501 Sports Drive, Suite A, • Sacramento • CA • 95834 Office 916.372.6100 • Fax 916.419.6108

TABLE OF CONTENTS

Α.	PROJ	IECT SUMMARY	1
В.	SOUF	RCES	2
C.	BAC	GROUND AND INTRODUCTION	3
D.	PROJ	IECT DESCRIPTION	5
Е.	ENVI	RONMENTAL FACTORS POTENTIALLY AFFECTED	15
F.	DETE	RMINATION	8
G.	ENVI	RONMENTAL CHECKLIST	16
	I. II. IV. V. VI. VII. IX. XI. XII. XII.	AESTHETICS. AGRICULTURE AND FOREST RESOURCES. AIR QUALITY. BIOLOGICAL RESOURCES. CULTURAL RESOURCES. ENERGY. GEOLOGY AND SOILS. GREENHOUSE GAS EMISSIONS. HAZARDS AND HAZARDOUS MATERIALS. HYDROLOGY AND WATER QUALITY. LAND USE AND PLANNING. MINERAL RESOURCES. NOISE. POPULATION AND HOUSING.	
	XV. XVI. XVII. XVIII. XIX. XX. XXI.	PUBLIC SERVICES. RECREATION. TRANSPORTATION. TRIBAL CULTURAL RESOURCES. UTILITIES AND SERVICE SYSTEMS. WILDFIRE. MANDATORY FINDINGS OF SIGNIFICANCE.	

APPENDICES:

Appendix A: Air Quality and Greenhouse Gas Modeling Results Appendix B: Tree Inventory Report Appendix C: Phase I Environmental Site Assessment

Appendix D: Preliminary Drainage Study

MODIFIED INITIAL STUDY

FEBRUARY 2025

Α.	PROJECT SUMMARY	
1.	Project Title:	WoodSpring Suites Hotel Project
2.	Lead Agency Name and Address:	City of Sacramento Community Development Department 300 Richards Boulevard, Third Floor Sacramento, CA 95811
3.	Lead Agency Contact and Phone Number:	Ron Bess Associate Planner (916) 808-8272
4.	Project Location:	East of Truxel Road/South of Del Paso Road Sacramento, CA 95834 sessor's Parcel Number (APN): 225-0070-127
5.	Project Applicant:	Chad B. Cook HMC Development LLC 7200 West 132 nd Street, Suite 220 Overland Park, KS 66213
6.	Existing General Plan Designation:	Employment Mixed-Use (EMU)
7.	Existing Zoning Designation:	Employment Center 50 Acre Planned Unit Development (EC-50-PUD)
8.	Proposed Zoning Designation:	General Commercial (C-2)
9.	Required Approvals from Other Public Age	ncies: None

- 9. Required Approvals from Other Public Agencies:
- 10. Project Location and Setting:

The project site is an approximately 2.09-acre portion of a 2.24-acre parcel identified by APN 225-0070-127 and is located southeast of the intersection of Del Paso Road and Truxel Road in the City of Sacramento, California. The project site is undeveloped, has been mass graded, and contains several trees, primarily located along the southern site boundary. Three existing light poles are located within APN 225-0070-127 outside of the project site boundaries and would not be removed as part of project development. Undeveloped land is located to the east of the project site and to the west, across Truxel Road. Surrounding existing uses include the Centerpointe at Natomas Crossing business park to the north; multi-family apartment buildings further to the east beyond the undeveloped land; and multi-family apartment buildings and an AT&T service building to the south. The project site is located in the North Natomas Community Plan area and the Natomas Crossing #1 Planned Unit Development (PUD). The City of Sacramento 2040 General Plan designates the site as EMU and the site is zoned EC-50-PUD.

11. Project Description Summary:

The WoodSpring Suites Hotel Project (proposed project) would include the development of a four-story, 50,922-square-foot (sf) extended stay hotel with 122 guestrooms. The ground floor of the hotel would include on-site amenities, including an indoor fitness room and guest laundry room. Eighteen of the 30 existing on-site trees would be removed to accommodate the proposed project. Site access would be provided through the existing internal roadways of the Centerpointe at Natomas Crossing business park, which includes an existing driveway off Del Paso Road to the north. The proposed project would provide a total of 126 parking stalls for hotel guests and employees, as well as short-term bicycle parking near the hotel's northern entrance. The proposed project would require City approval of a Rezone, Amendment to the Natomas Crossing #1 PUD, and Site Plan and Design Review.

12. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1) notification to tribes is not required for the proposed project given that this checklist determines no additional environmental review is required for the project, consistent with CEQA Guidelines Section 15183.

B. SOURCES

The following documents are referenced information sources used for the analysis within this Modified Initial Study:

- 1. California Building Standards Commission. 2022 California Green Building Standards Code. 2023.
- 2. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed August 2024.
- 3. California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility* Area. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed October 2024.
- 4. California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Sacramento County Landfill (Kiefer) (34-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed November 2024.
- California Department of Transportation. California State Scenic Highway System Map. Available https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8 e8057116f1aacaa/. Accessed October 2024.
- 6. California Environmental Protection Agency. *GeoTracker.* Available at: https://geotracker.waterboards.ca.gov/search. Accessed November 2024.
- 7. Cook, Chad B., Principal, HMC Development LLC. Personal communication [email] with Rod Stinson, Vice President, Raney Planning and Management, Inc. December 12, 2024.
- 8. City of Sacramento. 2023 Consumer Confidence Report. Available at: https://www.cityofsacramento.org/Utilities/Reports. Accessed August 2024.
- 9. City of Sacramento. City of Sacramento 2020 Urban Water Management Plan. June 2021.
- 10. City of Sacramento. *Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan.* Certified February 27, 2024.
- 11. City of Sacramento. Sacramento 2040 General Plan. Adopted February 27, 2024.

- 12. City of Sacramento. Sacramento 2040 Technical Background Report. January 19, 2021.
- 13. Department of Toxic Substances Control. *EnviroStor.* Available at: https://www.envirostor.dtsc.ca.gov/public/map. Accessed November 2024.
- 14. Federal Emergency Management Agency. *Flood Insurance Rate Map* 06067C0045J. Effective June 16, 2015.
- 15. LandAmerica Commercial Services. *Phase I Environmental Site Assessment Report.* February 16, 2006.
- 16. Natomas Unified School District. *Development Fee Information and Reporting.* Available at: https://www.natomasunified.org/departments/facilities-and-strategic-planning/developer-fee-information-and-reporting. Accessed November 2024.
- 17. Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed October 2024.
- 18. O'Dell Engineering. Arborist Tree Inventory Report. June 14, 2024.
- 19. Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments.* February 2015.
- 20. Sacramento Area Council of Governments. *Sacramento International Airport Land Use Compatibility Plan*. December 12, 2013.
- 21. Sacramento County. Sacramento County Local Hazard Mitigation Plan. July 2021. Available at: https://waterresources.saccounty.gov/stormready/Pages/Local-Hazard-Mitigation-Plan-2017-Update.aspx. Accessed November 2024.
- 22. Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.* June 2020.
- 23. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment in Sacramento County*. Revised April 2021.
- 24. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions.* October 2020.
- 25. Sacramento Metropolitan Air Quality Management District. SMAQMD Operational Screening Levels. April 2018.
- 26. State Water Resources Control Board. *Active CDO and CAO*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed November 2024.
- 27. U.S. Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed August 2024.
- 28. U.S. Environmental Protection Agency. User's Guide for the AMS/EPA Regulatory Model (AERMOD). December 2016.

C. BACKGROUND AND INTRODUCTION

The following provides a background of the proposed project, as well as a description of this Modified Initial Study's approach to evaluating the proposed project's consistency with California Environmental Quality Act (CEQA) Section 15183.

CEQA Guidelines Section 15183

This Modified Initial Study identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document is organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines.

On February 27, 2024, the City of Sacramento adopted the 2040 General Plan,¹ which became effective on March 28, 2024. The City of Sacramento also certified a Master Environmental Impact

¹ City of Sacramento. *Sacramento 2040 General Plan.* Adopted February 27, 2024.

Report (MEIR) associated with the 2040 General Plan on February 27, 2024.² The General Plan MEIR is a master EIR, prepared pursuant to Section 15169 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 et seq.). The General Plan MEIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan to the maximum extent feasible.

The City's 2040 General Plan designates the project site as EMU, which allows a mix of residential and industrial or commercial uses. Specific examples include, but are not limited to, accessory office uses, retail and service uses for employee support, and compatible residential uses such as employee housing, hotels and motels, and care facilities. The EMU designation generally applies to industrial areas that are next to residential neighborhoods. The proposed project would include development of a hotel adjacent to existing multi-family apartments, which is consistent with the site's EMU land use designation. Pursuant to Section 15183 of the CEQA Guidelines, where a project is consistent with the use and density established for a property under an existing general plan or zoning ordinance for which the City has already certified an EIR, additional environmental review is not required "except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." If such requirements are met, the examination of environmental effects is limited to those which the agency determines, in an Initial Study or other analysis:

- 1. Are peculiar to the project or the parcel on which the project would be located;
- 2. Were not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan with which the project is consistent;
- 3. Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action; or
- 4. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

As set forth by Section 15183 of the CEQA Guidelines, the City's General Plan MEIR serves as a basis for the Modified Initial Study to determine if project-specific impacts would occur that are not adequately covered in the previously certified MEIR.

This Modified Initial Study indicates whether the proposed project would result in a significant impact that: (1) is peculiar to the project or the project site; (2) was not identified as a significant effect in the General Plan MEIR; or (3) are previously identified significant effects, which as a result of substantial new information that was not known at the time that the General Plan MEIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan MEIR.

Regarding "peculiar" impacts, CEQA Guidelines Section 15183(f) states the following:

An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR.

² City of Sacramento. *Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan.* Certified February 27, 2024.

D. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary actions required for the project.

Project Location and Setting

The project site is an approximately 2.09-acre portion of a 2.24-acre parcel identified by APN 225-0070-127 and is located southeast of the intersection of Del Paso Road and Truxel Road in the City of Sacramento, California (see Figure 1 and Figure 2). The project site is undeveloped and contains several trees, primarily located along the southern site boundary. Three existing light poles are located within APN 225-0070-127, but all three are located outside of the project site boundaries and would not be removed as part of project development.

Undeveloped land is located to the east of the project site and to the west, across Truxel Road. Surrounding existing uses include the Centerpointe at Natomas Crossing business park to the north; multi-family apartment buildings further to the east beyond the undeveloped land; and multi-family apartment buildings and an AT&T service building to the south. The project site is located in the North Natomas Community Plan area and the Natomas Crossing #1 PUD. The City of Sacramento 2040 General Plan designates the site as EMU and the site is zoned EC-50-PUD.

Project Components

The proposed project would include the development of a four-story, 50,922-sf extended stay hotel with 122 guestrooms (see Figure 3). The ground floor of the hotel would be approximately 13,113 sf and would feature on-site amenities, including an indoor fitness room and guest laundry room. The subsequent three floors would be approximately 12,603 sf each and would primarily consist of guest rooms. Additional detail regarding the proposed project's parking, access, and circulation; landscaping; and utility infrastructure is provided below.

Parking, Access, and Circulation

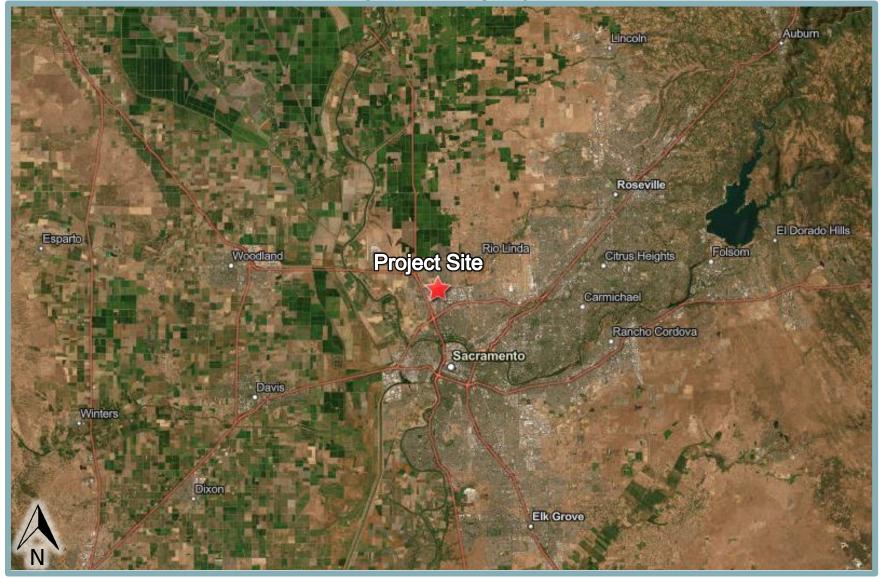
Site access would be provided through the existing internal roadways of the Centerpointe at Natomas Crossing business park, which includes an existing driveway off Del Paso Road to the north. The proposed project would provide a total of 126 parking stalls for hotel guests and employees, comprised of 117 standard parking spaces, two compact spaces, and seven accessible spaces compliant with the Americans with Disabilities Act (ADA). Of the 126 total spaces, 51 would include standard electric vehicle (EV) receptacles, and 13 would include standard EV charging stations.

The proposed project would also provide short-term bicycle parking through two bicycle racks installed near the hotel's northern entrance. Pedestrian access routes would be provided in the northeastern portion of the site, and would connect to off-site areas to the north and east. In addition, pedestrian access would be provided in the northwestern portion of the site and would connect to existing sidewalks along the Truxel Road frontage.

Landscaping

As part of the proposed project, 18 of the 30 existing on-site trees would be removed. Landscaping improvements, including 63 evergreen and deciduous trees in containers and shrubs, would be provided throughout the site (see Figure 4). All landscaping would comply with the Water Efficient Landscape Requirements contained in Chapter 15.92 of the City Code.

Figure 1 Regional Vicinity Map

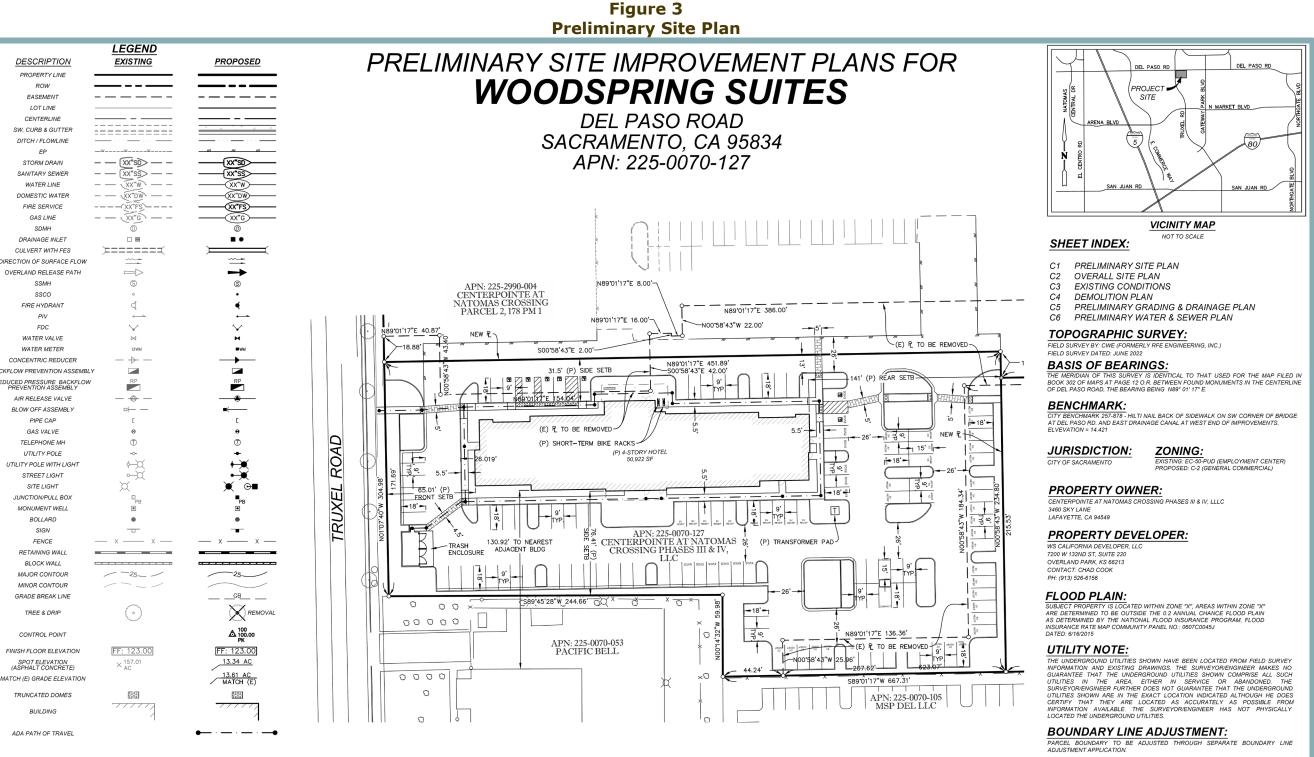


Page 6 February 2025

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Figure 2 Project Site Boundaries





ŀ

PARKING INFO	RMATION			PARKING STALL SUMMARY			
				STALL TYPE	NUMBER OF STALLS		
ITEM	REQUIREMENTS	PROVIDED		STANDARD	55		
PARKING REQUIRED	1 SPACE PER 4 GUEST ROOMS (122 ROOMS) -	126 SPACES		COMPACT	2		
PARKING REQUIRED	31 SPACES		STANDARD ADA	4			
MINIMUM PARKING	8.5' X 18' STD	9' X 18' STD		VAN ACCESSIBLE ADA	1		
DIMENSIONS	8' X 15' COMPACT	9' X 15' COMPACT		STANDARD EV CHARGING STATION	11		
MIN. DRIVEWAY WIDTH	25'	26'		STANDARD EV RECEPTACLE	51		
ACCESSIBLE SPACES	5 SPACES	7 SPACES		STANDARD ADA EV CHARGING STATION	1		
*PARKING STANDARDS PER CITY OF SACRAMENTO ZONING CODE				VAN ACCESSIBLE ADA EV CHARGING STATION	1		
				TOTAL	126		

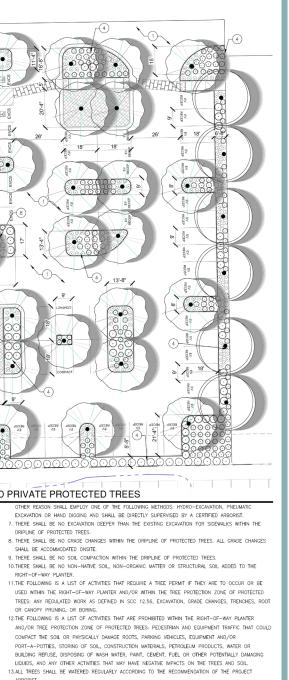
WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Page 8 February 2025

Figure 4 **Preliminary Landscape Plan**

PRELIMINAR	Y PLANT SCHEDULE						(11)-	· / 、 `
SYMBOL I	BOTANICAL NAME	COMMON NAME	SIZE	/ATER USE				× 1 10-8"
PARKING LOT TRE	EES				13'			
	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	24" BOX M	DERATE				
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	24" BOX	LOW		a 5	4'-6".	
	ULMUS PARVIFOLIA WILSONIANA 'PROSPECTOR'	PROSPECTOR ELM	24" BOX	LOW				
PERIMETER SCR	EEN TREES KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	15 GAL	LOW (7)			<u>2007 - 1</u>	
	PINUS CANARIENSIS	CANARY ISLAND PINE	15 GAL	LOW 4		L#114#11.		
	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	15 GAL N	(10)	· · · · · · · · · · · · · · · · · · ·			
ACCENT TREES	LENGTA JENNAR ONEER TAJE		10 012				~	
<u> </u>	CERCIS OCCIDENTALIS	WESTERN REDBUD	15 GAL	LOW				
\otimes	CHILOPSIS LINEARIS 'TIMELESS BEAUTY'	DESERT WILLOW	15 GAL					
I	LAGERSTROEMIA X 'MUSKOGEE'	LIGHT LAVENDER CRAPE MYRTLE	15 GAL	LOM ROA			///////////////////////////////////////	
ACCENT SHRUBS						<u>8668</u> 5899999999999999		<u> </u>
-	HESPERALOE PARVIFOLIA RIS DOUGLASIANA	RED YUCCA DOUGLAS IRIS	5 GAL 5 GAL				ai y	
-	PENSTEMON HETEROPHYLLUS 'MARGARITA BOP'	MARGARITA BOP PENSTEMON	5 GAL					
	RASS-LIKE PLANTS				Aller Aller			neces leces acces
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	LOW (10) 7			€ ₆ L ₃	8
	CAREX TUMULICOLA	BERKELEY SEDGE	1 GAL	LOW	6-1	1 18 1 18		
ROUNDCOVERS	MUHLENBERGIA RIGENS	DEEGRASS	5 GAL	LOW (4)		~ ` K I	1	EACE EACE EACE EACE EACE
	COTONEASTER DAMMERI 'LOWFAST'	LOWFAST BEARBERRY COTONEASTE	R 1 GAL	LOW				
• •	BACCHARIS PILULARIS	DWARF COYOTE BRUSH	1 GAL	LOW				
	ROSMARINUS OFFICINALIS 'HUNTINGTON'	TRAILING ROSEMARY	1 GAL	LOW			X COOX	
IEDIUM HEIGHT	SHRUBS CALLISTEMON 'LITTLE JOHN'	LITTLE JOHN BOTTLEBRUSH	5 GAL	LOW			7) X - //	
	NANDINA DOMESTICA 'GULF STREAM'	GULF STREAM NANDINA	5 GAL	LOW				
-	TEUCRIUM FRUTICANS	BUSH GERMANDER	5 GAL	LOW				18' 50 26'-6"
CREEN SHRUBS	/ HEDGES							
	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN'	HOWARD MCMINN MANZANITA	5 GAL	LOW			J	
	CEANOTHUS 'CONCHA'	CONCHA CEANOTHUS COMPACT XYLOSMA	5 GAL 5 GAL		D		Ň	
IORETENTION P	XYLOSMA CONGESTUM 'COMPACTA'	COMPACT XTEUSMA	5 GAL	ASPH	ě	XISTING CITY SIDEWALK	<u>î</u>	
	CAREX TUMULICOLA	BERKELEY SEDGE	1 GAL	LOW		ROPOSED TRANSFORMER LOCATION		
	CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	1 GAL	LOW		IOTEL SIGN XISTING TREES TO REMAIN	Ų	
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	MOD (5) TRASE	Š	XISTING TREES TO BE REMOVED		REQUIRED TREE PRESERVATION MEASURES FOR CITY AN 1. THIS PROJECT SHALL CONTRACT WITH A PROJECT ARBORIST EXPERIENCED WITH TREE PROTECTION AND
* NOTE: THIS DO OT TO BE USED ILL VARY DEPEN	OCUMENT IS FOR CONCEPTUAL PLANNING PURPOSE: FOR CONSTRUCTION PURPOSES. ANY IMAGES SHOW DING ON BUDGET, CLIENT DIRECTION, COMMUNITY II	S ONLY. THIS DOCUMENT IS MARKE WN ARE TO CONVEY CONCEPT ONLY. INPUT AND FINAL MATERIALS SELECTI	ED PRELIMINARY . CONSTRUCTION ION.	PLANS 6 PROP	SED BICYCLE PARKING - 4 RACKS	0 11	0 20 40 SCALE: 1" = 20'	CONSTRUCTION THAT IS REQUIRED TO: a. ATEND PRECONSTRUCTION MEETINGS TO APPROVE OF AND INFORM CONTRACTORS OF ALL TREE
	PRELIMINARY IRRIGATED LA				PROJECT IRRIGATION NOTES	TREE CONTAINER SIZE	TABLE	PROTECTION MEASURES. b. VISIT THE SITE BEFORE AND AFTER DEMOLITION, GRADING AND LANDSCAPING AS WELL AS AT LEAST
			TIOLENO	INDEL	THE PROPOSED PLANTING DESIGN FOR THIS PROJECT IS	SIZE: OTY.	7	TWICE EACH MONTH DURING CONSTRUCTION TO ENSURE THAT TREE PROTECTION MEASURES ARE
	LIED WATER ALLOWANCE				COMPRISED OF PREDOMINATELY LOW-WATER USE TREES, SHRUBS, AND GROUNDCOVERS. THE TREES WILL BE IRRIGATI	24" BOX: 25	40%	IMPLEMENTED AND MAINTAINED. c. BE RESPONSIBLE FOR CORRECTING ANY SITE CONDITIONS THAT MAY NEGATIVELY IMPACT THE TREES AND
MAWA=(ETo)(0	.62)((0.45xLA)+((1.0-0.45)xSLA))	LOCAL ETo= LA = S	ila =	MAWA TOTAL=	WITH A ROOT WATERING SYSTEM AND A SURFACE SUPPLEMENTAL BUBBLER. THE SHRUBS, GRASSES, AND	15 GAL: 38 TOTAL # OF TREES: 63	60% 100%	REVISIT THE SITE TO ENSURE THAT CORRECTIVE ACTION WAS PROPERLY IMPLEMENTED. d. THE PROJECT ARBORIST SHALL REPORT IN WRITING TO URBAN FORESTRY ALL VIOLATIONS AND TREE
		51.9 16,335	0	236,532 GAL	GROUNDCOVERS WILL BE IRRIGATED WITH LOW VOLUME POIN	EVERGREEN AND DECI	DUOUS TREE	PROTECTION FAILURES ALONG WITH CORRECTIVE ACTION TAKEN AND EXPECTED OUTCOMES. 2. ALL CONCRETE SIDEWALKS AND DRIVEWAYS SHALL BE RETAINED THROUGHOUT CONSTRUCTION TO PROTECT
				ETMU TOTAL	SOURCE DRIP/BUBBLERS TO PROVIDE ADEQUATE WATER TO THE PLANT ROOT ZONE. THE SITE IRRIGATION WILL BE	TYPE: QTY.	%	THE ROOTS AND SOIL FROM THE IMPACTS OF CONSTRUCTION ACTIVITIES.
1WU=(EIO)(0.	.62)(((PFxHA)/IE)+SLA) LOCAL ETo= 51.9		iLA =	ETWU TOTAL= 195,476 GAL.	CONTROLLED BY A 'SMART' CONTROLLER WITH WEATHER	EVERGREEN TREES: 25 DECIDUOUS TREES: 38	40% 60%	a. EXISTING DRIVEWAYS SHALL BE USED AS THE SOLE ACCESS TO THE SITE. WHERE THERE ARE NO EXISTING DRIVEWAYS, ACCESS SHALL BE LIMITED TO A ONE OR TWO LOCATIONS OUTSIDE THE DRIPLINE
HYDROZONE II	NFORMATION TABLE		-	100,470 042	SENSING CAPABILITIES (HUNTER, RAINBIRD, OR EQUAL). THE POINT OF CONNECTION WILL UTILIZE A BACKFLOW PREVENTE	R, TOTAL # OF TREES: 63	100%	OF PROTECTED TREES THAT HAVE PROTECTION FROM SOIL COMPACTION WITH THE USE OF ONE OR MORE OF THE FOLLOWING: A 6-INCH LAYER OF HARDWOOD CHIPS COVERED BY %-INCH PLYWOOD OR
HYDROZO	NE TAG PLANT FACTOR IRRIGATION (PF) METHOD		EA (SF)	X AREA ESTIMATED TOTAL WATER USE (ETWU	MASTER VALVE, AND FLOW SENSOR TO COMPLY WITH ALL APPLICABLE LOCAL AND STATE WATER EFFICIENT LANDSCAPE	SHRUB CONTAINER SIZ		TRENCH PLATES, GEOTEXTILE FABRIC COVERED BY A 6-INCH LAYER OF HARDWOOD CHIPS OR AN ALTERNATIVE THAT IS APPROVED BY THE CITY ARBORIST.
ANDSCAPE A					ORDINANCE CODES. THE PROPOSED IRRIGATION SYSTEM WILL COMPLY WITH ALL LOCAL AND STATE WATER EFFICIENT		% 30%	3. RIGHT-OF-WAY PLANTERS AND CITY TREES SHALL BE SEPARATED FROM THE CONSTRUCTION SITE WITH A
(TREE/RWS/	MODERATE) 0.50 RWS	0.81 0.62 1,7	780 SF	.099 35,356 GAL	LANDSCAPE ORDINANCE CODES (INCLUDING, BUT NOT LIMITE) 5 GAL: 850	70% 100%	SIX-FOOT HIGH CHAIN LINK FENCE THAT SHALL REMAIN THROUGHOUT THE DURATION OF THE PROJECT TO PROTECT TREES AND TO PREVENT CONSTRUCTION TRAFFIC FROM COMPACTING THE SOIL IN THE PLANTERS.
(BIORETENTION/D				276 41,057 GAL	TO - WATER BUDGET CALCULATIONS, LANDSCAPE MAINTENAM STANDARDS).	LANDSCAPE AREA CAL		4. CONSTRUCTION TRAILERS AND PORT-A-POTTIES SHALL BE PLACED ON EXISTING HARDSCAPE OR BRIDGED OVER THE TREE PROTECTION ZONE OR PLANTER SO AS NOT TO COMPACT SOIL.
(SHRUB/DF	RIP/LOW) 0.24 IN-LINE DRIP			,700 119,063 GAL		TOTAL PROJECT AREA - PARCEL SIZE:	93,731 SF	5. ANY REGULATED WORK WITHIN THE DRIPLINE OR TREE PROTECTION ZONE OF A PROTECTED TREE SHALL BE SEPARATELY PERMITTED PRIOR TO THE START OF CONSTRUCTION AND SUPERVISED BY A CERTIFIED
		16,	L AREA= 335 SF	TAL= TOTAL = ,075 195,476 GAL.	4	TOTAL LANDSCAPE AREA:	16,335 SF 100%	ARBORIST. SUBMIT A TREE PERMIT APPLICATION AND A TREE PROTECTION PLAN CREATED BY A CERTIFIED
	ION DERIVED FROM PLANT FACTOR DESIGNATIONS IN					SHRUB AND GROUNDCOVER AREA: BIORETENTION AREA:	14,268 SF 87.3% 2,067 SF 12.7%	ARBORIST TO URBANFORESTRY@CITYOFSACRAMENTO.ORG AND REFER TO THE PLANNING PROJECT NUMBER OF OFF-SITE PROJECT NUMBER.
)RA	FT CONCEP	T LANDS	SCA	PF PI A	Ν	PERCENT OF SITE IN LANDSCAPE:	18.1%	6. ALL EXCAVATION, GRADING, OR TRENCHING WITHIN THE DRIPLINE OF A PROTECTED TREE FOR THE PURPOSE OF UTILITY INSTALLATION, CONSTRUCTING FOUNDATIONS, FOOTINGS, SIDEWALKS, CURBS, GUTTERS, OR ANY
7/19/202	4							

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist



13.ALL TREES SHALL BE WATERED REQUEARLY AUCURUM IN THE RECOMMENDATION OF THE COMMENDATION OF THE PROJECT. ACCORDING THE RECOMPT AND ADDRESS AND



Utilities

The Sacramento Municipal Utility District (SMUD) would provide electricity services to the project site through connections to existing infrastructure in the project vicinity. Utilities for the proposed project, including water service, sewer service, and stormwater infrastructure, are discussed in further detail below.

Water

Treated water service for the proposed project would be provided by the City of Sacramento Department of Utilities (DOU). The City uses surface water from the American and Sacramento rivers, as well as groundwater north of the American River to meet the City's demands.

Utilities have been previously stubbed within the roadways bounding the project site as part of buildout of surrounding development. For example, two 10-inch water lines are currently contained within the project site, including a water line extending east from Truxel Road and a line extending north into the Centerpointe at Natomas Crossing business park (see Figure 5). The proposed project would include installation of four- and eight-inch water lines that would connect to the existing 10-inch lines within the project site, as well as an existing 12-inch water line located in Truxel Road, west of the project site.

Wastewater

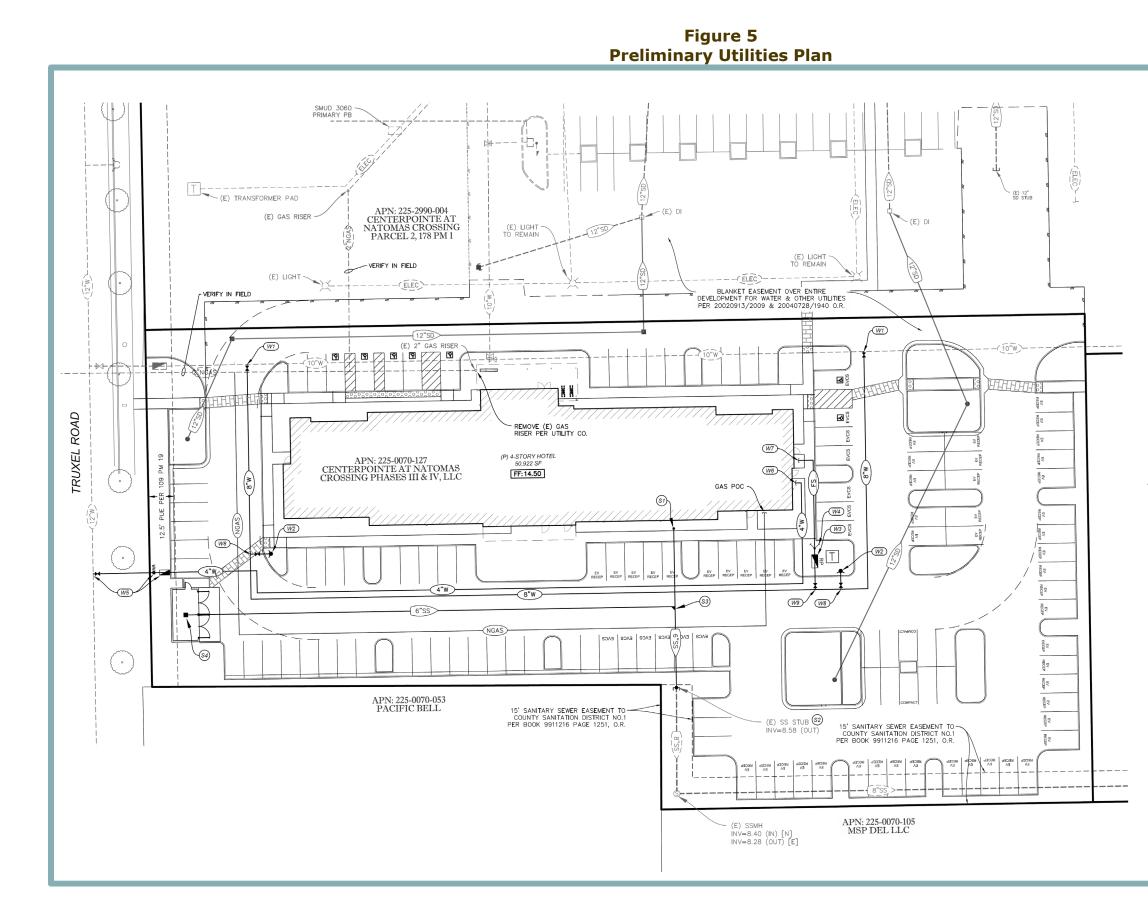
Wastewater treatment for the project area is currently provided by the Sacramento Area Sewer District (SacSewer). It should be noted that prior to December 26, 2023, SacSewer was represented by two independent special districts, a previous iteration of SacSewer and the Sacramento Regional County Sanitation District (Regional San). However, Sacramento Local Agency Formation Commission (LAFCo) authorized a reorganization of the districts, dissolving the former SacSewer, annexing the district into Regional San, and subsequently naming the wastewater special district "Sacramento Area Sewer District."

Wastewater generated in the project area is collected in the City's separated sewer system through a series of sewer pipes and flows into the SacSewer interceptor system, where the sewage is conveyed to the Sacramento Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is owned and operated by SacSewer and provides sewage treatment for the entire City. The proposed project would include installation of a six-inch sanitary sewer line that would connect to an existing stubbed eight-inch sanitary sewer line located in the southern portion of the project site (see Figure 5). The existing eight-inch line extends east within a 15-foot easement beyond the project site boundaries.

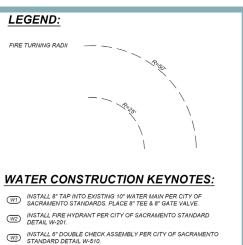
Stormwater Drainage

The City's DOU provides storm drainage service throughout the City by using drain inlets, pumps, and canals. The City provides stormwater drainage through the City's Separated Sewer System which covers approximately 35 percent of the City and is comprised of primary "backbone" sewers, sewer sheds, and pump stations. Stormwater collected by the City is transported to SacSewer's SRWWTP, where runoff is then treated prior to discharge into the Sacramento River.

Existing stormwater drainage infrastructure in the project vicinity includes storm drain infrastructure to the north associated with the Centerpointe at Natomas Crossing business park. The proposed project would be split into four drainage management areas (DMAs), DMA-01 to DMA-04 (see Figure 6). DMA-01, DMA-02, and DMA-03 would each include individual bioretention planters, which would collect stormwater runoff associated with each DMA prior to discharge to new on-site 12-inch storm drain lines.



WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist



- (W4) INSTALL FIRE DEPARTMENT CONNECTION.
- (W5) INSTALL DOMESTIC WATER SERVICE TAP AND METER / BFP PER CITY.
- (W6) DOMESTIC WATER SERVICE POINT OF CONNECTION.
- (W7) FIRE RISER LOCATION.
- (WB) INSTALL 6" TAP AND VALVE FOR FIRE HYDRANT.
- (W9) INSTALL TAP AND VALVE FOR FIRE SERVICE.

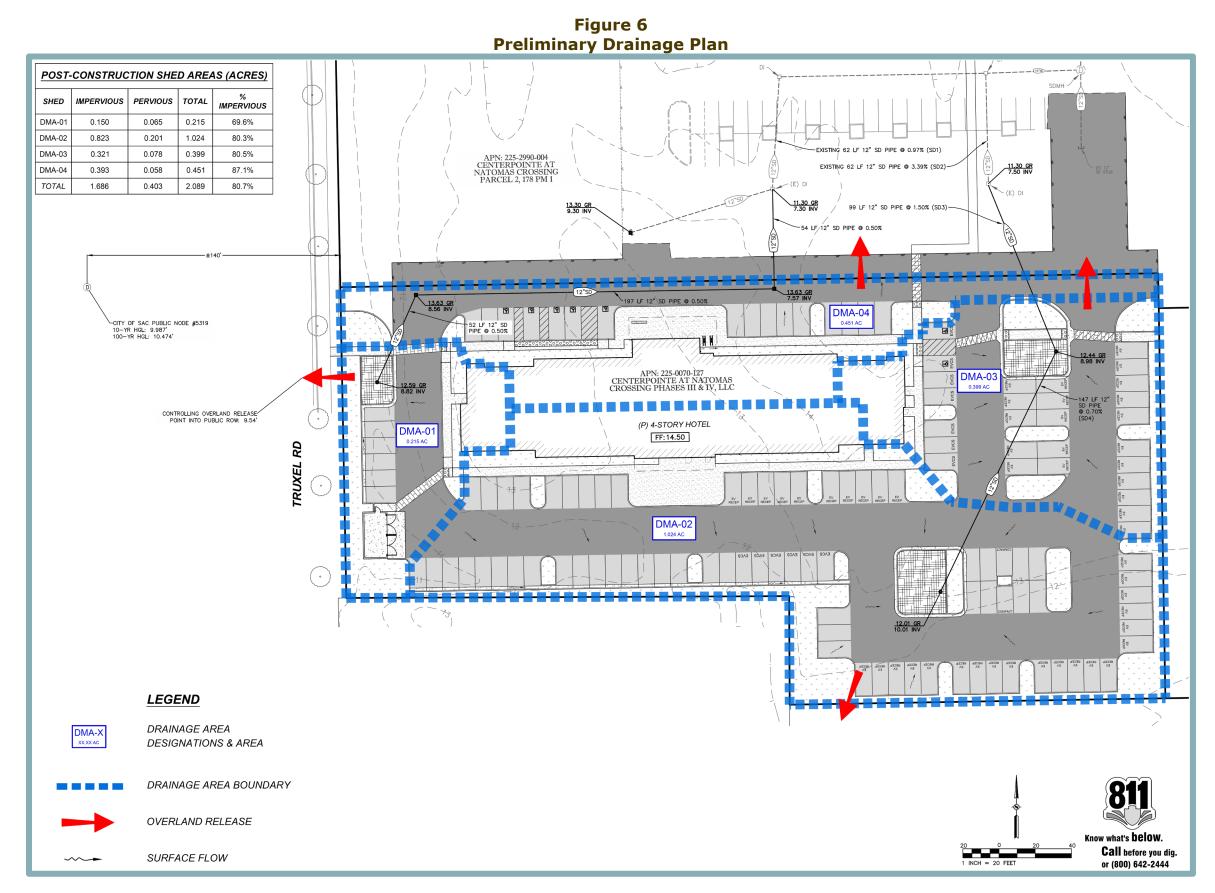
SANITARY SEWER CONSTRUCTION

KEYNOTES:

- SANITARY SEWER POINT OF CONNECTION TO BUILDING. INSTALL CLEANOUT.
- CONNECT INTO EXISTING SEWER. INSTALL NEW CLEANOUT.
- (3) INSTALL COMBINATION WYE & ¹/₈ BEND.
- () INSTALL SEWER DRAIN.

UTILITY GENERAL NOTES:

- CONTRACTOR TO VERIFY LOCATIONS OF UTILITY POINTS OF CONNECTION AT BUILDING WITH THE BUILDING PLANS PRIOR TO CONSTRUCTION.
- 2. ALL SEWER MATERIALS AND INSTALLATION OF PUBLIC SEWER FACILITIES SHALL BE IN ACCORDANCE WITH SASD STANDARDS.
- THE CONTRACTOR SHALL POTHOLE AND VERIFY THE DEPTH OF ALL EXISTING UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED UTILITIES. ANY UNANTICIPATED CONFLICTS SHALL BE REDESIGNED PRIOR TO BEGINNING WORK.
- ALL TRENCHING FOR WATER AND SEWER UTILITIES SHALL COMPLY WITH CITY & SASD. TRENCH RESTORATION CONSTRUCTED PER CITY & SASD SPECIFICATIONS.
- 5. WATERLINES TO BE INSTALLED WITH 36" MIN. COVER.
- 6. ALL SEWER MAINS SHALL BE CONSTRUCTED WITH SDR-35 PVC PIPE.
- 7. WATERLINES TO CROSS <u>ABOVE</u> SANITARY SEWER OR STORM DRAIN PIPES WITH MIN. 12" CLEAR FROM OUTER DIAMETER OF PIPE.
- 8. ALL WATER MATERIALS AND INSTALLATION OF PUBLIC WATER FACILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS.



WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Runoff in DMA-04 would flow into a combination of existing and proposed drainage inlets which would capture runoff to also be conveyed within the new on-site 12-inch storm drain lines. The proposed on-site storm drain lines would ultimately connect to the existing City stormwater drainage system located to the north of the site within the existing Centerpointe at Natomas Crossing business park. Existing storm drainage infrastructure includes Basin 15, an existing regional detention facility, which would ultimately capture and treat runoff associated with the proposed project.

Discretionary Actions

The proposed project would require City approval of a Rezone, Amendment to the Natomas Crossing #1 PUD, and Site Plan and Design Review. Each project approval is described in further detail below.

Rezone and PUD Amendment

The proposed project would require approval of a Rezone to change the zoning designation of the project site from EC-50-PUD to General Commercial (C-2). Pursuant to Section 17.216.710 of the City Code, hotel and motel uses are permitted in the C-2 zone if the project does not involve the demolition or conversion of multi-unit dwellings that exist or are under construction. Based on the vacant nature of the project site, the proposed project would be an allowed use under the C-2 zone.

The proposed project would also require a Natomas Crossing #1 PUD Amendment to reclassify 2.09 acres from vacant land to a hotel (see Figure 7).

Site Plan and Design Review

The proposed project would require approval of Site Plan and Design Review for the construction of the proposed hotel and project improvements. As detailed in Section 17.808.100 of the City Code, the purpose of the Site Plan and Design Review is to ensure that the physical aspects of development projects are consistent with the 2040 General Plan and any other relevant plans, as well as with any applicable design guidelines. In addition, the purpose of the permit is to ensure a development is of high quality and is compatible with and complementary to surrounding development; to ensure streets and other public access ways and facilities, parking facilities, and utility and other infrastructure, both on-site and off-site, are adequate and available to support a development and conform to City development standards; to promote energy efficiency and water conservation; and to avoid or minimize, to the extent feasible, adverse environmental effects of development.

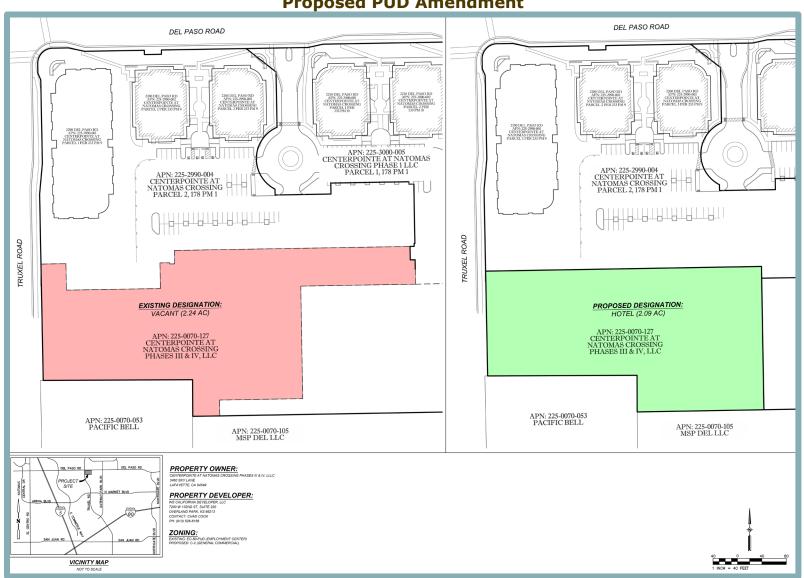


Figure 7 Proposed PUD Amendment

Page 14 February 2025

E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

On the basis of the following initial evaluation, the City has determined that the proposed project is consistent with the General Plan MEIR. All project impacts have been determined to be less than significant, or can be mitigated to a less-than-significant level given required compliance with General Plan policies or mitigation measures included in the General Plan MEIR.

Aesthetics Agriculture and Forest Air Quality Resources **Biological Resources Cultural Resources** Energy **Geology and Soils Greenhouse Gas Emissions Hazards and Hazardous Materials** Hydrology and Water □ Land Use and Planning **Mineral Resources** Quality Noise **Population and Housing Public Services** Recreation Transportation **Tribal Cultural Resources Utilities and Service** Wildfire Mandatory Findings of Significance Systems **F**. DETERMINATION

On the basis of this Modified Initial Study/15183 Checklist:

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

Signature

Date

<u>Ron Bess, Associate Planner</u> Printed Name <u>City of Sacramento</u> For

G. ENVIRONMENTAL CHECKLIST

The following modified checklist is based on the environmental checklist form presented in Appendix G of the CEQA Guidelines. The modified checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Significant Impact Peculiar to the Project or Project Site: An impact that could be significant due to something peculiar to the proposed project or the project site that was not previously identified in the General Plan MEIR. If any potentially significant peculiar impacts are identified, an additional CEQA document must be prepared to analyze such impacts.

Significant Impact due to New Information: Any impact that would be considered significant based on new information which was not known at the time the prior EIR was prepared. If any significant impacts are identified, an additional CEQA document must be prepared to analyze such impacts.

Impact Adequately Addressed in General Plan MEIR: Impacts previously evaluated in the City's General Plan MEIR that would not change from what was evaluated previously. This designation applies in cases where implementation of the proposed project would not result in a new significant impact, a substantially increased significant impact, or a peculiar impact that was not analyzed in the General Plan MEIR.

I. Wa	AESTHETICS. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a. b.	Have a substantial adverse effect on a scenic vista? Substantially damage scenic resources, including, but			*
	not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?			×
C.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			*
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			×

Discussion

a,b. As noted in the General Plan MEIR, important scenic resources in the City include major natural open space features, such as the American River and Sacramento River and associated parkways, as well as culturally important or historic buildings, such as the State Capitol building, Tower Bridge, and Sutter's Fort. Landmarks, historic districts, and parks also contribute to the existing visual character of the City.

According to the General Plan MEIR, new urban development would alter existing public views if located within view of the identified scenic resources. However, the 2040 General Plan includes policies and programs intended to preserve visual resources and ensure new development is designed to lessen impacts associated with preserving scenic views, including Policy LUP-4.6, which requires compatibility with adjoining uses through regulation of features such as building heights to maintain transitions in scale; Policy LUP-8.13, which ensures continuity in streetscape design; and Policy LUP-8.12, which requires that public spaces be visible from at least one street frontage and, if feasible, at least 50 percent visible from a secondary street frontage. Compliance with applicable General Plan policies related to scenic resources would ensure that views of existing scenic resources are preserved within the City. Thus, the General Plan MEIR concluded that a less-than-significant impact would occur.

According to the California Scenic Highway Mapping System, the project site is not located within the vicinity of an officially designated State Scenic Highway.³ Scenic resources, including rock outcroppings or historically significant buildings, do not exist on the project site. In addition, the project site is not located within the vicinity of the American River, Sacramento River, State Capitol building, Tower Bridge, or Sutter's Fort.

Given that the proposed project is consistent with the EMU land use designation of the project site, development of the site with a hotel and associated improvements has already been generally anticipated by the City and considered as part of the General Plan MEIR analysis.

³ California Department of Transportation. California State Scenic Highway System Map. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa/. Accessed October 2024.

The proposed project would not conflict with any General Plan policies related to the preservation of scenic vistas. In addition, the proposed project would be subject to the design standards established in the City Code and the General Plan. Furthermore, the proposed hotel would be generally consistent with the surrounding existing development in the project area. The proposed project would also be required to comply with the design and development standards contained within the Natomas Crossing PUD, including standards related to roadways, signage, lighting, parking, and landscaping.

Based on the above, impacts related to a substantial adverse effect on a scenic vista and substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway, have been adequately addressed in the General Plan MEIR and effects peculiar to the project or parcel on which the project would be located do not exist. Thus, the criteria for requiring further CEQA review are not met.

c. The General Plan MEIR assessed the potential for implementation of development under the General Plan to substantially degrade the existing visual character or quality of the City under Impact 4.1-2. As discussed above, the 2040 General Plan includes policies and programs intended to preserve visual resources and prevent the substantial degradation of views of existing scenic resources, as seen from visually sensitive public locations. The General Plan MEIR concluded that, with adherence to the applicable policies, potential development under the 2040 General Plan would not result in substantial changes to important scenic resources or their visibility from visually sensitive locations. Therefore, the impact was determined to be less than significant.

The project site is currently undeveloped, has been mass graded, and contains 30 trees. Surrounding existing uses include the Centerpointe at Natomas Crossing business park to the north; multi-family apartment buildings further to the east beyond the undeveloped land; and multi-family apartment buildings and an AT&T service building to the south. Pursuant to Appendix G of the CEQA Guidelines, because the project site is in an urbanized area, the relevant threshold is whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality rather than whether the project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The proposed project is consistent with the General Plan land use designation for the project site and would comply with all applicable development standards required by the City, including standards related to building height, lot area, setbacks, and building design, as well as all applicable General Plan Policies such as Policy LUP-4.6, Policy LUP-8.13, and Policy LUP-8.12. In addition, the proposed project would be generally consistent with the surrounding existing development in the project area. In addition, the proposed project would be subject to the Site Plan and Design Review process, during which the City would ensure consistency with all applicable design standards. Therefore, the proposed project would not result in any new or peculiar impacts related to degradation of visual character.

Based on the above, impacts related to degradation of visual character were adequately addressed in the General Plan MEIR, and the project would not result in more severe impacts beyond what was identified in the General Plan MEIR.

d. According to the General Plan MEIR, because the City of Sacramento is mostly built-out, a large amount of ambient lighting from urban uses already exists in the General Plan planning area. New development allowed under the 2040 General Plan could add lighting similar to the existing urban light sources from any of the following: exterior building lighting, new street lighting, parking lot lights, and headlights of vehicular traffic. However, because new sources of lighting associated with development permitted under the 2040 General Plan would be similar to the current urban setting in amount and intensity of lighting, the General Plan MEIR concluded that daytime or nighttime views of adjacent sensitive receptors (i.e., residential uses) would not be significantly affected.

In addition, new development would be subject to applicable General Plan policies, including Policy LUP-4.6, which would ensure that the introduction of higher-density or more intense development is compatible with and complimentary to surrounding development, such as by requiring all lighting to be shielded from view and directed downward, thereby minimizing impacts on adjacent residential uses. The 2040 General Plan also includes Policy LUP-8.10, which requires appropriate building and site design that considers and reflects the character of existing development, such as through the use of compatible building materials. Furthermore, the proposed project would be subject to the City's Site Plan and Design Review process. The scope of Site Plan and Design Review extends to all aspects of the physical characteristics of development, including building materials that could cause excessive glare (such as mirrored glass).

As discussed above, the project site is currently undeveloped. Thus, development of a hotel on the project site would result in new sources of light and glare on a site that does not currently contain light and glare sources. However, the project site is surrounded to the north, east, and south by existing development, and light associated with the proposed hotel would be consistent with what was anticipated for the site in the General Plan MEIR. Development within the City is also required to be consistent with the California Building Code standards for outdoor lighting as amended by Section 15.20.030 of the City Code, which are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. Furthermore, the proposed project would be required to comply with the aforementioned General Plan policies. Compliance with the aforementioned provisions would ensure that the light and glare anticipated for the project site.

Based on the above, impacts related to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area were adequately addressed in the General Plan MEIR and the proposed project would not result in any peculiar effects. Thus, the criteria for requiring further CEQA review are not met.

Significant

Impact

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d. Result in the loss of forest land or conversion of forest land to non-forest use?
- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Adequately Addressed in the General Plan MEIR
		*
		×
		*
		*
		*

Discussion

As discussed on page 4.2-2 of the City's General Plan MEIR, the Sacramento planning a.e. area contains 41 acres of Prime Farmland, nine acres of Farmland of Statewide Importance, zero acres of Unique Farmland, and 3,802 acres of Farmland of Local Importance, for a total of 3,852 acres of Farmland, according to the California Department of Conservation (DOC). The 2040 General Plan includes policies and programs related to agricultural operations and adjacent uses, including Policy LUP-1.11, which commits the City to the continued preservation of farmland through implementing all existing conservation plans, and Policy LUP-1.12, which requires open space or other agricultural buffers between agricultural and other land uses to protect agricultural operations. Compliance with the 2040 General Plan policies would ensure that future development under the 2040 General Plan would not affect commercial agricultural operations or resources, and would not contribute to the conversion of Farmland outside of the Planning Area. According to the General Plan MEIR, large-scale, active agricultural operations do not occur within the Planning Area, as such activities are not economically viable or compatible with adjacent urban development. Thus, the General Plan MEIR concluded that impacts related to the conversion of Farmland to non-agricultural uses would be lessthan-significant.

The DOC designates the project site as Urban and Built Up Land.⁴ Therefore, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. As such, the proposed project would not result in any peculiar effects related to such, and the criteria for requiring further CEQA review are not met.

⁴ California Department of Conservation. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed August 2024.

- b. As discussed on page 4.2-13 of the General Plan MEIR, four parcels in the City's Planning Area are under Williamson Act contracts. All four are in non-renewal status, meaning that the landowner does not intend to renew the Williamson Act contract after the current contract expires. Because all four parcels are currently in non-renewal status, the 2040 General Plan would not result in the premature conversion of Williamson Act contracts. As such, the General Plan MEIR concluded that buildout of the 2040 General Plan would not conflict with any such contracts. Thus, the issue was not addressed further. The project site is not subject to a Williamson Act contract. As such, the proposed project would not result in any peculiar effects, and the criteria for requiring further CEQA review are not met.
- c,d. Although the General Plan MEIR does not specifically address impacts related to the loss of forest land or timberland, it is noted that the City of Sacramento does not contain a zoning district for forest land or timberland. Woodlands are not located on the project site and the project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). As such, the proposed project would not result in any peculiar effects, and the criteria for requiring further CEQA review are not met.

	I. AIR QUALITY. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Conflict with or obstruct implementation of the applicable air quality plan?			×
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?			×
C.	Expose sensitive receptors to substantial pollutant concentrations?			×
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			×

Discussion

a,b. The City of Sacramento is located in the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Federal and State ambient air quality standards (AAQS) have been established for six common air pollutants, known as criteria pollutants, due to the potential for pollutants to be detrimental to human health and the environment. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_X), and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour PM_{2.5} AAQS, and attainment or unclassified for all other criteria pollutant AAQS. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone AAQS, nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour PM₁₀, AAQS, and attainment or unclassified for all other State AAQS.

As a part of the SVAB federal ozone nonattainment area, the SMAQMD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the Federal Clean Air Act (FCAA) requirement. The regional air quality management plan is called the State Implementation Plan (SIP) which describes and demonstrates how Sacramento County, as well as the Sacramento nonattainment area, would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, SMAQMD, along with the other air districts in the region, prepared the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan) in December 2008. The California Air Resources Board (CARB) determined that the Ozone Attainment Plan met FCAA requirements and approved the Plan on March 26, 2009, as a revision to the SIP. An update to the plan, the 2017 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2017 Ozone Attainment Plan), was prepared and adopted by CARB on November 16, 2017. An additional update to the plan was prepared and adopted by CARB on October 15, 2018, and known as the 2018 Updates to the California SIP.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficulty of attaining federal and State AAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants for which the area is designated nonattainment, SMAQMD has developed the Guide to Air Quality Assessment in Sacramento County (SMAQMD CEQA Guide), which includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under

nonattainment for ozone.⁵ The SMAQMD's recommended thresholds of significance for the ozone precursors reactive organic compounds (ROG) and NO_X, which are expressed in pounds per day (lbs/day) and tons per year (tons/yr), are presented in Table 1. As shown in the table, SMAQMD has construction and operational thresholds of significance for PM_{10} and $PM_{2.5}$ expressed in both lbs/day and tons/yr. The construction and operational thresholds for PM_{10} and $PM_{2.5}$ only apply to those projects that have implemented all applicable Best Available Control Technologies (BACTs) and Best Management Practices (BMPs).

Table 1 SMAQMD Thresholds of Significance						
Pollutant	Construction Thresholds	Operational Thresholds				
NOx	85 lbs/day	65 lbs/day				
ROG	N/A ¹	65 lbs/day				
PM10*	80 lbs/day and 14.6 tons/yr ²	80 lbs/day and 14.6 tons/yr ³				
PM _{2.5} *	82 lbs/day and 15 tons/yr ²	82 lbs/day and 15 tons/yr ³				
 construction activity. SMAQ implementation of Rule 442, SMAQMD has not adopted a ² The identified construction th feasible construction BMPs a Construction Emission Contro (Best Management Practices) ³ The identified operational thr feasible operational BMPs a stationary source operational from Land Use Development 	esholds of significance for PM ₁₀ and and BACTs are applied. The implen emissions. (SMAQMD, <i>Operational L</i>	emissions of ROG through the n architectural coatings. Therefore, G emissions. PM _{2.5} are only applicable when all tion BMPs are also known as Basic truction Emission Control Practices PM _{2.5} are only applicable when all nentation of BACTs apply only to				

The City of Sacramento, as the CEQA Lead Agency for the proposed project, uses the SMAQMD's thresholds of significance. Therefore, if the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Because construction equipment emits relatively low levels of ROG, and ROG emissions from other construction processes (e.g., asphalt paving, architectural coatings) are typically regulated by SMAQMD, SMAQMD has not adopted a construction emissions threshold for ROG. SMAQMD has, however, adopted a construction emissions threshold for NO_x, as shown in Table 1, above.

The General Plan MEIR concluded that compliance with General Plan policies and SMAQMD rules and regulations would ensure that General Plan buildout would not conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment.

The proposed project's construction-related and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) web-based version 2022.1.1.28 – a statewide model designed to provide a uniform platform for government

⁵ Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment in Sacramento County*. Revised April 2021.

agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (GHG) emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumed the following:

- Project construction was assumed to start in April of 2025 and occur over approximately one year;
- The site preparation phase of construction would require the removal of approximately 100 cubic yards (CY) of soil from the site; and
- The grading phase of construction would require the export of approximately 560 CY of soil.

All CalEEMod results are included in Appendix A. The proposed project's estimated emissions associated with construction and operations are provided below.

Construction Emissions

During construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site and vicinity, until all construction has been completed, construction is a potential concern because the project is in a non-attainment area for ozone, PM₁₀, and PM_{2.5}.

To apply the construction thresholds presented in Table 1, projects must implement all feasible SMAQMD BACTs and BMPs related to dust control. The control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The BMPs for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [CCR, Title 13, Sections 2449(d)(3) and 2485].

Provide clear signage that posts this requirement for workers at the entrances to the site;

- Provide current certificate(s) of compliance for the CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [CCR, Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance cert1.html; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Compliance with the foregoing measures is required pursuant to Rule 403, and project construction is assumed to include compliance with the foregoing measures. The foregoing measures would also be incorporated into the project through Conditions of Approval. Consequently, the project PM emissions are assessed in comparison to the thresholds presented in Table 1 above.

Based on the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project's maximum unmitigated construction emissions would be below the applicable thresholds of significance.

Table 2 Maximum Unmitigated Construction Emissions						
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?			
ROG	3.16 lbs/day		N/A			
NOx	14.6 lbs/day	85 lbs/day	NO			
PM10	7.89 lbs/day and 0.14 tons/yr	80 lbs/day and 14.6 tons/yr	NO			
PM _{2.5}	4.06 lbs/day and 0.08 tons/yr	82 lbs/day and 15 tons/yr	NO			
Source: CalE	EMod, November 2024 (see Appendi	ix A).				

As shown in the table, the project's construction emissions would be below the applicable SMAQMD thresholds of significance. Therefore, the proposed project would not substantially contribute to the SVAB's non-attainment status for ozone or PM during construction. In addition, the proposed project would be required to comply with all SMAQMD rules and regulations for construction, which would further reduce construction emissions of criteria pollutants to levels lower than those presented in Table 2. Applicable rules and regulations would include, but would not be limited to, the following:

- Rule 403 related to Fugitive Dust;
- Rule 404 related to Particulate Matter;
- Rule 407 related to Open Burning;
- Rule 442 related to Architectural Coatings;
- Rule 453 related to Cutback and Emulsified Asphalt Paving Materials; and
- Rule 460 related to Adhesives and Sealants.

Thus, in accordance with SMAQMD guidance, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans during project construction, and impacts related to such were adequately addressed in the City's General Plan MEIR.

Operational Emissions

SMAQMD has developed screening criteria to aid in determining if emissions from development projects would exceed the SMAQMD thresholds of significance presented in Table 1. The screening criteria provides a conservative indication of whether a development project could result in potentially significant air quality impacts. According to SMAQMD, if a project is below the screening level identified for the applicable land use type, emissions from the operation of the project would have a less-than-significant impact on air quality. The screening criterion for operational emissions associated with hotels is 732 rooms for ozone precursors and 1,950 rooms for particulate matter.⁶ The proposed project involves the development of a four-story hotel with 122 rooms, which would be below the operational screening criteria for both categories of criteria pollutants. Therefore, based on the SMAQMD's screening criteria, the proposed project's operational emissions would not be expected to exceed SMAQMD thresholds of significance.

Table 3Maximum Unmitigated Operational Emissions (Ibs/day)						
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?			
ROG	6.26 lbs/day	65 lbs/day	NO			
NOx	5.96 lbs/day	65 lbs/day	NO			
PM10	8.56 lbs/day and 1.46 tons/yr	80 lbs/day and 14.6 tons/yr	NO			
PM _{2.5}	2.26 lbs/day and 0.39 tons/yr	82 lbs/day and 15 tons/yr	NO			
Source: CalE	EMod, November 2024 (see Append	ix A).				

Nonetheless, to confirm this conclusion, operational air quality emissions were estimated using CalEEMod, and are presented in Table 3.

As shown in the table, the proposed project's maximum unmitigated operational emissions or criteria pollutants would be below the applicable thresholds of significance. As such, the proposed project would not result in a significant air quality impact during operations and impacts related to such were adequately addressed in the City's General Plan MEIR.

Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

Adopted SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated non-attainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD CEQA Guide, by exceeding the SMAQMD's project-level thresholds for construction or operational emissions, a project could contribute to the region's non-attainment status for

⁶ Sacramento Metropolitan Air Quality Management District. *SMAQMD Operational Screening Levels*. April 2018.

ozone and PM emissions and could be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

As discussed above, the proposed project would result in construction and operation emissions below the applicable thresholds of significance and, therefore, would result in less-than-significant impacts. As such, the proposed project would not be considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment and impacts related to such were adequately addressed in the City's General Plan MEIR.

Conclusion

As discussed above, the General Plan MEIR concluded that compliance with applicable General Plan policies, as well as SMAQMD rules and regulations, criteria air pollutant emissions associated with buildout of the 2040 General Plan would not cause a substantial net increase in emissions that exceeds the SMAQMD regional significance thresholds, and impacts would be less than significant. Nevertheless, for informational purposes, this Checklist has demonstrated that the proposed project is anticipated to result in emissions below the applicable thresholds of significance during both construction and operations. Thus, the proposed project would not be considered to conflict with or obstruct implementation of regional air quality plans. Therefore, the proposed project would not result in any peculiar effects related to the generation of criteria pollutants, and requirements for additional CEQA review are not met.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest sensitive receptors to the project site are the multi-family residences located to the south and east of the project site.

The major pollutant concentrations of concern are localized CO emissions, toxic air contaminant (TAC) emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions

The General Plan MEIR does not specifically evaluate the potential for buildout to expose sensitive receptors to substantial pollutant concentrations or include an analysis of CO emissions. However, as previously discussed, Impact 4.3-2 of the General Plan MEIR concluded that compliance with General Plan policies and SMAQMD rules and regulations would ensure that General Plan buildout would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment.

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Pursuant to the SMAQMD CEQA Guide, emissions of CO are generally of less concern

than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years.⁷ The proposed project would not contribute to high levels of traffic congestion that could result in long-term generation of CO. Additionally, due to the continued attainment of California AAQS (CAAQS) and national AAQS (NAAQS), and advances in vehicle emissions technologies, the likelihood that any single project would create a CO hotspot is minimal. Consequently, the proposed project would result in a less-than-significant impact related to localized CO emissions.

Therefore, based on the guidance of the SMAQMD, similar to the conclusions of the General Plan MEIR, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The General Plan MEIR does not specifically evaluate the potential for buildout to expose sensitive receptors to substantial pollutant concentrations or include an analysis of TAC emissions. However, the 2040 General Plan includes policies related to reducing TAC exposure of sensitive receptors. Specifically, implementation of Policies ERC-4.3, which promotes techniques intended to minimize pollution, and ERC-4.4, which is related to evaluating exposure of sensitive receptors to TACs, would minimize impacts from community risk and hazards. The proposed project would be subject to the foregoing policies, and does not include any operational activities that would be considered a substantial source of TACs. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of TACs during operations.

However, short-term, construction-related activities could result in the generation of TACs, primarily DPM, from on-road haul trucks and off-road equipment exhaust emissions. Although DPM emissions from on-road haul trucks would be widely dispersed throughout the project area, as haul trucks move goods and material to and from the site, exhaust from off-road equipment would primarily occur within the project site. Consequently, the operation of off-road equipment within the project site during project construction could result in exposure of the nearby residents and students to DPM.

To analyze potential health risks to nearby residents and students that could result from DPM emissions from off-road equipment at the project site, total DPM emissions from

⁷ Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions.* October 2020.

project construction were estimated. DPM is considered a subset of $PM_{2.5}$; thus, the CalEEMod-estimated $PM_{2.5}$ emissions from exhaust during project construction was conservatively assumed to represent all DPM emitted on-site. The CalEEMod-estimated $PM_{2.5}$ exhaust emissions were then used to calculate the concentration of DPM at the maximally exposed sensitive receptor near the project site. DPM concentrations resulting from project implementation were estimated using the American Meteorological Society/Environmental Protection Agency (AMS/EPA) Regulatory Model (AERMOD). The results of AERMOD are presented in Figure 8. As presented therein, the maximally exposed receptor, depicted by a white "X," is located south of the project site.

The associated cancer risk and non-cancer hazard index were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the risk assessment guidelines of the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.⁸ The modeling was performed in accordance with the United States Environmental Protection Agency (USEPA's) User's Guide for the AERMOD⁹ and the 2015 OEHHA Guidance Manual.

Based on the foregoing methodology, the cancer risk and non-cancer hazard indices are presented in Table 4.

Table 4Maximum Cancer Risk and Hazard Index Associated with Construction DPM					
Cancer Risk (per million Acute Chronic persons) Hazard Index Hazard Index					
Construction DPM Health Risks	8.75	0.00	0.01		
Thresholds of Significance	10	1.0	1.0		
Exceed Thresholds?	NO	NO	NO		
Source: AERMOD and HARP 2 RAS	T, December 2024 (se	e Appendix A).			

As shown in Table 4, construction of the proposed project would not result in cancer risks, acute hazards, or chronic hazards in excess of SMAQMD's standards. Thus, construction of the proposed project would not result in exposure of nearby receptors to substantial concentrations of TAC emissions.

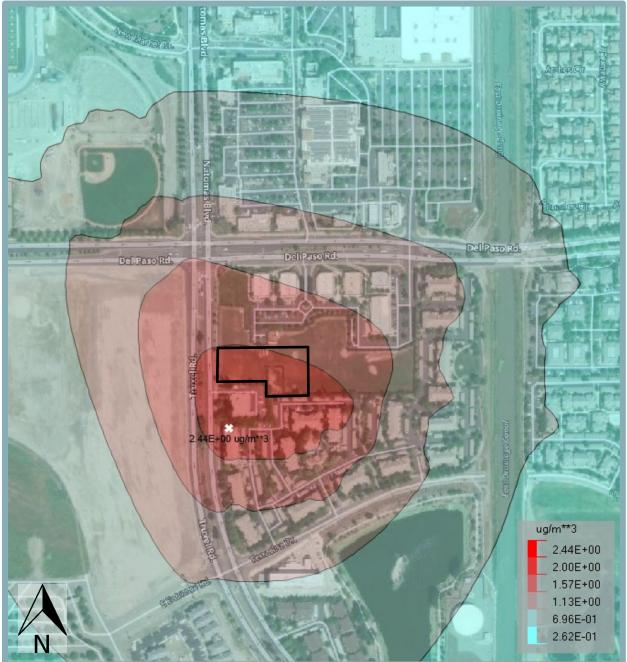
Criteria Pollutants

Recent rulings from the California Supreme Court (including the *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 case regarding the proposed Friant Ranch Project) have underscored the need for the analysis of potential health impacts resulting from the emission of criteria pollutants during operations of proposed projects. Although analysis of project-level health risks related to the emission of CO and TACs has long been practiced under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria pollutants is a relatively new field.

⁸ Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.

⁹ U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.

Figure 8 AERMOD Results



Source: AERMOD, December 2024 (see Appendix A).

The proposed project is consistent with the site's General Plan land use designation. Therefore, emissions associated with construction and operation of the proposed project have been anticipated and analyzed in the General Plan MEIR. As discussed under Impact 4.3-2 of the General Plan MEIR, the City's planning area is designated as nonattainment with respect to the NAAQS and CAAQS for ROG and NO_x, which are precursors to ozone (O₃). The health effects associated with O₃ are generally associated with reduced lung function. In addition, health effects that result from nitrogen dioxide (NO₂) and NO_x include respiratory irritation, which could be experienced by sensitive receptors during the periods of heaviest use of off-road construction equipment. As discussed previously, construction and operational emissions associated with buildout of the 2040 General Plan would result in less-than-significant impacts with implementation of the 2040 General Plan policies. Additionally, projects constructed under the 2040 General Plan would also comply with applicable SMAQMD rules and regulations.

Based on the above, implementation of the 2040 General Plan would not result in significant impacts related to emissions of criteria air pollutants and the associated health impacts, as well as ensuring that individual projects would not generate emissions in excess of applicable thresholds.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO, TACs, or criteria pollutants during construction or operation. Therefore, the proposed project would not result in any peculiar effects, and further CEQA review would not be required.

d. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in questions 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

According to the General Plan MEIR, compliance with local regulations, such as SMAQMD screening distances between sensitive receptors and odor-generating uses and SMAQMD's Nuisance Rule (Rule 402), would reduce odor impacts on sensitive receptors by prohibiting the discharge quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public. Therefore, the General Plan MEIR concluded that impacts related to odorous emissions would be less than significant.

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative analysis to determine the presence of a significant odor impact is difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants (WWTPs), landfills, and composting facilities. The proposed project would not introduce any such land uses and is not located in the vicinity of any such existing or planned land uses.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable.

However, as discussed above, construction activities would be temporary, and operation of construction equipment adjacent to existing residential and school uses would be restricted to the hours of 7:00 AM to 6:00 PM Monday through Saturday, and 9:00 AM to 6:00 PM Sundays and holidays, pursuant to Sacramento Municipal Code Section 8.60.060. Project construction would also be required to comply with all applicable SMAQMD rules and regulations, particularly Rule 402 (Nuisance), which prohibits any person or source from emitting air contaminants that cause detriment, nuisance, or annoyance to a considerable number of persons or the public. Rule 402 is enforced based on complaints. If complaints are received, the SMAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made after the proposed project is approved, the SMAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

Dust

The General Plan MEIR does not specifically evaluate the potential for buildout to result in the emission of dust that adversely affects a substantial number of people. However, the General Plan MEIR does include SMAQMD Rules 403 and 404 as applicable regulations that would control emissions of fugitive dust. In addition, as previously discussed, Impact 4.3-2 of the General Plan MEIR concluded that compliance with General Plan policies and SMAQMD rules and regulations would ensure that General Plan buildout would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment.

The proposed project would be required to comply with all applicable SMAQMD rules and regulations, including, but not limited to, Rule 403 and Rule 404. Furthermore, all projects within Sacramento County are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules and regulations and BCECP would help to ensure that dust is minimized during project construction. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

Based on the above, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people. Furthermore, given that the proposed project is consistent with the site's General Plan land use designation, emissions associated with construction and operation of the proposed project have been anticipated and analyzed in the General Plan MEIR. Therefore, the proposed project would not result in any peculiar effects, and further CEQA review would not be required for this topic.

BIOLOGICAL RESOURCES. IV.

Would the project:

- Have a substantial adverse effect, either directly or a. 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?
- Have a substantial adverse effect on any riparian b. habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?
- Have a substantial adverse effect on state or federally C. protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any d. resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?
- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat f. Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		×
		×
		×
		×
		×

Discussion

a.f. The General Plan MEIR concluded that applicable federal, State, regional, and local regulations, together with the policies and programs included in the General Plan would reduce potential impacts to special-status plant and wildlife species that could result from buildout of the General Plan to a less-than-significant level. Applicable federal and State regulations include, but are not limited to, the Clean Water Act (CWA), Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), California Endangered Species Act (CESA), and California Fish and Game Code (CFGC). Local regulations related to biological resources include Policy ERC-2.2, which directs the City to avoid, minimize or mitigate impacts on sensitive biological resources, including specialstatus species from development activities to the greatest extent feasible; Policy ERC-2.1 related to conservation efforts for creeks, riparian corridors, wetlands, undeveloped open space areas, levees, and drainage canals; and Policy ERC-6.3, which directs the City to protect urban creeks and rivers as suitable habitat for special-status species.

Special-status species include those species that are:

- Listed as endangered or threatened under the FESA (or formally proposed for, or ٠ candidates for, listing);
- Listed as endangered or threatened under the CESA (or proposed for listing); •
- Designated as endangered or rare, pursuant to CFGC (Section 1901); •
- Designated as fully-protected, pursuant to CFGC (Section 3511, Section 4700, or • Section 5050);

- Designated as species of special concern by the CDFW; or
- Defined as rare or endangered under CEQA [California Rare Plant Rank (CRPR) 1, 2, and 3].

Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the U.S., including non-status species, are protected by the MBTA of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal.

The project site is undeveloped, has been mass graded, and contains several trees, primarily located along the southern site boundary. The project site is also located within the southern portion of the Natomas Basin Habitat Conservation Plan (HCP). The Natomas Basin HCP covers 53,537 acres surrounding the Natomas Basin, located in the northern portion of Sacramento County and the southern portion of Sutter County. The southern portion of the Natomas Basin, including the project site, is urbanized, while the majority of the Basin land is used for agriculture. The Natomas Basin HCP provides project proponents incidental take permit coverage to implement various avoidance and minimization measures (AMMs) and collects mitigation fees that allow the Natomas Basin Conservancy to acquire, restore, and manage preserved lands to mitigate impacts to covered species.

The Natomas Basin HCP covers 22 special-status species, as presented in Table 1-1 of the Natomas Basin HCP. In order to ascertain the potential for any special-status species to occur on the project site, including such species covered by the Natomas Basin HCP, a search for records of special-status species within the nine U.S. Geological Survey (USGS) quadrangles including and surrounding the project site was conducted through the California Natural Diversity Database (CNDDB).

The potential for special-status species to occur on the project site is discussed in further detail below.

Special-Status Plants

Special-status plants generally occur in relatively undisturbed areas within vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, chaparral, alkali playa, dunes, and areas with unusual soil characteristics. The General Plan MEIR determined that 17 special-status plants have the potential to occur in the Planning Area. The species include palmate-bracted bird's beak (*Chloropyron palmatum*); Boggs Lake hedge-hyssop (*Gratiola heterosepala*); slender Orcutt grass (*Orcuttia tenuis*); and Sacramento Orcutt grass (*Orcuttia viscida*). The remainder of the special-status plant species are assigned CRPR by CDFW but are not listed under the FESA or CESA. As discussed under Impact 4.4-1 of the General Plan MEIR, undeveloped areas and vacant lots scattered throughout the Planning Area may support grasslands, seasonal wetlands, remnant vernal pools, and drainage ditches that could provide suitable habitat for special-status plants.

The Natomas Basin HCP provides protections for rare plant species, including five of the 17 plants determined as potentially occurring within the Planning Area by the General Plan MEIR: Boggs lake hedge-hyssop, legenere (*Legenere limosa*), Sacramento Orcutt grass, Sanford's arrowhead (*Sagittaria sanfordii*), and slender Orcutt grass.

The General Plan MEIR concluded that compliance with the Natomas Basin HCP and General Plan Policy ERC-2.2, ERC-2.1, and ERC-6.3 would avoid, minimize, and/or compensate for potential adverse effects to special-status plants species and habitats. Thus, the General Plan MEIR concluded that impacts to special-status plant species would be less than significant.

According to the CNDDB query conducted for the project site, special-status plant species have not been previously recorded within the Taylor Monument USGS quadrangle, which includes the project site. Therefore, special-status plant species are unlikely to be located within the project site or in the vicinity. In addition, the project site does not include vegetation communities or sensitive habitats that could support special-status plant species, such as wetlands, grasslands, marshes, swamps, or vernal pools. Furthermore, the project site has been significantly disturbed as part of mass grading activities, which would preclude any special-status plant species from occurring on-site, and the site is almost entirely surrounded by existing development.

Based on the above, special-status plant species are not anticipated to occur within the project site, and the proposed project would not be anticipated to result in impacts to special-status plant species.

Special-Status Wildlife

The General Plan MEIR identified various special-status wildlife species with the potential to occur in habitat within the planning area, including special-status invertebrates, fish species, reptiles and amphibians, bird species, and mammals. Such species include, but are not limited to, the vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle (VELB), Sacramento Perch, Chinook salmon, Central Valley steelhead, Delta smelt, western spadefoot, giant garter snake, northwestern pond turtle, tricolored blackbird, burrowing owl, loggerhead shrike, northern harrier, Swainson's hawk, white-tailed kite, song sparrow, pallid bat, and American badger. Of the foregoing species identified by the General Plan MEIR, the following are covered by the Natomas Basin HCP: vernal pool fairy shrimp; vernal pool tadpole shrimp; VELB; western spadefoot; giant garter snake; northwestern pond turtle; tricolored blackbird; burrowing owl; loggerhead shrike; and Swainson's hawk. Under Impacts 4.4-2 through 4.4-6, the General Plan MEIR concluded that potential impacts to special-status wildlife species would be less than significant with implementation of all applicable General Plan policies and compliance with the CESA and FESA.

According to the CNDDB results, 31 special-status wildlife species have previously been documented within the region. Of the 31 special-status wildlife species, the majority of the species would not have the potential to occur on-site due to the lack of suitable habitat (i.e., aquatic, riparian, woodland, and/or coastal habitat). For example, due to the lack of on-site aquatic resources, potential impacts as a result of the proposed project would not occur to special-status fish species, northwestern pond turtle, vernal pool fairy shrimp, vernal pool tadpole shrimp, or giant garter snake, as the project site does not contain requisite flowing waters or vernal pools. In addition, the project site supports heavily disturbed ruderal grassland vegetation and has been subject to mass grading activities as part of site preparation. The nature of the disturbance limits the site's ability to contain habitat necessary for accommodating special-status wildlife species that depend on preserved foraging habitat, such as VELB, western bumblebee, or Crotch's bumblebee. Therefore, although identified in the CNDDB query conducted as part of this IS/MND, the majority of the special-status species previously recorded in the area are not anticipated

to be significantly impacted by the proposed project. Furthermore, the project site's surrounding development further reduces the likelihood of wildlife species, including those with special status, to occur on-site.

It should be noted that the project site is located within an area of nearby CNDDB occurrences of burrowing owl.¹⁰ The burrowing owl, which is a Species of Special Concern under the CFGC, typically occupies abandoned ground burrows created by California ground squirrels. Burrowing owls are known to overwinter in disturbed sites and sites near frequent human use. For example, Occurrence Number 1021 is associated with the East Drainage Canal. However, the canal is located off-site and would not be impacted by the proposed project. In addition, burrowing owls are protected by the Natomas Basin HCP, and compliance with all applicable Natomas Basin HCP measures would sufficiently avoid adverse impacts to burrowing owl. Therefore, although identified in the CNDDB query conducted as part of this Modified Initial Study, burrowing owl would not be significantly impacted by the proposed project.

In addition, existing trees and shrubs within the project site could provide potential nesting habitat for nesting migratory birds and raptors protected by the MBTA. Therefore, project construction activities, including initial site grading, soil excavation, associated improvements, and/or tree and vegetation removal occurring during the nesting period for migratory birds (typically between February 1 to August 31) could have the potential to result in nest abandonment or death of any live eggs or young, should migratory birds or their nests be present within or near the project site. In such an event, the proposed project could result in a potentially significant impact. However, given the developed nature of the project site and surrounding area, and the fact that habitat for nesting birds and raptors is not uncommon within the project area, the site does not include any peculiar conditions from a biological perspective.

Furthermore, as discussed above, the General Plan includes policies and actions under Goal ERC-3 to reduce potential impacts to such species to less-than-significant levels and the Natomas Basin HCP provides protections for special-status birds species, including Swainson's hawk, burrowing owl, bank swallow, loggerhead shrike, and tricolored blackbird. According to the General Plan MEIR, white-tailed kite, northern harrier, and purple martin are not covered species under the Natomas Basin HCP, but can benefit from the same conservation efforts conducted for other covered species (e.g., the conservation of trees located in riparian woodland, agricultural lands, and annual grassland). Thus, the General Plan MEIR concluded that avoidance, compliance with federal requirements under the MBTA and ESA, as well as implementation of the 2040 General Plan goals and policies, would reduce the potential direct and indirect impacts on special-status bird species to a less-than-significant level. Finally, the Natomas Basin HCP requires a pre-construction survey of the site at least 30 days prior to commencement of construction activities to identify the status and presence of any covered species on-site, which would ensure that the proposed project would not result in any impacts to specialstatus wildlife species.

¹⁰ California Department of Fish and Wildlife. RareFind. Available at: https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx. Accessed October 2024.

Conclusion

Pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" The General Plan MEIR concluded that applicable federal, State, regional, and local regulations, together with General Plan policies and programs would reduce potential impacts to special-status species that could result from buildout of the General Plan.

Based on the above, impacts to species identified as special-status species in local or regional plans, policies, or regulations, including the Natomas Basin HCP, or by the CDFW or USFWS, were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects given required compliance with applicable federal, State, regional, and local regulations, together with the policies and programs included in the General Plan, which the General Plan MEIR found would substantially mitigate potential environmental effects. The proposed project would not require further CEQA review related to effects on any special-status plant and wildlife species, or conflicting with an adopted HCP, natural community conservation plan (NCCP), or other approved local, regional, or State habitat conservation plan.

- According to the General Plan MEIR, compliance with General Plan policies and programs b.c. would ensure that General Plan buildout would have a less-than-significant impact related to the loss or modification of riparian habitat or on jurisdictional waters of the U.S. and wetlands. As discussed under Impact 4.4-7 of the General Plan MEIR, riparian habitat is mostly located along the Sacramento and American rivers, as well as adjacent to smaller streams and drainage channels throughout the Planning Area. The project site is located approximately three miles from the Sacramento River and does not include riparian habitat on-site. The East Drainage Canal is located approximately 900 feet to the east of the project site. However, because the canal is manmade, the East Drainage Canal is not regulated by the CWA, the California Porter-Cologne Act, or the CFGC. In addition, the canal is located off-site and would not be impacted by the proposed project. Therefore, the proposed project would not result in adverse impacts upon sensitive natural communities, and impacts related to having a substantial adverse effect on riparian habitat, sensitive natural communities, or federally protected wetlands were adequately addressed in the General Plan MEIR. The proposed project would not result in any peculiar effects that would require further CEQA review related to effects on any riparian habitat, protected wetlands, or other sensitive natural communities.
- d. Under Impact 4.4-3, the General Plan MEIR identified the Sacramento River as providing migratory habitat for seven special-status fish species. However, as previously discussed, the project site is located approximately three miles from the Sacramento River. In addition, the project site is surrounded by existing residential development, which would provide a significant barrier to dispersal of native wildlife travelling to and from the site. Most current animal movements on the project site would likely be local movements within the site and its immediate vicinity rather than regional movements. Additionally, given that the proposed project is consistent with the City's General Plan land use designation for the project site, impacts related to migratory corridors associated with buildout of the site have been anticipated by the City and analyzed in the General Plan MEIR.

Based on the above, impacts related to interfering substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

- e. The General Plan MEIR did not specifically evaluate potential impacts related to conflicts with local policies or ordinances protecting biological resources. Chapter 12.56 of the City Code establishes guidelines for the conservation, protection, removal, and replacement of both City trees and private protected trees. Pursuant to Section 12.56.020, a private protected tree meets at least one of the following criteria:
 - A tree that is designated by City Council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
 - Any native Valley Oak (Quercus lobata), Blue Oak (Quercus douglasii), Interior Live Oak (Quercus wislizenii), Coast Live Oak (Quercus agrifolia), California Buckeye (Aesculus californica), or California Sycamore (Platanus racemosa), that has a diameter at standard height (DSH) of 12 inches or more, and is located on private property;
 - A tree that has a DSH of 24 inches or more located on private property that:
 - Is an undeveloped lot; or
 - Does not include any single unit or duplex dwellings; or
 - A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

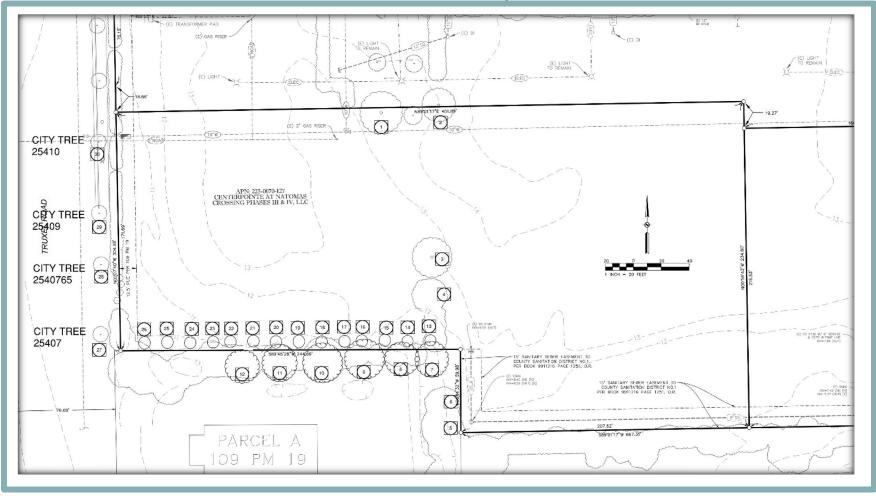
When circumstances do not allow for retention of trees, permits are required to remove City trees or private protected trees that are within the City's jurisdiction. In addition, City Code Section 12.56.050, Tree Permits, states that no person shall perform regulated work without a tree permit. The Tree Permit application requires a statement detailing the nature and necessity for the proposed regulated work and the location of the proposed work for evaluation and approval by the City Council.

According to a Tree Inventory Report prepared for the proposed project,¹¹ a total of 30 trees were inventoried and identified by species (see Figure 9). Of the 30 total trees inventoried, 18 would be removed. However, none of the identified trees met the above requirements for private protected trees (see Appendix B). It should be noted that, while the City's street trees along the Truxel Road right-of-way (ROW) to the west of the project site were included within the Tree Inventory Report, the street trees are small and do not overhang the property line.

Based on the above, because none of the on-site trees are considered protected by the City's tree ordinance, impacts related to conflicting with local policies or ordinances protecting biological resources would not occur, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

¹¹ O'Dell Engineering. *Arborist Tree Inventory Report*. June 14, 2024.

Figure 9 Tree Location Map



V. Wa	CULTURAL RESOURCES. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			*
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?			×
C.	Disturb any human remains, including those interred outside of dedicated cemeteries.			×

Discussion

a-c. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

According to the General Plan MEIR, the City's Planning Area contains numerous known historic resources recognized at the federal, State, and local level. Many known historic resources are located in the Central City, the oldest portion of the City. In addition, the General Plan MEIR notes that archaeological deposits have been found throughout the City, particularly in areas in close proximity to watercourses, including the Sacramento and American rivers.

The General Plan MEIR determined that compliance with the 2040 General Plan policies along with implementing actions and existing City requirements to protect and preserve historic and archaeological resources set forth in the City Code would reduce the significance of impacts to historic and archaeological resources. However, because feasible mitigation to guarantee that the loss, damage, or destruction of historically significant resources and archaeological resources (including human remains) does not exist, the General Plan MEIR concluded that buildout of the 2040 General Plan would result in a significant and unavoidable impact related to both historical and archaeological resources.

To ensure cultural resources have not been discovered on the project site since preparation of the General Plan MEIR, a California Historic Resources Information System (CHRIS) search was performed for the proposed project. Based on the results of the project-specific CHRIS search, four cultural resource studies have been previously conducted that included the project site and a surrounding 0.25-mile radius. According to the CHRIS search results, known historic or archaeological resources have not been identified on or adjacent to the project site. The project site was located within a recorded historic-period reclamation district. However, the CHRIS search concluded that a low potential exists for previously unrecorded cultural resources to occur on-site, based on the environmental setting of the site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was conducted for the project site, which yielded a negative result. Furthermore, the project site has been subject to mass disturbance as part of grading activities. Therefore, any surface-level historical or cultural resources located on-site would have been previously encountered.

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Nonetheless, while known resources are not located on-site, in the event that historical or archaeological resources are discovered during construction or grading activities, the project would be required to comply with all applicable General Plan policies and programs, including, but not limited to, General Plan Policy HCR-1.1, which directs the City to promote the preservation, restoration, enhancement, and recognition of cultural resources throughout the City; Policy HRC-1.14 related to compliance with federal and State regulations aimed at protecting archaeological, cultural, and tribal cultural resources; Action HCR-A.8, which requires the City to apply standard conditions of approval related to the halting of excavation work in the vicinity of an identified resource discovery, notification of the City, and coordination with the City to determine the appropriate response: Policy HCR-1.15, which requires Native American human remains to be treated with sensitivity and dignity in coordination with the NAHC; and policies related to the City's role in preserving historical resources (Policy HCR-2.1, HCR-2.2, and HCR-2.4). Implementation of all applicable General Plan policies would avoid potential impacts to significant cultural resources whenever possible and to conduct mitigation if impacts are unavoidable. In addition, the proposed project would be required to adhere to California Health and Safety Code Section 7050.5 and Section 7052 of California PRC Section 5097 if human remains are uncovered during ground-disturbing activities.

As previously discussed, pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" In the case of the proposed project, compliance with the City's General Plan policies, programs, and actions would substantially mitigate potential project impacts to cultural resources.

Based on the above, impacts related to causing a substantial adverse change in the significance of a historic or archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturbing human remains, including those interred outside of formal cemeteries, were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

VI Wa	ENERGY. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			×
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			×

Discussion

a,b. New development that would occur within the City is assessed to determine if PG&E and SMUD can accommodate the energy needs of the project. In addition, implementation of policies and programs included in the 2030 General Plan would reduce energy use for new development and encourage the use of renewable energy sources. The policies would also ensure that new development projects use design features, building materials, and building practices that would increase energy efficiency. Thus, the General Plan MEIR concluded that a less-than-significant impact would occur related to wasteful, inefficient, or unnecessary energy consumption with the implementation of General Plan policies and programs, as well as potential conflicts with or obstructing a State or local energy plan.

A description of the 2022 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2022 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC), which became effective with the rest of the CBSC on January 1, 2023.¹² The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen Code standards regulate the method of use, properties, performance, types of materials used in construction, alteration, repair, improvement, and rehabilitation of a structure or improvement to a property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of EV charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;

¹² California Building Standards Commission. *2022 California Green Building Standards Code*. 2023.

- Incentives for installation of electric heat pumps, which use less energy than traditional heating, ventilation, and air conditioning (HVAC) systems and water heaters;
- Required solar PV system and battery storage standards for certain buildings; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2022 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy-efficiency measures from the 2019 Building Energy Efficiency Standards, went into effect starting January 1, 2023. The 2022 standards provide for additional efficiency improvements beyond the 2019 standards. The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and Building Energy Efficiency Standards would ensure that the proposed structure would consume energy efficiently.

Construction Energy Use

Construction of the proposed project would involve increased energy demand and consumption related to the use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met through a hookup to the existing electricity grid. Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. Project construction would not involve the use of natural gas appliances or equipment.

All construction equipment and operation thereof would be regulated by the CARB's In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions from inuse, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and limit emissions associated with construction.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, SMUD would provide electricity to the project site. Energy use associated with operation of the proposed project would be typical of hotel uses, requiring electricity for interior and exterior building lighting, HVAC, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employees and visitors.

The proposed project would be subject to all relevant provisions of the CBSC, including the Building Energy Efficiency Standards and CALGreen Code. Adherence to the CALGreen Code, Building Energy Efficiency Standards, and all applicable regulations included in the City's Climate Adaptation and Action Plan (CAAP) would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high-performance attics and walls, and high-efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project site by SMUD would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy sources to 60 percent of total procurement by 2030.

The 2040 General Plan also includes policies such as ERC-4.3 (Project Design), ERC-8.1 (Cooling Design Techniques), ERC-9.3 (Lead By Example in Design of City Buildings), ERC-9.4 (Carbon-Neutral Buildings), and ERC-9.9 (Onsite Alternative Energy Creation), which would require projects to use green building technologies that meet or exceed the CALGreen energy efficiency standards, encourage alternative energy creation and on-site energy production, promote development that would be 100 percent electric, and transition existing buildings from fossil fuel-power to electric power.

With respect to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. Further discussion of vehicle miles traveled (VMT) associated with the proposed project is provided in Section XVII, Transportation, of this Modified Initial Study. Additionally, the City of Sacramento and surrounding areas provide residents with numerous public transportation options. Transit options include local bus stops and regional transit throughout the City. Transit would provide access to several grocery stores, restaurants, and businesses within close proximity to the project site. Furthermore, the proposed project would include a pedestrian connection to the commercial uses located north of the project site within the Centerpointe at Natomas Crossing business park. The site's access to public transit and pedestrian facilities would reduce VMT and, consequently, fuel consumption associated with the proposed hotel.

Based on the above, compliance with the State's latest Energy Efficiency Standards and local regulations would ensure that the proposed project would implement all necessary energy efficiency regulations and would contribute to the efficient use of energy resources.

Conclusion

Based on the above, the proposed project would involve energy use associated with construction activities and operations. Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the project site and associated energy demands have been anticipated by the City and analyzed in the General Plan MEIR. Furthermore, the project would comply with applicable General Plan policies, as well as other State energy standards, which would ensure that construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the above, impacts related to energy use were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

	I. GEOLOGY AND SOILS. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo			
	Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			*
	ii. Strong seismic ground shaking?			×
	iii. Seismic-related ground failure, including liquefaction?			×
	iv. Landslides?			×
о. С.	Result in substantial soil erosion or the loss of topsoil? Be located on a geologic unit or soil that is unstable, or			*
	that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			*
d.	Be located on expansive soil, as defined in Table 18- 1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			*
э.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			×
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			×

Discussion

ai-aii. The General Plan MEIR identifies the City as being located in the Great Valley, a relatively flat alluvial plain underlain by thick alluvial deposits, that typically does not experience strong ground shaking resulting from earthquakes along known active or older faults of the geomorphic province. As discussed on page 4.7-5 of the General Plan MEIR, the City of Sacramento does not include any Alquist-Priolo Earthquake Fault Zones and is not located in the immediate vicinity of an active fault. The closest fault to the project site is the Dunnigan Hills fault, which is located approximately 19.14 miles away. Thus, the potential for fault rupture risk at the project site is relatively low. However, according to the General Plan MEIR, Sacramento is located in a moderately seismically active region with periodic ground shaking as a result of distant earthquakes.

Based on the moderate seismic activity within the region, commercial, institutional, and large residential buildings and associated infrastructure within the City are required by Chapter 15.20 of the City code to incorporate seismic-resistant design in conformance with the most recent version of the CBSC. Projects designed in accordance with the CBSC should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that

structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake. In addition, General Plan Policies ERC-7.1, ERC-7.2, and EJ-1.6 require that the City regulates structures intended for human occupancy to ensure structural stability from seismic events including liquefaction hazards. Requirements specific to liquefaction hazards can be mitigated through adherence to the soil and foundation support parameters in Chapters 16 and 18 of the CBSC and the grading requirements in Chapters 18, 33, and the appendix to Chapter 33 of the CBSC.

The General Plan MEIR concluded that compliance with applicable General Plan policies and the CBSC would ensure impacts related to seismic ground shaking would be less than significant. Given that the proposed project would be consistent with the site's General Plan land use designation, potential ground shaking hazards associated with buildout of the project site have been anticipated by the City and analyzed in the General Plan MEIR. Overall, impacts related to seismic rupture of a known earthquake fault or strong seismic ground shaking were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

aiii,aiv,

C.

The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed in detail below.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. Additionally, loose unsaturated sandy soils have the potential to settle during strong seismic shaking. Liquefaction can often result in subsidence or settlement.

The California Geological Survey (CGS) has not evaluated the project site for liquefaction hazards.¹³ The nearest known liquefaction zone is located approximately 38.62 miles south of the project site. According to the General Plan MEIR, compliance with General Plan policies would reduce the potential for substantial adverse effects due to exposure of seismic-related ground failure. The proposed project would be subject to applicable General Plan policies presented in the General Plan MEIR under Impact 4.7-2 to mitigate possible exposure of people and structures to liquefaction.

In addition, the CBSC, as adopted by Chapter 15.20 of the City Code, provides standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, which would further reduce the potential for seismic-related ground failure, including liquefaction. Requirements specific to liquefaction hazards can be mitigated through adherence to the soil and foundation support parameters in Chapters 16 and 18 of the CBSC and the grading requirements in Chapters 18, 33, and the appendix to Chapter 33 of the CBSC. Compliance with the aforementioned uniformly applicable development

¹³ U.S. Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed August 2024.

regulations would ensure that the potential for risks related to liquefaction would be less than significant.

Given that the proposed project would be consistent with the project site's General Plan land use designation, the risks from liquefaction have been previously analyzed in the General Plan MEIR. The MEIR concluded that compliance with the General Plan policies and the CBSC as established by Chapter 15.20 of the City's Municipal Code would ensure that seismically induced ground shaking and secondary effects, including liquefaction, would be minimized.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The topography of the project site is considered level terrain and the project site does not contain any slopes. In addition, the General Plan MEIR concluded that compliance with CBSC standards would reduce impacts related to seismic hazards and secondary effects to a less-than-significant level. Thus, impacts related to landslides would be less than significant.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site does not contain any open faces that would be considered susceptible to lateral spreading. In addition, as noted above, the site is not anticipated to be subject to substantial liquefaction hazards. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years, and is a common consequence of liquefaction. As discussed above, on-site soils are not anticipated to be subject to substantial liquefaction risks. Because the site presents low potential for liquefaction, the potential for seismically induced settlement to occur at the project site is also considered to be low. In addition, the General Plan MEIR determined that the risk of liquefaction (and associated effects, such as subsidence/settlement) would be less than significant with compliance with the CBSC. The proposed project would be required to comply with all applicable policies, regulations, and standards set forth by the State and the City of Sacramento. Therefore, impacts related to subsidence/settlement would be less than significant.

Conclusion

Based on the above, impacts related to substantial risks related to liquefaction, landslides, lateral spreading, and subsidence/settlement were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

b. During construction activities, topsoil would be exposed following site grading and prior to constructing building foundations. As a result, the potential for topsoil erosion would exist. Following development of the site, all exposed soils would be covered with impervious

surfaces or landscaping and, thus, the potential for erosion to occur would not exist long-term.

Issues related to erosion and degradation of water quality during construction are discussed in Section X, Hydrology and Water Quality, of this Modified Initial Study, under question 'a.' As noted therein, the City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project. Additionally, in accordance with City Code Section 15.88.250, City of Sacramento staff would require preparation of an Erosion and Sediment Control Plan that demonstrates how the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction. The erosion control measures included in both the SWPPP and the Erosion and Sediment Control Plan would ensure that the proposed project would not result in substantial erosion or the loss of topsoil.

The General Plan MEIR concluded that, with implementation of all required regulations, including preparation of Erosion and Sediment Control Plans and a SWPPP, impacts related to soil erosion and loss of topsoil would be less than significant. Therefore, impacts related to soil erosion or loss of topsoil were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

d. Expansive soils can undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted. Expansive soils can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundation. Building damage due to volume changes associated with expansive soil can be reduced by a variety of solutions. If structures are underlain by expansive soils, foundation systems must be capable of tolerating or resisting any potentially damaging soil movements, and building foundation areas must be properly drained. Exposed soils must be kept moist prior to placement of concrete for foundation construction.

The General Plan MEIR includes various policies related to soil hazards, including Policy ERC-7.1, which includes the City's requirement for projects located in areas of expansive soils to submit geotechnical investigation reports. Soils with a low expansive potential rate at less than three percent, moderate between three percent and six percent, high between six percent and nine percent, and very high potential above nine percent. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey program,¹⁴ mapped soils within the project site consist of Clear Lake clay and Cosumnes silt loam soils. Clear Lake clay rates at 6.6 percent, a high potential, and Cosumnes silt loam rates at 4.5 percent, a moderate potential. Therefore, the proposed project would be required to comply with General Plan Policy ERC-7.1 and submit a geotechnical investigation report to the City and demonstrate that the project

¹⁴ Natural Resources Conservation Service. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed October 2024.

conforms to all mitigation measures recommended therein. In addition, the proposed project would be required to comply with CBSC standards, pursuant to Chapter 15.20 of the City Code, which would ensure that impacts related to constructing on expansive soils would be eliminated through foundation design.

Based on the above, the proposed project would not result in impacts related to substantial direct or indirect risks to life or property related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property that would require further CEQA review.

- e. The proposed project would connect to existing City sewer services. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project, and the proposed project would not result in any effects that would require further CEQA review for this topic.
- f. Paleontological resources or fossils are the remains of prehistoric plant and animal life. The City's General Plan MEIR does not indicate the existence of any unique geologic features within the City. Consequently, the proposed project would not be anticipated to result in direct or indirect destruction of unique geologic features. The General Plan MEIR indicates on page 4.7-8 that paleontological resources could occur within the geologic formations underlying the City Planning Area due to deposits laid down by large river systems. However, the General Plan MEIR ultimately concluded that compliance with the Paleontological Resource Protection Act and PRC Section 5097.5 would protect vertebrate paleontological sites and other paleontological resources. In addition, Policy HCR-1.1 requires the City to preserve cultural resources, which includes paleontological resources. Therefore, with adherence to the foregoing regulatory requirements policies, the General Plan MEIR determined that potential impacts to paleontological resources would be reduced to a less-than-significant level.

The project site does not contain any peculiar conditions that would result in increased potential for subsurface paleontological resources. Furthermore, the proposed project would be required to comply with all applicable federal, State, and local requirements to avoid potential adverse effects to paleontological resources, if such resources are discovered during ground-disturbing activities on the site. It should be noted that the project site has been subject to mass disturbance as part of grading activities. Therefore, any surface-level paleontological resources located on-site would have been previously encountered.

Based on the above, impacts related to resulting in the direct or indirect destruction of a unique paleontological resource were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?

Discussion

a,b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to the project would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents (MTCO₂e/yr).

Recognizing the global scale of climate change, California has enacted several pieces of legislations in an attempt to address GHG emissions. Specifically, AB 32, and more recently Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was approved in 2008, and updated in 2017 and 2022. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

The General Plan MEIR analyzed the potential for implementation of the 2040 General Plan to result in the generation of levels of GHGs that could cause cumulatively considerable impacts to the environment. As discussed under Impact 4.8-1 of the General Plan MEIR, the 2040 General Plan would enable the City to meet the 2030 GHG emission requirements included in SB 32 and would assist in meeting broader statewide emission reduction targets. In addition, the City's CAAP update includes measures and actions that enable the City to reduce projected 2030 GHG emissions and make substantial progress towards the City's goal of carbon neutrality by 2045. Thus, the General Plan MEIR concluded that potential impacts related to GHG emissions would be less than significant.

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		*
		*

GHG emissions resulting from construction and operations of the proposed project were modeled using the CalEEMod emissions model under the same assumptions as discussed in Section III, Air Quality, of this Modified Initial Study. All modeling results are included as Appendix A. In addition to project compliance with SMAQMD's established thresholds, potential impacts related to climate change from development within the City are assessed based on the project's compliance with the City's newly adopted CAAP reduction measures. In addition, SMAQMD has adopted thresholds of significance for GHG emissions during construction and operations of projects, which are discussed in further detail below.

Construction

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on an annual basis.

Nonetheless, to ensure the proposed project would result in emissions below the SMAQMD threshold, GHG emissions were modeled using CalEEMod under the same assumptions as presented in Section III, Air Quality, of this Modified Initial Study. For construction-related GHG emissions, SMAQMD has adopted a threshold of significance of 1,100 MTCO₂e/yr. If construction of the proposed project would result in emissions that exceed 1,100 MTCO₂e/yr, then construction could result in a potentially significant impact and mitigation measures would be required. The estimated unmitigated maximum annual construction-related emissions from the proposed project are presented in Table 5.

Table 5 Total Maximum Unmitigated Construction GHG Emissions		
GHG Emissions (MTCO ₂ e/yr)		
Maximum Construction GHG Emissions	245	
SMAQMD Threshold	1,100	
Exceeds Threshold?	NO	
Source: CalEEMod, November 2024 (see Appendix A).		

Based on the modeling conducted for the proposed project, construction of the project was estimated to generate maximum unmitigated GHG emissions of 245 MTCO₂e/yr. As shown in the table, maximum emissions related to construction of the proposed project would not exceed the applicable threshold of significance. Therefore, project construction would not result in a cumulatively considerable contribution to global climate change.

Operations

SMAQMD has adopted qualitative thresholds of significance for GHG emissions during operations of projects. However, SMAQMD's CEQA Guidelines note that, where local jurisdictions have adopted thresholds or guidance for analyzing GHG emissions, the local thresholds should be used for the project analysis. The City of Sacramento has adopted a CAAP, which provides a jurisdiction-wide approach to the analysis of GHG emissions. The City's CAAP includes Citywide measures intended to reduce emissions from existing sources, as well as measures aimed at reducing emissions from future sources related to development within the City. Thus, the analysis provided herein is focused on the proposed project's consistency with the City's CAAP. Nonetheless, the estimated unmitigated maximum annual operational emissions from the proposed project were

modeled for informational purposes. According to the CalEEMod calculations, the proposed project would generate maximum unmitigated GHG emissions of 1,747 MTCO₂e/yr during operations.

Consistency with the City of Sacramento CAAP

The City of Sacramento has integrated a CAAP into the City's 2040 General Plan. Potential impacts related to climate change from development within the City are assessed based on the project's compliance with the City's newly adopted CAAP reduction measures. The majority of the reduction measures set forth in the CAAP are citywide efforts in support of reducing overall citywide emissions of GHG and are not applicable to individual development projects. However, various measures related to new development within the City would directly apply to the proposed project. The project's general consistency with the applicable CAAP measures is discussed below.

Measure E-2 of the CAAP is intended to eliminate natural gas in new construction through the adoption of new regulations that mandate all-electric construction in new buildings within the City. Pursuant to City Code Section 15.38.020, which includes local amendments to the CALGreen Code, all new buildings constructed after January 1, 2026, shall be all-electric. The proposed project would start construction in April 2025; however, the proposed hotel would be designed such that project components are built all-electric.¹⁵ Therefore, the proposed project would be consistent with Measure E-2 of the CAAP.

In addition, all internal roadways and pedestrian connections would be constructed in conformance with City standards. As such, the proposed project would generally comply with Action TR-1.2 of the CAAP.

Finally, by including low impact development (LID) such as the proposed on-site bioretention planters, the proposed project would also generally comply with Action WW-1.4 of the CAAP.

As discussed above, the General Plan MEIR concluded that buildout of the City's General Plan, including the project site, would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The proposed project would be consistent with the City's EMU General Plan land use designation for the site as well as the CAAP policies discussed above that are intended to reduce GHG emissions from buildout of the City's General Plan. Thus, GHG emissions from operation of the proposed project would be generally similar to what was previously analyzed in the MEIR, and would be consistent with the CAAP.

Conclusion

Based on the above, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Because the proposed project would not be considered to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, the proposed project would not result in any peculiar effects related to the generation of GHG emissions, and requirements for additional CEQA review are not met.

¹⁵ Cook, Chad B., Principal, HMC Development LLC. Personal communication [email] with Rod Stinson, Vice President, Raney Planning and Management, Inc. December 12, 2024.

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?

Discussion

a. The General Plan MEIR does not specifically evaluate the routine transport, use, or disposal of hazardous materials, but does include discussions on the potential for buildout of the 2040 General Plan to expose people to hazardous materials during construction. As discussed throughout Impacts 4.9-1 through 4.9-3, various regulations and guidelines mitigate exposure to hazardous materials, including asbestos, lead, PCBs, and mercury. The use of hazardous materials is regulated in part by the California Occupational Safety and Health Administration (OSHA), including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs.

Hotel uses are not typically associated with the routine transport, use, disposal, or generation of hazardous materials. Operations would likely involve use of common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount that would be used on the site, occasional use of such products would not represent a substantial risk to public health or the environment during project operation. Therefore, impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials were

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		×
		×
		×
		*
		×
		*

adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

b,d. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

The General Plan MEIR concluded that given compliance with applicable General Plan policies, as well as local, State, and federal regulations related to hazardous waste, impacts related to hazards and hazardous materials would be less than significant.

Construction Activities

Construction activities associated with the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local City ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b), the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, the Sacramento County Environmental Compliance Division) in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, City, or County fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractor is required to notify the Sacramento County Environmental Compliance Division in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures. Compliance with such regulations would ensure that a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions during construction would not occur.

Existing On-Site Hazardous Conditions

The General Plan MEIR evaluated potential exposure to hazardous materials under Impact 4.9-1, related to contaminated soils, Impact 4.9-2, related to hazardous building materials, and Impact 4.9-3, related to contaminated groundwater. The General Plan MEIR concluded that compliance with all applicable rules and regulations, along with implementation of the General Plan policies, would reduce the potential for exposure of construction workers and the general public to unusual or excessive risks related to such hazardous materials or situations, including accidental releases to the environment to a less-than-significant level. The proposed project would not include the demolition of any existing buildings; as such, hazardous building materials are not anticipated to pose a hazard during project construction. In addition, the project site is undeveloped and has been previously mass graded. Thus, impacts related to contaminated soils or groundwater would not occur.

With respect to sites with known hazardous materials, Government Code Section 65962.5 requires the California Environmental Protection Agency to annually develop an updated

Cortese List. The project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, including the map of Department of Toxic Substances Control (DTSC) cleanup sites¹⁶ or the State Water Resources Control Board's (SWRCB) GeoTracker system and list of leaking underground storage tank (LUST) sites.¹⁷ In addition, the project site is not located on or near any hazardous waste sites identified on the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB.¹⁸

A Phase I Environmental Site Assessment (ESA) was prepared for the Centerpointe at Natomas Crossing business park by LandAmerica Commercial Services (LAC) for the purpose of identifying potential recognized environmental conditions (RECs) associated with the Centerpointe at Natomas Crossing business park and the project site (see Appendix C).¹⁹ The Phase I ESA included a site reconnaissance; a review of historical documents of the project site; interviews of persons familiar with the project site and applicable local agencies; and a review of appropriate federal. State, and local regulatory agencies to reveal known hazardous waste sites or leaks or spills of hazardous materials at the project site or the project vicinity. As the project site is located immediately adjacent to the Centerpointe at Natomas Crossing business park, portions of the information and analysis contained within the Phase I ESA apply to the project site. For example, LAC conducted a search of local, State, and federal agency databases regarding the project site and known contaminated sites in the immediate vicinity. The database search conducted as part of the Phase I ESA did not identify facilities with hazardous materials for the Centerpointe at Natomas Crossing business park or the adjacent properties, including the project site. Therefore, the project site is not anticipated to contain existing on-site hazardous conditions that could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions.

Conclusion

Based on the above, the proposed project would not result in any peculiar effects that would require further CEQA review related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, or through being located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5, and impacts were adequately addressed in the General Plan MEIR.

c. The General Plan MEIR did not specifically evaluate impacts related to the release of hazardous materials within one-quarter mile of existing or proposed schools. The project site is located approximately 0.13-mile southeast of Inderkum High School, and is therefore located within 0.25-mile of an existing school. However, as discussed above, evidence of RECs or hazardous facilities was not identified in connection with the project site or the surrounding area. In addition, operation of the site as a hotel would not include any activities that would involve the routine transport, use, or disposal of hazardous material. As such, future operations at the project site would not emit any hazardous emissions, substances, or waste. Therefore, the proposed project would not result in any

¹⁶ Department of Toxic Substances Control. *EnviroStor.* Available at: https://www.envirostor.dtsc.ca.gov/public/map. Accessed November 2024.

 ¹⁷ California Environmental Protection Agency. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/search. Accessed November 2024.
 ¹⁸ State Water Becourses Control Poord Active CDO and CAO Available at:

¹⁸ State Water Resources Control Board. Active CDO and CAO. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed November 2024.

¹⁹ LandAmerica Commercial Services. *Phase I Environmental Site Assessment Report.* February 16, 2006.

adverse effects related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and further CEQA review is not required for this topic.

e. The General Plan MEIR evaluated potential hazards related to airports and air traffic under Impact 4.9-2. As discussed therein, development projects located near airports would be required to comply with the airport's adopted Airport Land Use Compatibility Plan (ALUCP). ALUCPs limit the height, type, and intensity of land uses surrounding airports to reduce safety concerns associated with aircraft crashes as well as uses that are sensitive to noise. In addition, General Plan Policy ERC 10.10 requires compliance with applicable ALUCPs and would substantially limit the potential for exposure of people to aircraft-related hazards. The General Plan MEIR concluded that compliance with the applicable ALUCP and General Plan policies would reduce the potential for exposure to hazards and hazardous materials, including potential hazards related to airports and air traffic, and such impacts would be less than significant.

The nearest public airports to the project site are the Rio Linda Airport, located approximately 3.7 miles northeast of the project site, and the Sacramento International Airport, located approximately 4.17 miles to the northeast. The project site is located within the Airport Influence Area for the Sacramento International Airport, but is outside the Airport Influence Area associated with the Rio Linda Airport. A discussion of noise-related impacts associated with the project site being located within the Sacramento International Airport Influence Area is provided in Section XIII, Noise. Therefore, the following discussion is focused on whether the proposed project would result in a safety hazard associated with the Sacramento International Airport for people working in the project area.

According to Map 3 of the Sacramento International ACLUP, the project site is located outside of the airport referral area and the established safety zones.²⁰ As such, risks associated with an off-airport aircraft accident or emergency landing are not anticipated to occur and the proposed project would not result in an airport-related safety hazard for people staying at or working in the proposed hotel, and such impacts do not require further CEQA review.

f. The General Plan MEIR concluded that, based on the temporary nature of any road closures, lane narrowing, or detours combined with compliance with City requirements, building codes, and Policy PFS 2.3 related to evacuation routes, impacts related to interfering with an adopted emergency response plan, or emergency evacuation plan would be less than significant.

Implementation of the proposed project would not result in any substantial modifications to the City's existing roadway system. During construction of the proposed project, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the City that could be used as evacuation routes during emergency events. In addition, construction activities would be temporary, and permanent modifications to the nearby roadways would not occur. The project would not interfere with potential evacuation or response routes used by emergency response teams. In addition, the proposed project would be subject to Sections 12.20.020 and 12.20.030 of the City Code, which require all development projects to prepare a Traffic Management Plan for

²⁰ Sacramento Area Council of Governments. *Sacramento International Airport Land Use Compatibility Plan*. December 12, 2013.

construction activities. During project operations, the proposed project would provide adequate access for emergency vehicles by way of the northernmost site access point and would not interfere with potential evacuation or response routes used by emergency response teams.

Furthermore, the proposed project would not interfere with potential evacuation or response routes used by emergency response teams and would not conflict with the Sacramento County Local Hazard Mitigation Plan.²¹ The proposed project is consistent with the site's General Plan land use designation; thus, development of the site and associated effects on evacuation routes has been anticipated by the City. Furthermore, the proposed project would be required to comply with all applicable General Plan policies.

Based on the above, impacts related to interfering with an emergency evacuation or response plan were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

g. Under Impact 4.9-5 of the General Plan MEIR, wildfire risk is discussed as predominantly associated with wildland urban interface (WUI) areas. The entirety of the City's planning area is located in a Local Responsibility Area (LRA); thus, fire protection responsibility lies with local agencies, including the Sacramento Fire Department (SFD). The nearest Very High Fire Hazard Safety Zone (FHSZ) is approximately 21.80 miles east of the project site near Folsom Lake.²² Overall, the General Plan MEIR concluded that compliance with the California Fire Code (CFC) and the applicable General Plan policies would minimize risks associated with wildfires, and, as a result, a less-than-significant impact would occur.

The General Plan MEIR identifies various areas as fairly susceptible to urban wildfire, including areas along the American River Parkway from Watt Avenue to the Sacramento River; along Garden Highway in the Natomas area, approximately two miles from the project site; and the area where Interstate 80 (I-80) crosses the Sacramento River, approximately four miles from the project site. The project site is separated from such areas by existing urban development, which serves as a fire break to the project site. Furthermore, the proposed project would be required to comply with all applicable requirements of the CFC, as adopted by Chapter 15.36 of the City Code, including installation of fire sprinkler systems. In addition, the CBSC includes requirements related to fire hazards for new buildings. Such features would help to reduce the spread of fire.

As discussed under Section XX, Wildfire, of this Modified Initial Study, the project site is not located on a substantial slope, and the project area does not include existing features that would substantially increase fire risk. Given that the project site is located within a developed urban area, development of the proposed project would not result in substantial fire risks related to installation or maintenance of such infrastructure.

Based on the above, wildfire risks were adequately addressed in the General Plan MEIR, and the site would not be subject to any peculiar hazards related to the exposure of people or structures, either directly or indirectly, to the risk of loss, injury, or death involving wildland fires. Thus, the criteria for requiring further CEQA review are not met.

²¹ Sacramento County. Sacramento County Local Hazard Mitigation Plan. July 2021. Available at: https://waterresources.saccounty.gov/stormready/Pages/Local-Hazard-Mitigation-Plan-2017-Update.aspx. Accessed November 2024.

²² California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area*. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed October 2024.

Impact Х. HYDROLOGY AND WATER Significant Significant Adequately Impact Peculiar **QUALITY.** Impact due to Addressed in to the Project or New Information the General the Project Site Would the project: Plan MEIR Violate any water quality standards or waste a. × discharge requirements or otherwise substantially degrade surface or ground water guality? b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge × such that the project may impede sustainable groundwater management of the basin? Substantially alter the existing drainage pattern of the C. site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: Result in substantial erosion or siltation oni. \square \square × or off-site; Substantially increase the rate or amount of ii. surface runoff in a manner which would × result in flooding on- or offsite; iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or × provide substantial additional sources of polluted runoff; or \square Impede or redirect flood flows? iv. In flood hazard, tsunami, or seiche zones, risk release d. of pollutants due to project inundation? Conflict with or obstruct implementation of a water e. quality control plan or sustainable groundwater ¥ management plan?

Discussion

a, The following discussion provides a summary of the proposed project's potential to violate ci-ciii. water quality standards/waste discharge requirements, alter the drainage pattern of the site resulting in erosion or siltation, increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or otherwise degrade water quality during construction and operation.

The General Plan MEIR concluded that adherence to State and local regulations and General Plan Policies ERC 1.1 through ERC 1.4 related to pollution prevention, water protection, and requiring compliance with applicable City ordinances, as well as ERC 5.2, which encourages runoff reduction measures such as LID strategies and BMPs, would reduce the potential for development projects associated with General Plan buildout to substantially degrade water quality or violate State water quality standards due to sediments or other contaminants to a less-than-significant level.

Construction

During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground with impervious surfaces and structures, the potential exists for wind and water to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality. The City of Sacramento's Grading Ordinance requires that development projects comply with the requirements of the City's Stormwater Quality Improvement Program (SQIP). The SQIP outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management Program, which in turn is based on the NPDES Municipal Stormwater Discharge Permit. The comprehensive Stormwater Management Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations.

The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in land disturbance of one or more acres. The City's NPDES permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a SWPPP. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project.

With implementation of the required SWPPP and BMPs included therein, construction of the proposed project would not result in a violation of water quality standards and/or degradation of water quality. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association Stormwater BMP Handbooks and Section 11 of the City's Development Standards, and implemented by the project contractor. Because the proposed project would disturb greater than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit.

Additionally, in accordance with City Code Section 15.88.250, City of Sacramento staff would require preparation of an Erosion and Sediment Control Plan that demonstrates how the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction. The Erosion and Sediment Control Plan would be required to be submitted concurrently with the final grading plan prepared for the proposed project.

Based on the above, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during construction.

Operations

Following project buildout, the surface of the site would be covered with either impervious surfaces or landscaped areas, and topsoil would no longer be exposed. As such, the potential for erosion and associated impacts to water quality would be reduced. However, the addition of impervious surfaces on the site would result in the generation of urban runoff during project operations, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported by way of stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly

addressed, which would provide a more lucrative means of transport for pollutants to enter the waterways.

Consistent with Chapter 13.16.120 of the City Code, the post-development stormwater flows from the site would be required to be equal to or less than pre-development conditions. The proposed project would comply with Section 13.08.145 of the City Code, which requires the following:

"When property that contributes drainage to the storm drain system or combined sewer system is improved or developed, all stormwater and surface runoff drainage impacts resulting from the improvement or development shall be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property."

The project site is currently vacant. Development of the project would include a four-story hotel building and 126 parking spaces within an on-site parking lot. With the exception of the pervious landscaping and bioretention basins, development of the proposed project would convert the 2.09-acre site from pervious surfaces to impervious surfaces. Development of the proposed project would include an on-site stormwater drainage system to capture runoff from the new impervious surfaces, which would be routed through new storm drain lines to the proposed bioretention planters located within the proposed parking lot.

Measures that reduce or eliminate post-construction-related water quality problems range from source controls, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. The City's SQIP and the Stormwater Quality Design Manual for the Sacramento Region include BMPs to be implemented to mitigate impacts from new development and redevelopment projects. Additionally, the City's DOU recommends implementation of LID measures.

Proposed source control measures included as part of the proposed project would be designed consistent with the standards set forth in the Sacramento Region Stormwater Quality Design Manual. As previously discussed, DMAs -01, -02, and -03 would each include individual bioretention planters, which would collect stormwater runoff associated with each DMA prior to discharge to new on-site 12-inch storm drain lines. Runoff in DMA-04 would flow into a combination of existing and proposed drainage inlets which would capture runoff to also be conveyed within the new on-site 12-inch storm drain lines. The proposed on-site storm drain system would ultimately connect to the existing City stormwater drainage system located to the north of the site within the existing Centerpointe at Natomas Crossing business park. Existing storm drainage infrastructure includes Basin 15, an existing regional detention facility. According to the Preliminary Drainage Study prepared for the proposed project by CWE, Basin 15 is sized to accommodate the project site and the increased peak flows associated with this development (see Appendix D).²³ As further discussed in the Preliminary Drainage Study, the peak flow for DMA-01 and DMA-04 would be substantially less than the capacity a 12inch pipe can convey. Because all on-site pipes have a 12-inch diameter, the proposed stormwater drainage pipes would sufficiently handle surface runoff such that on- or offsite flooding would not occur.

²³ CWE. *Preliminary Drainage Study*. July 2024.

Finally, as established by City Code Section 15.88.260, the proposed project would be required to prepare a Post-Construction Erosion and Sediment Control Plan, which would detail how the project would control surface runoff and retain sediment on-site after all proposed improvements and structures have been installed on-site. The Post-Construction Erosion and Sediment Control Plan would be required to be submitted to the City concurrently with the final grading plan prepared for the proposed project.

Based on the above, water quality standards or waste discharge requirements would not be violated, and downstream water quality would not be degraded as a result of operations of the proposed project.

Conclusion

The General Plan MEIR concluded that required compliance with the SQIP, NPDES General Construction Permit, City ordinances, and adherence to General Plan policies would render any potential construction and operational impacts to water quality less than significant. As discussed above, the proposed project would comply with the aforementioned requirements. Therefore, impacts related to violation of water quality standards or degradation of water quality during construction or operation were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

b,e. Water supplies for the project site would be provided by the City. The City's water infrastructure network consists of two surface water treatment facilities, two pressure zones, and a supporting system of groundwater wells, pumping facilities, storage tanks, and distribution/transmission pipelines. According to the General Plan MEIR, the City supplies domestic water from a combination of surface water and groundwater sources. The City is permitted to 326.800 acre-feet per year (AFY) of surface water diverted from the Sacramento and American rivers in 2030, while the City's average groundwater deliveries from 2006 to 2017 were approximately 17,932 AFY. The City's 2020 Urban Water Management Plan (UWMP) includes a water service reliability assessment of the City's projected supplies and demands during normal, single dry, and five consecutive dry years. Under the various water year types, the total annual water supply sources available are compared to the total annual projected water use for the City's water service area from 2025 to 2045 in five-year increments. The City is projected to have a surplus of water supplies in all water year types through 2045. According to the General Plan MEIR, because the City has evaluated existing water supplies as sufficient for more than 20 years into the future, even during multiple dry years, together with the applicable General Plan policies and adherence to the regulatory requirements of current legislation, potential impacts related to water supply would be less than significant.

The proposed project is consistent with the site's General Plan land use designation and would not generate an increase in water demand beyond what has already been anticipated in the MEIR. As such, adequate capacity is expected to be available to serve the proposed project's water demands. Therefore, while a portion of the water supplied to the project site by the City would be obtained through groundwater resources, such groundwater usage has been anticipated and would not substantially deplete groundwater supplies within the project area.

The proposed project would result in an increase of impervious surfaces within the project site, which would reduce the infiltration of groundwater as compared to existing conditions. However, stormwater runoff from such impervious surfaces would be directed to the

proposed stormwater drainage system. The stormwater drainage system would include bioretention planters within the parking lot area, as well as new storm drain inlets to capture on-site stormwater runoff and convey flows to the proposed bioretention planters for treatment.

The proposed bioretention planters would allow for stormwater to continue to percolate within on-site soils, thereby contributing to groundwater recharge. In addition, the project site represents a relatively small area compared to the size of the groundwater basin, and thus, does not currently represent a substantial source of groundwater recharge. Furthermore, the project site has been previously designated for the proposed uses, and the loss of groundwater infiltration at the site due to development has been previously anticipated in the General Plan MEIR. Therefore, the proposed project would not interfere substantially with groundwater recharge.

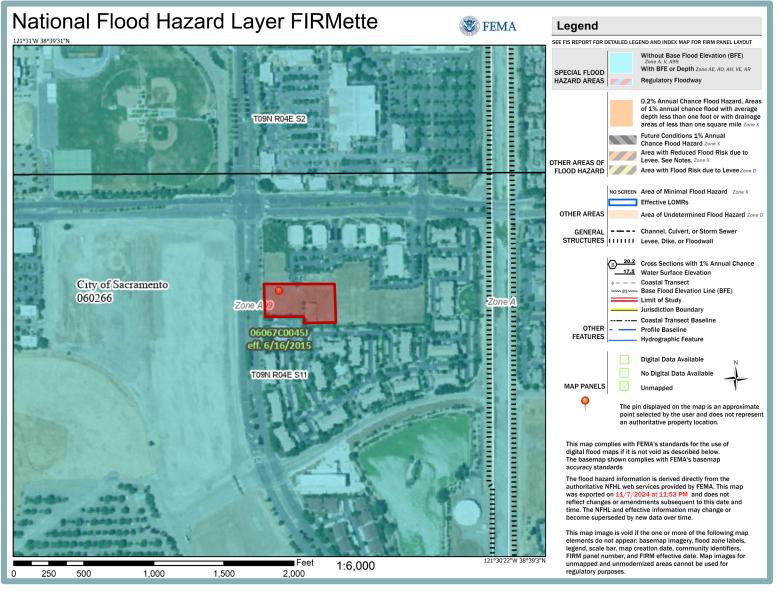
Based on the above, potential impacts related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

civ. The project site is located within Zone A99, a Special Flood Hazard Area (SFHA) Without Base Flood Elevation (BFE).²⁴ A99 is an interim designation that allows new development to proceed without elevation verification while the improvements needed to provide protection from the 100-year flood (i.e., levees) are under construction. However, the A99 flood zone is still a SFHA until construction of the levees is complete, and the levees are certified by the Federal Emergency Management Agency (FEMA). According to FEMA Flood Insurance Rate Map 06067C0045J, the Zone A99 area is created by the close proximity of the East Drainage Canal to the east of the project site (see Figure 10). Given that the project site are within a SFHA, the proposed project could be exposed to risks associated with flood hazards.

However, the proposed project would be subject to General Plan Policies ERC 6.1 through ERC 6.12. For example, the proposed project would be subject to applicable State requirements for 200-year flood protection and federal requirements for 100-year protection (Policy ERC 6.6) and would not be approved unless appropriate flood risk evaluations had been conducted to minimize the risk of damage (Policy ERC 6.7). In addition, the proposed project would be subject to the requirements set forth in Chapter 15.104, Floodplain Management Regulations, of the City Code. Furthermore, the proposed project is consistent with the existing land use designation for the site and, thus, is consistent with the type and intensity of development that has previously been anticipated for the site by the City and analyzed in the General Plan MEIR. The General Plan MEIR included an analysis of flood risks under Impact 4.10-2 and concluded that the ongoing flood protection projects by the City and USACE, combined with compliance with General Plan policies, would minimize the potential for adverse effects to occur due to flooding. Therefore, the proposed project would not result in adverse impacts related to impeding or redirecting flood flows were adequately addressed in the General Plan MEIR. and the proposed project would not result in any effects that would require further CEQA review for this topic.

²⁴ Federal Emergency Management Agency. *Flood Insurance Rate Map* 06067C0045J. Effective June 16, 2015.

Figure 10 FEMA FIRM 06067C0045J

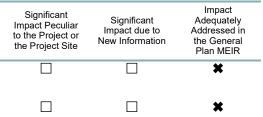


d. Impacts related to flooding risks are discussed under question 'c.iv' above. Although the General Plan MEIR does not evaluate potential impacts related to tsunami or seiche zones, the General Plan MEIR concludes that with implementation of General Plan policies, impacts related to flooding would be less than significant. In addition, because the project site is not located in the proximity of a shoreline or a closed body of water, the proposed project would not be subject to adverse impacts related to tsunami or seiche zones. Therefore, impacts related to flooding were adequately addressed in the General Plan MEIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

XI. LAND USE AND PLANNING.

Would the project:

a. Physically divide an established community?
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?



Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community or isolate an existing land use. The proposed project would include development of a 122-room hotel, which would be generally consistent with the existing commercial uses adjacent to the project site. Therefore, the proposed project would be a continuation of the surrounding urban development and would not isolate an existing land use. Furthermore, the proposed project is consistent with the site's existing land use designation and, thus, is consistent with the type and intensity of development that has previously been anticipated for the site by the City and analyzed in the General Plan MEIR. The General Plan MEIR concluded that the 2040 General Plan includes policies which would enhance and protect existing neighborhoods, as well as discourage the physical division of established communities. Additionally, the 2021-2029 Housing Element includes specific goals and policies to protect residents from displacement and preserve housing stock.

Based on the above, the project would not result in new development or features that would divide existing residential neighborhoods or communities. As such, impacts related to physically dividing an established community were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. The proposed project would be consistent with the site's current EMU General Plan land use designation. As discussed throughout this Modified Initial Study, the proposed project would not result in any new significant environmental effects that were not previously identified in the General Plan MEIR and could not be substantially mitigated by uniformly applicable development policies and standards, pursuant to CEQA Guidelines Section 15183. In addition, the proposed project would not conflict with City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the City's tree preservation ordinance, the City's noise standards, and applicable SWRCB regulations related to stormwater. In addition, the proposed project would be subject to the City's Site Plan and Design Review process, as established by Chapter 17.808 of the City Code, to allow the City to ensure significant environmental effects would be avoided. Therefore, the proposed project would not cause a significant environmental impact in excess of what has already been analyzed and anticipated in the General Plan MEIR. As such, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact and further CEQA review for this topic would not be required.

XI Wa	I. MINERAL RESOURCES. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			×
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			×

Discussion

a,b. The project site is located in a developed area of the City. According to the City's 2040 General Plan Technical Background Report, areas with deposits of mineral resources are not located within the vicinity of the project site.²⁵ As discussed therein, the northern portions of the City are primarily Mineral Resource Zone 1 (MRZ-1), areas where available geologic information indicates little or no likelihood for presence of significant mineral resources. The City has developed policies that address mineral resource recovery areas designated by the State as MRZ-2 (significant existing or likely mineral deposits). Overall, the General Plan MEIR concluded that compliance with such polices would ensure impacts related to mineral resources would be less than significant.

Given that the proposed project is located within a developed and urbanized area designated MRZ-1, General Plan policies that address mineral resource recovery areas would not be applicable to the proposed project. In addition, the proposed project would not result in the loss of availability of a known local- or State-defined mineral resource. Thus, the proposed project would not result in any peculiar effects related to mineral resources such that further CEQA review for this topic would be required.

²⁵ City of Sacramento. Sacramento 2040 Technical Background Report [pg. 6-94]. Adopted January 19, 2021.

	II. NOISE. build the project result in:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
а.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			×
b.	Generation of excessive groundborne vibration or groundborne noise levels?			×
C.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to			×

Discussion

excessive noise levels?

- a. The discussion below presents information regarding sensitive noise receptors in proximity to the project site, applicable noise standards, the existing noise environment, and the potential for the proposed project to result in noise impacts during project construction and operation. The following terms are referenced in the sections below:
 - Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to dB in this report will be A-weighted unless noted otherwise.
 - Community Noise Equivalent Level (CNEL): The cumulative noise exposure over a 24-hour period. Weighting factors of +5 and +10 dBA are applied to the evening and nighttime periods, respectively, to account for the greater sensitivity of people to noise during those periods.
 - Day-Night Average Level (L_{dn}): The average sound level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours.
 - Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
 - Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
 - Median Sound Level (L₅₀): The sound level exceeded 50 percent of the time over a given time-period.

Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the project site, sensitive land uses include the existing multi-family residences located to the south and east.

Standards of Significance

Pursuant to City Code Section 8.68.060, the proposed project, which is considered to be a "stationary" noise source, shall not be permitted to generate noise levels exceeding 55 dBA L_{50} or 75 dBA L_{max} during daytime hours (7:00 AM to 10:00 PM) and 50 dBA L_{50} or 70

dBA L_{max} during nighttime hours (10:00 PM to 7:00 AM) at the adjacent noise sensitive receptors.

The City has not adopted any formal standard for evaluating temporary construction noise which occurs within allowable hours. Therefore, for short-term noise associated with project construction, the California Department of Transportation (Caltrans) increase criteria of 12 dBA is applied to existing sensitive receptors in the project vicinity. The 12 dBA increase is approximately equivalent to a doubling of sound energy and has historically been the standard of significance for Caltrans projects.

The Federal Interagency Commission on Noise (FICON) has also developed a graduated scale for use in the assessment of project-related traffic noise level increases. The criteria shown in Table 6 was developed by FICON as a means of developing thresholds for impact identification for project-related traffic noise level increases. FICON's significance thresholds are used to identify the significance of an incremental increase in noise levels.

Table 6 FICON Noise Exposure Increases for Determining Level of Significance			
Noise Exposure without Project Potential Significant Impact			
< 60 dB CNEL	5 dB or more		
60-65 dB CNEL	3 dB or more		
>65 dB CNEL 1.5 dB or more			
Source: Federal Interagency Committee on Noise (FICON). 2000.			

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, Caltrans requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding significant noise impacts as low as 1.5 dB, provides a conservative approach to the impact assessment for the proposed project.

Impact Analysis

The General Plan MEIR included an analysis of potential noise impacts associated with construction and operation of new development occurring pursuant to the General Plan under Section 4.11. The General Plan MEIR concluded that compliance with Mitigation Measure NOI-1 as set forth under Impact 4.11-2 would ensure potential impacts related to temporary increases in ambient noise levels during construction activities would be less than significant.

With respect to permanent noise level increases, as discussed under Impact 4.11-1 of the General Plan MEIR, implementation of noise attenuation measures sufficient to reduce noise levels to below the City's exterior land use compatibility standards may not be feasible due to limitations on allowable roadway modifications, inadequate ROW for construction of noise barriers, or limitation due to ingress and egress paths. General Plan Policies ERC 4.3, ERC 10.2, ERC 10.3, and ERC 10.8 require implementation of feasible noise-attenuating design features, when needed. However, existing noise-sensitive land uses located along 13 sections of major roadways, as presented in Table 4.11-1 of the General Plan MEIR, would experience increased traffic volumes from full General Plan buildout and the associated increased traffic noise levels. Such noise level changes would

range from a reduction of -4.6 dB to an increase of 5.5 dB. The change in traffic noise levels between the existing and future scenarios would exceed the applicable relative noise level thresholds at 13 locations. Thus, the General Plan MEIR determined additional feasible mitigation measures beyond the aforementioned General Plan policies are not available, and as a result, the General Plan MEIR concluded that new development within the City would result in a significant and unavoidable impact related to creating substantial permanent increases in ambient noise levels.

The following sections provide an analysis of potential noise impacts associated with operation, construction, and traffic noise of the proposed project. It should be noted that the project site is not located on any road segments identified by the General Plan MEIR as exceeding the applicable noise thresholds.

Project Construction Noise

During construction of the proposed project, heavy-duty equipment would be used for grading, excavation, paving, and building construction, which would temporarily increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and haul trucks would be used in association with the proposed activities.

Table 7 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet. As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source decrease at a rate of approximately 6 dB per every doubling of distance from the noise source. Construction of the proposed project would be required to comply with the limited construction hours set forth by Section 8.68.080 of the City's Municipal Code. Construction activities would be temporary in nature and are anticipated to occur during normal daytime hours, consistent with Section 8.68.080 of the City Code.

Table 7				
Construction Equipment Noise				
Type of Equipment	Maximum Level, dB at 50 feet			
Auger Drill Rig	84			
Backhoe	78			
Compactor	83			
Compressor (air)	78			
Concrete Saw	90			
Dozer	82			
Dump Truck	76			
Excavator	81			
Generator	81			
Jackhammer 89				
Pneumatic Tools 85				
Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.				

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Based on Table 7, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet. As previously discussed, existing residential uses are located to the south and east of the project site. However, the proposed project is consistent with the site's current General Plan land use designation. and, therefore, construction noise associated with buildout of the proposed project has been anticipated, and the proposed project would not result in any peculiar effects related to an increase in ambient noise levels. As discussed above, the General Plan MEIR determined that compliance with Mitigation Measure NOI-1 as set forth under Impact 4.11-2 would ensure that construction noise associated with the project would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project site. The proposed project would be required to comply with Mitigation Measure NOI-1 to reduce construction noise as a condition of project approval. The noise reduction measures required therein include, but are not limited to, prohibiting all construction activities from occurring during restricted hours; fitting construction equipment and vehicles with noise suppression devices (e.g., mufflers, silencers, wraps); shielding any area that requires working with impact tools and particularly loud equipment (e.g., concrete saws); limiting idling times in the immediate vicinity of nearby sensitive receptors; and locating stationary noise-generating equipment as far from sensitive receptors as possible. Therefore, construction activities associated with the proposed project would not result in new significant noise impacts relative to what was analyzed in the General Plan MEIR.

Project Operational Noise

Hotel uses are not typically considered substantial sources of noise. Noise-generating operations associated with the proposed hotel would primarily consist of landscaping maintenance, HVAC systems, and other typical activities. Such activities are not expected to generate noise levels exceeding the City's exterior noise level standards. Therefore, on-site operation of the proposed project would not be considered to generate a substantial permanent increase in ambient noise levels in the vicinity of the project.

The City of Sacramento does not have a significance threshold for increases in nontransportation noise sources. In the absence of a specific threshold, the FICON criteria established in Table 6 are used to assess increases in ambient noise environment. As such, where existing traffic noise levels are less than 60 dB L_{dn} , a five dB L_{dn} increase in roadway noise levels would be considered significant.

The primary noise source associated with operation of the proposed project would be traffic noise. According to Table 4.11-1 of the General Plan MEIR, the existing baseline traffic noise level on the segment of Truxel Road between Del Paso Road to Arena Boulevard, on which the project site is located, is 69.6 dBA and features significant daily traffic as an arterial roadway. Generally, a doubling in traffic volumes is required to increase traffic noise levels by five dB. Due to the nature and relatively small size of the proposed project, substantial daily vehicle trips sufficient to double traffic volumes would not be generated on local roadways as a result of the proposed project. Additionally, the proposed project would be consistent with the project site's current land use designation. Therefore, traffic noise level increases associated with a hotel on the project site have been previously anticipated by the City. As further presented in Table 4.11-1 of the General Plan MEIR, the future (2040) traffic noise level on the segment of Truxel Road between Del Paso Road to Arena Boulevard is anticipated to be 70.1 dBA. Consequently, even with buildout of the entire General Plan planning area, noise levels along the segment of Truxel Road within the project vicinity would not increase by five dB. As such, the proposed project would not be anticipated to substantially increase traffic noise in the

project vicinity beyond what was planned by the City and addressed in the General Plan MEIR. and, thus, would not substantially increase traffic noise in the project vicinity.

For impacts determined to be significant in a General Plan EIR, CEQA Section 15183 allows for future environmental documents to limit examination of environmental effects to those impacts which were not already analyzed as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the City's General Plan land use designation for the project site, impacts related to an increase in noise associated with buildout of the proposed project have been anticipated by the City and analyzed in the General Plan MEIR. The proposed project would not involve any operations or uses that would result in new, or increase the severity of, impacts identified in the General Plan MEIR.

Conclusion

Based on the above, impacts related to temporary or permanent noise level increases were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

The General Plan MEIR included an analysis of potential vibration impacts associated with buildout of the General Plan under Impact 4.11-3. The General Plan MEIR determined that implementation of the General Plan policies would avoid significant impacts. Therefore, through adherence to the requirements, policies, and strategies in the General Plan, the General Plan MEIR concluded that vibration impacts would be less than significant.

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of construction. Table 8, which was developed by the California Department of Transportation (Caltrans), shows that the vibration levels that would normally be required to result in damage to structures range from 0.2 to 0.6 in/sec PPV. The general threshold at which human annoyance could occur is 0.10 in/sec PPV.

Table 8							
PF	Effects of Vibration on People and Buildings PPV						
mm/sec	in/sec	Human Reaction	Effect on Buildings				
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type				
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected				
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings				
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage				
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage				
Source: Cali 200		portation Related Earthborne Vibra	ations. TAV-02-01-R9601. February 20,				

The primary vibration-generating activities associated with the proposed project would occur during grading, placement of underground utilities, and construction of foundations. Table 9 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with project construction would be the use of vibratory compactors, which exceeds the 0.20 in/sec threshold at 25 feet. Use of vibratory compactors/rollers could be required during construction of the proposed drive aisles and parking areas. However, the nearest existing structure is located approximately 60 feet from the project site boundaries. Thus, because the nearest existing buildings are located further than 25 feet from the project site, the proposed project would not include the use of vibratory compactors within 25 feet of the adjacent structures.

Table 9Vibration Levels for Various Construction Equipment									
Type of Equipment PPV at 25 feet (in/sec) PPV at 50 feet (in/sec)									
Large Bulldozer	0.089	0.031							
Loaded Trucks	0.076	0.027							
Small Bulldozer	0.003	0.001							
Auger/drill Rigs	0.089	0.031							
Jackhammer	0.035	0.012							
Vibratory Hammer	0.070	0.025							
Vibratory Compactor/roller	0.210 (less than 0.20 at 26 feet)	0.074							
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.									

Based on the above, impacts related to vibration were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

c. The General Plan MEIR evaluated potential impacts related to aircraft noise under Impact 4.11-4. As discussed therein, the General Plan MEIR concluded that any development of noise-sensitive land uses within the 65 dBA CNEL contour associated with the Rio Linda Airport would need to comply with General Plan policies LUP 1.13, ERC 10.10, and ERC 10.11 to reduce potential impacts related to aircraft noise to a less-than-significant level.

The closest airports to the project site include the Rio Linda Airport, located approximately 3.7 miles northeast of the project site, and the Sacramento International Airport, located approximately 4.17 miles northwest from the site. As discussed under Impact 4.11-4 of the General Plan MEIR, the southern portion of the Rio Linda Airport 65 dBA CNEL noise contour extends into the City limits, but only includes a single low density residential parcel, and the 65 dBA CNEL land use compatibility noise contour for the Sacramento International Airport does not cross over into the City limits. Based on the location of the project site, the site is not located within noise contour areas associated with each airport. Therefore, the project site is not subject to any airport land use plans and impacts related to excessive noise levels from private airstrips or heliports would not occur.

Based on the above, impacts related to aircraft noise were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

XIV. POPULATION AND HOUSING. *Would the project:*

- a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?
- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		×

Discussion

a. The General Plan MEIR determined that implementation of the General Plan would result in population growth in the City. However, the General Plan is designed to balance future housing, office, retail, commercial, and industrial uses to accommodate such growth. In addition, the City has included various goals and policies within the 2040 General Plan designed to support a compact urban footprint, infill development, and complete neighborhoods, such as policies LUP-1.1, LUP-1.7, and Goal LUP-6. The land use policies included in the General Plan would not induce development beyond what was planned by the City and addressed in the General Plan MEIR. Thus, impacts related to population growth would be less than significant.

The proposed project would include the development of a hotel on a site that is designated for mixed use development. Given that the project would not include any residential development, the project would not directly induce population growth. While the proposed project would include the creation of new jobs, which could potentially result in an increase in the housing demand in the area, such an increase would be minimal due to the relatively small scale of the proposed project. In addition, given that the project is consistent with the site's current land use designations, potential growth associated with development of the site has been anticipated by the City and analyzed in the General Plan MEIR.

Based on the above, the proposed project would not result in any peculiar effects related to inducing substantial unplanned population growth in an area, either directly or indirectly, and further CEQA review related to such is not required.

b. The General Plan MEIR discussed the potential displacement of people and existing housing under Section 3.5.7. As discussed therein, the 2040 General Plan policies provide for flexible development of housing, and residents would be protected by displacement through compliance with applicable policies, such as policies H-5.1, H-5.3, H-6.1, and H-6.5. Therefore, potential impacts related to displacement of people and existing housing was determined to be less than significant and the topic was not discussed further in the EIR.

The project site is undeveloped and does not currently include existing housing or other habitable structures. As such, the proposed project would not displace existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, impacts related to displacement of substantial housing or people were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

 \square

¥

XV. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

facilities, the se significant tain acceptable r performance	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
			×
			×
			×
			*

 \square

b. Police protection?

Fire protection?

- c. Schools?
- d. Parks?

a.

e. Other Public Facilities?

Discussion

a,b. The General Plan MEIR concluded that although General Plan buildout would likely require the development of additional fire protection and police facilities, the General Plan policies include measures to accommodate for growth and increased service demands. Based on the analysis included throughout the General Plan MEIR, the physical environmental impacts of such development would be generally consistent with the impacts associated with urban development addressed throughout the General Plan MEIR. Furthermore, the General Plan MEIR concluded that adherence to the relevant General Plan policies would ensure that adequate facilities would be available to accommodate current and future needs of the City. Therefore, according to the General Plan MEIR, buildout of the General Plan would result in a less-than-significant impact related to fire and police protection services.

Fire protection services would be provided to the site by the SFD. SFD operates 24 fire stations to serve approximately 101 square miles, as well as two contract areas that include 47.1 square miles within the unincorporated Sacramento County adjacent to the City. All Sacramento County fire agencies (SFD, Sacramento Metro Fire District, Sacramento International Airport Fire, Cosumnes Fire District, and the Folsom Fire Department) share an automatic aid agreement. According to the General Plan MEIR, when the SFD is fully staffed, 173 personnel are on duty for fire and emergency medical services (EMS), and 34 personnel are on duty for emergency ambulance services. The closest fire station to the project site is Fire Station 30, located approximately 1.19 miles north of the site at 1901 Club Center Drive. In addition, Fire Station 43, located at 4201 El Centro Road, is located approximately 1.67 miles southwest of the project site and Fire Station 18 is located at 746 North Market Boulevard, 1.73 miles southeast of the site.

The project site is located within the jurisdiction of the Sacramento Police Department (SPD). The SPD operates from four stations in the City, and is staffed with 674 sworn personnel. The nearest police station to the project site is located at 300 Richards Boulevard, approximately four miles south of the site.

While the proposed project would result in increased demands on fire and police protection services, such demands would be consistent with what has been anticipated by the City and analyzed in the General Plan MEIR. In addition, the project site is surrounded by existing commercial and residential development currently served by the SFD and SPD. Furthermore, the project would comply with all applicable State and local requirements

related to fire safety and security, including installation of fire sprinklers. In addition, as established by General Plan Policy PFS-1.15, the City of Sacramento requires new development projects to contribute fees for the provision of adequate fire and police protection services and facilities. The proposed project would be subject to all applicable development impact fees. Payment of applicable development impact fees to ensure the project contributes a fair share towards funding any new fire facilities deemed necessary by the City. Such facilities would be required to be designed in compliance with applicable regulations and standards, and if necessary, undergo analysis of all potential environmental impacts under CEQA. Compliance with such standards would minimize fire and police protection demands associated with the project.

Therefore, impacts related to the need for new or physically altered fire or police protection facilities, the construction of which could cause significant environmental impacts, were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

c-e. The General Plan MEIR concluded that with implementation of applicable General Plan policies, as well as applicable federal, State, and local development standards, implementation of the General Plan would result in a less-than-significant impact to schools, parks, and other public facilities such as libraries.

Hotel uses are not generally anticipated to increase the student population, as the proposed hotel would not generate permanent new residents to the City. In addition, the proposed project would be subject to payment of all applicable development impact fees. The project site is located within the Natomas Unified School District (NUSD), which includes development impact fees for commercial development at \$0.84 per sf.²⁶ Payment of such fees would serve as the project's fair-share contribution for funding expanded educational services that could result from a student population increase generated by the project's future residents. Revenues generated through payment of the fees would ensure sufficient funds exist to pay for any expanded or new equipment or facilities the NUSD deems necessary. According to SB 50, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property" (Government Code 65996[b]). As such, payment of developer fees would be considered sufficient to reduce any potential impacts related to school services.

With regard to parks and other public facilities, such as libraries, the proposed project would not be anticipated to result in a permanent substantial increase in population or the associated demand for such services, such that expanded facilities would be required. In addition, Section 18.56.220 of the City Code requires all new development within the City, including non-residential development, to pay a park impact fee. Funds collected from the park impact fees are intended to provide for the design, construction, installation, improvement, and acquisition of new park facilities by the City. Payment of all applicable fees would be considered sufficient to ensure that adequate public parkland is provided as decided by the City. Furthermore, the proposed project is consistent with the General

²⁶ Natomas Unified School District. Development Fee Information and Reporting. Available at: https://www.natomasunified.org/departments/facilities-and-strategic-planning/developer-fee-information-andreporting. Accessed November 2024.

Plan land use designation for the site; as such, any associated increase in demand for parks and other public facilities was anticipated and analyzed in the General Plan MEIR.

Based on the above, impacts related to the need for new or physically altered schools, parks, or other public facilities, the construction of which could cause significant environmental impacts, were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

	VI. RECREATION. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			×
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the			×

Discussion

environment?

a,b. As discussed under Impacts 4.12-5 and 4.12-6 of the General Plan MEIR, with implementation of applicable General Plan policies, buildout of the 2040 General Plan would result in a less-than-significant impact to parks and recreation facilities. In addition, the proposed project includes construction of a hotel, which is not associated with a permanent increase in population due to the temporary nature of hotel stays. Given that the proposed project would be consistent with the General Plan land use designation of the project site, any increase in population associated with project buildout, as well as the resulting increase in demand for parks and recreation facilities, has been anticipated and analyzed in the General Plan MEIR. In addition, Section 18.56.220 of the City Code requires all new development within the City, including non-residential development, to pay a park impact fee.

Based on the above, impacts related to parks and recreation facilities were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

	VII. TRANSPORTATION. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			×
b.	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			×
C.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			*
d.	Result in inadequate emergency access?			×

Discussion

a. The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Previously, lead agencies used a performance metric entitled 'level of service' (LOS) to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Enacted as part of SB 743 (2013), PRC Section 21099(b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It should be noted that OPR is currently known as the Office of Land Use and Climate Innovation (LCI).

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018, which became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." See question 'b' for a discussion of VMT.

Pedestrian, Bicycle, and Transit Facilities

As discussed under Impact 4.14-3 of the General Plan MEIR, development of the mobility element and circulation diagram network changes outlined in the 2040 General Plan would not physically disrupt an existing bicycle facility or interfere with implementation of a planned bicycle facility identified in the City of Sacramento Bicycle Master Plan. In addition, the General Plan MEIR includes policies supporting the expansion of transportation facilities and improving safety for all roadway users, including cyclists and pedestrians. With respect to transit facilities, which are discussed under Impact 4.14-2 of the General Plan MEIR, the 2040 General Plan and associated CAAP contain policies related to parking management, network expansion, and transit service improvements that could support higher levels of walking, cycling, and transit if needed (General Plan Policies M 2.14 and M 2.17, plus CAAP measures TR-1 and TR-2).

Overall, the land use and mobility elements of the City's General Plan have been designed to create interconnected, accessible neighborhoods that support pedestrian travel, cycling, and transit, and potential impacts related to such facilities would be less than significant. Because the proposed project is consistent with the General Plan land use designation for the site, the development of a hotel on-site was generally anticipated and included in the General Plan MEIR's analysis.

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and offstreet paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities. Sidewalks are currently located on the project site's Truxel Road frontage. The proposed project would include five-foot pedestrian connections in the northwestern and northeastern portions of the site that would connect to existing pedestrian facilities included as part of the Truxel Road frontage, the off-site areas to the north and east, and the existing commercial development north of the project site in the Centerpointe at Natomas Crossing business park. Given that the proposed project would provide adequate access for pedestrians, the proposed project would not conflict with a program, plan, or ordinance addressing pedestrian facilities.

Bicycle facilities include the following:

- Bike Paths (Class I) Paved trails that are separated from roadways;
- Bike Lanes (Class II) Lanes on roadways designated for use by bicycles through striping, pavement legends, and signs;
- Bike Routes (Class III) Designated roadways for bicycle use by signs or other markings, and may or may not include additional pavement width for cyclists; and
- Separated Bikeway (Class IV) Exclusive to the use of bicycles similar to a Class II facility but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers, or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

Currently, a Class II bicycle lane exists between the project frontage and the Truxel Road travel lanes. Development of the proposed project would not preclude the construction of any planned bicycle facilities, and the proposed project would not alter the existing circulation system in a way that would conflict with any adopted programs, plans, ordinances, or policies addressing bicycle facilities. In addition, the proposed project includes short-term bike racks to provide on-site bicycle parking.

Public transit service is provided to the Sacramento area by Sacramento Regional Transit (SacRT). Routes 11 and 13 have stops at the intersection of Del Paso Road and Truxel Road, located just northeast of the project site. A southbound stop is located across Truxel Road, approximately 300 feet from the project site, and the westbound bus stop is located Del Paso Road, approximately 620 feet from the site. The 11 and 13 bus routes run from Natomas past the project site towards Land Park and Arden, respectively. The lines run every day, starting as early as 5:53 AM on weekdays and 6:55 AM on weekends and ending as late as 9:20 PM on weekdays and 9:55 on weekends. SacRT GO also offers ADA Paratransit service available to all destinations within 0.75-mile of an active bus route or Light Rail station. The proposed project would comply with all applicable policies established in the General Plan and the proposed project would not conflict with any adopted programs, plans, ordinances, or policies addressing transit facilities.

Based on the above, impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

- b. The City's General Plan MEIR determined that implementation of the 2040 General Plan would result in a less than significant impact related to VMT. Specifically, implementation of the 2040 General Plan would result in a 17.2 percent reduction in passenger vehicle VMT per capita compared to the City baseline, which exceeds the 16.8 percent reduction established as the City's VMT impact threshold. Pursuant to Section 2.10.2 of the General Plan MEIR and based on LCI guidance, projects consistent with the General Plan land use designation and development intensities may not be required to evaluate VMT. Because the proposed project would be consistent with the site's General Plan land use designation of EMU, the proposed project would not be anticipated to result in VMT greater than what was previously anticipated for the project site. Thus, the proposed project would not result in any peculiar effects that would require further CEQA review related to such.
- c,d. The General Plan MEIR did not specifically evaluate hazardous design features or emergency access. Under Impact 4.14-3, the MEIR notes that the Mobility Element of the City's 2040 General Plan contains policies supporting the expansion of active-transportation facilities and improving safety for all roadway users, including those who travel by active modes and are vulnerable to collisions.

The proposed project would not include any new sharp curves or dangerous intersections and would not be located in the vicinity of any such roadway features. Site access would be provided through the existing internal roadways of the Centerpointe at Natomas Crossing business park, which includes an existing driveway off Del Paso Road to the north. The proposed project would include 126 surface parking spaces. All proposed driveways would comply with applicable City design standards. In addition, the design of the proposed parking lot and connections to existing circulation systems would not involve any features that would increase traffic hazards at the site. The project driveways would be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians, bicycles, or vehicles in the area. Any landscaping and signage would be located in such a way to ensure an unobstructed view for drivers exiting the site.

Several factors determine whether a project has sufficient access for emergency vehicles, including the following:

- Number of access points (both public and emergency access only);
- Width of access points; and
- Width of internal roadways.

Figure 3 of this IS/MND includes the proposed access and circulation plans. Based on the site plan configuration, adequate access would be provided for emergency vehicles and trucks to enter and exit the site driveways and maneuver around the drive aisles. All driveways would be at least 26 feet wide and could accommodate an emergency vehicle, and would be constructed in accordance with the City standards to ensure adequate sight distance, stopping distances, and other components to ensure public safety.

Construction traffic associated with the proposed project would include heavy-duty vehicles which would share the area roadways with normal vehicle traffic, as well as transport of construction materials, and daily construction employee trips to and from the site. However, such heavy-duty truck traffic would only occur throughout the duration of construction activities and would cease upon buildout of the proposed hotel.

The proposed project would be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and the SFD. Required review by the aforementioned departments would ensure that the proposed circulation system for the project site would provide adequate emergency access. In addition, City Code Section 12.20.030 requires that a Construction Traffic Control Plan be prepared and approved prior to the commencement of project construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. All work performed during construction would be required to conform to the conditions and requirements of the approved plan. The plan would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan must include the following:

- Time and day of street closures;
- Proper advance warning and posted signage regarding street closures;
- Provision of driveway access plan to ensure safe vehicular, pedestrian, and bicycle movements;
- Safe and efficient access routes for emergency vehicles;
- Provisions for pedestrian safety;
- Use of manual traffic control when necessary;
- Number of anticipated truck trips, and time of day of arrival and departure of trucks;
- Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network; and
- The plan must be available at the site for inspection by the City representative during all work.

Based on the above, impacts related to substantially increasing hazards due to design features or incompatible uses would be less than significant, and effects peculiar to the proposed project would not occur. Thus, the proposed project would not require further CEQA review for this topic.

XVIII.TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
- 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.

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		×

Discussion

a,b. The General Plan MEIR determined that compliance with the 2040 General Plan policies, along with implementing actions intended to protect tribal cultural resources, would reduce the significance of impacts to tribal cultural resources. However, because feasible mitigation to guarantee that the loss, damage, or destruction of tribal cultural resources listed or eligible for listing as significant does not exist, the General Plan MEIR concluded that buildout of the 2040 General Plan would result in a significant and unavoidable impact.

AB 52 (PRC Section 21080.3.1) notification to tribes is not required for the proposed project, given that this checklist determines no additional environmental review is required for the project, consistent with CEQA Guidelines Section 15183.

Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the project site and potential disturbance of buried prehistoric, historical, or archaeological resources, which are assumed to include tribal cultural resources, has been anticipated by the City and analyzed in the General Plan MEIR. In addition, as previously discussed, pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" In the case of the proposed project, compliance with General Plan policies and existing regulations, such as Policy HCR-1.1, Policy HRC-1.14, Policy HCR-1.15, policies related to the City's role in preserving historical resources (Policy HCR-2.1, HCR-2.2, and HCR-2.4), Policy HCR 1.17, Implementing Action HCR-A.8, California Health and Safety Code Section 7050.5 and 7052, and PRC Section 5097, would help avoid impacts to tribal cultural resources. Furthermore, pursuant to the CHRIS and NAHC SLF searches conducted for the proposed project, known tribal cultural resources do not occur on-site or in the site vicinity.

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Based on the above, the proposed project is not expected to adversely impact tribal cultural resources. Therefore, impacts related to resulting in a substantial adverse change in the significance of a tribal cultural resource were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		×
		×
		×
		×

Discussion

Water and sewer services for the proposed project would be provided by the City of а Sacramento. As part of the proposed project, new sanitary sewer lines and water lines would be extended from existing nearby 12-inch water line and eight-inch sewer line to the west of the project site and within the southern portion of the site, respectively. Stormwater runoff from the project site would flow into the four DMAs as shown in Figure 6 and into the City's existing storm drainage system. Electricity and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. Therefore, the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, or other utility infrastructure would not be required. In addition, the proposed project would be subject to General Plan policies related to utility services, including, but not limited to, Policy PFS-3.5, PFS-3.6, and ERC-5.4. Furthermore, given that the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated utility improvements have been analyzed in the General Plan MEIR. According to the General Plan MEIR, with implementation of General Plan policies and applicable regulations, impacts related to the construction or expansion of water, wastewater, storm drainage, electric, or telecommunications facilities or infrastructure would be less than significant.

Based on the above, impacts related to the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects, were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. Water service to the project site would be provided by the City of Sacramento's DOU through connection to existing water lines to the north and west of the project site. To meet the City's water demand, the City uses surface water from the Sacramento and American rivers, and groundwater pumped from the North American and South American Subbasins. According to the City's 2020 UWMP, the City is projected to have sufficient water supply to meet the projected demand through 2045 even after multiple dry years.²⁷ According to the DOU's 2019 Consumer Confidence Report, the City's drinking water meets or exceeds all federal and State drinking water standards.²⁸ The proposed project would be subject to Water System Development and Installation Fees payable to the City's DOU.

According to Impacts 4.13-1 through 4.13-3 of the General Plan MEIR, potential impacts related to adequate water supplies would be less than significant and water supplies for the City would meet expected demand for normal year, single-dry year, and multiple-dry year scenarios through 2045. Furthermore, the City's General Plan policies encourage increased recycled water use (Policy PFS-4.6) and ensure adequate water supply capacity prior to approving new building permits (Policy PFS-4.8). In addition, although adequate capacity is expected to be available to serve the proposed project's water demands, a water study would be prepared for the proposed project by a licensed engineer in accordance with the City's Water Study Manual pursuant to Section 13.2.3 of the City of Sacramento Design and Procedure Manual. The water study would demonstrate that the proposed water system is capable of meeting the needs of the proposed project while meeting design criteria presented therein. Finally, the proposed project would be required to pay water development impact fees applicable to all new metered domestic services, thereby further reducing the potential impact related to water demand.

Given that the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated water use has been analyzed in the General Plan MEIR. Impacts related to sufficient water supplies being available to serve the project and reasonably foreseeable future development were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

c. Sanitary sewer services would be provided to the project site by the City of Sacramento, which is responsible for the operation and maintenance of the sewer system, including hundreds of miles of sewer pipes and dozens of pumping stations. A combined stormwater and wastewater system, as well as a separated wastewater system, collect and transport sewage to SacSewer. As the regional provider, SacSewer maintains approximately 5,000 miles of sewer pipe and 117 pump stations within a 386-square-mile service area. Based on the project site's location, SacSewer would provide sewage collection, as well as treatment and resource recovery services to the proposed project. The sewer lift stations pump raw wastewater that is collected throughout the City to the SRWWTP.

As discussed under Impact 4.13-4 of the General Plan MEIR, adequate capacity exists to serve buildout of the General Plan planning area, and impacts related to wastewater treatment capacity would be less than significant. Additionally, SacSewer would require

²⁷ City of Sacramento. *City of Sacramento 2020 Urban Water Management Plan*. June 2021.

²⁸ City of Sacramento. 2023 Consumer Confidence Report. Available at: https://www.cityofsacramento.org/Utilities/Reports. Accessed August 2024.

payment of sewer impact fees. All applicable impact fees would be required to be paid prior to issuance of a building permit and would further reduce any potential impacts associated with increased demand for wastewater service. Given that the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated wastewater demand has been analyzed in the General Plan MEIR. Therefore, the proposed project would not generate wastewater flows beyond the capacity of existing wastewater treatment facilities or planned future improvements to such facilities.

Based on the above, the availability of adequate capacity to serve the wastewater demand projected for the proposed project in addition to the City's existing commitments was adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

d,e. Solid waste, recyclable materials, and compostable material collection within the project area is operated by private haulers and disposed of at the Kiefer Landfill, which has been recently expanded. The Kiefer Landfill covers 1,084 acres of land; 660 acres are permitted for disposal. The site's permit allows the landfill to receive a maximum of 10,815 tons of waste per day. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Kiefer Landfill has a remaining capacity of 102,300,000 cubic yards out of a total permitted capacity of 117,400,000, or 87 percent remaining capacity.²⁹

The City's General Plan MEIR concluded that adequate capacity at local landfills exists to serve full buildout of the General Plan. Considering such existing capacity, as well as implementation of General Plan policies that would promote long-term reduction of solid waste generation in the General Plan planning area, the General Plan MEIR concluded that impacts would be less than significant.

The proposed project is consistent with the General Plan land use designation of the project site, and the associated increase in solid waste disposal needs associated with development of the site was generally considered in the MEIR analysis. Furthermore, the project would be required to comply with all applicable provisions of Chapter 8.124, Construction and Demolition Debris Recycling, of the City Code. Therefore, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Based on the above, impacts related to solid waste were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

²⁹ California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details:* Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed November 2024.

XX. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Discussion

a-d. Under Impact 4.9-5 of the General Plan MEIR, wildfire risk is discussed as predominantly associated with WUI areas. According to the City's General Plan MEIR, the City is not located within a WUI area. The entirety of the City's planning area is located in an LRA, and thus, fire protection responsibility lies with the SFD. Overall, the General Plan MEIR concluded that compliance with the CFC and the applicable General Plan MEIR identifies areas along the American and Sacramento Rivers as fairly susceptible to urban wildfires. The project site is not located within the immediate vicinity of such areas, and additional intervening development is located between the site and the Sacramento River. According to the CALFIRE Fire and Resource Assessment Program, the project site is not located within or near a Very High FHSZ.³⁰ The nearest Very High FHSZ is located approximately 21.80 miles east of the project site near Folsom Lake.

The proposed project would be required to comply with all applicable requirements of the CFC, as adopted by Chapter 15.36 of the City's Municipal Code, including installation of fire sprinkler systems. In addition, the CBSC includes requirements related to fire hazards for new buildings. Such features would help to reduce the spread of fire.

The project is not located on a substantial slope, and the project area does not include any existing features that would substantially increase fire risk for future residents, workers, or visitors. Given that the project site is located within a developed urban area and is situated adjacent to existing roads, water lines, and other utilities, the project would not result in substantial fire risks related to installation or maintenance of such infrastructure. Lastly, as discussed in Section VII, Geology and Soils, and Section X, Hydrology and Water Quality, of this Modified Initial Study, development of the proposed project would not expose people or structures to significant risks related to flooding or landslides.

Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan MEIR
		×
		*
		×
		×

³⁰ California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area*. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed October 2024.

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

Based on the above, impacts related to wildfire risks were adequately addressed in the General Plan MEIR, and the site would not be subject to any peculiar hazards related to wildfire risk. Thus, the criteria for requiring further CEQA review are not met.

Significant

Impact

Adequately

Significant

Impact

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

- Does the project have the potential to substantially degrade а. the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- Does the project have impacts that are individually limited, but b. 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)?
- Peculiar to Impact due to Addressed in the Project New the General or the Information Plan MEIR Project Site × X \square ×
- Does the project have environmental effects which will cause C. substantial adverse effects on human beings, either directly or indirectly?

Discussion

As discussed in Section IV, Biological Resources, of this Modified Initial Study, the а. proposed project would not adversely impact special-status plant or wildlife species. The proposed project would be required to comply with applicable policies and programs included in the General Plan and Natomas Basin HCP related to effects on any specialstatus plant and wildlife species, including pre-construction surveys. In addition, because the project site does not contain any known historic or prehistoric resources, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. The proposed project would be required to comply with applicable General Plan policies, as well as all applicable State regulations, related to preservation of archaeological resources and human remains if such resources are discovered within the project site during construction activities, consistent with the requirements of CEQA.

Considering the above, the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Impacts associated with such resources have been adequately addressed and would not change from what was identified in the General Plan MEIR, and the criteria for requiring further CEQA review are not met.

The proposed project, in conjunction with other development within the City of b. Sacramento, could incrementally contribute to cumulative impacts in the area. However, the proposed project was included in the future development assumptions evaluated in the General Plan MEIR. The General Plan MEIR concluded that cumulative impacts to biological resources, cultural resources, noise, and tribal cultural resources would be significant and unavoidable. For those impacts determined to be significant in a General Plan EIR, CEQA Section 15183 allows for future environmental documents to limit examination of environmental effects to those impacts which were not already analyzed

WoodSpring Suites Hotel Project Modified Initial Study/15183 Checklist

as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the City's General Plan land use designation for the project site, cumulative impacts associated with buildout of the site have been anticipated by the City and were analyzed in the General Plan MEIR. Cumulative effects peculiar to the project or project site do not exist. Additionally, the proposed project does not include cumulative impacts that were not analyzed or discussed in the City's General Plan MEIR. Furthermore, as discussed throughout this Modified Initial Study, all impacts associated with the proposed project were adequately addressed in the General Plan MEIR, and the proposed project would not result in any peculiar effects that would require further CEQA review. As such, this Modified Initial Study does not include any substantial new information that shows impacts are more severe than previously discussed, and further analysis is not required.

c. As described in this Modified Initial Study, the proposed project would comply with all applicable General Plan policies, City Code standards, other applicable local, County and State regulations. In addition, as discussed in the Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise sections of this Modified Initial Study, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, geologic hazards, hazardous materials, and excessive noise, beyond the effects previously analyzed as part of the General Plan MEIR. Therefore, further CEQA review is not required.

APPENDIX A

AIR QUALITY AND GREENHOUSE GAS MODELING RESULTS

WoodSpring Suites Hotel Project Custom Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Site Preparation (2025) Unmitigated
 - 3.3. Grading (2025) Unmitigated
 - 3.5. Building Construction (2025) Unmitigated
 - 3.7. Building Construction (2026) Unmitigated
 - 3.9. Paving (2025) Unmitigated

- 3.11. Architectural Coating (2025) Unmitigated
- 3.13. Architectural Coating (2026) Unmitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use Unmitigated
 - 4.2.3. Natural Gas Emissions By Land Use Unmitigated
 - 4.3. Area Emissions by Source
 - 4.3.1. Unmitigated
 - 4.4. Water Emissions by Land Use
 - 4.4.1. Unmitigated
 - 4.5. Waste Emissions by Land Use
 - 4.5.1. Unmitigated
 - 4.6. Refrigerant Emissions by Land Use
 - 4.6.1. Unmitigated
 - 4.7. Offroad Emissions By Equipment Type
 - 4.7.1. Unmitigated

- 4.8. Stationary Emissions By Equipment Type
 - 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
 - 4.9.1. Unmitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
 - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
 - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
 - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
- 5. Activity Data
 - 5.1. Construction Schedule
 - 5.2. Off-Road Equipment
 - 5.2.1. Unmitigated
 - 5.3. Construction Vehicles
 - 5.3.1. Unmitigated
 - 5.4. Vehicles
 - 5.4.1. Construction Vehicle Control Strategies
 - 5.5. Architectural Coatings
 - 5.6. Dust Mitigation

- 5.6.1. Construction Earthmoving Activities
- 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.9. Operational Mobile Sources
 - 5.9.1. Unmitigated
- 5.10. Operational Area Sources
 - 5.10.1. Hearths
 - 5.10.1.1. Unmitigated
 - 5.10.2. Architectural Coatings
 - 5.10.3. Landscape Equipment
- 5.11. Operational Energy Consumption
 - 5.11.1. Unmitigated
- 5.12. Operational Water and Wastewater Consumption
 - 5.12.1. Unmitigated
- 5.13. Operational Waste Generation
 - 5.13.1. Unmitigated
- 5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

- 5.15. Operational Off-Road Equipment
 - 5.15.1. Unmitigated

5.16. Stationary Sources

- 5.16.1. Emergency Generators and Fire Pumps
- 5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	WoodSpring Suites Hotel Project
Construction Start Date	4/1/2025
Operational Year	2026
Lead Agency	City of Sacramento
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	37.6
Location	38.65473574774017, -121.51144230038187
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	600
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subty	e Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Hotel	122	Room	0.91	50,922	17,575	_	—	—

Parking Lot	126	Space	1.18	0.00	0.00	—		—
-------------	-----	-------	------	------	------	---	--	---

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
	100	ROO	ПОЛ		002				1 102.02	1 1012.00	1 1012.01	0002	NDOOZ	0021			TX	0020
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.45	3.16	14.6	15.2	0.03	0.65	7.24	7.89	0.60	3.46	4.06	—	2,983	2,983	0.13	0.06	1.48	3,004
Daily, Winter (Max)	—	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.44	3.14	12.0	14.2	0.03	0.43	0.28	0.71	0.40	0.07	0.47	—	2,756	2,756	0.11	0.06	0.04	2,776
Average Daily (Max)	—	_	_	_	-	_	_	_	—	—	—	—	_	_	_	_	—	—
Unmit.	1.66	1.51	6.46	7.53	0.01	0.24	0.54	0.79	0.22	0.22	0.45	—	1,468	1,468	0.06	0.03	0.32	1,479
Annual (Max)	—		_	_	_		_	_	_	_	_	_	_	_	_	_	—	-
Unmit.	0.30	0.27	1.18	1.38	< 0.005	0.04	0.10	0.14	0.04	0.04	0.08	_	243	243	0.01	0.01	0.05	245

2.2. Construction Emissions by Year, Unmitigated

					·			<u> </u>	-									
Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	_	—	—	_	—	—	—	_			—		_		—		—

2025	3.45	3.16	14.6	15.2	0.03	0.65	7.24	7.89	0.60	3.46	4.06	—	2,983	2,983	0.13	0.06	1.48	3,004
Daily - Winter (Max)	_	_	-	_	_	_	_	-	-	-		—	-	-	_	_		_
2025	3.44	3.14	12.0	14.2	0.03	0.43	0.28	0.71	0.40	0.07	0.47	_	2,756	2,756	0.11	0.06	0.04	2,776
2026	3.35	3.07	11.4	14.0	0.03	0.39	0.28	0.66	0.36	0.07	0.42	_	2,748	2,748	0.11	0.06	0.03	2,768
Average Daily	-	-	-	-	—	-	-	-	-	—	-	—	—	-	-	-	-	-
2025	1.66	1.51	6.46	7.53	0.01	0.24	0.54	0.79	0.22	0.22	0.45	_	1,468	1,468	0.06	0.03	0.32	1,479
2026	0.54	0.50	1.70	2.09	< 0.005	0.06	0.04	0.10	0.05	0.01	0.06	_	409	409	0.02	0.01	0.09	412
Annual	_	_	_	_	_	-	_	_	_	_	_	_	_	-	_	_	_	_
2025	0.30	0.27	1.18	1.38	< 0.005	0.04	0.10	0.14	0.04	0.04	0.08	_	243	243	0.01	0.01	0.05	245
2026	0.10	0.09	0.31	0.38	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	_	67.7	67.7	< 0.005	< 0.005	0.01	68.2

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	_	—	_	—	—	—	—	_	—
Unmit.	6.77	6.26	5.18	47.9	0.10	0.13	8.44	8.56	0.12	2.14	2.26	42.6	11,312	11,355	4.12	0.42	115	11,699
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	_	-	-	-	_	-	_	_	_
Unmit.	5.93	5.43	5.96	38.1	0.10	0.12	8.44	8.56	0.12	2.14	2.26	42.6	10,415	10,458	4.16	0.46	80.5	10,781
Average Daily (Max)	—	—	—	—	—	_	_	_	_	—	—	_	_	—	_	—	—	_
Unmit.	5.99	5.50	5.41	37.7	0.09	0.12	7.87	7.99	0.12	2.00	2.12	42.6	10,184	10,227	4.12	0.43	94.3	10,551
Annual (Max)	_	—	—		_	_	_		_	_	_	_	_	_	_	_	_	
Unmit.	1.09	1.00	0.99	6.88	0.02	0.02	1.44	1.46	0.02	0.37	0.39	7.05	1,686	1,693	0.68	0.07	15.6	1,747

2.5. Operations Emissions by Sector, Unmitigated

omonia				,,,	.,					, 1011 7	ji iei ai	intereal)						
Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)		_	_	_	_	_	_	_	—	_	_	_	—	_	_	_	_	—
Mobile	5.11	4.67	4.52	45.1	0.10	0.07	8.44	8.51	0.07	2.14	2.21	_	10,253	10,253	0.41	0.41	35.6	10,420
Area	1.59	1.56	0.02	2.21	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	9.11	9.11	< 0.005	< 0.005	_	9.14
Energy	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,044	1,044	0.08	< 0.005	_	1,046
Water	_	-	-	_	_	_	_	_	_	_	_	6.61	6.70	13.3	0.02	0.01	_	18.2
Waste	_	-	-	_	_	_	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Refrig.	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	-	79.6	79.6
Total	6.77	6.26	5.18	47.9	0.10	0.13	8.44	8.56	0.12	2.14	2.26	42.6	11,312	11,355	4.12	0.42	115	11,699
Daily, Winter (Max)	_	-	-	_	_	-	-	-	_	_	-	-	-	_	_	-	-	-
Mobile	4.66	4.20	5.31	37.6	0.09	0.07	8.44	8.51	0.07	2.14	2.21	_	9,365	9,365	0.46	0.45	0.92	9,510
Area	1.19	1.19	-	_	_	_	_	_	_	_	_	_	_	_	_	-	_	-
Energy	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,044	1,044	0.08	< 0.005	_	1,046
Water	_	-	-	—	—	_	_	_	-	_	_	6.61	6.70	13.3	0.02	0.01	_	18.2
Waste	_	-	-	—	—	_	_	_	-	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Refrig.	_	-	-	—	—	_	_	_	-	_	_	_	_	_	-	-	79.6	79.6
Total	5.93	5.43	5.96	38.1	0.10	0.12	8.44	8.56	0.12	2.14	2.26	42.6	10,415	10,458	4.16	0.46	80.5	10,781
Average Daily	—	—	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mobile	4.45	4.02	4.76	35.6	0.09	0.07	7.87	7.94	0.07	2.00	2.07	_	9,128	9,128	0.41	0.41	14.7	9,275
Area	1.46	1.44	0.01	1.52	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.24	6.24	< 0.005	< 0.005	_	6.26
Energy	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,044	1,044	0.08	< 0.005	_	1,046
Water	_	_	-	_	_	_	_	_	_	_	_	6.61	6.70	13.3	0.02	0.01	_	18.2
Waste	_	_	_	_	_	_	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126

Refrig.	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	79.6	79.6
Total	5.99	5.50	5.41	37.7	0.09	0.12	7.87	7.99	0.12	2.00	2.12	42.6	10,184	10,227	4.12	0.43	94.3	10,551
Annual	_	_	_	_	—	-	_	-	-	-	_	_	_	-	_	-	—	—
Mobile	0.81	0.73	0.87	6.50	0.02	0.01	1.44	1.45	0.01	0.37	0.38	—	1,511	1,511	0.07	0.07	2.43	1,536
Area	0.27	0.26	< 0.005	0.28	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.03	1.03	< 0.005	< 0.005	_	1.04
Energy	0.01	0.01	0.12	0.10	< 0.005	0.01	_	0.01	0.01	_	0.01	_	173	173	0.01	< 0.005	_	173
Water	_	_	_	_	_	_	—	—	-	_	_	1.09	1.11	2.20	< 0.005	< 0.005	—	3.01
Waste	_	_	_	_	_	_	—	—	-	_	_	5.96	0.00	5.96	0.60	0.00	—	20.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	13.2	13.2
Total	1.09	1.00	0.99	6.88	0.02	0.02	1.44	1.46	0.02	0.37	0.39	7.05	1,686	1,693	0.68	0.07	15.6	1,747

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

	-	· ·	-	3 /	1	/		· ·		<i>.</i>	<i>.</i>	/						
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	_	_	_	—	—	—	—		—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43		0.43	_	2,717	2,717	0.11	0.02		2,726
Dust From Material Movemer				_		_	1.59	1.59		0.17	0.17							
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)		_	_	_	_	_	_		_	_	_	_		_	_	_		_
Average Daily	—	_	-	_	—	-	_	_	-	_	_	-	-	-	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.15	0.15	< 0.005	0.01	_	0.01	0.01	—	0.01	_	37.2	37.2	< 0.005	< 0.005		37.3
Dust From Material Movemer		_		_	_	_	0.02	0.02	_	< 0.005	< 0.005			_	_	—		—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	—	< 0.005	_	6.16	6.16	< 0.005	< 0.005	_	6.18
Dust From Material Movemer	it	_	_		_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_				_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	_	_	-	—	_	_	—	_	_	_	_	_	_	_	_	_	—
Daily, Summer (Max)		—	—	—	_	—	—	—	—	—	—	—	—	—	—	—	—	_
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.1	74.1	< 0.005	< 0.005	0.28	75.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.35	0.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	-	193	193	0.02	0.03	0.40	203
Daily, Winter (Max)	_	_	_	_	-	_	-	_	_	-	-	_	_	_	-	-		-

Average Daily	_	_	_	_	-	_	_	_	_	-	_	-	-	-	_	_	_	-
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.92	0.92	< 0.005	< 0.005	< 0.005	0.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.77
Annual	_	_	_	_	-	-	-	_	-	-	-	_	-	-	—	-	-	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx		SO2				PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		_	_	_		—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59		0.59	_	2,455	2,455	0.10	0.02		2,463
Dust From Material Movemer		_	_	_		—	7.08	7.08	_	3.43	3.43	_	—	—	—	—		_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_	—	_		—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d	0.10	0.08	0.77	0.80	< 0.005	0.04	_	0.04	0.03	_	0.03	-	135	135	0.01	< 0.005	_	135
Dust From Material Movemer	 it			_			0.39	0.39		0.19	0.19	_		_				
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	-	_	_	_	-	_	-	_	-	_	_	_	_	-	-	-	-
Off-Roa d Equipm ent	0.02	0.02	0.14	0.15	< 0.005	0.01	_	0.01	0.01	—	0.01	_	22.3	22.3	< 0.005	< 0.005	_	22.3
Dust From Material Movemer	 It			_	_	_	0.07	0.07	_	0.03	0.03	_		_		_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	_	_	—	_	-	_	-	_	-	_	_	_		_		_	_	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.09	0.09	0.00	0.02	0.02	_	98.7	98.7	< 0.005	< 0.005	0.38	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.01	0.47	0.18	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	259	259	0.02	0.04	0.55	273
Daily, Winter (Max)	_	-	_	_	-	-	-	-	-	-	-	_	-	-	_	-	_	_
Average Daily		—	—	—	—	_	_	_	_	_	—	—	—	_	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.93	4.93	< 0.005	< 0.005	0.01	5.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	14.2	14.2	< 0.005	< 0.005	0.01	14.9
Annual	_	_	_	-	_	_	—	_	_	-	_	—	-	_	-	_	_	-

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.35	2.35	< 0.005	< 0.005	< 0.005	2.47

3.5. Building Construction (2025) - Unmitigated

				aany, to					ay 101 ac	,,	j. 101 a.							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	_	—	—	—	—	-	-	_	_	-	—	_	—	—
Daily, Summer (Max)		_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.49	1.24	10.6	11.9	0.02	0.40		0.40	0.37		0.37	_	2,201	2,201	0.09	0.02		2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	-	-		-	_	-	_	_	-	_	-	_	-	-	-
Off-Roa d Equipm ent	1.49	1.24	10.6	11.9	0.02	0.40	-	0.40	0.37	_	0.37	_	2,201	2,201	0.09	0.02	-	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	-	_	_	-	_	_	-	-	-	-	-	-	-	_	_	-
Off-Roa d Equipm ent	0.68	0.56	4.83	5.41	0.01	0.18		0.18	0.17	-	0.17		1,004	1,004	0.04	0.01	_	1,007
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	-	-	-	-	-	_	_	-	_	_	-
Off-Roa d Equipm ent	0.12	0.10	0.88	0.99	< 0.005	0.03	_	0.03	0.03	_	0.03		166	166	0.01	< 0.005	_	167
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	-	_	_	_	_	_	_	_	-	_	_	_	_	_
Daily, Summer (Max)	_	_	_	-		_	_	_	_	_	_	_	-	_	-	_	_	-
Worker	0.10	0.09	0.06	1.14	0.00	0.00	0.19	0.19	0.00	0.04	0.04	-	211	211	< 0.005	0.01	0.81	214
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	-	197	197	0.01	0.03	0.51	206
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	-	-	_	-	_	_	_	-	-	-	-	-	-	-	-	_	-	-
Worker	0.09	0.08	0.07	0.86	0.00	0.00	0.19	0.19	0.00	0.04	0.04	_	188	188	0.01	0.01	0.02	190
Vendor	0.02	0.01	0.40	0.15	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	197	197	0.01	0.03	0.01	206
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	-	-	-	-	—	_	_	-	-	_	_	-	—	-	-	-	-	-
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	-	87.8	87.8	< 0.005	< 0.005	0.16	89.0
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	-	89.7	89.7	0.01	0.01	0.10	93.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	14.5	14.5	< 0.005	< 0.005	0.03	14.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	14.8	14.8	< 0.005	< 0.005	0.02	15.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Location		ROG	NOx		SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	_	_	_	—	_	_	_	—	—	_	—	_	—	—	_	—	-
Daily, Summer (Max)	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Daily, Winter (Max)	_	-	-	-	-	_	_	-	-	-	_	-	-	-	-	_	-	-
Off-Roa d Equipm ent	1.41	1.18	10.1	11.8	0.02	0.36	-	0.36	0.33	-	0.33	-	2,201	2,201	0.09	0.02	-	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	-	-	-	-	_	-	-	-	_	_	-	_	-	-	_	-	-	-
Off-Roa d Equipm ent	0.21	0.17	1.48	1.73	< 0.005	0.05	-	0.05	0.05	-	0.05	-	323	323	0.01	< 0.005	-	324
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.04	0.03	0.27	0.31	< 0.005	0.01	—	0.01	0.01	_	0.01	_	53.5	53.5	< 0.005	< 0.005	_	53.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_		_	_	_		_	_	_	_	_	_	

Daily, Winter (Max)					_	-				_	_	_	-	_	-	_	_	_
Worker	0.08	0.08	0.06	0.80	0.00	0.00	0.19	0.19	0.00	0.04	0.04	_	184	184	< 0.005	0.01	0.02	186
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	193	193	0.01	0.03	0.01	202
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	-	-	-	-	-	-	—	—	-	-	-	-	-	-	-	-	_	_
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	27.7	27.7	< 0.005	< 0.005	0.05	28.1
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	28.3	28.3	< 0.005	< 0.005	0.03	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	-	-	_	_	-	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.59	4.59	< 0.005	< 0.005	0.01	4.65
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	4.68	4.68	< 0.005	< 0.005	< 0.005	4.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	—	-	—	—	—	—	—	—	—	—	_	_	—	_	—	—	—
Daily, Summer (Max)	_	_	—		—		—	—	_			—	—		—	—	—	_
Off-Roa d Equipm ent	0.83	0.70	6.13	8.21	0.01	0.27		0.27	0.25		0.25		1,244	1,244	0.05	0.01		1,248
Paving	0.62	0.62	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)		_	_	_	_		_	_		_		_	_	_			_	_
Average Daily	—	-	-	-	_	-	-	-	_	_	_	-	_	-	-	_	_	-
Off-Roa d Equipm ent	0.01	0.01	0.08	0.11	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.0	17.0	< 0.005	< 0.005	_	17.1
Paving	0.01	0.01	—	_	-	—	—	-	-	-	—	—	-	—	—	_	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	-	_	_	_	_	_	_	_	-	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	2.82	2.82	< 0.005	< 0.005	-	2.83
Paving	< 0.005	< 0.005	—	_	—	_	-	—	-	—	_	-	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	-	—	-	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		_	_	-	_	_	-	_	_	_	_	_	—	_	_	_	_	_
Worker	0.07	0.06	0.04	0.80	0.00	0.00	0.13	0.13	0.00	0.03	0.03	-	148	148	< 0.005	0.01	0.57	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily		_	_	_	_	_	—	_	—	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	_	-	-	-	-	-	_	_	-	-	_	-	-	—	-	-	-
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.31	0.31	< 0.005	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

emena		(any, ton							yr ior ar							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	—	—	—	—	—	—	—	—	—	—	_	—	—	—	—		—
Daily, Summer (Max)	_	_	—	_	_	—			_	—			—					—
Off-Roa d Equipm ent	0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03		134	134	0.01	< 0.005		134
Architect ural Coating s	1.67	1.67		_	_													_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	—	_	_	—			_	—			—					—
Off-Roa d Equipm ent	0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03		134	134	0.01	< 0.005		134
Architect ural Coating s	1.67	1.67																

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	_	_	—	—	_	—	_	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.05	0.38	0.49	< 0.005	0.01	_	0.01	0.01	_	0.01	_	57.2	57.2	< 0.005	< 0.005	-	57.4
Architect ural Coating s	0.72	0.72			_		_			_	_	_	_		_			
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	-	_	-	_	_	_	_	_	_	-	_	-	-	-	_	-
Off-Roa d Equipm ent	0.01	0.01	0.07	0.09	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	9.47	9.47	< 0.005	< 0.005	-	9.51
Architect ural Coating s	0.13	0.13	-	-	-	_	-		-	_	-	_	-	-	-	_	-	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		-	_	-	-	_	_	—	_	-	_	-	-	-	-	—	_	-
Worker	0.02	0.02	0.01	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	-	42.2	42.2	< 0.005	< 0.005	0.16	42.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_			-		_		_	_	_		-	-	_			—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	37.5	37.5	< 0.005	< 0.005	< 0.005	38.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	-	_	_		-	_	_	_	_	_	_	_	_	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	0.03	16.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	-	-	-	_	_	-	-	_	-	-	_	_	-	-	-	_	-	-
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.73	2.73	< 0.005	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

		· ·																
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		_	_		—				—		—	—				—		
Daily, Winter (Max)	—	_	—		—	—			—		—	—	—			—		
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architect ural Coating s	1.67	1.67																
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	_	_	-	-	—	—	-	_	-	_	-	_	_	_	_	—	-
Off-Roa d Equipm ent	0.03	0.02	0.15	0.20	< 0.005	< 0.005		< 0.005	< 0.005	-	< 0.005	_	23.3	23.3	< 0.005	< 0.005		23.3
Architect ural Coating s	0.29	0.29																
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	-	—	—	—	—	—	-	—	-	—	-	-	-	-	-	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.85	3.85	< 0.005	< 0.005	_	3.86
Architect ural Coating s	0.05	0.05	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	—	—	-	-	—	-	—	_	_	—	-	—	—	-	_
Daily, Summer (Max)			_	_	_	_	_	_	_	_	_	_	—	_	_	_	_	_
Daily, Winter (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	36.8	36.8	< 0.005	< 0.005	< 0.005	37.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily			_	_	_	—	_	_	—	_	—	-	—	_	_	_	—	_
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	6.57	6.57	< 0.005	< 0.005	0.01	6.67

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	-	_	_	_	-	_	_	-	-	-	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.09	1.09	< 0.005	< 0.005	< 0.005	1.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	—	_	-	-	—	_	-	-	_	_	—	_	-	-	_	_	-
Hotel	5.11	4.67	4.52	45.1	0.10	0.07	8.44	8.51	0.07	2.14	2.21	_	10,253	10,253	0.41	0.41	35.6	10,420
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.11	4.67	4.52	45.1	0.10	0.07	8.44	8.51	0.07	2.14	2.21	_	10,253	10,253	0.41	0.41	35.6	10,420
Daily, Winter (Max)	-	-	-	-	-	-	_	-	_	_	-	_	_	-	-	-	-	-
Hotel	4.66	4.20	5.31	37.6	0.09	0.07	8.44	8.51	0.07	2.14	2.21	_	9,365	9,365	0.46	0.45	0.92	9,510
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.66	4.20	5.31	37.6	0.09	0.07	8.44	8.51	0.07	2.14	2.21	_	9,365	9,365	0.46	0.45	0.92	9,510
Annual	-	-	_	_	_	_	-	_	-	_	_	_	-	_	-	_	_	_
Hotel	0.81	0.73	0.87	6.50	0.02	0.01	1.44	1.45	0.01	0.37	0.38	_	1,511	1,511	0.07	0.07	2.43	1,536

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.81	0.73	0.87	6.50	0.02	0.01	1.44	1.45	0.01	0.37	0.38		1,511	1,511	0.07	0.07	2.43	1,536

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E			PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	-	-	-	-	-	-	_	_	_	_	_	-	_	-	-	_	-
Hotel	-	-	_	_	_	-	-	_	-	_	_	-	242	242	0.01	< 0.005	_	242
Parking Lot	-	_	_	-	-	_	_	_	_	_		—	34.4	34.4	< 0.005	< 0.005	-	34.5
Total	-	-	_	_	_	-	-	_	-	_	_	-	276	276	0.01	< 0.005	_	277
Daily, Winter (Max)	-	-	-	-	-	_	_	_	_	_	_	_	_	_	-	_	_	-
Hotel	_	_	_	_	_	_	_	_	_	_	_	_	242	242	0.01	< 0.005	_	242
Parking Lot	_	_	-	-	-	-	-	_	—	_		—	34.4	34.4	< 0.005	< 0.005	-	34.5
Total	-	_	_	_	_	_	_	_	_	_	_	_	276	276	0.01	< 0.005	_	277
Annual	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hotel	-	_	_	_	_	_	_	_	_	_	_	_	40.0	40.0	< 0.005	< 0.005	_	40.1
Parking Lot	_	—	-	-	-	-	-	—	-	—	_	-	5.70	5.70	< 0.005	< 0.005	-	5.72
Total	_	_	_	_	_	_	_	_	_	_	_	_	45.7	45.7	< 0.005	< 0.005	_	45.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	_	_	-	-	-	—	—	—	_	_	—	—	—	-	-	—	-
Hotel	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	767	767	0.07	< 0.005	_	770
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	767	767	0.07	< 0.005	_	770
Daily, Winter (Max)	_	-	-	-	-	-	-	_	-	_	_	_	_	_	-	_	_	_
Hotel	0.07	0.04	0.64	0.54	< 0.005	0.05	-	0.05	0.05	_	0.05	-	767	767	0.07	< 0.005	-	770
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	-	0.00
Total	0.07	0.04	0.64	0.54	< 0.005	0.05	_	0.05	0.05	_	0.05	_	767	767	0.07	< 0.005	_	770
Annual	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Hotel	0.01	0.01	0.12	0.10	< 0.005	0.01	_	0.01	0.01	_	0.01	_	127	127	0.01	< 0.005	_	127
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	_	0.00	—	0.00	0.00	0.00	0.00	_	0.00
Total	0.01	0.01	0.12	0.10	< 0.005	0.01	_	0.01	0.01	_	0.01	_	127	127	0.01	< 0.005	_	127

4.3. Area Emissions by Source

4.3.1. Unmitigated

			-		<i>.</i>	· · · ·		<u> </u>	-									
Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily,	-	-	_	_	_	_	_	_	_	_	_	_	—	_	_	_	_	_
Summer																		
(Max)																		

Consum er Product s	1.09	1.09																
Architect ural Coating s	0.10	0.10	_	—	_	—	_	_	_	_	_	_	_	_	—		_	_
Landsca pe Equipm ent	0.39	0.36	0.02	2.21	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005		9.11	9.11	< 0.005	< 0.005		9.14
Total	1.59	1.56	0.02	2.21	< 0.005	< 0.005	—	< 0.005	< 0.005	-	< 0.005	—	9.11	9.11	< 0.005	< 0.005	—	9.14
Daily, Winter (Max)		—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—
Consum er Product s	1.09	1.09	_	_	—	_	—	_	—	_	—	_	—	—	—		—	
Architect ural Coating s	0.10	0.10	_	_	_	_			_	_			_	_				
Total	1.19	1.19	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Product s	0.20	0.20	_	_	_	_				_								
Architect ural Coating s	0.02	0.02	_	_	-	—		—	_	_	_	—	_	_	_			
Landsca pe Equipm ent	0.05	0.05	< 0.005	0.28	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.03	1.03	< 0.005	< 0.005		1.04

Total	0.27	0.26	< 0.005	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.03	1.03	< 0.005	< 0.005	—	1.04	
-------	------	------	---------	------	---------	---------	---	---------	---------	---	---------	---	------	------	---------	---------	---	------	--

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

		· ·	,	•,, ••··	,	/		``		<i>,</i> ,,.		/						
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	-	-	_	_	—	_	—	_	_	_	-	_	_	-
Hotel	—	—	_	_	_	_	—	_	_	_	_	6.61	6.70	13.3	0.02	0.01	_	18.2
Parking Lot	—	_	_	_	_	_	—	—	—	_	—	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	—	—	—	_	_	_	—	_	_	—	_	6.61	6.70	13.3	0.02	0.01	—	18.2
Daily, Winter (Max)	—	_	_	-	_	_	—			_		—	—	—	_	_	-	_
Hotel	-	_	_	_	_	—	-	—	—	_	_	6.61	6.70	13.3	0.02	0.01	-	18.2
Parking Lot	_	-	-	-	-	-	—	_	_	_	—	0.00	0.00	0.00	0.00	0.00	-	0.00
Total	-	_	_	_	-	-	-	_	_	_	_	6.61	6.70	13.3	0.02	0.01	_	18.2
Annual	_	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_	_
Hotel	_	_	_	_	_	_	_	_	_	_	_	1.09	1.11	2.20	< 0.005	< 0.005	_	3.01
Parking Lot	_	_	-	_	-	-	_	_	_		_	0.00	0.00	0.00	0.00	0.00	-	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	1.09	1.11	2.20	< 0.005	< 0.005	_	3.01

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E			PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)		—	—	_	—	—						—	—		_	—	-	—
Hotel	_	_	_	_	-	-	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Parking Lot	-	_	-	-	-	_	_	_	—		—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	_	_	_	_	_	-	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Daily, Winter (Max)	-	_	_	-	-	-			_			-	-	-	-	-	-	-
Hotel	_	_	-	_	_	_	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Parking Lot	-	_	-	-	-	-	_	_	-	_	-	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	-	_	_	_	_	_	_	_	_	36.0	0.00	36.0	3.60	0.00	_	126
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hotel	_	_	_	_	_	_	_	_	_	_	_	5.96	0.00	5.96	0.60	0.00	_	20.9
Parking Lot	-	_	_	-	-	-	—	—	-	—	—	0.00	0.00	0.00	0.00	0.00	-	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	5.96	0.00	5.96	0.60	0.00	_	20.9

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

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_		—		_			—	_	_	—	—		_				
Hotel	—	—	—	—	—	_	_	—		—	—	—	—	—	—	—	79.6	79.6

Total	_	—	—	—	—	—		—	—	—	—	—	—	—	—	—	79.6	79.6
Daily, Winter (Max)	_	—	—	_	—	—			—	—	—	—	—	—	—	—	—	—
Hotel	_	—	_	_	—	—	—	—	—	—	—	—	—	-	—	—	79.6	79.6
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	—	_	—	79.6	79.6
Annual	-	—	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	-
Hotel	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	13.2	13.2
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	13.2	13.2

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

		``	,	,	,			<u> </u>	,	, ,								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	—		—	—	—	—	—	—	—	—	_	—	—	_	—	—	—	—
Total	—	_	—	—	—	—	_	—	—	—	_	—	_	_	—	—	—	_
Daily, Winter (Max)	_			_	_			—					_					_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	—	_	_	_	_	_	—	_

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

			-		*			<u> </u>										
Equipm ent Type	тоg	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—		_	—		—		—	—			_	_	_
Total	—	—	—	-	-	_	—	—	_	—		—	—	_	_	_	—	_
Daily, Winter (Max)				_	_	_	_	_		_			—			_	—	
Total	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Annual	_	_	_	_	_	_		_		_		_	_		_	_	_	_
Total	_	_	_	_	_			_		_		_	_		_	_	_	_

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

					1	/			/									
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—
Total	_	—	_	—	—	—	—	—	—	—	—	—	—	_	—	—	—	_
Daily, Winter (Max)	_	—						—	_	_		_	_	_	_	_	—	_
Total	_	—	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

					<i>.</i>	/		<u> </u>	-		-	,						
Vegetati on	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—		—		—	—		—		—	—			—	—		
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—		—	—	—	—		—	—			—	—		—
Total	—	—	—	—	—	—	—	—	—	—	_	_	—	—	—	—	—	—
Annual	_	_	_	_	_	—	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_		_		_	_	_	_	_	_	_			_	_	_	

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

ontonia				, ,	yr ior a				-	-	yr ior ar							
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	—	_	_	—	_	—	—	_	—	_	—	_	_	—	_	—	-
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	-	—	—	—	—	-
Subtotal	—	—	—	—	_	—	—	—	—	—	—	—	—	—	—	—	_	-
Sequest ered		-	-	-	_	-	_	_	_	-	-	-	-	_	-	_	_	-
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Remove d	—	—	-	—	—	-	—	—		_	—	—	—		_	_		—
Subtotal	—	_	_	—	—	—	—	—	—	_	_	—	—	—	_	_	_	—
—	—	-	-	—	-	—	_	_	_	-	-	-	-	_	-	-	_	—
Daily, Winter (Max)		—	_	-	—	_	_	_	—	—	—	—	—	—	—	—	—	-
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	—	_	_	-	—	_	_	_	—	—	—	_	—	—	—	—	—	_
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Remove d		—	_	—	—	—			_	—	—	—			—		—	—
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	—	_	_	_	—	_	_	_	_	—	—	_	_	—	_	_	_	_

Sequest ered	—			—	—			—	—	—	—	—	—		—		—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d					—		—			—		—						—
Subtotal	_	_	_	_	_	_	_	_	_	_	_	—	_	_	—	_	—	—
_	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2025	4/7/2025	5.00	5.00	—
Grading	Grading	4/8/2025	5/5/2025	5.00	20.0	—
Building Construction	Building Construction	5/13/2025	3/16/2026	5.00	220	—
Paving	Paving	5/6/2025	5/12/2025	5.00	5.00	—
Architectural Coating	Architectural Coating	5/27/2025	3/30/2026	5.00	220	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	12.4	LDA,LDT1,LDT2
Site Preparation	Vendor	_	7.10	HHDT,MHDT
Site Preparation	Hauling	2.60	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	_	—	_
Grading	Worker	10.0	12.4	LDA,LDT1,LDT2
Grading	Vendor		7.10	HHDT,MHDT
Grading	Hauling	3.50	20.0	HHDT

Grading	Onsite truck	—		HHDT
Building Construction	_	—	—	—
Building Construction	Worker	21.4	12.4	LDA,LDT1,LDT2
Building Construction	Vendor	8.35	7.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	_	HHDT
Paving	_	—	_	—
Paving	Worker	15.0	12.4	LDA,LDT1,LDT2
Paving	Vendor	—	7.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	_	HHDT
Architectural Coating	_	—	_	_
Architectural Coating	Worker	4.28	12.4	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	76,383	25,461	3,084

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	100	7.50	0.00	—
Grading	—	560	20.0	0.00	
Paving	0.00	0.00	0.00	0.00	1.18

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Parking Lot	1.18	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	1,020	999	726	355,858	11,896	11,654	8,466	4,150,501
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)		Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	76,383	25,461	3,084

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	316,249	279	0.0129	0.0017	2,394,460
Parking Lot	45,027	279	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	3,094,746	245,458

Parking Lot 0.00	
------------------	--

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	66.8	_
Parking Lot	0.00	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

WoodSpring Suites Hotel Project Custom Report, 11/5/2024

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
5.18. Vegetation	
5.18.1. Land Use Change	

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres				
5 18 1 Biomass Cover Type							
5.18.1. Biomass Cover Type							

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
5.18.2. Sequestration		
5.18.2.1. Unmitigated		

Тгее Туре	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

8. User Changes to Default Data

Screen	Justification		
39 / 40			

Land Use	Lot acreage adjusted to represent overall acreage of the project site. Building square feet adjusted to represent the provided building square footage of the project.
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days. Demolition not required for the proposed project.

APPENDIX B

TREE INVENTORY REPORT



ARBORIST TREE INVENTORY REPORT

Project Name:	Woodsprings Suites Hotel Natoma	Site Visit Date:	June 12, 2024
Project #:	41423	Location:	4762 Truxel Road
Date:	June 14, 2024	Time:	11:30 a.m.
Client:	WS California Developer, LLC	Weather:	Sunny & Dry
Contact:	Tyler Fay, O'Dell	O'Dell Arborist:	Karen Folsom, ISA WE-9866A

Summary

On June 12, 2024, O'Dell visited the above site to review and measure the existing trees on site, including those found to meet the City of Sacramento Urban Forestry definitions of a private protected tree. These include native trees with a Diameter Standard Height (DSH) measuring 12" or more and any other species of tree measuring 24" or more. There are a total of thirty (30) trees that were inventoried and identified by species. No trees met the requirements for private protected trees as defined by the City ordinance.

Observations were performed from the ground without the use of climbing, coring, drilling, or excavation equipment, binoculars, or drones. The site was fenced and locked at the time of review. Trees numbered 1-4 and 13-26 were all unavailable to be measured and DSH was estimated for this report.

Included here is a Tree Inventory List, Map of Tree Locations, and Photographic Inventory of selected trees. Each tree's condition is determined by several factors including overall health, structure, condition and evidence of pests or disease. Tree Protection status was determined by <u>City of Sacramento Urban Forestry and the City Tree</u> <u>Code Chapter 12.56</u>

The City street trees along Truxel are very small and do not overhang the property line. They have been included in this report with the City inventory number found on the City ARCGIS website.

Notes

This is a Tree Inventory Report and not a Tree Risk Assessment. No trees were assessed for risk, nor are risk ratings provided. Notwithstanding the information included within this report, trees and nature can be unpredictable and conditions are constantly changing and may be undetectable from view. Trees are susceptible to shifts in climate, disturbance, pests and disease and changes to site conditions.

Loss or alteration of any part of this report invalidates the report in its entirety. There is no warranty or guarantee expressed or implied that problems or deficiencies in the trees in question may not arise in the future.

Respectfully submitted,

Karen N. Jolom

Karen N. Folsom, ISA Certified Arborist # WE-9866A O'Dell Engineering, a Westwood Company

p:209.571.1765

REPORT O'Dell Engineering

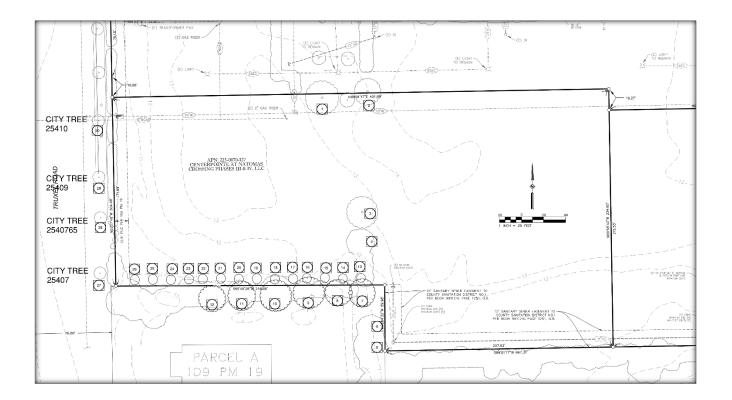
1

Tree Inventory List-

<u>No.</u>	Tree Species	<u>DBH</u>	Protected	<u>Condition</u>
1	Melia spp. / Chinaberry	UNK	N	Fair
2	Zelkova spp	8" +/_	N	Good
3	Pistacia spp.	10" +/-	N	Fair
4	Pistacia spp.	9" +/-	N	Fair
5	Ligustrum spp	6"	N	Poor
6	Ligustrum spp	6"	N	Poor
7	Celtis spp.	6	N	Good
8	Celtis spp.	9	N	Good
9	Celtis spp.	12	N	Good
10	Celtis spp.	14.5	N	Good
11	Celtis spp.	9	N	Good
12	Celtis spp.	9.25	N	Good
13	Sequoia sempervirens	2"-3"	N	Good
14	Sequoia sempervirens	2"-3"	N	Good
15	Sequoia sempervirens	2"-3"	N	Good
16	Sequoia sempervirens	2"-3"	N	Good
17	Sequoia sempervirens	2"-3"	N	Good
18	Sequoia sempervirens	2"-3"	N	Good
19	Sequoia sempervirens	2"-3"	N	Good
20	Sequoia sempervirens	2"-3"	N	Good
21	Sequoia sempervirens	2"-3"	N	Good
22	Sequoia sempervirens	2"-3"	N	Good
23	Sequoia sempervirens	2"-3"	N	Good
24	Sequoia sempervirens	2"-3"	N	Good
25	Sequoia sempervirens	2"-3"	N	Good
26	Sequoia sempervirens	2"-3"	N	Good
27 - City Tree 25407	Nyssa sylvatica	0-3"	N	Good
28 - City Tree 2540765	Ulmus Frontier	0-3"	N	Fair
29 - City Tree 25409	Nyssa sylvatica	0-3"	N	Fair
30 - City Tree 25410	Nyssa sylvatica	0-3"	N	Good

2

Tree Location Map-



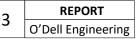
Tree Photographic Inventory-







p:925-223-8340 3



6200 Stoneridge Mall Rd, Ste. 330, Pleasanton, CA 94588 | www.odellengineering.com





3,4

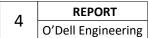
9



14



City trees



p:925-223-8340 6200 Stoneridge Mall Rd, Ste. 330, Pleasanton, CA 94588 | www.odellengineering.com

APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Prepared For

MERRILL LYNCH MORTGAGE LENDING, INC. 10877 WILSHIRE BLVD. 20TH FLOOR LOS ANGELES, CA 90024

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

CENTERPOINTE AT NATOMAS 2200-2250 Del Paso Road Sacramento, California 95834

Date Issued: February 16, 2006 LAC Project Number 06-34635.1

Prepared By

LANDAMERICA ASSESSMENT CORPORATION 3520 Highway 9 South, Suite 204, Howell, New Jersey 07731 Telephone: 732.942.6200 Facsimile: 732.942.2911





Project No. 06-34635.1 February 16, 2006

Ms. Anne-Marie Gryte Merrill Lynch Mortgage Lending, Inc. 10877 Wilshire Blvd. 20th Floor Los Angeles, CA 90024

RE: Phase I Environmental Site Assessment Centerpointe at Natomas 2200-2250 Del Paso Road Sacramento, California 95834

Dear Ms. Gryte:

LandAmerica Assessment Corporation (LAC) is pleased to provide the results of our Phase I Environmental Site Assessment of the Centerpointe at Natomas property located in Sacramento, California. This assessment was authorized on January 25, 2006, and performed in general accordance with ASTM E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and the Merrill Lynch Mortgage Lending Inc. scope of work for Phase I Environmental Site Assessments.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property management, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to Merrill Lynch Mortgage Lending Inc. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Gene Belli at 732-942-2901.

Very truly yours,

LANDAMERICA ASSESSMENT CORPORATION

gen il Hughes

Fell May and

G a Book

Jean Hughes, REA Professional Associate

Fred Howlett Project Manager

Eugene A. Belli, REPA, CHMM Vice President



and a superior of the second secon

TABLE OF CONTENTS

EXECUTIVE SUMMARY			
1.0	INTRODUCTION		1
	I.1	Purpose	1
	1.2	Scope of Services	1
	1.3	Assumptions	
	1.4	Limitations and Exceptions	
	1.5	Special Terms and Conditions	
	1.6	Use Reliance	
2.0		Description	
	2.1	User Provided Information	
	2.2	Location and Legal Description	4
	2.3	Site and Vicinity General Characteristics	
	2.4	Current Use of the Property	
	2.5	Description of Site Improvements	
	2.6	Current Use of Adjoining Properties	
3.0		RDS REVIEW	
510	3.1	Standard Environmental Record Sources	
	1.1	3.1.1 State and Federal Regulatory Review	
		3.1.2 Local Regulatory Review	
	3.2	Physical Setting Sources	
	<i>سد</i> . <i>ک</i>	3.2.1 Topography	
		3.2.2 Soils/Geology	
		3.2.3 Hydrology	
		3.2.4 Flood Zone Information	
		3.2.5 Oil and Gas Exploration	10
	3.3	Historical Use Information	
		3.3.1 Aerial Photographs	
		3.3.2 Fire Insurance Maps	
		3.3.3 City Directories	
		3.3.4 Chain of Title	
		3.3.5 Additional Environmental Record Sources	
		3.3.6 Historical Use Information on Adjoining Properties	
4.0	SITE RECONNAISSANCE		
	4.1	General Site Characteristics	
		4.1.1 Solid Waste Disposal	
		4.1.2 Surface Water Drainage	
		 4.1.3 Wells and Cisterns 4.1.4 Wastewater 	
		 4.1.4 Wastewater	
	4.2	Potential Environmental Conditions	
	4.2	4.2.1 Hazardous Materials and Petroleum Products Used or Stored at the Site	
		4.2.1 Hazardous Materials and Petroleum Products Osed of Stored at the Site	
		4.2.3 Polychlorinated Biphenyls (PCBs)	
		4.2.4 Landfills	
		4.2.5 Pits, Ponds, Lagoons, Sumps, and Catch Basins	
		4.2.6 On-Site ASTs and USTs	



		4.2.7	Radiological Hazards	.15
		4.2.8	Drinking Water	.15
		4.2.9	Additional Hazard Observations	
		4.2.10	Asbestos-Containing Materials (ACM)	.15
		4.2.11	Radon	.15
		4.2.12	Lead-Based Paint	.16
		4.2.13	Mold Evaluation	
5.0	INTER	VIEWS.		.18
6.0 FINDINGS AND CONCLUSIONS		D CONCLUSIONS	.19	
	6.1	Finding	S	.19
		6.1.1	On-Site Environmental Conditions	.19
		6.1.2	Off-Site Environmental Conditions	.19
		6.1.3	Previously Resolved Environmental Conditions	
		6.1.4	De Minimis Environmental Conditions	.19
	6.2	Opínior		.19
	6.3	Conclus	ions	19
	6.4	Recom	nendations	. 19
	6.5		0115	
7.0	REFEI	RENCES	******	20

FIGURES

Figure 1	Site Vicinity Map
Figure 2	Site Plan
Figure 3	Topographic Map

APPENDIX

Appendix A	Site Photographs		
Appendix B	Historical Research Documentation		
	Exhibit B-1	Aerial Photographs	
	Exhibit B-2	Fire Insurance Maps	
	Exhibit B-3	City Directories	
	Exhibit B-4	Title Search Records	
Appendix C	Regulatory Records Documentation		
	Exhibit C-1	Mapped Database Report	
	Exhibit C-2	General Public Records	
Appendix D	Interview Reco	ords	
Appendix E	Client-Provide	ed Documentation	
Appendix F	Laboratory Re	ports	
Appendix G	Other Support	ing Documentation	
Appendix H	Qualifications	Of Envionmental Professionals	

EXECUTIVE SUMMARY

LandAmerica Assessment Corporation (LAC) has performed a Phase I Environmental Site Assessment (ESA) in general accordance with the scope of work and limitations set forth by Merrill Lynch Mortgage Lending Inc. (Merrill) for the Centerpointe at Natomas located at 2200-2250 Del Paso Road, Sacramento, California 95834 (the "Property").

The Phase I Environmental Site Assessment is designed to provide Merrill with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the property. This assessment was conducted utilizing generally accepted ESA industry standards in accordance with ASTM E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Merrill's scope of work for Phase I Environmental Site Assessments.

The Property is currently developed for commercial use. There are four single story buildings which are occupied by offices. The property was undeveloped land from at least 1964 until the existing buildings were constructed in 2005. The buildings are occupied as follows: 2200 = Safe Credit Union, 2210 = Sutter Health Medical Office, Placer Title Company and vacant space, 2230 = North American Title Company, and 2250 = Prudential Real Estate and Countrywide Home Loans. The Property is not identified on the database report.

The site is situated within a suburban area northwest of downtown Sacramento, California. The property is bound to the north by Del Paso Road, across which is the Park Place Center which includes a Raley's grocery store, a Kohl's Department Store, a Shell gasoline station and several smaller shops and restaurants (including the 5 Star Cleaners, which is a drop off only facility); to the east by Park Place South Road, apartments, and farther east by the East Drainage Canal; to the south by undeveloped land, and farther south by apartments; and to the west by undeveloped land, and farther west by Truxel Road, across which is additional undeveloped land. The Property is located approximately three-quarters of a mile northeast of Highway 5 and one mile northeast of the Sacramento River. Based upon topographic map interpretation and site observations, groundwater flow beneath the site is inferred to be in a westerly direction toward the Sacramento River

LAC obtained and reviewed a database report from Environmental Data Resources (EDR) for the Property and the surrounding area. Based on the database report, no upgradient sites were identified as potential concerns to the Property. LAC did identify one recycling center site and one Chemical hazardous Materials Incident Response System (CHMIRS) site located within the prescribed search radii. Neither of the sites consisted of releases to soil or groundwater and therefore they are not considered to be a Recognized Environmental Conditions (REC).

CONCLUSIONS

LAC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-00 of Centerpointe at Natomas, 2200-2250 Del Paso Road, Sacramento, California, the Property. Any exceptions to or deletions from this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property.



RECOMMENDATIONS

Based on the information available at the time of this assessment, LAC does not recommend further investigation of the Property at this time.

The following table summarizes the findings of the significant elements of this investigation.

Assessment Component	Acceptable	Routine Solution	Phase II	Estimated Cost	Reference Section
Historical Review	X				3.3
On-site Operations	х				2.4
Hazardous Materials	X				4.3.1
Waste Generation	х				4.2.1, 4.3.1
PCBs	Х				4.3.3
Asbestos	Х				4.3.10
Lead in Drinking Water	X				4.3.8
Storage Tanks	X				4.3.6
Surface Areas	х				4.3.2
Regulatory Database Review	х				3.1
Adjoining Properties	x				2.6, 3.3.6
Other					NA



1.0 INTRODUCTION

LandAmerica Assessment Corporation (LAC) was retained by Merrill Lynch Mortgage Lending Inc. (Merrill) to conduct a Phase I Environmental Site Assessment (ESA) of the Centerpointe at Natomas located at 2200-2250 Del Paso Road, Sacramento, California 95834 (the Property). The protocol used for this assessment is in general conformance with ASTM E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Merrill's scope of work for Phase I Environmental Site Assessments.

On January 13, 2006, Jean Hughes, a representative of LAC, conducted a site reconnaissance to assess the possible presence of petroleum products and hazardous materials at the Property. LAC's investigation included review of aerial photos, reconnaissance of adjacent properties, background research, and review of available local, state, and federal regulatory records regarding the presence of petroleum products and/or hazardous materials at the Property.

LAC contracted Environmental Data Resources of Milford, Connecticut, to perform a computer database search for local, state, and Federal regulatory records pertaining to environmental concerns for the Property and properties in the vicinity of the Property (see Section 3.0).

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-00) in connection with the Property. LAC understands that the findings of this study will be used by Merrill to evaluate a pending financial transaction in connection with the Property.

1.2 Scope of Services

The scope of work for this ESA is in accordance with Merrill's Phase I Environmental Site Assessment protocol and is in general accordance with the requirements of ASTM Standard E 1527-00. LAC warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an Environmental Site Assessment of a property for the purpose of identifying recognized environmental conditions.

No other warranties are implied or expressed.

1.3 Assumptions

There is a possibility that even with the proper application of these methodologies there may exist on the Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. LAC believes that the information obtained from the record review and the interviews concerning the site is reliable. However, LAC cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide Merrill with information relating to the Property.



1.4 Limitations and Exceptions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM 1527-00. Specific limitations and exceptions to this ESA are more specifically set forth below:

• LAC was not able to document the historical use of the property prior to 1964, since aerial photographs were not reasonably ascertainable from local agencies and other historical sources were not available.

1.5 Special Terms and Conditions

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the client. No subsurface exploratory drilling or sampling was done under the scope of this work. Unless specifically stated otherwise in the report, no chemical analyses have been performed during the course of this ESA.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

1.6 Use Reliance

Merrill, in evaluating a request for an extension of credit (the "Mortgage Loan") to be secured by the property may rely upon this report. This information also may be used by any actual or prospective purchaser, transferee, assignee, or servicer of the Mortgage Loan, any actual or prospective investor (including agent or advisor) in any securities evidencing a beneficial interest in or backed by the Mortgage Loan, any rating agency actually or prospectively rating any such securities, any indenture trustee, and any institutional provider(s) from time to time of any liquidity facility or credit support for such financing. In addition, this report or a reference to this report, may be included or quoted in any offering circular, registration statement, or prospectus in connection with a securitization or transaction involving the Mortgage Loan and/or such securities. This report has no other purpose and should not be relied upon by any other person or entity.

2.0 SITE DESCRIPTION

2.1 User Provided Information

Pursuant to ASTM E 1527-00, LAC requested the following site information from Merrill (User of this report) and from the owner, Jack Meissner.

2.1.1 Title Records

LAC requested title records from the site contact, however, title records were not available at the Property and were not provided to LAC for review.

2.1.2 Environmental Liens or Activity and Use Limitation

LAC requested information from the site contact regarding knowledge of environmental liens, activity and use limitations for the Property. The site contact was not aware of any environmental liens associated with the Property. In addition, the site contact had no knowledge of any use or activity limitations

2.1.3 Specialized Knowledge

LAC inquired with the site contact regarding any specialized knowledge of environmental conditions associated with the Property. The site contact was not aware of any environmental conditions associated with the Property.

2.1.4 Valuation Reduction for Environmental Issues

LAC inquired with the site contact regarding any knowledge of reductions in property value due to environmental issues. The site contact was not aware of any valuation reductions associated with the Property.

2.1.5 Identification of Key Site Manager

Mr. Scott Peterson identified Jack Meissner, owner, as the key site contact for LAC.

2.1.6 Reason for Performing Phase 1 ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-00) in connection with the Property. LAC understands that the findings of this study will be used by Merrill to evaluate a pending financial transaction in connection with the Property.

2.1.7 Prior Environmental Reports

According to Mr. Meissner, prior environmental reports are available for the Property. The reports were not provided for LAC review.



2.2 Location and Legal Description

The address of the Property is 2200, 2210, 2300, and 2250 Del Paso Road, Sacramento, California, 95834. The Property is located in a newly developed area of Sacramento County. According to the County Assessors office, the assessor's parcel number of the Property is 225-0070-125-0000.

According to the Sacramento County Tax Assessor's office, the Property is currently owned by the Jack and Mary Anne Meissner Family Revocable Trust, who has owned the Property since 2003.

2.3 Site and Vicinity General Characteristics

The Property is located in a newly developing residential and commercial area that is characterized by retail shopping centers and multi-family apartment complexes. The Property is zoned commercial by the City of Sacramento.

The Property consists of an irregularly shaped parcel approximately 3.73 acres in size. The Property is designed and used for commercial purposes. Currently, the Property is developed with four structures that were constructed in 2005. The structures at the Property are single-story in height, and comprise a total of 36,795 square feet of building space. The site offers a total of seven tenant spaces.

There is an Automatic Teller Machine (ATM) kiosk for Safe Credit Union located south of the 2210 Building. Access to the asphalt-surfaced Property parking lots on the northern and eastern portions of the Property is provided from Del Paso Road to the north and Park Place South to the east. Manicured landscaping is located on portions of the Property. No other structures or significant surface features were noted on the Property at the time of the reconnaissance.

2.4 Current Use of the Property

The 2200 building is 5,073 square feet and is entirely occupied by Safe Credit Union as a branch. The 2210 building is occupied by Sutter Health Medical Group (Suite A = 5,665 square feet of offices and exam rooms), Placer Title Company (Suite B, 2,000 square feet of office), and by 7,185 square feet of vacant space which hasn't been built out. The 2230 building is occupied by North American Title Company and consists of 8,479 square feet of offices. The 2250 Building is occupied by Prudential Real Estate who uses 3,988 square feet for offices, and Country wide Home Loans who uses 4,406 square feet for offices.

2.5 Description of Site Improvements

All four buildings are of steel frame on concrete slab construction, and have the following interior square footages: Building 2200 = 5,073 square feet; Building 2210 = 14,850 square feet; Building 2230 = 8,479 square feet and Building 2250 = 8,394 square feet. The walls have exterior stucco glass and stone surfacing, with interior finishes comprised of 2'x2' and 2'x4' acoustical ceiling panels and gypsum wallboard interior walls. Carpeting covers the majority of interior floors, with ceramic tiles and vinyl flooring present in restrooms, lobbies, and break rooms.

The City of Sacramento supplies drinking water to the Property from the municipal distribution system. Sanitary discharges on the Property are discharged into the municipal sanitary sewer system. The Property area is serviced by the City of Sacramento.



Electricity is provided to the Property by the Sacramento Municipal Utility District (SMUD). Natural gas is provided by Pacific Gas and Electric Company (PG&E).

2.6 Current Use of Adjoining Properties

During the vicinity reconnaissance, LAC observed the following land use on properties in the immediate vicinity of the Property.

- North: Across Del Paso Road to the north of the Property is the Park Place Center, which is a retail center which includes Raley's Grocery Store, Kohl's Department Store, a Shell Gasoline Station (2221 Del Paso Road) and a number of small retail stores and restaurants. There is also a drop off dry-cleaner, 5 Star Cleaners.
- South: Undeveloped land, and then apartments. Farther south is Highway 5 and approximately three and a half miles south is the confluence of the American and Sacramento Rivers.
- East: Park Place South, and across the roadway are apartments. Farther east is the East Drainage Canal.
- West: Undeveloped land to Truxel Road. An SBC station, including an emergency generator, is located to the southwest, approximately one-eighth mile.



3.0 RECORDS REVIEW

3.1 Standard Environmental Record Sources

3.1.1 State and Federal Regulatory Review

Information from standard Federal and state environmental record sources was provided through Environmental Data Resources (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. This integrated database also contains postal service data in order to enhance address matching. Records from one government source are compared to records from another to clarify any address ambiguities. The demographic and geographic information available provides assistance in identifying and managing risk. The accuracy of the geocoded locations is approximately +/-300 feet.

In some cases, location information supplied by the regulatory agencies is insufficient to allow the database companies to geocoded facility locations. These facilities are listed under the unmappables section within the EDR report. A review of the unmappable facilities indicated that none of these facilities are within the ASTM minimum search distance from the Property.

Regulatory information from the following database sources regarding possible recognized environmental conditions, within the ASTM minimum search distance from the Property, was reviewed. Specific facilities are discussed below if determined likely that a potential recognized environmental condition has resulted at the Property from the listed facilities. Please refer to Appendix C-1 for a complete listing.

Federal NPL

The National Priorities List (NPL) is the Environmental Protection Agency (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program.

The Property is not listed as a NPL facility. No NPL sites are located within one mile of the Property.

Federal CERCLIS List

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is a compilation of sites that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances.

The Property is not listed as a CERCLIS facility. No CERCLIS sites are listed within onehalf mile of the Property.



Federal CERCLIS NFRAP Sites List

The CERCLIS No Further Remedial Action Planned (NFRAP) List is a compilation of sites that the EPA has investigated, and has determined that the facility does not pose a threat to human health or the environment, under the CERCLA framework.

The Property is not listed as a CERCLIS-NFRAP facility. No CERCLIS-NFRAP sites are listed on or adjoining the Property.

Federal Resource Conservation and Recovery Act (RCRA) CORRACTS TSD Facilities List

The EPA Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Treatment, Storage and Disposal (TSD) database is a compilation by the EPA of reporting facilities that treat, store or dispose of hazardous waste. The CORRACTS database is the EPA's list of treatment storage or disposal facilities subject to corrective action under RCRA.

The Property is not listed as a RCRA CORRACTS TSD facility. No RCRA CORRACTS TSD facilities are listed within one mile of the Property.

Federal Resource Conservation and Recovery Act (RCRA) Non-CORRACTS TSD Facilities List

The RCRA TSD database is a compilation by the EPA of reporting facilities that treat, store or dispose of hazardous waste.

The Property is not listed as a RCRA-TSD facility. No RCRA TSD sites are listed within one-half mile of the Property.

Federal RCRA Generator List

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators database is a compilation by the EPA of reporting facilities that generate hazardous waste.

The Property is not listed as a RCRA facility. No RCRA Generator facilities are listed on the Property or on the adjacent properties.

Federal Emergency Response Notification System (ERNS)

The Emergency Response Notification System (ERNS) is a national database used to collect information or reported release of oil or hazardous substances. The Chemical Hazardous Material Incident Response System (CHMIRS) also identifies spills, releases and responses.

No ERNS sites were listed on the Property or on the adjacent properties. One CHMIRS site was identified at 2450 Del Paso Road. The incident consisted of employees being overcome by paint fumes in a new building in 1999.



State Priority List

The Cal EPA, Department of Toxic Substances Control (DTSC) maintains a State Priority List (SPL) of sites considered to be actually or potentially contaminated and presenting a possible threat to human health and the environment.

The Property is not listed as a SPL facility. No SPL sites are listed within one mile of the Property.

State CERCLIS-Equivalent List

The DTSC maintains a State CERCLIS-equivalent list (SCL) of sites under investigation that could be actually or potentially contaminated and presenting a possible threat to human health and the environment.

The Property is not listed as a State CERCLIS facility. No SCL sites are listed within onehalf mile of the Property.

Solid Waste/Landfill Facilities (SWLF)

A database of SWLF is prepared by the California Integrated Waste Management Board.

The Property is not listed as a SWLF facility. No SWLF facilities are listed within one-half mile of the Property. One recycling center is identified at Raley's, 4650 Natomas Boulevard. This facility has not had releases.

State Leaking Underground Storage Tank List (LUST)

The Cal EPA Regional Water Quality Control Board (RWQCB) compiles lists of all leaks of hazardous substances from underground storage tanks.

The Property is not listed as a LUST facility. No LUST sites are listed within one-half mile of the Property.

State Underground Storage Tank List (UST)

The RWQCB compiles a list of UST locations.

The Property is not listed as an UST facility. No registered UST facilities are listed adjacent to the Property. The Shell located across Del Paso Road to the north is registered on the County of Sacramento Master List as having three USTs. No releases have been reported from the Shell.

3.1.2 Local Regulatory Review

3.1.2.1 County Recorder/ Assessor

According the Sacramento County Recorder's Office, no environmentally-related liens or deed restrictions have been recorded against the Property.



3.1.2.2 Fire Officials

Records were requested from the Sacramento Metropolitan Fire Department for evidence indicating the presence of underground storage tanks and for the use of hazardous materials. Sacramento Metropolitan Fire Department personnel indicated that records would be held by the County of Sacramento, Environmental Management Department. See Section 3.1.2.4 for further information.

3.1.2.3 Building Department

Records were requested from the Sacramento Building Department for evidence indicating the developmental history of the Property, and for the presence of documentation relative to underground storage tanks. The records were not available at the time of this report. If information becomes available it will be provided.

3.1.2.4 Other Agencies

A file review was requested from the County of Sacramento, Environmental Management Department. No records indicated current or past usage of hazardous materials, USTs or ASTs at the Property.

3.2 Physical Setting Sources

3.2.1 Topography

The United States Geological Survey (USGS), Taylor Monument, California Quadrangle 7.5 minute series topographic map was reviewed for this ESA. This map was published by the USGS in 1967 and was photorevised in 1975. According to the contour lines on the topographic map, the Property is located at approximately eleven feet above mean sea level (MSL). The contour lines in the area of the Property indicate the area is relatively flat. The Property is depicted as undeveloped. Del Paso Road is depicted to the north and the East Drainage Canal is depicted to the east. Highway 5 is depicted approximately one mile to the west. The confluence of the Sacramento and American Rivers is located approximately 3.5 miles to the south. No surface waters are depicted as present on or adjacent to the Property, nor are production wells or other significant surface features depicted on the USGS map.

3.2.2 Soils/Geology

Based on the Soil Survey of Sacramento County, California, published by the USDA Soil Conservation Service (1993), the Property is mapped as Clear Lake clay. Clear Lake clay is very deep and deep, artificially drained soils in basins. Levees, drainage ditches and pumps have lowered the water table and altered the drainage of the soil. The soil formed in somewhat poorly drained, fine textured alluvium derived from mixed rock sources. A system of levees and large upstream dams has reduced the hazard of flooding. The Clear Lake clay is described as having a dark gray clay surface layer with segregated concretions of lime. The subsoil consists of yellowish brown and gray clay loam which also has segregated concretions of lime. A hardpan which consists of cemented silica is located beneath the surface soils, at depth of 64 inches below ground surface (bgs).



The Property is situated within the Sacramento Valley Geomorphic Province of California. The area of the Property is formerly known as the American Basin which was the site of intermittent lakes in the early 1900s. This was before the area was protected by levees.

3.2.3 Hydrology

Review of the Ground Water Elevation Map, Spring, 2003, published by the County of Sacramento, Water Resources Division, indicates that groundwater is encountered at approximately ten feet bgs and flows to the west. No on-site water wells or springs were observed during the Property reconnaissance.

The nearest surface water in the vicinity of the Property is the confluence of the American and Sacramento Rivers which is located approximately 3.5 miles to the south of the Property. No settling ponds, lagoons, surface impoundments, wetlands or natural catchbasins were observed at the Property during this investigation.

3.2.4 Flood Zone Information

A review of the Flood Insurance Rate Maps, published by the Federal Emergency Management Agency, was performed. According to Panel Number 060266 0020F, dated July 6, 1998, with a Letter of Map Revision dated April 1, 1999, the Property is located in Flood Zone X. Flood Zone X is not an area of flooding.

3.2.5 Oil and Gas Exploration

According to the State of California, Division of Oil, Gas and Geothermal website, Wildcat Map 614, there are no oil or gas wells on the Property or in the vicinity of the Property.

3.3 Historical Use Information

LAC's review of aerial photographs from 1964, 1985 and 2004 indicate that the Property was undeveloped land prior to construction of the existing buildings in 2005. A 1970-1977 aerial photograph was also reviewed in the Soil Survey Report reviewed for this assessment. That photograph also depicted the Property as undeveloped. The Topographic Map published in 1967 and photorevised in 1975 also depicts the Property as undeveloped. City Directories for 1988 through 2005 indicate that the Property was undeveloped land.

The current Property buildings have not been utilized for environmentally sensitive purposes, such as photo developing or dry cleaning; rather, the tenants currently present at the Property have occupied them.

3.3.1 Aerial Photographs

Available aerial photographs dated 1964, 1985 and 2004, from the County of Sacramento, Water Resources Division were reviewed for this ESA. Copies of selected photographs are included in Appendix B-1 of this report. The photographs are discussed below:



Date: Scale: Photo I.D. No.:	February 19, 1964 1" = 3000' 64-1
Description:	The 1964 photograph depicts the Property as undeveloped land. The East Drainage Canal is located to the east. A roadway is depicted in the location of Del Paso Road to the north. The properties to the north, south, east and west are also undeveloped. There is a rural residential compound (couple of structures, house and barn) located to the west. No other development is observed in the area.
Date: Scale: Photo ID: Description:	April 3, 1985 1" = 1000' 7-50 The 1985 photograph depicts the Property as undeveloped land. The Property and surrounding areas appear as they did on the 1964 photograph. Interstate 5 is present to the west, approximately one mile.
Date: Scale: Photo ID: Description:	2004 1" = 400' County of Sacramento The 2004 photograph depicts the Property as undeveloped land. Del Paso Road is present to the north, and across Del Paso Road is the Park Place Center, which includes several retail buildings, and a gasoline station. The Shell station is present to the north. Apartments are located to the east, across Park Place South Drive. Undeveloped land is located immediately to the west and south. West of the undeveloped land is Truxel Road, across which is also undeveloped. South of the undeveloped land are apartments.

3.3.2 Fire Insurance Maps

Sanborn Fire Insurance maps were requested for review by EDR/Sanborn. A copy of the No Coverage letter is included in Appendix B-2.

3.3.3 City Directories

Historical City directories published by Haines Criss Cross Directories were reviewed at the Sacramento County Library for past names and business that were listed for the Property and adjoining properties. The findings are presented in the following table:

YEAR	ON-SITE	ADJOINING PROPERTIES
1988	No listing	West – no listing
		North no listing
		East – no listing
		South – no listing
1995/1996	No listing	West – no listing
		North – no listing
		East – no listing



YEAR	ON-SITE	ADJOINING PROPERTIES
		South no listing
2005	No listing	West – no listing
		North –2221 Del Paso Rd. = C & C Construction, Collins electrical, Just ATMS, and Los Amigos Mexican Food, and Park Place Shell
		East – no listing
		South – no listing

3.3.4 Chain of Title

A 50-year chain-of-title was not requested for this study. Historical use of the Property was researched using other standard historical sources.

3.3.5 Additional Environmental Record Sources

Mr. Meissner indicated that prior reports were available, however the reports were not provided to LAC.

3.3.6 Historical Use Information on Adjoining Properties

By review of the standard historical sources referenced above, the historical uses of the adjoining properties are summarized below:

North:	Prior to the current use as a retail shopping center in 2004/2005, the property to the north was undeveloped land. The shopping center was first observed on a 2004 aerial.
South:	The property to the south has been undeveloped land since at least 1964.
East:	The property to the east has been undeveloped land since at least 1964. The existing apartments were first observed on the 2004 aerial.
West:	The property to the west has been undeveloped land since at least 1964.

4.0 SITE RECONNAISSANCE

The Property was inspected by Jean Hughes on February 13, 2006. The weather at the time of the site visit was warm and sunny. Mr. Jack Meissner, owner provided site access and accompanied Ms. Hughes on the inspection.

4.1 General Site Characteristics

The Property is comprised of an irregularly shaped parcel approximately 3.73 acres in size. The Property is designed for office purposes. Currently, the Property is developed with four single-story structures that were constructed in 2005. The structures on-site comprise a total of approximately 36,795 square feet of building space. The Property offers a total of seven tenant spaces, although the tenant spaces vary in size. All tenants of the subject buildings are offices, except for Sutter Medical in 2210, Suite A which uses the space for medical offices. No x-rays are taken at the Property, however sharps and biomedical waste is generated. Additional information is presented in Section 4.1.1.2. No leasing or building management office spaces exist in the Property building. The Property building is served by a grade level open asphalt parking lot, located on the East Side of the Property.

4.1.1 Solid Waste Disposal

Solid waste on the Property is collected in two 5-cubic yard dumpsters situated in a fenced enclosure at the west boundary of the Property. The solid waste is collected once a week by Waste Management under contract to the County of Sacramento. The dumpsters were noted to contain miscellaneous office debris at the time of the Property reconnaissance and no indication of potentially hazardous material disposal was noted during LAC's reconnaissance.

4.1.2 Surface Water Drainage

Surface water at the Property flows into grated storm drains located in the parking areas. The Property is connected to the municipal storm drain system maintained by the City of Sacramento.

4.1.3 Wells and Cisterns

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

4.1.4 Wastewater

No indications of industrial wastewater disposal or treatment facilities were observed during the onsite reconnaissance.

4.1.5 Additional Site Observations

No additional relevant general site characteristics were observed.

4.2 Potential Environmental Conditions

4.2.1 Hazardous Materials and Petroleum Products Used or Stored at the Site

No evidence of the use of hazardous materials or wastes was observed on the Property. Building materials were stored in the vacant suite in Building 2210 and included: one quart of laquer thinner, one quart of paint thinner, one half gallon of muriatic acid, one gallon of bleach, and five gallons of Henry's roof adhesive. There were also two gasoline cans which held approximately one gallon each. A blower and lawn mower were located in the space. No indication of spills or releases was noted in the storage area..

4.2.1.1 Unlabeled Containers and Drums

No unlabeled containers or drums were observed during the site reconnaissance.

4.2.1.2 Disposal Locations of Regulated/ Hazardous Waste

No obvious indications of hazardous waste generation, storage or disposal were observed on the Property or were indicated during interviews.

Biomedical and "sharps" waste are picked up and disposed of by California Medical Disposal on an as needed basis from the Sutter Medical suite. The premises were in excellent condition, with all material safety data sheets (MSDS) in binders and all hazardous waste and "sharps" containers appropriately labeled.

4.2.2 Evidence of Releases

No obvious indications of hazardous material or petroleum product releases, such as stained areas or stressed vegetation, was observed during the site reconnaissance or reported during interviews.

4.2.3 Polychlorinated Biphenyls (PCBs)

Older transformers and other electrical equipment could contain polychlorinated biphenyls (PCBs) at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Under the regulations, there are three categories into which electrical equipment can be classified:

- Less than 50 parts per million (PPM) of PCBs "Non-PCB" transformer
- 50 ppm-500 ppm "PCB-Contaminated" electrical equipment
- Greater than 500 ppm "*PCB" transformer*

LAC observed two pad-mounted electrical transformers on the Property. The units are situated outside the southeast corner of Building 2250 and 2210. The units were labeled as to contain Envirotemp FR3 Fluid and to be owned and operated by SMUD. No indication of staining, leaks or fire damage was observed on or around the bases of the two units. Based on the initial development of the Property in 2005, both units are



considered "Non-PCB" transformers. Additionally, LAC contacted Customer Service for SMUD (telephone conversation of February 13, 2005) who confirmed the SMUD ownership and operational responsibility. No other electrical equipment expected to contain PCBs was observed on the Property during LAC's reconnaissance.

4.2.4 Landfills

No evidence of on-site landfilling was observed or reported during the site reconnaissance.

4.2.5 Pits, Ponds, Lagoons, Sumps, and Catch Basins

No evidence of on-site pits, ponds, lagoons was observed or reported during the site reconnaissance. No evidence of sumps or catch basins, other than used for stormwater removal, was observed or reported during the site reconnaissance.

4.2.6 On-Site ASTs and USTs

No evidence of aboveground or underground storage tanks was observed during the site reconnaissance or reported during interviews.

4.2.7 Radiological Hazards

No radiological substances or equipment was observed or reported stored on the subject site.

4.2.8 Drinking Water

The Property is connected to the city water supply provided by the City of Sacramento. According to Customer Service at the City Utility Division, the drinking water supplied to the site is within state and federal standards, including lead and copper.

4.2.9 Additional Hazard Observations

No additional hazards were observed on the Site.

4.2.10 Asbestos-Containing Materials (ACM)

The subject buildings were constructed in 2005. While asbestos containing material may be present in the structure, the Occupational Safety and Health Administration (OSHA) finds the installation of friable surfacing material and thermal system insulation after December 31, 1980 unlikely. The definition of suspect ACM and presumed asbestos containing material is taken from 29 CRF Parts 1910, et al. Occupational Exposure to Asbestos; Final Rule.

4.2.11 Radon

The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, Zone 1 being those areas with the average predicted



indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 picoCuries per Liter (pCi/L). It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Property in Zone 3, where average predicted radon levels are less than 2.0 pCi/L.

4.2.12 Lead-Based Paint

LAC has conducted a limited, visual evaluation to note the condition of painted surfaces at the property. Due to the date of construction (2005), lead-based paint is not likely to be present. In general, the painted surfaces appeared in good condition, as no chalking, peeling or flaking paint was observed.

4.2.13 Mold Evaluation

As part of this assessment, LAC performed a limited visual inspection for the conspicuous presence of mold. A class of fungi, molds have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments, and produce spores to reproduce, just as plants produce seeds. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common locations of mold growth. Building materials including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth. Moisture control is the key to mold control. Molds need both food and water to survive; since molds can digest most things, water is the factor that limits mold growth.

The EPA recommends the following action to prevent the amplification of mold growth in buildings:

- Fix leaky plumbing and leaks in the building envelope as soon as possible;
- Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible;
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid);
- Keep heating, ventilation, and air conditioning (HVAC) drip pans clean, flowing properly, and unobstructed;
- Vent moisture-generating appliances, such as dryers, to the outside where possible;
- Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible;



- Perform regular building/HVAC inspections and maintenance as scheduled;
- Clean and dry wet or damp spots within 48 hours;
- Don't let foundations stay wet. Provide drainage and slope the ground away from the foundation.

LAC observed interior areas of the Property structures, including interior walls and ceilings (in all of the units observed), in-unit and common mechanical closets for the presence of conspicuous mold or observed water intrusion or accumulation. LAC did not note conspicuous visual or olfactory indications of the presence of mold, nor did LAC observe obvious indications of significant water damage. No sampling was conducted as part of this assessment.

This activity was not designed to discover all areas, which may be affected by mold growth on the Property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the Property. This evaluation did not include a review of pipe chases, HVAC systems or areas behind enclosed walls and ceilings.

5.0 INTERVIEWS

Interviews were conducted with the following individuals. Findings from these interviews are discussed in the appropriate sections in this report.

SITE

- Scott Peterson, 858-546-4607
- Jack Meissner, owner, 916-801-4243

SURROUNDING AREA

County of Sacramento, Water Resources Division, Aerial Photograph Review

REGULATORY OFFICIALS

• County of Sacramento, Environmental Management Division

6.0 FINDINGS AND CONCLUSIONS

6.1 Findings

6.1.1 On-Site Environmental Conditions

No on-site environmental conditions were identified during the course of this assessment.

6.1.2 Off-Site Environmental Conditions

No offsite environmental conditions were identified that were considered likely to impact the Property.

6.1.3 Previously Resolved Environmental Conditions

No historical recognized environmental conditions were identified in connection with the Property during the course of this assessment.

6.1.4 De Minimis Environmental Conditions

No *de minimis* environmental conditions were identified in connection with the Property during the course of this assessment.

6.2 Opinion

Based on the information reviewed during this assessment, the Property was undeveloped land from at least 1964 until the existing buildings were constructed in 2005. While there may have been agricultural use, there is no indication of recognized environmental conditions at the Property.

6.3 Conclusions

LAC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-00 of Centerpointe at Natomas, 2200-2250 Del Paso Road, Sacramento, California the Property. Any exceptions to or deletions from this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property.

6.4 Recommendations

Based on the conclusions of this assessment, LAC does not recommend further investigation of the Property at this time.

6.5 Deviations

This Phase I ESA substantially complies with the scope of services and ASTM 1527-00, as amended, except for exceptions and/or limiting conditions as discussed in Section 1.4.



7.0 REFERENCES

REPORTS, PLANS, AND OTHER DOCUMENTS REVIEWED:

Environmental Data Resources, Radius database report (2200-2250 Del Paso Road, Sacramento, California, Report No. 1615216.1s)

US EPA Map of Radon Zones

- Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, Community Panel Number 060266 0020F dated July 6, 1998, and a Letter of Map Revision dated April 1, 1999.
- USGS 7.5 Minute Topographic Quadrangle of Taylor Monument, CA, 1967, photorevised 1975.
- USDA Soil Conservation Service, Soil Survey of Sacramento County, California, April 1993, pages 33 and Map Sheet 1.

Sacramento County Library, 828 I Street, Sacramento, City Directories 1988, 1995/1996, 2005.

AGENCIES CONTACTED:

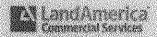
City of Sacramento

Utilities Department, 916-874-6851

Building and Planning Department, 2101 Arena Blvd., Sacramento, 916-808-5656

County of Sacramento

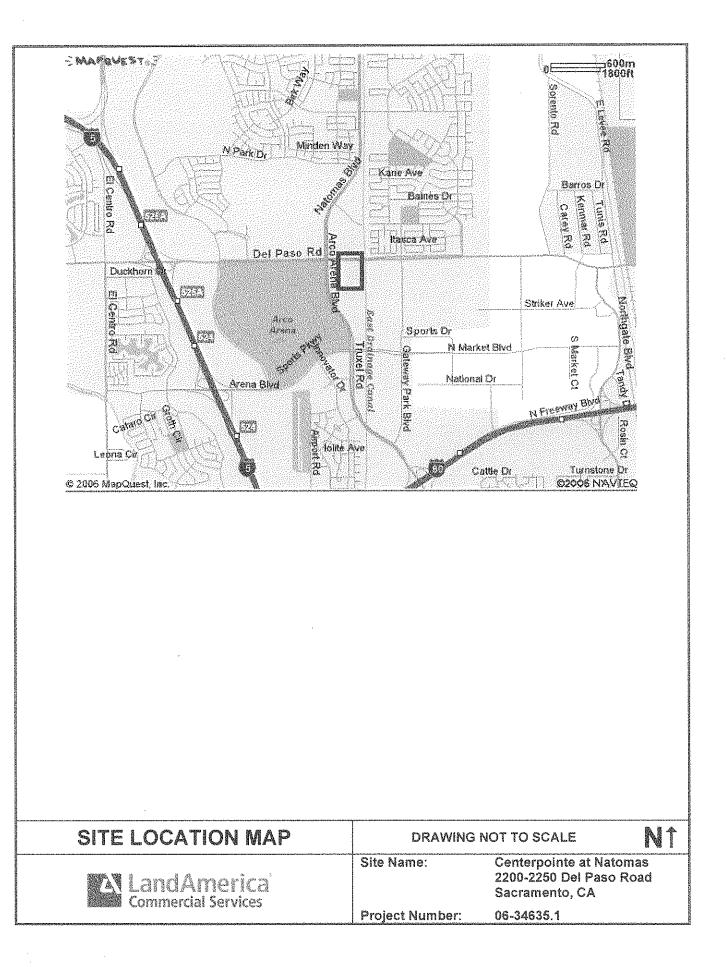
Environmental Management, 8475 Jackson Highway, Sacramento, 916-875-8549

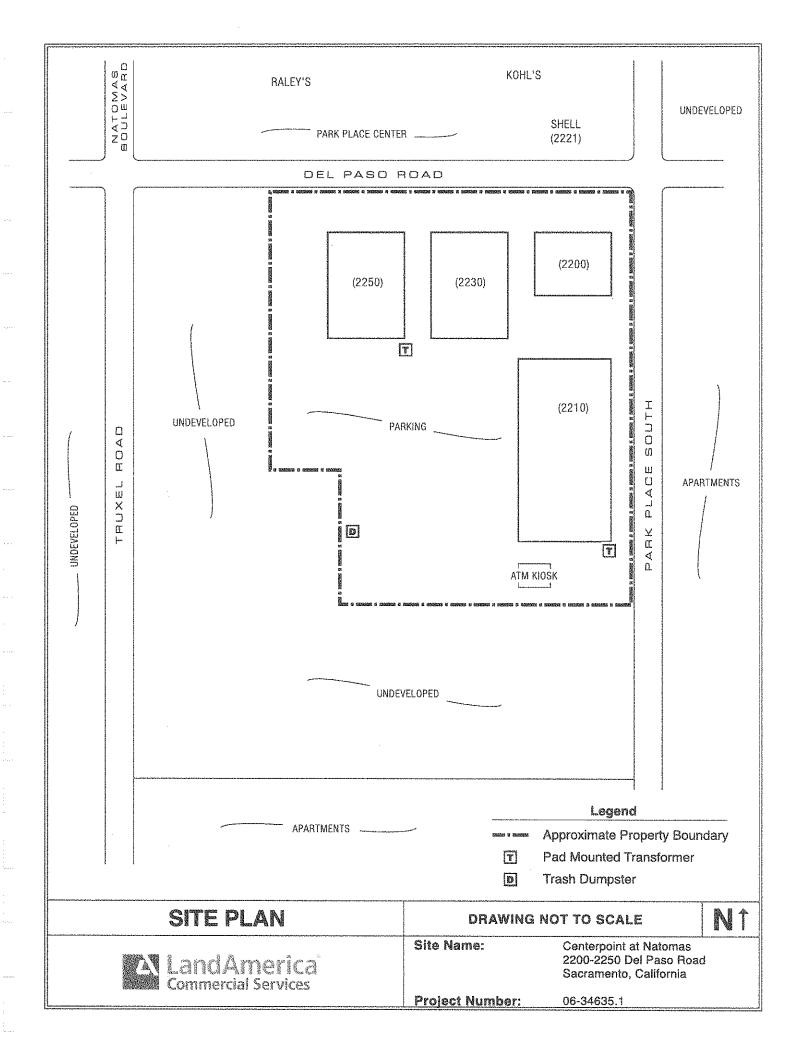


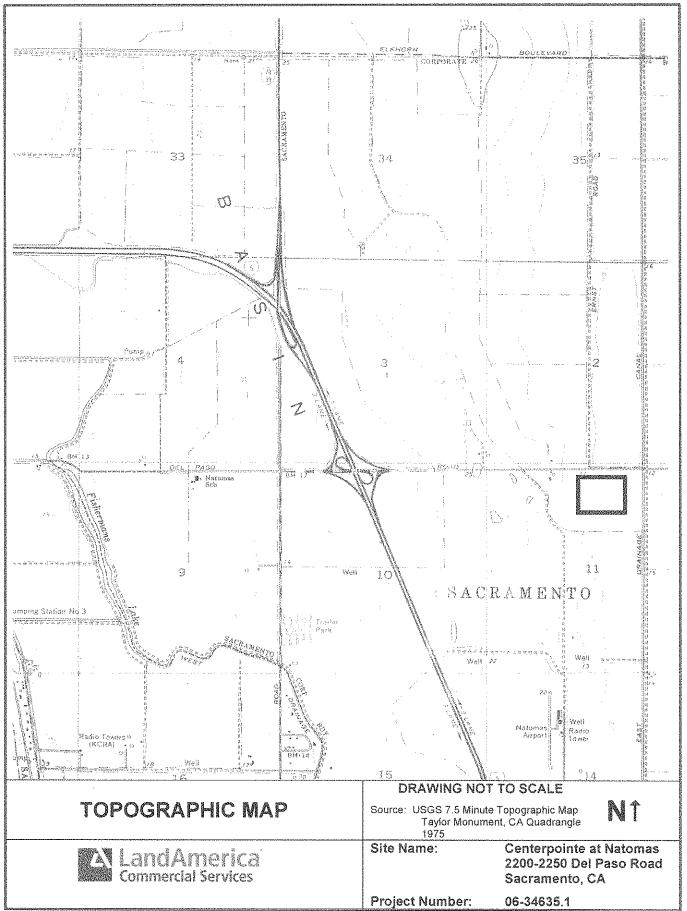
FIGURES

SITE VICINITY MAP SITE PLAN SITE TOPOGRAPHIC MAP

LAC PROJECT NO. 06-34635.1







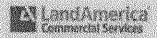




Photograph Number 1: ATM Kiosk in southeast corner, looking northwest at subject buildings



Photograph Number 2 South side of 2210 building

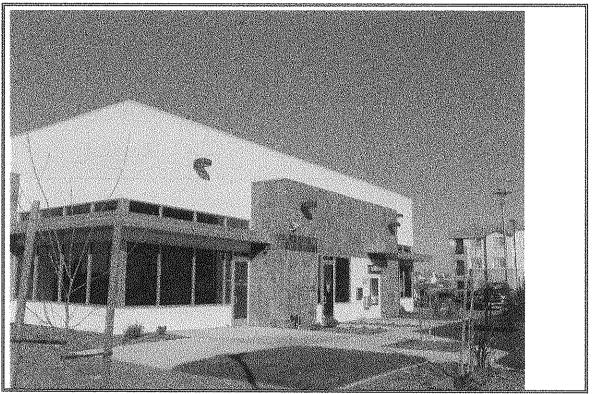


APPENDIX A SITE PHOTOGRAPHS





Photograph Number 3: Southeast corner of 2210 Building, and apartments across Park Place South



Photograph Number 4 South side (entrance) of 2200 Building



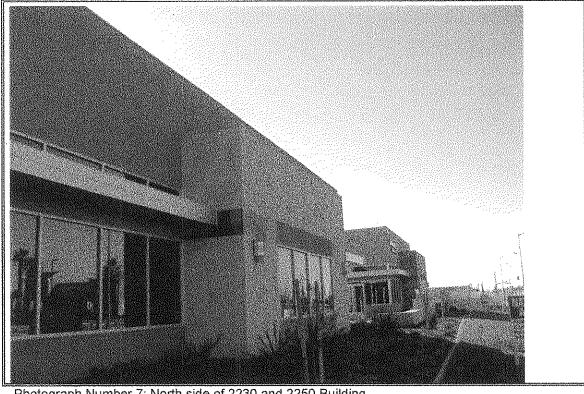


Photograph Number 5: West side of 2210 Building



Photograph Number 6 West side of 2200 Building





Photograph Number 7: North side of 2230 and 2250 Building



Photograph Number 8 Northwest side of 2230 Building

LandAmerica Commercial Services



Photograph Number 9: Northwest side of 2250 Building



Photograph Number 10 West side of 2250 Building





Photograph Number 11: Southwest view of 2250 Building

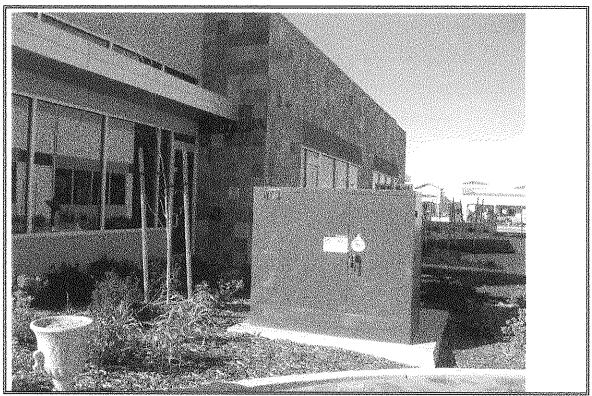


Photograph Number 12 South side of 2250 and 2230 Buildings, parking area and west side of 2210 Building



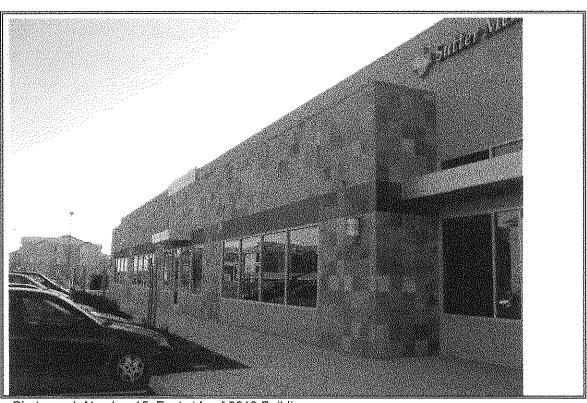


Photograph Number 13: Parking area and south boundary of Property



Photograph Number 14 Transformer east of 2250 Building



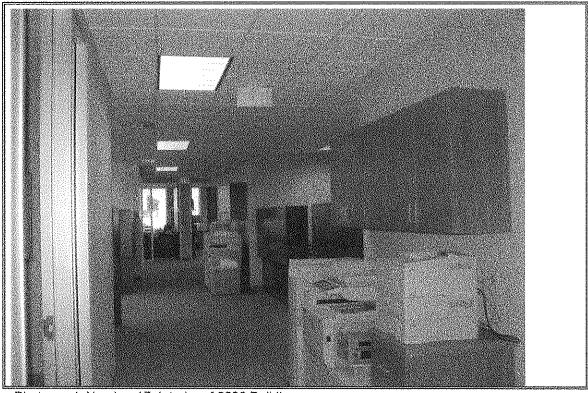


Photograph Number 15: East side of 2210 Building

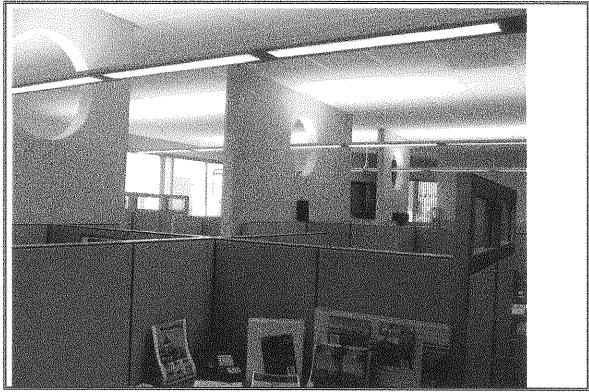


Photograph Number 16 South side of 2200 Building





Photograph Number 17: Interior of 2230 Building



Photograph Number 18 Interior of 2250 Building

APPENDIX D

PRELIMINARY DRAINAGE STUDY





PRELIMINARY DRAINAGE STUDY

For

Woodspring Suites Sacramento, CA 95834 APN: 225-0070-127

July 2024

Prepared by, CWE 2260 Douglas Blvd., Suite 160 Roseville, CA 95661 Ph 916-772-7800 CWE Project No. R23138



TABLE OF CONTENTS

А.	PROJECT LOCATION	3
В.	PROJECT DESCRIPTION	3
С.	EXISTING CONDITIONS	3
D.	PROPOSED CONDITIONS	4
Е.	CONCLUSIONS	5
F.	REFERENCES	6

APPENDIX

APPENDIX A	VICINITY MAP AND SITE PLAN
APPENDIX B	PROJECT SHED MAPS
APPENDIX C	DRAINAGE CALCULATIONS
APPENDIX D	PROPRIETARY INFORMATION



A. PROJECT LOCATION

The project property is located on Truxel Rd in Sacramento, CA 95834. The property is 2.24 acres. It is part of the Centerpointe Business Park located at the southeast corner of Truxel Road and Del Paso Road. Much of the storm drain infrastructure was installed 15-20 years ago with the initial project phases. The assessor's parcel number is 225-0070-127. The site is located at latitude 38°39'16" N and longitude 121°30'39" W. The vicinity map of this project can be found in Appendix A.

B. PROJECT DESCRIPTION

This proposed project will include the construction of a 4-story hotel that will have a building footprint of approximately 13,120 square feet, 50,922 total square feet, and 122 guest rooms. The project will also include construction of new associated parking, flatwork, landscaping, and underground utilities. The site plan can be found in Appendix A.

C. EXISTING CONDITIONS

The project site is largely undeveloped with seasonal grasses, however there are a number of existing utility lines located onsite such as electrical, gas, water, sewer, and storm drain. In summary, bordering properties include the following:

- North: Developed employment center property (2260 & 2280 Del Paso Road) and undeveloped employment center property (2290 Del Paso Road)
- East: Undeveloped employment center property (2240 Del Paso Road)
- South: Developed employment center property (4752 Truxel Road)
- > West: Truxel Road and undeveloped employment center property beyond (2380 Del Paso Road)

The existing site has mild slopes with elevations ranging between 10-14 feet. The existing site can be divided into three drainage sheds, A-X1 to A-X3. It should be noted that the overall drainage shed does not match the existing property boundary as the property owner is currently in the process of a boundary line adjustment, so the overall drainage shed perimeter matches the proposed property boundary. This project is part of a larger overall master plan that has been developed in phases, dating back to 2006. The existing conditions and delineated existing drainage sheds can be found on the Pre-Construction Shed Map in Appendix B.



D. PROPOSED CONDITIONS

The storm drainage design of the site has been done in accordance with the City of Sacramento Onsite Design Manual. The proposed project has been split into four drainage management areas (DMA's), DMA-01 to DMA-04, that represent areas tributary to the proposed onsite system that ties into the larger existing system within the employment center complex. DMA-01 represents the western portion of the site, DMA-02 represents the southern portion of the site, DMA-03 represents the eastern portion of the site, and DMA-04 represents the northern portion of the site. DMA-01, DMA-02, and DMA-03 are each tributary to their own bioretention planters where runoff will be treated and eventually tie into the larger existing system. Runoff in DMA-04 will sheet flow into a combination of existing and proposed drainage inlets that tie into the larger existing system. The proposed conditions and delineated proposed drainage sheds can be found on the Post-Construction Shed Map in Appendix B.

Design Criteria

Per Section 3.1.2 of the City of Sacramento Onsite Design Manual, the Rational Method (Static Analysis) was used to determine peak flows based on a 10-year event. A spreadsheet including all the information used to determine the peak flows using the rational method can be found in Appendix C. All proposed storm drain pipes will be 12" PVC SDR-35 pipe. CWE analyzed the capacity of several pipes that are deemed critical to the overall system using AutoCAD's Hydraflow Express Extension to ensure that 12" pipes would be sufficient to convey the peak flows calculated using the rational method. The critical pipes are labeled as SD1 through SD4 on the Post-Construction Shed Map in Appendix B. SD1 is the existing pipe that will convey the runoff from DMA-01 and DMA-04 into the existing larger system. The peak flow for DMA-01 and DMA-04 is substantially less than the full flow capacity a 12" pipe can convey, and since all onsite pipes have a 12" diameter, it can be assumed that all pipes that within the DMA-01 and DMA-04 system are sufficient. The peak flow for DMA-02 and DMA-03 combined is much larger as these shed areas are larger, so it was important that CWE analyzed the capacity of the onsite pipes in these sheds as well as the existing tie-in pipe. SD2 is the existing pipe that will convey the runoff from DMA-02 and DMA-03 into the existing larger system. SD3 is the proposed pipe that will convey the runoff from DMA-02 and DMA-03 from the DMA-03 bioretention planter to SD2. SD4 is the proposed pipe that will convey the DMA-02 runoff to SD3. The Hydraflow Express reports can be found in Appendix C.

Detention

This project will be collected and conveyed to Basin 15, an existing regional detention facility for site drainage. This project conforms to the Basin 15 model and will not be required to provide onsite detention, as Basin 15 is sized adequately to accommodate the project site and the increased peak flows that come with this development. See Email Correspondence with Wint Tun in Appendix D that confirms onsite detention will not be required for this project.



Low-Impact Development

Basin 15 provides treatment, however the project is still required to provide low-impact development control and accumulate 100 LID credits across the project site. DMA-01, DMA-02, and DMA-03 each propose bioretention planters of 458, 922, and 690 square feet respectively all with a 6" ponding depth. All four DMA's incorporate runoff reduction in the form of proposed deciduous and evergreen trees, disconnected roof drains, and landscape used to disconnect pavement. The overall weighted LID points for the project site totals over 100 points. The LID worksheet can be found in Appendix C.

Trash Capture Control

To satisfy full trash capture control requirements, the proposed bioretention planters will be designed and regularly maintained per the California State Water Board's Bioretention BMP Minimum Specifications found in Appendix D. All proposed drainage inlets will also be installed with ADS Flexstorm Pure Inlet Filters that satisfy full trash capture requirements. Details and specifications for ADS Flexstorm Pure Inlet Filters can be found in Appendix D.

Finish Floor Elevation

Per the City of Sacramento Onsite Design Manual, for an infill development, the finish floor elevation of new structures must be at least 6" above the nearest 100-year event HGL of the City's drainage system and 12" above the controlling overland release point in the public right of way. The nearest drainage node within the City's drainage system is Node 5319, about 140' west of the project site. Node 5319 has 10-year and 100-year HGL's of 9.987' and 10.474' respectively. The finish floor elevation of the proposed hotel is 14.50', which is 4.026' above the nearest City 100-year HGL, well above the 6" minimum. The controlling overland release point in the public right of way is the overland release point for the western bioretention planter tributary to DMA-01. The elevation at the back of walk along Truxel where runoff would flow into the public right of way is about 9.54, which is well under the 12" minimum.

This project is also located in a Special Flood Hazard Area (Zone A99), so this requires the lowest proposed finish floor to be at least 12" above the highest adjacent 100-year event HGL (Node 5319: 10.474') and 18" above the controlling overland release point in the public right of way (9.54'). The proposed hotel finish floor elevation of 14.50' is still well above these minimum requirements.

E. CONCLUSIONS

The storm drainage improvements were designed to meet the minimum design standards of the City of Sacramento Onsite Design Manual. The proposed on-site storm drainage pipe system is adequate to convey the peak design flows. Overland flows would be routed off-site with sufficient freeboard from the building finish floor elevation.





F. REFERENCES

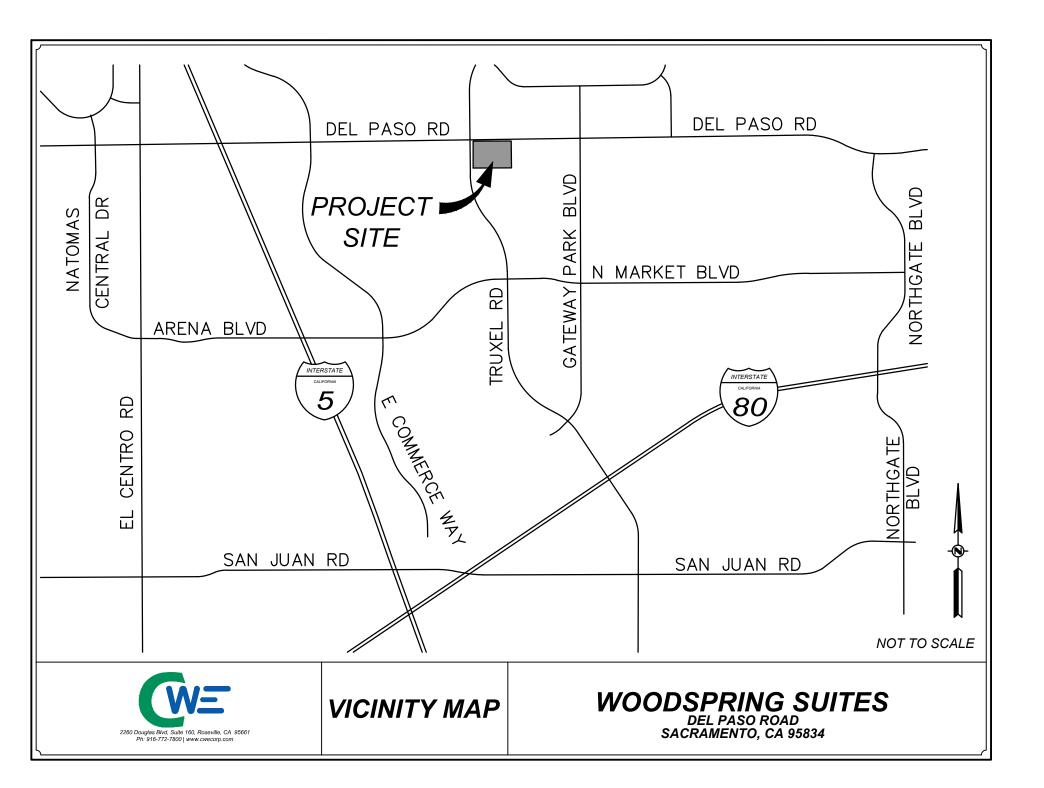
• City of Sacramento Onsite Design Manual for Onsite Drainage, Sewer, Water, Stormwater Quality and Erosion and Sediment Control. May 2020

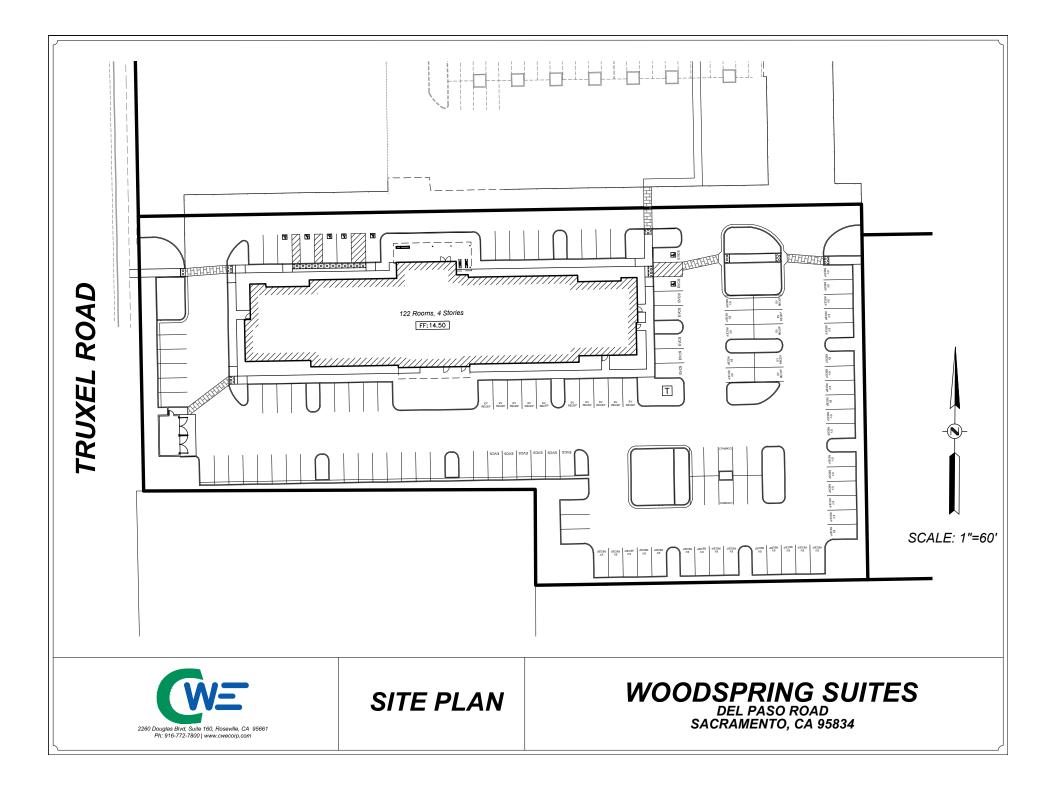
WOODSPRING SUITES

PRELIMINARY DRAINAGE STUDY



VICINITY MAP AND SITE PLAN





WOODSPRING SUITES

PRELIMINARY DRAINAGE STUDY

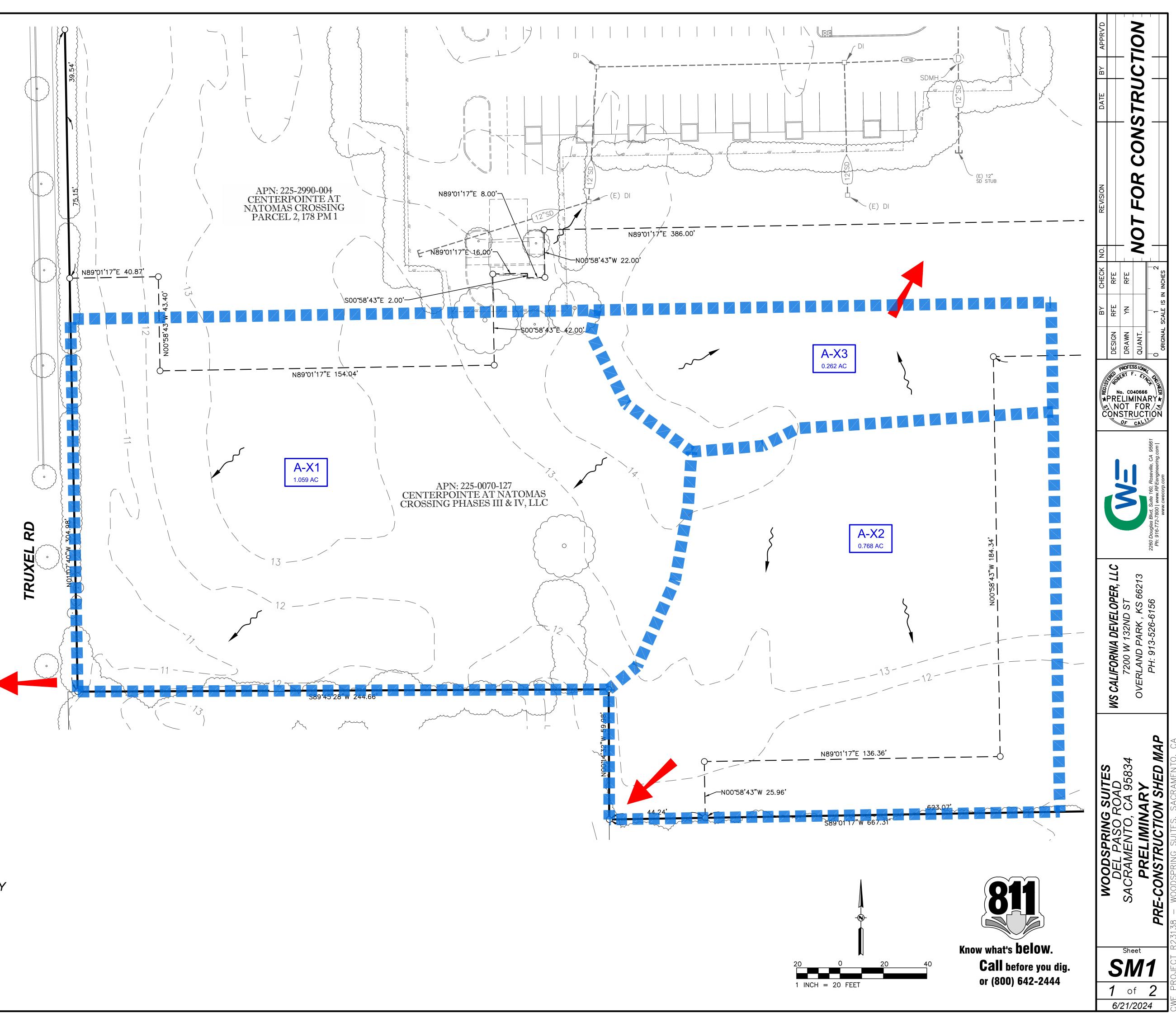


APPENDIX B

PROJECT SHED MAPS

PRE-CONSTRUCTION SHED AREAS (ACRES)

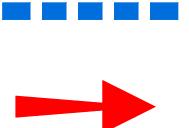
SHED	IMPERVIOUS	PERVIOUS	TOTAL	% IMPERVIOUS					
A-X1	0.000	1.059	1.059	0.0%					
A-X2	0.000	0.768	0.768	0.0%					
A-X3	0.000	0.262	0.262	0.0%					
TOTAL	0.000	2.089	2.09	0.0%					



LEGEND



DRAINAGE AREA DESIGNATIONS & AREA

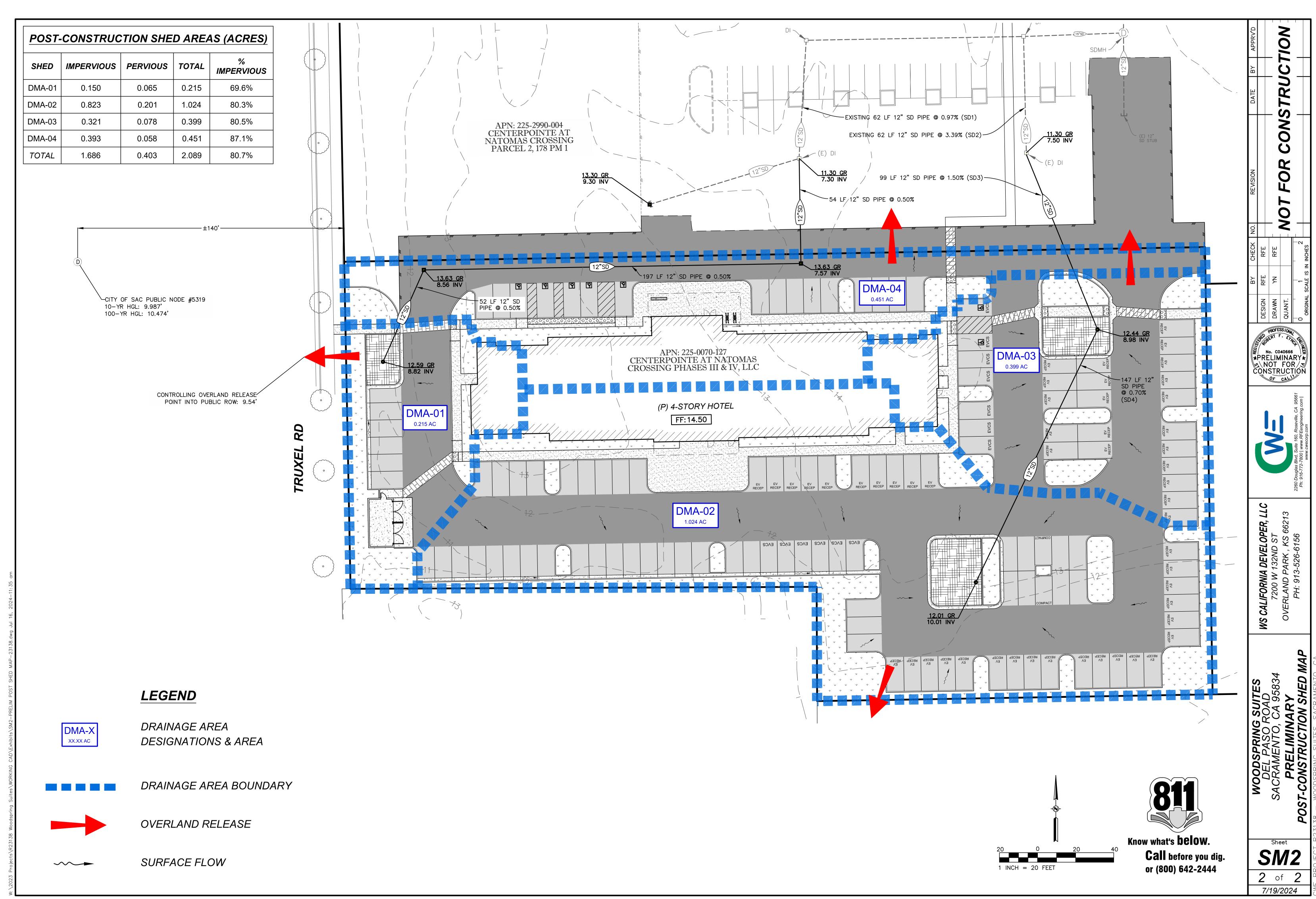


 \sim

DRAINAGE AREA BOUNDARY

OVERLAND RELEASE

SURFACE FLOW



WE PROJECT R23138 - WOODSPRING SUITES, SACRAMENT

WOODSPRING SUITES

PRELIMINARY DRAINAGE STUDY



APPENDIX C

DRAINAGE CALCULATIONS



Peak Flow Calculations

Date: 7/15/2024					
Project: Woodspring Suites					
Location: Sacrament	Location: Sacramento, CA				
Designer: AEB					
References:	City of Sacramento Onsite Design Manual				

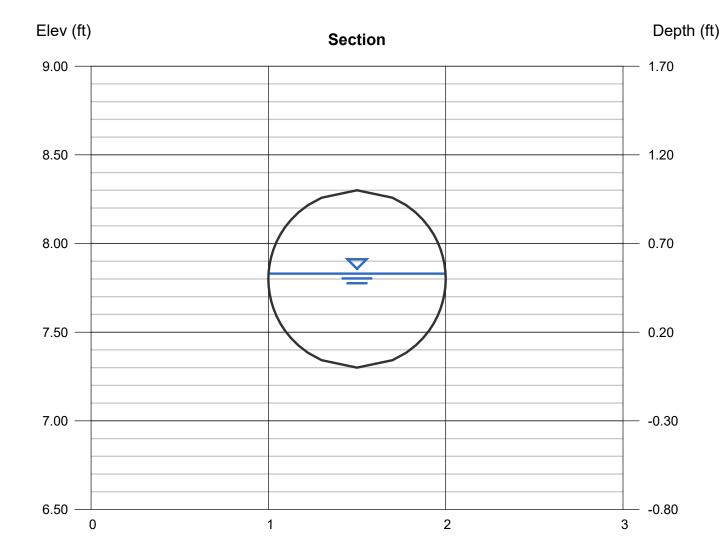
Land Coverage

Shed	Imper	vious Area	Pervio	us Area	Total	Area	% Imp.	Runoff Coeff.	Time of Conc. (min.)	Rainfall Intensity (in./hr.)	Peak Flow (cfs)
	SF	AC	SF	AC	SF	AC		С	t	i	Q
DMA-01	6521	0.150	2845	0.065	9366	0.215	69.62%	0.78	6.09	2.88	0.484
DMA-02	35818	0.822	8767	0.201	44585	1.024	80.34%	0.84	5.79	2.96	2.551
DMA-03	14004	0.321	3397	0.078	17401	0.399	80.48%	0.84	5.79	2.96	0.997
DMA-04	17121	0.393	2539	0.058	19660	0.451	87.09%	0.88	5.61	3.02	1.197

Monday, Jul 15 2024

Existing 12-inch SD Pipe (Serving DMA-01 and DMA-04)

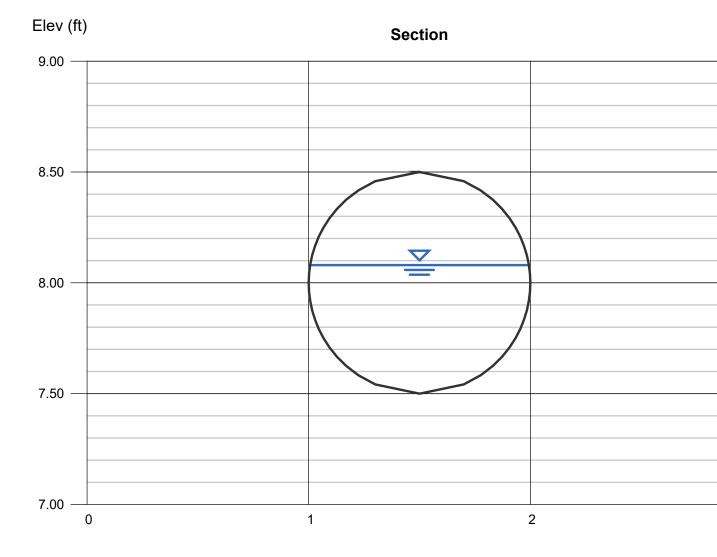
Circular		Highlighted	
Diameter (ft)	= 1.00	Depth (ft)	= 0.53
		Q (cfs)	= 1.681
		Area (sqft)	= 0.42
Invert Elev (ft)	= 7.30	Velocity (ft/s)	= 3.96
Slope (%)	= 0.97	Wetted Perim (ft)	= 1.63
N-Value	= 0.015	Crit Depth, Yc (ft)	= 0.55
		Top Width (ft)	= 1.00
Calculations		EGL (ft)	= 0.77
Compute by:	Known Q		
Known Q (cfs)	= 1.68		



Reach (ft)

Existing 12-inch SD Pipe (Serving DMA-02 and DMA-03)

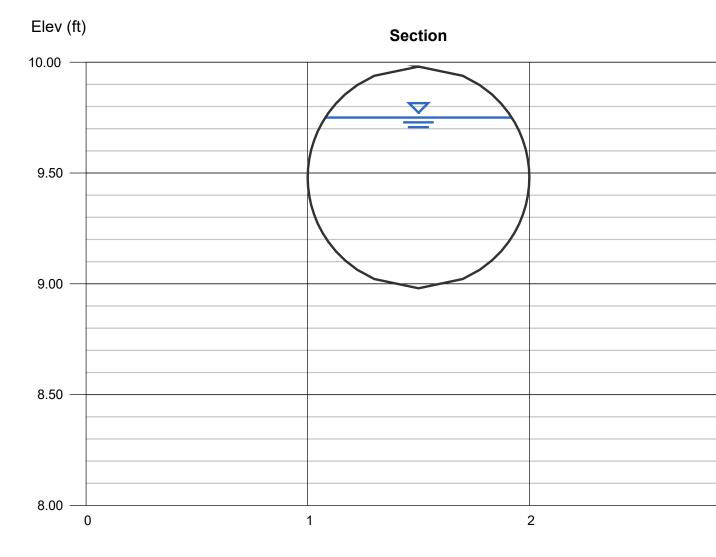
Circular		Highlighted	
Diameter (ft)	= 1.00	Depth (ft)	= 0.58
		Q (cfs)	= 3.550
		Area (sqft)	= 0.47
Invert Elev (ft)	= 7.50	Velocity (ft/s)	= 7.49
Slope (%)	= 3.39	Wetted Perim (ft)	= 1.73
N-Value	= 0.015	Crit Depth, Yc (ft)	= 0.81
		Top Width (ft)	= 0.99
Calculations		EGL (ft)	= 1.45
Compute by:	Known Q		
Known Q (cfs)	= 3.55		



Reach (ft)

Proposed 12-inch SD Pipe (Serving DMA-02 and DMA-03)

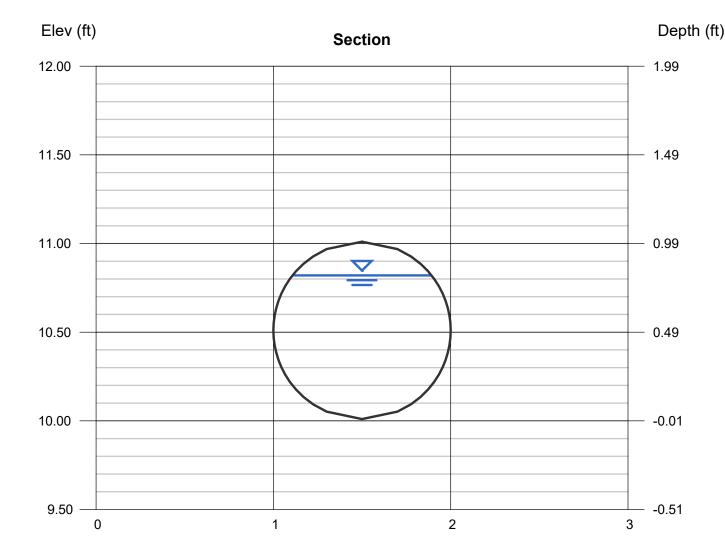
Circular		Highlighted	
Diameter (ft)	= 1.00	Depth (ft)	= 0.77
		Q (cfs)	= 3.550
		Area (sqft)	= 0.65
Invert Elev (ft)	= 8.98	Velocity (ft/s)	= 5.46
Slope (%)	= 1.50	Wetted Perim (ft)	= 2.15
N-Value	= 0.015	Crit Depth, Yc (ft)	= 0.81
		Top Width (ft)	= 0.84
Calculations		EGL (ft)	= 1.23
Compute by:	Known Q		
Known Q (cfs)	= 3.55		



Monday, Jul 15 2024

Proposed 12-inch SD Pipe (Serving DMA-02)

Circular		Highlighted	
Diameter (ft)	= 1.00	Depth (ft)	= 0.81
		Q (cfs)	= 2.550
		Area (sqft)	= 0.68
Invert Elev (ft)	= 10.01	Velocity (ft/s)	= 3.74
Slope (%)	= 0.70	Wetted Perim (ft)	= 2.24
N-Value	= 0.015	Crit Depth, Yc (ft)	= 0.69
		Top Width (ft)	= 0.78
Calculations		EGL (ft)	= 1.03
Compute by:	Known Q		
Known Q (cfs)	= 2.55		



Reach (ft)



WEIGHTED LID TABLE

		Contributions	to Runoff					
Drainage Shed	Shed Area (AC)	Pervious (AC)	Impervious (AC)	Area of LID Feature ¹ (SF)	LID Points from Worksheet (max 200) ²	% of Site	Weighted LID Points	
DMA-01	0.215	0.065	0.150	458	173	10%	11.01	6-in pond dep
DMA-02	1.024	0.201	0.822	922	99	49%	52.42	6-in pond dep
DMA-03	0.399	0.078	0.321	690	123	19%	20.46	6-in pond dep
DMA-04	0.451	0.058	0.393	0	80	22%	23.11	6-in pond dep
DMA-05				-	-			
DMA-06				-	-			
Sub-Total	2.089	0.403	1.687	-	-	-	-	1
Totals	2.089					100%	107.0	⁴ This is the v
	Ve	erify Sub-Total	2.089	9				

Notes:

¹ Area of LID features should not be included in Step 1 of the LID worksheet.

² Maximum of 200 LID credits per drainage shed can be applied to the weighting of the overall site LID.

³ These DMAs are at the exterior of the site and flow offsite. SWQ has been met with inteceptor trees where needed.

⁴ The weighted LID points only applies to obtaining LID compliance. 100% SWQ treatment is still required for any shed with new or reconstructed impervious area.

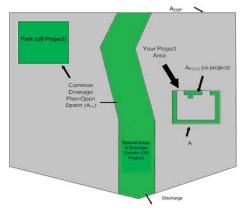
⁵ Proprietary Sacramento Stormwater Quality Partnership (SSQP) approved SWQ Treatment structure with 50in/hr Hydraulic Load Rate (HLR).

⁶ DMA-5 AND DMA-6 Do Not Require LID OR SWQ treatment as no additional impervious area is created or replaced.

Description Aepth, 4-in subdrain, 0 new trees Aepth, 4-in subdrain, 0 new trees

Name of Drainage Shed: DMA-01				Fill in Blue Highlighted boxes	
Location of project: Sacramento				·	
Step 1 - Open Space and Pervious Area Cr					
Is your project within the drainage area of a common drainage	plan that includes open space	? If not, skip to 1 b.			
1 a. Common Drainage Plan Area			488 acres	A _{CDP}	
Common Drainage Plan Open Space (Off-project))		121 acres	A _{os}	see area example
a. Natural storage reservoirs and drainage corridors			0 acres		below
b. Buffer zones for natural water bodies			0 acres		Delow
c. Natural areas including existing trees, other vegeta	ation, and soil		0 acres		
d. Common landscape area/park			107 acres		
e. Regional Flood Control/Drainage basins			14 acres		
1 b. Project Drainage Shed Area (Total) Project-Specific Open Space (In-project, commun	nal**)	(0.215 acres	A A _{PSOS}	
a. Natural storage reservoirs and drainage corridors	. ,		0.00 acres		
b. Buffer zones for natural water bodies			0.00 acres		
c. Natural areas including existing trees, other vegeta	ation, and soil		0.00 acres		see area example
d. Landscape area/park		(0.0548 acres		below
e. Flood Control/Drainage basins			0.00 acres		
** Doesn't include impervious areas within individual I	lots and surrounding indiv	vidual units. That is accoun	ted for below usir	ng Form D-1a in Step 2.	
Area with Runoff Reduction Potential	A - A _{PSOS} =	().1602 acres	A _T	
Assumed Initial Impervious Fraction	A _T / A =		0.75	I	
Open Space & Pervious Area LID Credit (Step 1)					
(A	$A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$		50 pts		



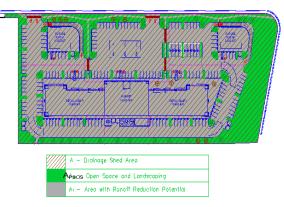


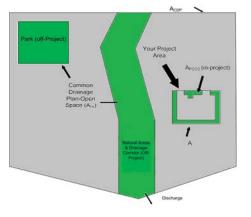
Step 2 - Runoff Reduction Credits	Step 2 - Runoff Reduction Credits							
Runoff Reduction Treatments	Impervious Area Managed		Efficiency Factor		Effective Area Managed (A _C)			
Porous Pavement:	0							
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)		acres	x <u>1</u>	=	0.000	acres		
Option 2: Disconnected Pavement use F (see Fact Sheet, excludes porous pavement used in Option 1)	Form D-2a for credits				0.00	acres		
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0110	acres		=	0.01	acres		
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.028	acres		=	0.03	acres		
Ecoroof (see Fact Sheet)	0	acres		=	0.00	acres		
Interceptor Trees use Form D-2b for credit (see Fact Sheet)	ts				0.00	acres		
Total Effective Area Managed by Runoff Reduction Meas	sures		A _C		0.04	acres		
Runoff Reduction Credit (Step 2)			(A ₀	_C / A _T)*100 =	24	pts		

	Table D-2a				Table [D-2b	
		Efficiency				Minimu	m travel
	Porous Pavement Type	Multiplier		Maximum roof		dista	
	Cobblestone Block Pavement Pervious Concrete/Asphalt	0.40 0.60		≤ 3,500 sq f ≤ 5,000 sq f			21 ft 24 ft
	Modular Block Pavement &	0.75		≤ 7,500 sq f	t	:	28 ft
	Reinforced Grass Pavement	1.00		≤ 10,000 sq	ft	;	32 ft
	-2a: Disconnected Pavement Sheet for more information regarding Disc		credit guidelines				Effective Area Managed (A _c)
Paveme	nt Draining to Porous Pavement						<u> </u>
2. Enter	area draining onto Porous Pavement			0.00		acres	Box K1
3. Enter	area of Receiving Porous Pavement			0.00		acres	Box K2
	s area entered in Step 2 under Porous	Pavement)					
4. Ratio	of Areas (Box K1 / Box K2)			0.00			Box K3
5. Select	multiplier using ratio from Box K3 and	enter into Box K4					
	Ratio (Box D) Ratio is ≤ 0.5		Multiplier 1.00				
	Ratio is > 0.5 and < 1.0		0.83				Box K4
	Ratio is > 1.0 and < 1.5		0.71	1			
	Ratio is > 1.5 and < 2.0		0.55				
6. Enter	Efficiency of Porous Pavement (see t	able below)					Box K5
	Porous Povoment Turne	Efficiency Multiplier					
	Porous Pavement Type Cobblestone Block Pavement	Multiplier 0.40					
	Pervious Concrete	0.60					
	Asphalt Pavement Modular Block Pavement	0.00					
	Porous Gravel Pavement	0.75					
	Reinforced Grass Pavement	1.00					
7. Multip	ly Box K2 by Box K5 and enter into Bo	ox K6		0.00		acres	Box K6
8. Multip	ly Boxes K1,K4, and K5 and enter the	result in Box K7		0.00		acres	Box K7
	box K6 to Box K7 and multiply by 60%, e amount of area credit to enter into the						0.00 acres
Form D	-2b: Interceptor Tree Workshe	et			_		
	Sheet for more information regarding Inter		idelines				
New Eve	rgreen Trees						
1. Enter	number of new evergreen trees that q	ualify as Intercepto	r Trees in Box L1.	0	trees	Box L1	
2 Multin	ly Box L1 by 200 and enter result in B	lox I 2		0	sq. ft.	Box L2	
z. wuudp	y Box L i by 200 and enter result in E				əq. it.	BOX L2	
	iduous Trees number of new deciduous trees that q	ualify as Intercente	r Trees in Box L3	0	trees	Box L3	
J. Liner	namesi or new desiduous nees that q	adiny do intercepto			1005	DOX L3	
4. Multip	ly Box L3 by 100 and enter result in B	ox L4		0	sq. ft.	Box L4	
Existing	Tree Canopy						
5. Enter	square footage of existing tree canopy	that qualifies as E	xisting Tree canopy in Box L5.	0	sq. ft.	Box L5	
6. Multip	ly Box L5 by 0.5 and enter the result ir	n Box L6		0	sq. ft.	Box L6	
Total Int	erceptor Tree EAM Credits						
Add Boxe	es L2, L4, and L6 and enter it into Box	L7		0	sq. ft.	Box L7	
			monogod and anter service Decision				
	ox L7 by 43,560 and multiply by 20% to e amount of area credit to enter into th			0.00	acres	Box L8	

Chan 2 Dun off Monoromout C	ealts			
Step 3 - Runoff Management Co Capture and Use Credits				
Impervious Area Managed by Rair	barrels, Cisterns, and automatically-emptied	•		
(see Fact Sheet)		ns, for simple rain barrels	0	.00 acres
Automated-Control Capture and U (see Fact Sheet, then enter impervious a			0	.00 acres
Bioretention/Infiltration Credits	ea managea by the system)			
Impervious Area Managed by Bior	etention BMPs Bioretention Area	458 sq ft		
(see Fact Sheet)	Subdrain Elevation	27 inches	0.07	794
	Ponding Depth, inches	6 inches	0.07	acres
Impervious Area Managed by Infil	ration BMPs			
(see Fact Sheet)	Drawdown Time, hrs Soil Infiltration Rate, in/hr	drawdown_hrs_inf soil_inf_rate		
				.00 acres
	Sizing Option 1: Capture Volume, acre-ft	capture_vol_inf	0	.00 acres
	Sizing Option 2: Infiltration BMP surface area, sq ft	soil_surface_area	0.00	000 acres
	Basin or trench?	approximate BMP depth 0.00 f	ft	
Impervious Area Managed by Ame (see Fact Sheet)	nded Soil or Mulch Beds Mulched Infiltration Area, sq ft	- mulch_area	0	.00 acres
	Multice militation Area, sq t	minion_area		
Total Effective Area Managed by Ca	ture-and-Use/Bioretention/Infiltration BMPs		0.078	ALIDC
Runoff Management Credit (Step 3)		AL	$_{\rm IDC}/A_{\rm T}^{*}200 = 9$	7.9 pts
Total LID Credits (Step 1	+2+3) LID compliant. ch	eck for treatment sizing in	n Step 4 172	2.5
	on management? If yes, proceed to using S			
Does project require hydromodificat		аспм.		
			0.0428	A.r
Does project require hydromodificat Adjusted Area for Flow-Based, Non-		A _T - A _C -A _{LIDC} =	0.0428	A _{AT}
Adjusted Area for Flow-Based, Non-			0.0428	A _{AT}
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fe	LD Treatment or Volume-Based, Non-LID Treatment	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20	
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fe	.ID Treatment	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20	
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo Further treatment is req	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20	
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo Further treatment is req Step 4a Treatment - Flow-Based (Ratio	ID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method)	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20	
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo Further treatment is req	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20	I _A
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo Further treatment is req Step 4a Treatment - Flow-Based (Ratio	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 g in Step 4 Table D-2 Ra	C nfall Intensity
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo <u>Further treatment is req</u> Step 4a Treatment - Flow-Based (Ratic Calculate treatment flow (cfs): Look up value for i in Table D-2c (Rainfall Intensi	LD Treatment or Volume-Based, Non-LID Treatment Lired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai (y) 0.18	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 g in Step 4 Table D-2 Ra Roseville	IA c infall Intensity i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo <u>Further treatment is req</u> Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs):	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 g in Step 4 Table D-2 Ra	IA c infall Intensity i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A fo <u>Further treatment is req</u> Step 4a Treatment - Flow-Based (Ratic Calculate treatment flow (cfs): Look up value for i in Table D-2c (Rainfall Intensi	LD Treatment or Volume-Based, Non-LID Treatment Lired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai (y) 0.18	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): Look up value for i in Table D-2c (Rainfall Intensi Obtain A _{AT} from Step 3	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai ty) 0.18 i 0.04 A _{AT}	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai by 0.18 i 0.04 A _{AT} 0.95 c	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai by 0.18 i 0.04 A _{AT} 0.95 c	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95	LID Treatment or Volume-Based, Non-LID Treatment Litred, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai U) 0.18 i 0.04 A _{AT} 0.95 c 0.01 cfs	A _T - A _C -A _{LIDC} = A _{AT} / A = [or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT}	LID Treatment or Volume-Based, Non-LID Treatment Luired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai by 0.18 i 0.04 A _{AT} 0.95 c 0.01 ofs SCE-WEF)	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ or volume-based sizing	0.20 j in Step 4 Table D-2 Ra Roseville Sacramento	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensis Datain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet):	LID Treatment or Volume-Based, Non-LID Treatment uired, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai ty) 0.18 i 0.04 A _{AT} 0.95 c 0.01 cfs SCE-WEF) WQV = Area x Maximized Dete	A _T - A _C - A _{LIDC} = A _{AT} / A = [or volume-based sizing Infall Intensity x Area	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT}	LID Treatment or Volume-Based, Non-LID Treatment Lilred, see choose flow-based nal Method) Flow = Runoff Coefficient x Rai U) 0.18]i 0.04 A _{AT} 0.95 c 0.01 cfs SCE-WEF) WQV = Area x Maximized Dete	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ or volume-based sizing	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr 0.18 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dbtain A from Step 1 Dbtain A from Step 1	LID Treatment Tr Volume-Based, Non-LID Treatment Luired, see choose flow-based Inal Method) Flow = Runoff Coefficient x Rai U (y) 0.18 i 0.04 A _{AT} 0.95 C 0.01 cfs C C C C C C C C C C C C C C C C C C C	A _T - A _C - A _{LIDC} = A _{AT} / A = [or volume-based sizing Infall Intensity x Area	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dbtain A from Step 1 Dbtain A from Step 1 Dbtain P ₀ : Maximized Detention Volume from fig n Appendix E of this manual using I ₆ from Step 2	LID Treatment Tr Volume-Based, Non-LID Treatment Luired, see choose flow-based Inal Method) Flow = Runoff Coefficient x Rai U (y) 0.18 i 0.04 A _{AT} 0.95 C 0.01 cfs C C C C C C C C C C C C C C C C C C C	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ or volume-based sizing nfall Intensity x Area ntion Volume (P ₀) $A \qquad 12$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dbtain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dbtain A from Step 1 Dbtain A from Step 1	LID Treatment Tr Volume-Based, Non-LID Treatment Lilred, see choose flow-based Trial Method) Flow = Runoff Coefficient x Rai Trial T	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dotain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dotain A from Step 1 Dotain P ₀ : Maximized Detention Volume from fig n Appendix E of this manual using I ₆ from Step 2 Calculate treatment volume (acre-ft):	LID Treatment ar Volume-Based, Non-LID Treatment uired, see choose flow-based real Method) Flow = Runoff Coefficient x Rai U U U U U U U U U	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ or volume-based sizing nfall Intensity x Area ntion Volume (P ₀) $A \qquad 12$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dotain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dotain A from Step 1 Dotain P ₀ : Maximized Detention Volume from fig n Appendix E of this manual using I ₆ from Step 2 Calculate treatment volume (acre-ft):	LID Treatment Tr Volume-Based, Non-LID Treatment Lilred, see choose flow-based Trial Method) Flow = Runoff Coefficient x Rai Trial T	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dotain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dotain A from Step 1 Dotain P ₀ : Maximized Detention Volume from fig n Appendix E of this manual using I ₆ from Step 2 Calculate treatment volume (acre-ft):	LID Treatment Tr Volume-Based, Non-LID Treatment Lilred, see choose flow-based Trial Method) Flow = Runoff Coefficient x Rai Trial T	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr
Adjusted Area for Flow-Based, Non- Adjusted Impervious Fraction of A for Further treatment is req Step 4a Treatment - Flow-Based (Ratio Calculate treatment flow (cfs): .ook up value for i in Table D-2c (Rainfall Intensi Dotain A_{AT} from Step 3 Jse C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (A: Calculate water quality volume (Acre-Feet): Dotain A from Step 1 Dotain P ₀ : Maximized Detention Volume from fig n Appendix E of this manual using I ₆ from Step 2 Calculate treatment volume (acre-ft):	LID Treatment Tr Volume-Based, Non-LID Treatment Lilred, see choose flow-based Trial Method) Flow = Runoff Coefficient x Rai Trial T	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.20 J in Step 4 Table D-2 Ra Roseville Sacramento Folsom	IA c infall Intensity i = 0.20 in/hr o i = 0.18 in/hr i = 0.20 in/hr

Appendix D-2: Commercial Sites: Low Im	pact Development (L	D) Credits and Treatment BMP	Sizing Calculations	
Name of Drainage Shed: DMA-02			Fill in Blue Highlighted boxes	S
Location of project: Sacramento				
Step 1 - Open Space and Pervious Area C	redits			
Is your project within the drainage area of a common drainage	plan that includes open space?	? If not, skip to 1 b.		
1 a. Common Drainage Plan Area	[488 acre	s A _{CDP}	
Common Drainage Plan Open Space (Off-project) Г	121 acres	s A _{os}	see area example
a. Natural storage reservoirs and drainage corridors		0 acres	S	below
b. Buffer zones for natural water bodies		0 acres	s	DEIOW
c. Natural areas including existing trees, other vegeta	ation, and soil	0 acres	S	
d. Common landscape area/park		107 acres	S	
e. Regional Flood Control/Drainage basins		14 acres	s	
1 b. Project Drainage Shed Area (Total)	C	1.024 acre	s A	
Project-Specific Open Space (In-project, commun	nal**)	0.1801 acres	s A _{PSOS}	
a. Natural storage reservoirs and drainage corridors		0.00 acres	s	
b. Buffer zones for natural water bodies		0.00 acres	s	ana araa ayamala
c. Natural areas including existing trees, other vegeta	ation, and soil	0.00 acres	S	see area example
d. Landscape area/park		0.1801 acres	S	below
e. Flood Control/Drainage basins		0.00 acres	S	
** Doesn't include impervious areas within individual	lots and surrounding indivi	dual units. That is accounted for below	using Form D-1a in Step 2.	
Area with Runoff Reduction Potential	A - A _{PSOS} =	0.8434 acres	s A _T	
	-	<u> </u>		
Assumed Initial Impervious Fraction	A _T / A =	0.82	Ι	
	-			
Open Space & Pervious Area LID Credit (Step 1)				
(A	$A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$	42 pts		



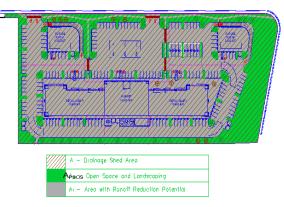


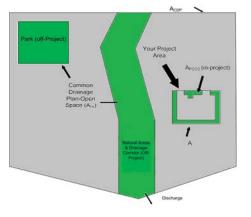
Step 2 - Runoff Reduction Credits						
Runoff Reduction Treatments	Impervious Area Managed		Efficiency Factor		Effective Area Managed (A _C)	
Porous Pavement:						
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0	acres	x	=	0.000	acres
Option 2: Disconnected Pavement used in Option 1)	Form D-2a for credits			E	0.00	acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0410	acres		=	0.04	acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.121	acres		=	0.12	acres
Ecoroof (see Fact Sheet)	0	acres		=	0.00	acres
Interceptor Trees use Form D-2b for cred (see Fact Sheet)	its				0.00	acres
Total Effective Area Managed by Runoff Reduction Mea	sures		A _C		0.16	acres
Runoff Reduction Credit (Step 2)			(A _c / /	A _T)*100 =	19	pts

	Table D-2a				Table [D-2b	
		Efficiency				Minimu	m travel
	Porous Pavement Type	Multiplier		Maximum roof		dista	
	Cobblestone Block Pavement Pervious Concrete/Asphalt	0.40 0.60		≤ 3,500 sq f ≤ 5,000 sq f			21 ft 24 ft
	Modular Block Pavement &	0.75		≤ 7,500 sq f	t	:	28 ft
	Reinforced Grass Pavement	1.00		≤ 10,000 sq	ft	;	32 ft
	-2a: Disconnected Pavement Sheet for more information regarding Disc		credit guidelines				Effective Area Managed (A _c)
Paveme	nt Draining to Porous Pavement						<u> </u>
2. Enter	area draining onto Porous Pavement			0.00		acres	Box K1
3. Enter	area of Receiving Porous Pavement			0.00		acres	Box K2
	s area entered in Step 2 under Porous	Pavement)					
4. Ratio	of Areas (Box K1 / Box K2)			0.00			Box K3
5. Select	multiplier using ratio from Box K3 and	enter into Box K4					
	Ratio (Box D) Ratio is ≤ 0.5		Multiplier 1.00				
	Ratio is > 0.5 and < 1.0		0.83				Box K4
	Ratio is > 1.0 and < 1.5		0.71	1			
	Ratio is > 1.5 and < 2.0		0.55				
6. Enter	Efficiency of Porous Pavement (see t	able below)					Box K5
	Porous Povoment Turne	Efficiency Multiplier					
	Porous Pavement Type Cobblestone Block Pavement	Multiplier 0.40					
	Pervious Concrete	0.60					
	Asphalt Pavement Modular Block Pavement	0.00					
	Porous Gravel Pavement	0.75					
	Reinforced Grass Pavement	1.00					
7. Multip	ly Box K2 by Box K5 and enter into Bo	ox K6		0.00		acres	Box K6
8. Multip	ly Boxes K1,K4, and K5 and enter the	result in Box K7		0.00		acres	Box K7
	box K6 to Box K7 and multiply by 60%, e amount of area credit to enter into the						0.00 acres
Form D	-2b: Interceptor Tree Workshe	et			_		
	Sheet for more information regarding Inter		idelines				
New Eve	rgreen Trees						
1. Enter	number of new evergreen trees that q	ualify as Intercepto	r Trees in Box L1.	0	trees	Box L1	
2 Multin	ly Box L1 by 200 and enter result in B	lox I 2		0	sq. ft.	Box L2	
z. wuudp	y Box L i by 200 and enter result in E				əq. it.	BOX L2	
	iduous Trees number of new deciduous trees that q	ualify as Intercente	r Trees in Box L3	0	trees	Box L3	
J. Liner	namesi or new desiduous nees that q	adiny do intercepto			1005	DOX L3	
4. Multip	ly Box L3 by 100 and enter result in B	ox L4		0	sq. ft.	Box L4	
Existing	Tree Canopy						
5. Enter	square footage of existing tree canopy	that qualifies as E	xisting Tree canopy in Box L5.	0	sq. ft.	Box L5	
6. Multip	ly Box L5 by 0.5 and enter the result ir	n Box L6		0	sq. ft.	Box L6	
Total Int	erceptor Tree EAM Credits						
Add Boxe	es L2, L4, and L6 and enter it into Box	L7		0	sq. ft.	Box L7	
			monogod and anter service Decision				
	ox L7 by 43,560 and multiply by 20% to e amount of area credit to enter into th			0.00	acres	Box L8	

	Step 3 - Runoff Management Credits Capture and Use Credits				
					
	Impervious Area Managed by Rain barrels,	Cisterns, and automatically-emptied	d systems		
	(see Fact Sheet)	- enter gallor	ons, for simple rain barrels		0.00 acres
	Automated-Control Capture and Use Syste				
	(see Fact Sheet, then enter impervious area manage	ed by the system)			0.00 acres
E	Bioretention/Infiltration Credits Impervious Area Managed by Bioretention	BMPs Bioretention Area	922 sq ft		
	(see Fact Sheet)	Subdrain Elevation			
		Ponding Depth, inches	6 inches	0.1	1578 acres
	Increase increase Manageral Inclusion Di	MD-			
	Impervious Area Managed by Infiltration BI (see Fact Sheet)	Drawdown Time, hrs	drawdown_hrs_inf		
		Soil Infiltration Rate, in/hr	soil_inf_rate		
	Sizing Op	otion 1: Capture Volume, acre-ft	capture_vol_inf		0.00 acres
	Sizing Or	otion 2: Infiltration BMP surface area, sq ft	soil_surface_area	0.0	0000 acres
					adica
	Bas	sin or trench?	approximate BMP depth 0.00 f	t	
	Impervious Area Managed by Amended So (see Fact Sheet)	Il or Mulch Beds Mulched Infiltration Area, sq ft	- mulch_area		0.00 acres
	(,	······································	n		
т	Total Effective Area Managed by Capture-and	I-Use/Bioretention/Infiltration BMPs		0.15	5784 A _{LIDc}
F	Runoff Management Credit (Step 3)		AL	_{IDC} /A _T *200 =	37.4 pts
-	Total LID Credits (Step 1+2+3)		Warning: More LID Is R	Required 9	9.0
	Total LID Credits (Step 1+2+3) Does project require hydromodification mana		Warning: More LID Is R GacHM.	Required 9	99.0
C	Does project require hydromodification mana	agement? If yes, proceed to using S	GacHM.		
C		agement? If yes, proceed to using S		Required 9 0.5236	99.0
C A	Does project require hydromodification mana	agement? If yes, proceed to using S ment	GacHM.		
ם م	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume	agement? If yes, proceed to using S iment e-Based, Non-LID Treatment	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$	0.5236	A _{AT}
ם م	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat	agement? If yes, proceed to using S iment e-Based, Non-LID Treatment	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$	0.5236	A _{AT}
۲ م F	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required,	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$	0.5236	A _{AT}
۲ م F	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$	0.5236	A _{AT}
A A F Step 4a	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required,	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 in Step 4	A _{AT}
C A F Step 4a Calculate t	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs):	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D-	A _{AT}
C A F Step 4a Calculate t	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod)	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D-	A _{AT}
E A F Step 4a Calculate t oook up va	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs):	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- R	A _{AT} I _A 2c ainfall Intensity i = 0.20 in/hr
E A A B Calculate t Calculate t Cook up va Dotain A _{AT}	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT}	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville	A _{AT} I _A 2c ainfall Intensity i = 0.20 in/hr
E Step 4a Calculate t oook up va Dbtain A _{AT}	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S iment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
E A A B Calculate t Calculate t Cook up va Dotain A _{AT}	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT}	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
E Step 4a Calculate t oook up va Dbtain A _{AT}	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 c	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
E Step 4a Calculate t Cook up va Dótain A _{AT}	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 c	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
E Step 4a Calculate t .ook up va Dotain A _{AT} Jse C = 0.	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 C 0.09 cfs	A _T - A _C -A _{LIDC} =[A _{AT} / A = [or volume-based sizing	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
E Sitep 4a Ealculate t ook up va Obtain A _{AT} Use C = 0. Sitep 4b	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) from Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 c 0.09 cfs	acHM. $A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Step 4a Step 4a Salculate t ook up va Dotain A _{AT} Jse C = 0. Step 4b Salculate v	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE water quality volume (Acre-Feet):	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 C 0.09 cfs EF) WQV = Area x Maximized Dete	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area ention Volume (P ₀)	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament Folsom	A _{AT} I _A 22C ainfall Intensity i = 0.20 in/hr to i = 0.20 in/hr i = 0.20 in/hr
Step 4a Step 4a Salculate t ook up va Dotain A _{AT} Jse C = 0. Step 4b Salculate v	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) from Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 c 0.09 cfs EF) WQV = Area x Maximized Dete	acHM. $A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Step 4a Step 4a Salculate t ook up va Dotain A_{AT} Jse C = 0. Step 4b Calculate v Dotain A fr	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) T from Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE water quality volume (Acre-Feet):	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see Choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 ji 0.52 A _{AT} 0.95 c 0.09 cfs EF) WQV = Area x Maximized Dete 1.02	SacHM. $A_T - A_C - A_{LDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area ention Volume (P ₀)	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament Folsom	A _{AT} I _A 22C ainfall Intensity i = 0.20 in/hr to i = 0.20 in/hr i = 0.20 in/hr
Step 4a Step 4a Calculate t ook up va Dotain A_{AT} Jse C = 0. Step 4b Calculate v Dotain A fr Dotain A fr Dotain A fr	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) from Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE water quality volume (Acre-Feet): irom Step 1	agement? If yes, proceed to using S ment e-Based, Non-LID Treatment see Choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 ji 0.52 A _{AT} 0.95 c 0.09 cfs EF) WQV = Area x Maximized Dete 1.02	sacHM. $A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area ention Volume (P ₀) $A \qquad 12$	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament Folsom	A _{AT} I _A 22C ainfall Intensity i = 0.20 in/hr to i = 0.20 in/hr i = 0.20 in/hr
E Cook up va Step 4a Staculate t ook up va Staculate t Staculate v Staculate	Does project require hydromodification mana Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volume Further treatment is required, Treatment - Flow-Based (Rational Met treatment flow (cfs): alue for i in Table D-2c (Rainfall Intensity) Trom Step 3 .95 Flow = 0.95 * i * A _{AT} Treatment - Volume-Based (ASCE-WE water quality volume (Acre-Feet): rom Step 1	agement? If yes, proceed to using S iment e-Based, Non-LID Treatment see choose flow-based thod) Flow = Runoff Coefficient x Rai 0.18 i 0.52 A _{AT} 0.95 c 0.09 cfs F) WQV = Area x Maximized Dete 1.02 to E-4 0.25	sacHM. $A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A = \end{bmatrix}$ or volume-based sizing infall Intensity x Area ention Volume (P ₀) $A \qquad 12$	0.5236 0.51 J in Step 4 Table D- Roseville Sacrament Folsom	A _{AT} I _A 22C ainfall Intensity i = 0.20 in/hr to i = 0.20 in/hr i = 0.20 in/hr

Appendix D-2: Commercial Sites: Low Im	pact Development (Li	D) Credits and Treatment BMP	Sizing Calculations	
Name of Drainage Shed: DMA-03			Fill in Blue Highlighted boxe	s
Location of project: Sacramento				
Step 1 - Open Space and Pervious Area C	redits			
Is your project within the drainage area of a common drainage	plan that includes open space?	If not, skip to 1 b.		
1 a. Common Drainage Plan Area		488 acre	es A _{CDP}	
Common Drainage Plan Open Space (Off-project) Г	121 acr	es A _{os}	see area example
a. Natural storage reservoirs and drainage corridors		0 acre	es	below
b. Buffer zones for natural water bodies		0 acre		Delow
c. Natural areas including existing trees, other vegeta	ation, and soil	0 acre	es	
d. Common landscape area/park		107 acre	es	
e. Regional Flood Control/Drainage basins		14 acre	es	
1 b. Project Drainage Shed Area (Total)	Ε	0.399 <mark>acre</mark>	es A	
Project-Specific Open Space (In-project, commun	nal**)	0.0621 acre	es A _{PSOS}	
a. Natural storage reservoirs and drainage corridors		0.00 acre	es	
b. Buffer zones for natural water bodies		0.00 acre	es	see area example
c. Natural areas including existing trees, other vegeta	ation, and soil	0.00 acre	es	below
d. Landscape area/park		0.0621 acr	es	below
e. Flood Control/Drainage basins		0.00 acr	es	
** Doesn't include impervious areas within individual	lots and surrounding indivi	dual units. That is accounted for below	w using Form D-1a in Step 2.	
Area with Runoff Reduction Potential	A - A _{PSOS} =	0.3373 acro	es A _T	
Assumed Initial Impervious Fraction	$A_T / A =$	0.84	I	
Open Space & Pervious Area LID Credit (Step 1)	_			
A)	$A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$	40 pts		



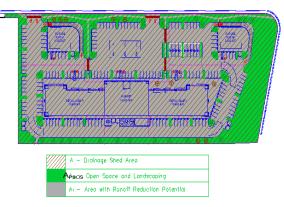


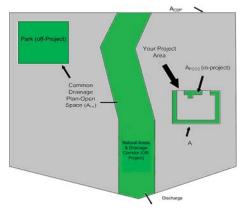
Step 2 - Runoff Reduction Credits							
Runoff Reduction Treatments	Impervious Area Managed			Efficiency Factor		Effective Area Managed (A _C)	
Porous Pavement:	-						
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0	acres	×		=	0.000	acres
Option 2: Disconnected Pavement used in Option 1)	Form D-2a for credits				[0.00	acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0104	acres			=	0.01	acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.0321	acres			=	0.03	acres
Ecoroof (see Fact Sheet)	0	acres			=	0.00	acres
Interceptor Trees use Form D-2b for cred (see Fact Sheet)	its					0.00	acres
Total Effective Area Managed by Runoff Reduction Measure	sures			A _C		0.04	acres
Runoff Reduction Credit (Step 2)				(A _C /	A _T)*100 =	13	pts

	Table D-2a				Table I	D-2b	
		Efficiency				Minimu	n travel
	Porous Pavement Type	Multiplier		Maximum roof		dista	
	bblestone Block Pavement vious Concrete/Asphalt	0.40 0.60		≤ 3,500 sq f ≤ 5,000 sq f			21 ft 24 ft
Mod	ular Block Pavement &	0.75		≤ 7,500 sq f	ť	1	28 ft
Rein	nforced Grass Pavement	1.00		≤ 10,000 sq	ft		32 ft
	Disconnected Pavement V for more information regarding Disco		credit guidelines				
Pavement Dra	aining to Porous Pavement	_			-	_	Effective Area Managed (A _c)
	draining onto Porous Pavement			0.00		acres	Box K1
				0.00			5 1/2
	of Receiving Porous Pavement a entered in Step 2 under Porous	Pavement)		0.00		acres	Box K2
	eas (Box K1 / Box K2)	,		0.00			Box K3
	alian union antia farma Davi K2 and	to - into Davi KA					
	plier using ratio from Box K3 and o (Box D)	enter Into Box K4	Multiplier				
Ratio	o is ≤ 0.5		1.00				Daw 1/4
	o is > 0.5 and < 1.0 o is > 1.0 and < 1.5		0.83 0.71	1			Box K4
Ratio	o is > 1.5 and < 2.0		0.55				
6. Enter Efficie	ency of Porous Pavement (see ta	able below)					Box K5
		Efficiency					
	Porous Pavement Type	Multiplier					
	blestone Block Pavement vious Concrete	0.40					
	halt Pavement	0.60					
	lular Block Pavement	0.75					
	bus Gravel Pavement Inforced Grass Pavement	1.00					
	x K2 by Box K5 and enter into Bo:			0.00		acres	Box K6
Multiply Box	xes K1,K4, and K5 and enter the	result in Box K7		0.00		acres	Box K7
	6 to Box K7 and multiply by 60%, ount of area credit to enter into the						0.00 acres
Form D-2b:	Interceptor Tree Workshe	et					
See Fact Sheet	for more information regarding Intere-	ceptor Tree credit gu	idelines				
New Evergree			- ·				
1. Enter numb	per of new evergreen trees that qu	any as interceptor	Trees In Box L1.		trees	Box L1	
2. Multiply Box	x L1 by 200 and enter result in Bo	ox L2		0	sq. ft.	Box L2	
New Deciduo	us Trees						
3. Enter numb	per of new deciduous trees that qu	alify as Interceptor	Trees in Box L3.	0	trees	Box L3	
4. Multiply Box	x L3 by 100 and enter result in Bo	ox L4		0	sq. ft.	Box L4	
Existing Tree	Canopy						
5. Enter squar	re footage of existing tree canopy	that qualifies as Ex	xisting Tree canopy in Box L5.	0	sq. ft.	Box L5	
6. Multiply Bo	x L5 by 0.5 and enter the result in	Box L6		0	sq. ft.	Box L6	
Total Intercep	otor Tree EAM Credits						
Add Boxes L2,	, L4, and L6 and enter it into Box I	L7		0	sq. ft.	Box L7	
Divide Box I 7	by 43,560 and multiply by 20% to	det effective area	managed and enter result in Box L8	0.00	acres	Box L8	
	ount of area credit to enter into the			0.00	aues	DUX LO	
This is the amo	ount of area credit to enter into the	e "Interceptor Trees	s" Box of Form D-2				

Obtain A _{AT} from Step 3 0.18 A _{AT} Sacramento i = 0.18 in/hr	Stop 2 Dupoff Management Credite				
Impervious Area Managed by Rain barrels 0.000 area Impervious Area Managed by Rain barrels 0.000 area Impervious Area Managed by Initiation BMPs 0.1181 area Impervious Area Managed by Initiation BMPs 0.1181 area Impervious Area Managed by Initiation BMPs 0.000 area Impervious Area Managed by Initiation BMPs 0.000 area Impervious Area Managed by Initiation BMPs 0.01181 area Impervious Area Managed by Initiation BMPs 0.000 area Impervious Area Managed by Initiation BMPs 0.000 area Impervious Area Managed by Capture and Use State area area or genome RMP draft 0.000 Impervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Impervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Intervious Area Managed by Capture-and-Use Bioreterion Math Beds 0.011812 A.rea Adjusted Area for Flow-B					
Automatic Control Capture and Use System 0.00 acts Use Trait Direct Train the three t	Impervious Area Managed by Rain barrels,				0.00
Impervious Area Managed by Discretion BMPs Excention Area Excenti		ontor gallone, for e	simple rain barrels		0.00 acres
Bioretention/Infiltration Credits Impervises Area Managed by Bioretention BMPs Impervises Area Managed by Infiltration BMPs Impervises Area Managed by Annoted Soil or Muich Beds Impervises Area Managed by Annoted Soil or Muich Beds Impervises Area Managed by Capture- and-UseBiorstention/Infiltration BMPs Impervises Area Managed BMPs Impervises Area Area Area Area Area Area Area Area					0.00 acres
Impervious Area Managed by Biordention BMPs Develoan Area 000 sql h Impervious Area Managed by Inititation BMPs Develoan Area Other and the state of the					<u> </u>
Poding Dupth, undtar 0 interview 0.1181 accs Impervious Area Managed by Infiltration BMPs Development Time, Int 0 0 accs String Option 1: Capatro View 0 0.000 accs Basin or brench?	Impervious Area Managed by Bioretention				
Impervious Area Managed by inflictation BMPs Detections Thms, its	(see Fact Sheet)			0.1	1181 acres
image Fact Shert) Development, hrs.					
Side infinition Rate, infor			draudaum bra inf		
Sizing Option 2: Midded Infiltation RMP surface area, eq it	(See Fact Sheet)				
Sizing Option 2: initiation failer surface area, and inclusion of a construction of a for volume Based in or transhop 0.0000 occs Impervious Area Managed by Amended Sol or Muich Beds 0.0100 occs (see fast Sheet) 0.011812 Auge Total Effective Area Managed by Capture-and-UsorBioretentionInfiltration BMPs 0.011812 Auge Total Effective Area Managed by Capture-and-UsorBioretentionInfiltration BMPs 0.011812 Auge Total LID Creditis (Step 1) LID compliant, check for treatment sizing in Step 4 123.0 Desproject require hydromedifeation management? If yes, proceed to using SactMM. Auge/Ar-200 = 0.01768 Auge Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment Ar Ac Auge = 0.01768 Auge Capture treatment flow (ds): Four = Ruoff Coefficient x Rainfall Intensity X Area Table D-2c Table D-2c Step 4a Treatment - Flow-Based (ASCE-WEF) 0.003 ds Table D-2c Table D-2c Table D-2c Data Ar, foro Step 3 0.180 Scenament or i = 0.201 m/hi	Sizing O	ption 1: Capture Volume, acre-ft	capture_vol_inf		0.00 acres
Basin or trench?				0.0	0000
Impervious Area Managed by Amended Soli or Much Beds (see Fact Sheet) Muched infiliation Area, aq 8	Sizing O	ption 2: Infiltration BMP surface area, sq ft	soil_surface_area	0.0	JUUU acres
(see Fact Sheet) Mulched infilization Area, as nmulch_area 0.00 acreas Total Effective Area Managed by Capture-and-Use/Bioretention/Infilization BMPs 0.11812 A.uce Runoff Management Credit (Step 3) A.uc/Ar;200 = 70.0 pts Total LID Credit's (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Does project require hydromodification management? If yes, proceed to using SacHM. Ar AcA.uce = 0.1768 Ar.r Adjusted Area for Flow-Based, Non-LID Treatment Ar AcA.uce = 0.1768 Ar.r Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment Ar.r / A = 0.44 Ta. Eturther treatment is required, see choose flow-based or volume-based sizing in Step 4 Table D-2c Cook up value for in Table D-2c (Rainfall Intensity) 0.18 Non-LID Treatment / B. Out and Ar.r 0.03 dfs Sacramento i = 0.20 in/hi Step 4D Treatment - Flow-Based (ASCE-WEF) Cool of a for Sacramento i = 0.20 in/hi Calculate water quality volume (Acre-Feet): WOV = Area x Maximized Detention Volume (Ps) Specified Draw Down time Step 4D Treatment - Volume-Based (ASCE-WEF) 0.40 A 12/hrs Specified Draw Down time Step 4D Treatment - Volume-Based (ASCE-WEF) <td>Ва</td> <td>isin or trench?a</td> <td>pproximate BMP depth 0.00 f</td> <td>t</td> <td></td>	Ва	isin or trench?a	pproximate BMP depth 0.00 f	t	
(see Fact Sheet) Mulched infilization Area, as nmulch_area 0.00 acreas Total Effective Area Managed by Capture-and-Use/Bioretention/Infilization BMPs 0.11812 A.uce Runoff Management Credit (Step 3) A.uc/Ar;200 = 70.0 pts Total LID Credit's (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Does project require hydromodification management? If yes, proceed to using SacHM. Ar AcA.uce = 0.1768 Ar.r Adjusted Area for Flow-Based, Non-LID Treatment Ar AcA.uce = 0.1768 Ar.r Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment Ar.r / A = 0.44 Ta. Eturther treatment is required, see choose flow-based or volume-based sizing in Step 4 Table D-2c Cook up value for in Table D-2c (Rainfall Intensity) 0.18 Non-LID Treatment / B. Out and Ar.r 0.03 dfs Sacramento i = 0.20 in/hi Step 4D Treatment - Flow-Based (ASCE-WEF) Cool of a for Sacramento i = 0.20 in/hi Calculate water quality volume (Acre-Feet): WOV = Area x Maximized Detention Volume (Ps) Specified Draw Down time Step 4D Treatment - Volume-Based (ASCE-WEF) 0.40 A 12/hrs Specified Draw Down time Step 4D Treatment - Volume-Based (ASCE-WEF) <td></td> <td></td> <td></td> <td></td> <td></td>					
Runoff Management Credit (Step 3) $A_{Lec}/A_{r}^{+}200 = 70.0$ pts Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Does project require hydromodification management? If yes, proceed to using SacHM. $A_{T} - A_{c} - A_{LOC} = 0.1768$ A_{AT} Adjusted Area for Flow-Based, Non-LID Treatment $A_{T} - A_{c} - A_{LOC} = 0.1768$ A_{AT} Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{T} + A_{c} - A_{LOC} = 0.1768$ A_{AT} Euclate treatment is required, see choose flow-based or volume-based sizing in Step 4 L L Step 4a Treatment - Flow-Based (Rational Method) Image: Step 4a Treatment flow (ds): Flow = Runoff Coefficient x Rainfall Intensity x Area Step 4a Treatment - Flow-Based (Rational Method) Image: Step 4a Treatment flow (ds): Flow = Runoff Coefficient x Rainfall Intensity x Area Step 4a Treatment - Flow-Based (Rational Method) Image: Step 4b Treatment flow (ds): Flow = 0.95 ° C Step 4b Treatment - Volume-Based (ASCE-WEF) Image: Step 4b Treatment - Volume-Based (ASCE-WEF) Step 4b Treatment - Volume-Based (ASCE-WEF) Image: Step 4b Treatment - Volume-Based (ASCE-WEF) Step 4b Treatment - Volume-Based (ASCE-WEF) Image: Step 4b A A 12 hrs Specified Draw Down time Detain Area Maximized Detention Volume (Acre-Fe			- mulch_area		0.00 acres
Runoff Management Credit (Step 3) $A_{Loc}/A_{r}^{+}200 = 70.0$ pts Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Does project require hydromodification management? If yes, proceed to using SacHM. $A_{T} \cdot A_{c} \cdot A_{ucc} = 0.1768$ A_{uT} Adjusted area for Flow-Based, Non-LID Treatment $A_{T} \cdot A_{c} \cdot A_{ucc} = 0.1768$ A_{uT} Adjusted impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{uT} \cdot A_{c} \cdot A_{ucc} = 0.1768$ A_{uT} Euclate treatment is required, see choose flow-based or volume-based sizing in Step 4 L L Step 4a Treatment - Flow-Based (Rational Method) Else value for in Table D-2c (Rainfall Intensity) 0.18] Step 4a Treatment - Flow-Based (Rational Method) Else value for in Table D-2c (Rainfall Intensity) 0.18] Step 4a Treatment - Flow-Based (Rational Method) Else value for in Table D-2c (Rainfall Intensity) 0.18] Ubtain A_{xT} from Step 3 0.18] A_{xT} Else Value Value for in Table D-2c (Rainfall Intensity) 0.18] Step 4D Treatment - Volume-Based (ASCE-WEF) Else Value Value For 0.95 ° C Else Value Value For 0.003 ° ds Else Value Value For 0.95 ° L * A_{xT} 0.03 ° ds Step 4D Treatment - Volume-Based (ASCE-WEF) UAQ A 12 hrs Specified Draw Down time Polytain A from Step 1					
Runoff Management Credit (Step 3) $A_{Loc}/A_{r}^{+}200 = 70.0$ pts Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Dess project require hydromodification management? If yes, proceed to using SacHM. $A_{T} - A_{C} - A_{LOC} = 0.1768$ A_{AT} Adjusted Area for Flow-Based, Non-LID Treatment $A_{T} - A_{C} - A_{LOC} = 0.1768$ A_{AT} Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{T} / A = 0.44$ I_{A} Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Is Step 4a Treatment - Flow-Based (Rational Method) Image: Sacchard and	Total Effective Area Managed by Capture-and	d-Use/Bioretention/Infiltration BMPs		0.11	812 A _{LIDc}
Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4 123.0 Does project require hydromodification management? If yes, proceed to using SacHM. $A_r - A_c - A_{unc} = 0.1768$ A_{vr} Adjusted Area for Flow-Based, Non-LID Treatment $A_r - A_c - A_{unc} = 0.1768$ A_{vr} Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{vr} / A = 0.44$ I_A Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Ise paid treatment is required, see choose flow-based or volume-based sizing in Step 4 Table D-2c Step 4a Treatment - Flow-Based (Rational Method) Ise paid treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Table D-2c Cook up value for in Table D-2c (Rainfall Intensity) 0.18 i/m Rainfall Intensity Rainfall Intensity Detain A_{xr} from Step 3 0.18 i/m Rainfall Intensity Rainfall Intensity Rainfall Intensity Step 4b Treatment - Volume-Based (ASCE-WEF) Ise of the start area maximized Detention Volume (P_0) Ise in the start area maximized Detention Volume (P_0) Ise paid the manual using k, from Step 1 0.40 A 12 hrs Specified Draw Down time Detain A from Step 1 0.40 A 12 hrs Specified Draw Down time Po <td>Dura (f Managament Ora dit (Otar 2)</td> <td></td> <td></td> <td>(A \$000</td> <td></td>	Dura (f Managament Ora dit (Otar 2)			(A \$000	
Does project require hydromodification management? If yes, proceed to using SacHM. Adjusted Area for Flow-Based, Non-LID Treatment $A_T + A_c - A_{LOC} = 0.1768$ A_{AT} Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{AT} / A = 0.44$ I_A Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Image: Step 4a Treatment - Flow-Based (Rational Method) Sate 4a Treatment - Flow-Based (Rational Method) Else value for in Table D-2c (Rainfall Intensity) 0.18 in Max from Step 3 Cook up value for in Table D-2c (Rainfall Intensity) 0.18 in Max from Step 3 0.18 AxT Data Ax from Step 3 0.18 AxT Sacramento i = 0.20 in/hi Step 4b Treatment - Volume-Based (ASCE-WEF) Sacramento i = 0.35 c 0.395 c Step 4b Treatment - Volume-Based (ASCE-WEF) WQV = Area x Maximized Detention Volume (P ₀) Detain Arm Step 1 0.40 A 12 hrs Specified Draw Down time Detain A from Step 1 0.40 A 12 hrs Specified Draw Down time Detain A from Step 1 0.40 A 12 hrs Specified Draw Down time Detain A from Step 1 0.40 A 12 hrs Specified Draw Down time Detain A from Step 1 0.40 A 12 hrs Specified Draw D	Runom Management Credit (Step 3)		AL	_{.IDC} /A _T *200 =	70.0 pts
Adjusted Area for Flow-Based, Non-LID Treatment $A_T \cdot A_C \cdot A_{LDC} = 0.1768$ A_{AT} Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{T} / A = 0.44$ I_A Further treatment is required, see choose flow-based or volume-based sizing in Step 4 I_A Step 4a Treatment - Flow-Based (Rational Method) A_{AT} A_{AT} Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Table D-2c cook up value for i in Table D-2c (Rainfall Intensity) 0.18] $Rainfall Intensity$ Roseville blain A_{AT} from Step 3 0.18] A_{AT} $Rainfall Intensity$ Roseville $i = 0.20$ in/hi Step 4b Treatment - Volume-Based (ASCE-WEF) 0.03 cfs $Roseville = i = 0.20$ in/hi $Sec = 0.95$ Flow = 0.95 * 1* A_{AT} 0.03 cfs $O.20$ in/hi $Sec = 0.20$ in/hi $Sec = 0.20$ in/hi Step 4b Treatment - Volume-Based (ASCE-WEF) $Sec = 0.40$ A 12 hrs Specified Draw Down time Calculate water quality volume (Acre-Feet): $WOV = Area x Maximized Detention Volume (P_0) Sec = 0.22 P_0 A_0 12 hrs Specified Draw Down time Obtain A from Step 1 0.40 A 12 hrs$	Total LID Credits (Step 1+2+3)	LID compliant, check	for treatment sizing in	n Step 4 12	3.0
Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{xT} / A = 0.44$ I_A Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Step 4a Treatment - Flow-Based (Rational Method) Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Cook up value for in Table D-2c (Rainfall Intensity) 0.18 Jac Datain A_{xT} from Step 3 0.18 Jac Jace C = 0.95 0.95 C Flow = 0.95 * i * A_{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) WQV = Area x Maximized Detention Volume (P_0) Calculate water quality volume (Acre-Freet): WQV = Area x Maximized Detention Volume (P_0) Datain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain A from Step 1 0.40 A 0.22 P ₀ Adjusted water quality volume (acre-Freet): 0.22 P ₀ Calculate treatment volume (acre-H): 0.22 P ₀					
Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $A_{xT} / A = 0.44$ I_A Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Step 41 Treatment - Flow-Based (Rational Method) Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area .ook up value for in Table D-2c (Rainfall Intensity) 0.18 j .obtain A_{xT} from Step 3 0.18 JA_{xT} .obs c = 0.95 0.95 c . Flow = 0.95 * i * A_{xT} 0.03 cfs Step 4D Treatment - Volume-Based (ASCE-WEF) VQV = Area x Maximized Detention Volume (P ₀) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Datain A from Step 1 0.40 A 12 hrs Specified Draw Down time Datain A from Step 1 0.40 A 12 hrs Specified Draw Down time Datain A from Step 1 0.40 A 12 hrs Specified Draw Down time Datain A from Step 1 0.42 P ₀ Appendix E of this manual using k, from Step 2. P ₀ Datain A from Step 1 0.40 P ₀ 12 hrs Specified Draw Down time					
Further treatment is required, see choose flow-based or volume-based sizing in Step 4 Step 4a Treatment - Flow-Based (Rational Method) Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Data in Table D-2c (Rainfall Intensity) O.18] Dotain A _{xT} from Step 3 0.18] A _{xT} Table D-2c See C = 0.95 0.95] C To 0.03] cfs Flow = 0.95 * 1 * A _{xT} O.03] cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Datain A _{xT} 0.03] cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Datain A _x from Step 1 0.40 A 12] hrs Specified Draw Down time Datain A _x from Step 1 0.40 A 12] hrs Specified Draw Down time Datain A _x 0.02 P ₀ A from Step 2. Colspan= 2	Does project require hydromodification man	agement? If yes, proceed to using SacHM	_	0.1768	A _{AT}
Step 4a Treatment - Flow-Based (Rational Method) Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Look up value for i in Table D-2c (Rainfall Intensity) O.18 i Dotain A_{xT} from Step 3 0.18 A_{xT} Rainfall Intensity Use C = 0.95 0.95 C Flow = 0.95 * i * A_{xT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A _r from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume (acre-ft): 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man	agement? If yes, proceed to using SacHM tment	A _T - A _C -A _{LIDC} =		
Step 4a Treatment - Flow-Based (Rational Method) Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Look up value for i in Table D-2c (Rainfall Intensity) O.18 i Dotain A_{xT} from Step 3 0.18 A_{xT} Rainfall Intensity Use C = 0.95 0.95 C Flow = 0.95 * i * A_{xT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A _r from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume (acre-ft): 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man	agement? If yes, proceed to using SacHM tment	A _T - A _C -A _{LIDC} =		
Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Area Look up value for i in Table D-2c (Rainfall Intensity) 0.18 i Table D-2c Obtain A_{AT} from Step 3 0.18 A_{AT} 0.18 A_{AT} Use C = 0.95 0.95 C 0.95 C Flow = 0.95 * i * A_{AT} 0.03 cfs 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) WQV = Area x Maximized Detention Volume (P_0) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum	agement? If yes, proceed to using SacHM tment ie-Based, Non-LID Treatment	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44	
Look up value for i in Table D-2c (Rainfall Intensity) Look up value for i in Table D-2c (Rainfall Intensity) 0.18 Rainfall Intensity Roseville 0.20 in/hi Obtain A _{AT} from Step 3 0.18 A _{AT} Roseville i = 0.20 in/hi Use C = 0.95 0.95 C <	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum	agement? If yes, proceed to using SacHM tment ie-Based, Non-LID Treatment	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44	
Look up value for i in Table D-2c (Rainfall Intensity) 0.18 i Rainfall Intensity Dbtain A _{AT} from Step 3 0.18 A _{AT} Roseville i = 0.20 in/hi Jse C = 0.95 0.95 c Flow = 0.95 * i * A _{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ Appendix E of this manual using I _k from Step 2. P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Trea Adjusted Impervious Fraction of A for Volum Further treatment is required,	agement? If yes, proceed to using SacHM tment ie-Based, Non-LID Treatment See Choose flow-based or v	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44	
Dotain A _{AT} from Step 3 0.18 A _{AT} Roseville i = 0.20 in/hi Sacramento i = 0.18 in/hi 0.195 c 0.95 c Flow = 0.95 * i * A _{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) 0.03 cfs Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Me	agement? If yes, proceed to using SacHM tment ie-Based, Non-LID Treatment See choose flow-based or v thod)	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44	
Jse C = 0.95 0.95 C Flow = 0.95 * i * A _{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) 0.03 cfs Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Met calculate treatment flow (cfs):	agement? If yes, proceed to using SacHM tment e-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D-	I _A
Jse C = 0.95 Flow = 0.95 * i * A _{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Dbtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Dbtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Met calculate treatment flow (cfs):	agement? If yes, proceed to using SacHM tment e-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D-	I _A
Flow = 0.95 * i * A _{AT} 0.03 cfs Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Met Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity)	agement? If yes, proceed to using SacHM tment e-Based, Non-LID Treatment see choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Step 4b Treatment - Volume-Based (ASCE-WEF) Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ Nappendix E of this manual using I _k from Step 2. Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A _{AT} from Step 3	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18]i 0.18]A _{AT}	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) Obtain A _{AT} from Step 3 Use C = 0.95	agement? If yes, proceed to using SacHM tment ee-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) Obtain A _{AT} from Step 3 Use C = 0.95	agement? If yes, proceed to using SacHM tment ee-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Calculate water quality volume (Acre-Feet): WQV = Area x Maximized Detention Volume (P ₀) Obtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Obtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ P ₀ Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) Obtain A _{AT} from Step 3 Use C = 0.95	agement? If yes, proceed to using SacHM tment ee-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Dbtain A from Step 1 0.40 A 12 hrs Specified Draw Down time Dbtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ n Appendix E of this manual using I _h from Step 2. Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Ise C = 0.95 Flow = 0.95 * i * A_{AT}	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 C 0.03 cfs	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Dbtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ n Appendix E of this manual using I _A from Step 2. Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Ise C = 0.95 Flow = 0.95 * i * A_{AT}	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 C 0.03 cfs	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
Dbtain P ₀ : Maximized Detention Volume from figures E-1 to E-4 0.22 P ₀ n Appendix E of this manual using I _k from Step 2. Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required , Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-WE	agement? If yes, proceed to using SacHM tment see Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF)	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	0.44 J in Step 4 Table D- Roseville Sacrameni	IA 2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr
n Appendix E of this manual using I _k from Step 2.	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 ise C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-With Calculate water quality volume (Acre-Feet):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18]i 0.18]A _{AT} 0.95]C 0.03]cfs EF) WQV = Area x Maximized Detention 1	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
Calculate treatment volume (acre-ft):	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required , Step 4a Treatment - Flow-Based (Rational Mer Salculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Ise C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-With Salculate water quality volume (Acre-Feet): Obtain A from Step 1	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 1 0.40 A	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
Treatment volume = A x (P ₀ / 12) 0.007270 Acre-Feet	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required , Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) Potain A _{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A _{AT} Step 4b Treatment - Volume-Based (ASCE-With Calculate water quality volume (Acre-Feet): Potain A from Step 1 Potain P ₀ : Maximized Detention Volume from figures E-1	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 1 0.40 A	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Salculate treatment flow (cfs): cook up value for i in Table D-2c (Rainfall Intensity) Potain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-With Calculate water quality volume (Acre-Feet): Potain A from Step 1 Potain P ₀ : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I ₆ from Step 2.	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See Choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 1 0.40 A	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-Wit Calculate water quality volume (Acre-Feet): Statual A from Step 1 Obtain P_0 : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I_h from Step 2. Calculate treatment volume (acre-ft):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 0.40 A to E-4 0.22 P ₀	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-Wit Calculate water quality volume (Acre-Feet): Statual A from Step 1 Obtain P_0 : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I_h from Step 2. Calculate treatment volume (acre-ft):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 0.40 A to E-4 0.22 P ₀	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-Wit Calculate water quality volume (Acre-Feet): Statual A from Step 1 Obtain P_0 : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I_h from Step 2. Calculate treatment volume (acre-ft):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 0.40 A to E-4 0.22 P ₀	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-Wit Calculate water quality volume (Acre-Feet): Statual A from Step 1 Obtain P_0 : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I_h from Step 2. Calculate treatment volume (acre-ft):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 0.40 A to E-4 0.22 P ₀	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr
	Does project require hydromodification man Adjusted Area for Flow-Based, Non-LID Treat Adjusted Impervious Fraction of A for Volum Further treatment is required, Step 4a Treatment - Flow-Based (Rational Mer Calculate treatment flow (cfs): ook up value for i in Table D-2c (Rainfall Intensity) Obtain A_{AT} from Step 3 Use C = 0.95 Flow = 0.95 * i * A_{AT} Step 4b Treatment - Volume-Based (ASCE-Wit Calculate water quality volume (Acre-Feet): Statual A from Step 1 Obtain P_0 : Maximized Detention Volume from figures E-1 a Appendix E of this manual using I_h from Step 2. Calculate treatment volume (acre-ft):	agement? If yes, proceed to using SacHM tment te-Based, Non-LID Treatment See choose flow-based or v thod) Flow = Runoff Coefficient x Rainfall Ir 0.18 i 0.18 A _{AT} 0.95 c 0.03 cfs EF) WQV = Area x Maximized Detention 0.40 A to E-4 0.22 P ₀	$A_{T} - A_{C} - A_{LIDC} = \begin{bmatrix} \\ A_{AT} / A \end{bmatrix}$ rolume-based sizing Intensity x Area	0.44 J in Step 4 Table D- Roseville Sacrament Folsom	2c ainfall Intensity i = 0.20 in/hr to i = 0.18 in/hr i = 0.20 in/hr

Name of Drainage Shed: DMA-04]	Fill in Blue Highlighted boxes	
Location of project: Sacramento			J	·	
Step 1 - Open Space and Pervious Area Cr	redits				
Is your project within the drainage area of a common drainage	plan that includes open space	? If not, skip to 1 b.			
1 a. Common Drainage Plan Area			488 acres	A _{CDP}	
Common Drainage Plan Open Space (Off-project)			121 acres	A _{os}	see area example
a. Natural storage reservoirs and drainage corridors			0 acres		below
b. Buffer zones for natural water bodies			0 acres		Delow
c. Natural areas including existing trees, other vegeta	tion, and soil		0 acres		
d. Common landscape area/park			107 acres		
e. Regional Flood Control/Drainage basins			14 acres		
1 b. Project Drainage Shed Area (Total) Project-Specific Open Space (In-project, commun	al**)		0.451 acres	A A _{PSOS}	
a. Natural storage reservoirs and drainage corridors	,		0.00 acres	1000	
b. Buffer zones for natural water bodies			0.00 acres		
c. Natural areas including existing trees, other vegeta	tion, and soil		0.00 acres		see area example
d. Landscape area/park			0.058 acres		below
e. Flood Control/Drainage basins			0.00 acres		
** Doesn't include impervious areas within individual l	ots and surrounding indiv	vidual units. That is ac	counted for below usin	g Form D-1a in Step 2.	
Area with Runoff Reduction Potential	A - A _{PSOS} =		0.3930 acres	A _T	
Assumed Initial Impervious Fraction	A _T / A =		0.87	Ι	
Open Space & Pervious Area LID Credit (Step 1)					
(A	os/A _{CDP} +A _{PSOS} /A)x100 =		38 pts		





Step 2 - Runoff Reduction Credits							
Runoff Reduction Treatments	Impervious Area Managed			fficiency Factor		Effective Area Managed (A _C)	
Porous Pavement:	-						
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0	acres	x		=	0.000	acres
Option 2: Disconnected Pavement used in Option 1)	Form D-2a for credits				l	0.00	acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0444	acres			=	0.04	acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.120684	acres			=	0.12	acres
Ecoroof (see Fact Sheet)	0	acres			=	0.00	acres
Interceptor Trees use Form D-2b for credit (see Fact Sheet)	'S					0.00	acres
Total Effective Area Managed by Runoff Reduction Meas	ures			A _C		0.17	acres
Runoff Reduction Credit (Step 2)				(A _C / A	Α _T)*100 =	42	pts

	Table D-2a				Table I	D-2b	
		Efficiency				Minimu	m travel
	Porous Pavement Type	Multiplier		Maximum roof		dista	
	Cobblestone Block Pavement Pervious Concrete/Asphalt	0.40 0.60		≤ 3,500 sq f ≤ 5,000 sq f			21 ft 24 ft
	Modular Block Pavement &	0.75		≤ 7,500 sq f	t	:	28 ft
	Reinforced Grass Pavement	1.00		≤ 10,000 sq	ft		32 ft
	-2a: Disconnected Pavement Sheet for more information regarding Disc		credit guidelines				
Paveme	nt Draining to Porous Pavement				_	_	Effective Area Managed (A _c)
2. Enter	area draining onto Porous Pavement			0.00		acres	Box K1
3 Enter	area of Receiving Porous Pavement			0.00		acres	Box K2
	area entered in Step 2 under Porous	Pavement)		0.00		80103	DOX NZ
	of Areas (Box K1 / Box K2)	,		0.00			Box K3
5 Salact	multiplier using ratio from Box K3 and	enter into Box KA					
	Ratio (Box D)	ontor into box R4	Multiplier				
	Ratio is ≤ 0.5 Ratio is > 0.5 and < 1.0		1.00				Pay 1/4
	Ratio is > 0.5 and < 1.0 Ratio is > 1.0 and < 1.5		0.83 0.71	1			Box K4
	Ratio is > 1.5 and < 2.0		0.55				
6. Enter	Efficiency of Porous Pavement (see ta	able below)					Box K5
		Efficiency					
	Porous Pavement Type	Multiplier					
	Cobblestone Block Pavement Pervious Concrete	0.40					
	Asphalt Pavement	0.60					
	Modular Block Pavement	0.75					
	Porous Gravel Pavement Reinforced Grass Pavement	1.00					
7. Multip	ly Box K2 by Box K5 and enter into Bo			0.00		acres	Box K6
8. Multip	ly Boxes K1,K4, and K5 and enter the	result in Box K7		0.00		acres	Box K7
9. Add B	ox K6 to Box K7 and multiply by 60%,	and enter the Resi	ılt in Box K8				0.00 acres
This is th	e amount of area credit to enter into th	e "Disconnected P	avement" Box of Form D-2				
Form D	-2b: Interceptor Tree Workshe	et					
See Fact	Sheet for more information regarding Inter	rceptor Tree credit gu	idelines				
New Eve	rgreen Trees						
1. Enter	number of new evergreen trees that q	ualify as Intercepto	Trees in Box L1.	0	trees	Box L1	
2. Multin	ly Box L1 by 200 and enter result in B	Box L2		0	sq. ft.	Box L2	
				`			
	iduous Trees number of new deciduous trees that q	ualify as Intercente	Trees in Box L3	0	troop	Poy 12	
J. Linter	namber of new deciduous trees that q	adiny as intercepto	Hoga III DOX EG.	0	trees	Box L3	
4. Multip	ly Box L3 by 100 and enter result in Bo	ox L4		0	sq. ft.	Box L4	
Existing	Tree Canopy						
5. Enter	square footage of existing tree canopy	/ that qualifies as E	xisting Tree canopy in Box L5.	0	sq. ft.	Box L5	
6. Multip	ly Box L5 by 0.5 and enter the result ir	n Box L6		0	sq. ft.	Box L6	
Total Int	erceptor Tree EAM Credits						
Add Boxe	es L2, L4, and L6 and enter it into Box	L7		0	sq. ft.	Box L7	
Divido Pr	x 1.7 by 43.560 and multiply by 200/ +	o det effectivo area	managed and enter result in Roy I 9	0.00	0.017-7	Devilo	
	ox L7 by 43,560 and multiply by 20% to e amount of area credit to enter into th			0.00	acres	Box L8	

Step 3 - Runoff Management Credits Capture and Use Credits			
	, Cisterns, and automatically-emptied systems		
(see Fact Sheet)	enter gallons, for simple rain barrels		0.00 acres
Automated-Control Capture and Use Syste			
(see Fact Sheet, then enter impervious area manag	ged by the system)		0.00 acres
Bioretention/Infiltration Credits	DND- Division and the second		
Impervious Area Managed by Bioretention (see Fact Sheet)	BMPs Bioretention Area - sq ft Subdrain Elevation - inches		
	Ponding Depth, inches		0.0000 acres
Impervious Area Managed by Infiltration B (see Fact Sheet)	BMPs Drawdown Time, hrs drawdown_hrs_i	nf	
	Soil Infiltration Rate, in/hr soil_inf_rate		
Sizing O	ption 1: Capture Volume, acre-ft capture_vol_inf		0.00 acres
g -			
Sizing O	ption 2: Infiltration BMP surface area, sq ftsoil_surface_are	a	0.0000 acres
Ba	asin or trench? approximate BMP depth	0.00 ft	
Impervious Area Managed by Amended Sc	oil or Mulch Beds		
(see Fact Sheet)	Mulched Infiltration Area, sq ft mulch_area		0.00 acres
Total Effective Area Managed by Capture-and	d-Use/Bioretention/Infiltration BMPs	(0.00000 A _{LIDc}
Runoff Management Credit (Step 3)		A _{LIDC} /A _T *200 =	0.0 pts
Total LID Credits (Step 1+2+3)		ID Is Required	79.7
Does project require hydromodification man	agement? If yes, proceed to using SacHM.		
Adjusted Area for Flow-Based, Non-LID Trea	utment A _T - A _C	-A _{LIDC} = 0.2279	A _{AT}
•			
Adjusted Area for Flow-Based, Non-LID Trea Adjusted Impervious Fraction of A for Volum		$A_{AT} - A_{LIDC} = 0.2279$ $A_{AT} - A_{AT} = 0.50$	A _{AT}
Adjusted Impervious Fraction of A for Volum	ne-Based, Non-LID Treatment	A _{AT} / A = 0.50	
Adjusted Impervious Fraction of A for Volum		A _{AT} / A = 0.50	
Adjusted Impervious Fraction of A for Volum	re-Based, Non-LID Treatment	A _{AT} / A = 0.50	
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me	ne-Based, Non-LID Treatment //	A _{AT} / A = 0.50	
Adjusted Impervious Fraction of A for Volum	re-Based, Non-LID Treatment	A _{AT} / A = 0.50	I _A
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me	ne-Based, Non-LID Treatment //	A _{AT} / A = 0.50	IA IA D-2c Rainfall Intensity
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): pook up value for i in Table D-2c (Rainfall Intensity)	thod)	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil	IA D-2c Rainfall Intensity le i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs):	re-Based, Non-LID Treatment	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): pook up value for i in Table D-2c (Rainfall Intensity)	thod)	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Mer alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95	re-Based, Non-LID Treatment	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): pok up value for i in Table D-2c (Rainfall Intensity) btain A _{AT} from Step 3	re-Based, Non-LID Treatment	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Mer alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95	re-Based, Non-LID Treatment	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT}	re-Based, Non-LID Treatment , see choose flow-based or volume-based thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18 i 0.23 A _{AT} 0.95 c 0.04 cfs	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Mer alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95	re-Based, Non-LID Treatment , see choose flow-based or volume-based thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18 i 0.23 A _{AT} 0.95 c 0.04 cfs	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT}	re-Based, Non-LID Treatment , see choose flow-based or volume-based thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18 i 0.23 A _{AT} 0.95 c 0.04 cfs	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacram	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet):	Arthod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18 i 0.23 A _{AT} 0.95 c 0.04 cfs EF) WQV = Area x Maximized Detention Volume (P ₀)	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): book up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-WI	re-Based, Non-LID Treatment	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	IA IA
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Mer alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Wi alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1	re-Based, Non-LID Treatment A , see choose flow-based or volume-based	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Wi alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using I _A from Step 2.	re-Based, Non-LID Treatment A , see choose flow-based or volume-based	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using l_{h} from Step 2. alculate treatment volume (acre-ft):	re-Based, Non-LID Treatment A , see choose flow-based or volume-based .thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18]i 0.23] A _{AT} 0.95] C 0.04] cfs WQV = Area x Maximized Detention Volume (P ₀) 0.45 A 0.45 A 0.45 A	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Wi alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using I _A from Step 2.	re-Based, Non-LID Treatment A , see choose flow-based or volume-based	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using l_{h} from Step 2. alculate treatment volume (acre-ft):	re-Based, Non-LID Treatment A , see choose flow-based or volume-based .thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18]i 0.23] A _{AT} 0.95] C 0.04] cfs WQV = Area x Maximized Detention Volume (P ₀) 0.45 A 0.45 A 0.45 A	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using l_{h} from Step 2. alculate treatment volume (acre-ft):	re-Based, Non-LID Treatment A , see choose flow-based or volume-based .thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18]i 0.23] A _{AT} 0.95] C 0.04] cfs WQV = Area x Maximized Detention Volume (P ₀) 0.45 A 0.45 A 0.45 A	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using l_{h} from Step 2. alculate treatment volume (acre-ft):	re-Based, Non-LID Treatment A , see choose flow-based or volume-based .thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18]i 0.23] A _{AT} 0.95] C 0.04] cfs WQV = Area x Maximized Detention Volume (P ₀) 0.45 A 0.45 A 0.45 A	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr
Adjusted Impervious Fraction of A for Volum Further treatment is required, tep 4a Treatment - Flow-Based (Rational Me alculate treatment flow (cfs): bok up value for i in Table D-2c (Rainfall Intensity) btain A_{AT} from Step 3 se C = 0.95 Flow = 0.95 * i * A_{AT} tep 4b Treatment - Volume-Based (ASCE-Will alculate water quality volume (Acre-Feet): btain A from Step 1 btain P ₀ : Maximized Detention Volume from figures E-1 Appendix E of this manual using l_{h} from Step 2. alculate treatment volume (acre-ft):	re-Based, Non-LID Treatment A , see choose flow-based or volume-based .thod) Flow = Runoff Coefficient x Rainfall Intensity x Area 0.18]i 0.23] A _{AT} 0.95] C 0.04] cfs WQV = Area x Maximized Detention Volume (P ₀) 0.45 A 0.45 A 0.45 A	A _{AT} / A = 0.50 sizing in Step 4 Table Rosevil Sacran Folsom	ED-2c Rainfall Intensity le i = 0.20 in/hr hento i = 0.18 in/hr i = 0.20 in/hr

v06232012

WOODSPRING SUITES



WE

PRELIMINARY DRAINAGE STUDY

APPENDIX D

PROPRIETARY INFORMATION

Bioretention Trash Best Management Practices (BMP) Minimum Specifications



Figure A: CA State University-Sacramento Bioretention BMP

Figure B. American Common Bio-Swale Detail

Description

Bioretention BMPs, including bio-swales, remove pollutants from storm water runoff through physical filtration as storm water passes through media layers. The treatment area consists of: a ponding layer; vegetated, mulched, and engineered soil layer; and supporting bed layer of sand or gravel. Bioretention BMPs can be a variety of shapes and sizes. Storm water entering the treatment area evapotranspires or gradually passes through the mulch/soil/gravel layers where it then infiltrates into native soil or collects in an underdrain that conveys to a discharge point.

Performance and Design

The bioretention BMP must be designed to trap trash particles that are 5 mm or greater and prevent offsite migration, and the design must include:

- 1. A screen¹ that prohibits the discharge of particles 5 mm or greater at the BMP overflow or bypass outlet;
- 2. A treatment capacity equal to or greater than the volume collected during the region specific one-year, one-hour storm event from the applicable drainage area; or a capacity to carry at least the same flows of the corresponding storm drain; and
- Stamped and signed design plans by a registered California licensed professional civil engineer (see Bus. & Prof. Code Section 6700, et seq.).

Maintenance

Regular maintenance is required to maintain adequate trash capture capacity and to ensure that trapped trash does not migrate offsite. The owner should establish a maintenance schedule based on site-specific factors, including the size of the bioretention BMP trench, storm frequency, and characterization of upstream trash and vegetation accumulation. Trash capture and maintenance may be improved by addition of various forms of pretreatment, such as upstream swales or forebays.

¹Upon approval by the Regional Water Quality Control Board Executive Officer, an external design feature or upgradient structure designed to bypass flows exceeding the region specific one-year, one-hour, storm event does not require a 5 mm screen.

FlexStorm Pure[™] Inlet Filters

FlexStorm Pure inlet filters are the preferred choice for permanent inlet protection and stormwater runoff control. Constructed of stainless steel, FlexStorm Pure inlet filters will fit any drainage structure and are available with site-specific filter bags providing various levels of filtration.

Applications

- Car washes
- Commercial
- Loading ramps
- Industrial

Features

- Custom stainless steel frames are configured to fit into any drainage structure
- Flow and bypass rates meet specific inlet requirements
- Works below grade with bypass to drain area if bag is full
- Installed and maintained by one worker, without additional equipment

- Gas stations
- Parking lots
- Dock drains
- Maintenance

Benefits

- Stainless steel frame provides extended service life
- Easily replaceable filter bags
- Meets stringent removal requirements:
- All bags rated >80% removal efficiency of street sweep-size particles
- Optional FXP/PCP bags can be used for hydrocarbon removal when required







FlexStorm Pure Inlet Filters Specification

Material and Performance

The filter is comprised of a stainless steel frame and a replaceable geotextile filter bag attached to the frame with a stainless steel locking band. The filter bag hangs suspended below the grate that shall allow full bypass flow into the drainage structure if the bag is completely filled with sediment. The standard woven polypropylene "FX" filters bags are rated for 200 gpm/sqft with a removal efficiency of 82% when filtering a USDA Sandy Loam sediment load. The post-construction PCP filter bags are rated for 137 gpm/sqft and have been third-party tested at 99% TSS removal.

Installation

- 1. Remove the grate from the inlet.
- 2. Clean debris from the ledges of the inlet.
- 3. Place the inlet filter onto the load bearing ledges of the structure.
- 4. Replace the grate and confirm it is not elevated more than 1/8" (3 mm).

Frequency of Inspections

- 1. Inspection should occur following rain events greater than ½" (13 mm).
- 2. Filter inspections should occur a minimum of three times per year, and in snowfall affected regions, inspections prior to and after snowfall season.
- 3. Industrial application site inspections (loading ramps, wash racks & maintenance facilities) to be scheduled on a recurring basis no less than four times per year or as needed.

Maintenance Guidelines

- 1. Empty the filter bag manually or by industrial vacuum taking care not to damage the geotextile bag when more than half filled or during scheduled inspection period.
- 2. Remove compacted silt from sediment bag and flush with medium spray.
- 3. "PCP" style bags should be pressed or wrung to recover retained oils.
- 4. Oil skimmer pouches solidify and darken when saturated, indicating time for replacement.
- 5. Dispose of all oil-contaminated products and recovered oils in accordance with EPA guidelines. Oil skimmer pouches, since a solidifier, will not leach and can be disposed of directly.
- 6. Inspect and replace bag if torn or punctured.

Filter Bag Replacement

- 1. Remove the bag by loosening or cutting off clamping band.
- 2. Take the new correctly sized sediment bag and secure hose clamping band to the frame channel as previously removed.
- 3. Ensure bag is secure and there is no slack around perimeter.

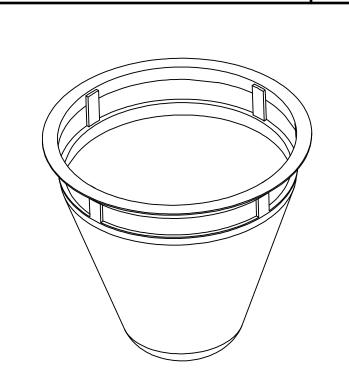
Build America, Buy America (BABA)

For any questions related to Build America, Buy America (BABA) Act compliance contact an ADS representative.



ADS "Terms and Conditions of Sale" are available on the ADS website, www.adspipe.com. ADS[™], FlexStorm Pure[™] and the Green Stripe are registered trademarks of Advanced Drainage Systems, Inc. © 2023 Advanced Drainage Systems, Inc. #10892 02/23 MH

ADS FLEXSTORM PURE INLET FILTERS



ROUND INLET FILTER				
Clear Opening Size	Style P/N	Minimum Bypass		
Clear Opening Size	SLYIE P/IN	Flow Rate (CFS)		
Small: 10" - 16" Dia.	62SHDR	1.6		
Medium: 17" - 24" Dia.	62MHDR	2.7		
Large: 25" - 36" Dia.	62LHDR	3.8		

CURB OPEN THROAT INLET FILT	ER
Basin Width Size	S
Up to 4' Width (1 Piece Set)	62
4' - 8' Width (2 Piece Set)	62
8' - 12' Width (3 Piece Set)	62
12' - 16' Width (4 Piece Set)	62

4

SPECIFICATIONS BY NOMINAL SIZE RANGE (MIN. VALUES)					
Nominal Bag	Solids Storage	Flow Rate (CFS)*		Oil Retention (Oz)**	
Size	(CuFt)	FX/FXP	РСР	FXP	РСР
Small	1.6	1.2	0.8	89	168
Medium	2.1	1.7	1.2	89	204
Large	3.8	2.7	1.8	89	262
Extra Large	4.2	3.6	2.4	178	319
TSS Removal Rate		82%	N/A	Large scale 3rd party testing per ASTM D 7351 using 7% concentration USDA Sandy Loam	
TSS Removal Rate		NA	99%	Large Scale testing at 90 GPM using US Silica OK-110 sand at 1750 mg/L measuring TSS per SM 2540D.	
TPH Removal Rate		NA	97%	Large Scale testing at 90 GPM with used motor oil at 243 mg/L measuring per EPA Method 1664A.	
*Filter bag at 50% max solids storage capacity					
**Filter bag at 50% oil capacity and oil skimmer pouch at 100% oil capacity					

NOTES:

4

1. ALL FRAMING IS CONSTRUCTED OF 304 STAINLESS STEEL.

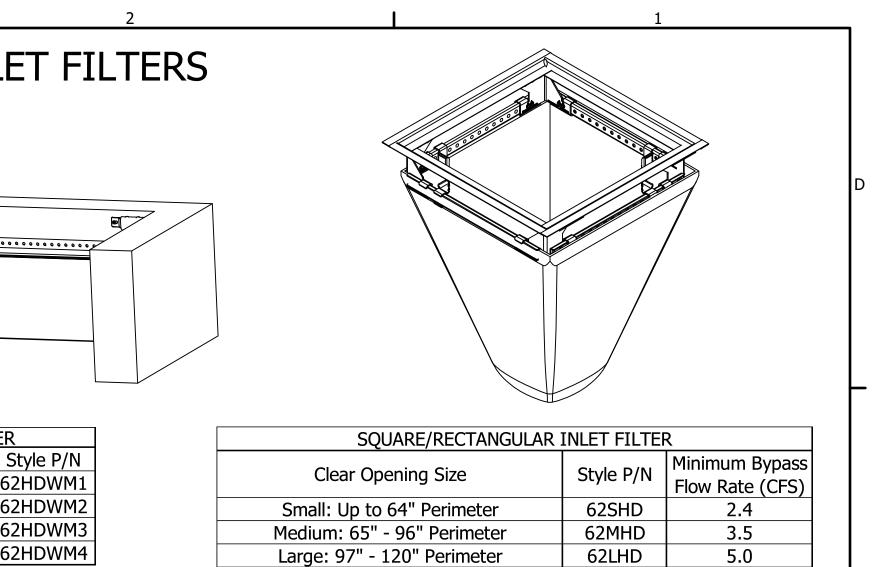
2. TOTAL BYPASS CAPACITY WILL VARY WITH EACH SIZE DRAINAGE STRUCTURE. ADS DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE.

3. UPON ORDERING, CONFIRMATION OF THE INLET SPECIFICATION, PRECAST/FOUNDRY CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE AN INLET FILTER.

3

4. ALL FILTERS MEET ASTM D8057 SPECIFICATIONS.

5. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.ADSPIPE.COM.

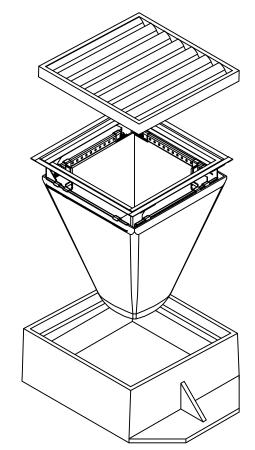


Extra-Large: 121" or Greater Perimeter

INSTALLATION INSTRUCTIONS:

1. REMOVE GRATE

- 2. CLEAN GRATE LEDGE
- 3. SET INLET FILTER ON LOAD
- **BEARING LEDGE OF STRUCTURE**
- 4. REPLACE GRATE



62XLHD

7.2

ALL PRODUCTS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS WWW.ADSPIPE.COM PH. 1-800-821-6710

Our reason is water.™

SIZE	DATE		DWG NO		REV
С	02/06/	/2023	ADS FLEXSTORM	PURE	А
SCALE	N/A			SHEET 1 OF 1	
				L	

2

Aaron Bernatchy (CWE)

From:	Wint Tun <wtun@cityofsacramento.org></wtun@cityofsacramento.org>
Sent:	Wednesday, June 5, 2024 4:01 PM
To:	Aaron Bernatchy (CWE); Emmerson Zapata
Cc:	Bob Eynck (CWE)
Subject:	RE: Woodspring Suites Hotel at Centerpointe P24-013
Attachments:	2018 Commercial LID CreditsPW-withregionalbasin5NORTH_LID.xlsx

***** CAUTION: THIS EMAIL IS FROM AN EXTERNAL (i.e. NON-CWE) SENDER. *****

Aaron,

Your interpretation is correct. The regional detention basin provides the necessary treatment; therefore, you are required to implement Low Impact Development (LID) measures and achieve 100 LID credits for the site. Please ensure that you include the LID worksheet with your study as specified in the comments. Since the project is located in the North Natomas Area, you can receive some credits for the Common Drainage Plan Open Space (Off-Project). See the attached LID worksheet for Basin 15's Common Drainage Plan Open Space Credits. Be sure to fill in the specific Project Drainage Shed Area and the specific open space acreage.

I have confirmed that your proposed project does not require an onsite detention basin since the city's drainage system can handle up to 95% imperviousness. The post-project imperviousness shown on Sheet SM2 is 85.2%, which is within the city's allowed limit. However, this project still requires the implementation of LID and Full Trash Capture measures, as well as the inclusion of an LID worksheet as mentioned above. Additionally, the 10-year and 100-year HGL at node 5319 are 9.897 and 10.474 respectively.

Please include the city benchmark number and datum information used for the project in your report. If the runoff is directed into the drainage on the north, the neighboring properties must be under the same ownership. If they are not, an agreement must be provided for the construction of drainage across the neighboring property. This additional information should also be included in your report.

If you have any further questions or need additional clarification, please let me know.

Thank You,

Wint Tun Assistant Civil Engineer Department of Utilities 1395 35th Ave (916) 808-6241

