ATTACHMENT E2

Attachment A-2

Revised IS/MND Appendices

Appendix A

CalEEMod Outputs

E Green St Existing Unmit
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	69.44	1000sqft	1.59	69,442.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2020
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - operations only.

Off-road Equipment - Operations only.

Grading - Operations only.

Trips and VMT - Operations only.

Vehicle Trips - TIA

Energy Use - Existing emissions

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	4/8/2020	4/7/2020
tblEnergyUse	LightingElect	4.63	3.77
tblEnergyUse	T24E	5.99	4.60
tblEnergyUse	T24NG	12.05	10.02
tblGrading	AcresOfGrading	0.50	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	2.6300e-003	0.0000	2.6300e-003	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6300e-003**	**0.0000**	**2.6300e-003**	**1.4500e-003**	**0.0000**	**1.4500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	2.6300e-003	0.0000	2.6300e-003	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6300e-003**	**0.0000**	**2.6300e-003**	**1.4500e-003**	**0.0000**	**1.4500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2832	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003
Energy	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	237.6671	237.6671	0.0126	3.1600e-003	238.9246
Mobile	0.1820	0.9329	2.4841	8.0300e-003	0.6283	8.3100e-003	0.6366	0.1684	7.8000e-003	0.1762	0.0000	740.4788	740.4788	0.0415	0.0000	741.5164
Waste						0.0000	0.0000		0.0000	0.0000	13.1092	0.0000	13.1092	0.7747	0.0000	32.4774
Water						0.0000	0.0000		0.0000	0.0000	3.9155	54.0170	57.9325	0.4054	0.0102	71.0952
Total	**0.4691**	**0.9683**	**2.5147**	**8.2400e-003**	**0.6283**	**0.0110**	**0.6393**	**0.1684**	**0.0105**	**0.1789**	**17.0247**	**1,032.1646**	**1,049.1892**	**1.2342**	**0.0133**	**1,084.0154**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2832	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003
Energy	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	237.6671	237.6671	0.0126	3.1600e-003	238.9246
Mobile	0.1820	0.9329	2.4841	8.0300e-003	0.6283	8.3100e-003	0.6366	0.1684	7.8000e-003	0.1762	0.0000	740.4788	740.4788	0.0415	0.0000	741.5164
Waste						0.0000	0.0000		0.0000	0.0000	13.1092	0.0000	13.1092	0.7747	0.0000	32.4774
Water						0.0000	0.0000		0.0000	0.0000	3.9155	54.0170	57.9325	0.4054	0.0102	71.0952
Total	**0.4691**	**0.9683**	**2.5147**	**8.2400e-003**	**0.6283**	**0.0110**	**0.6393**	**0.1684**	**0.0105**	**0.1789**	**17.0247**	**1,032.1646**	**1,049.1892**	**1.2342**	**0.0133**	**1,084.0154**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/7/2020	4/7/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40

<u>Trips and VMT</u>

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6300e-003	0.0000	2.6300e-003	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6300e-003**	**0.0000**	**2.6300e-003**	**1.4500e-003**	**0.0000**	**1.4500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6300e-003	0.0000	2.6300e-003	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6300e-003**	**0.0000**	**2.6300e-003**	**1.4500e-003**	**0.0000**	**1.4500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1820	0.9329	2.4841	8.0300e-003	0.6283	8.3100e-003	0.6366	0.1684	7.8000e-003	0.1762	0.0000	740.4788	740.4788	0.0415	0.0000	741.5164
Unmitigated	0.1820	0.9329	2.4841	8.0300e-003	0.6283	8.3100e-003	0.6366	0.1684	7.8000e-003	0.1762	0.0000	740.4788	740.4788	0.0415	0.0000	741.5164

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	676.37	150.69	64.58	1,655,415	1,655,415
Total	676.37	150.69	64.58	1,655,415	1,655,415

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	199.0909	199.0909	0.0119	2.4500e-003	200.1191
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	199.0909	199.0909	0.0119	2.4500e-003	200.1191
NaturalGas Mitigated	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.5762	38.5762	7.4000e-004	7.1000e-004	38.8055
NaturalGas Unmitigated	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.5762	38.5762	7.4000e-004	7.1000e-004	38.8055

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	722891	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.5762	38.5762	7.4000e-004	7.1000e-004	38.8055
Total		**3.9000e-003**	**0.0354**	**0.0298**	**2.1000e-004**		**2.6900e-003**	**2.6900e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**38.5762**	**38.5762**	**7.4000e-004**	**7.1000e-004**	**38.8055**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	722891	3.9000e-003	0.0354	0.0298	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.5762	38.5762	7.4000e-004	7.1000e-004	38.8055
Total		**3.9000e-003**	**0.0354**	**0.0298**	**2.1000e-004**		**2.6900e-003**	**2.6900e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**38.5762**	**38.5762**	**7.4000e-004**	**7.1000e-004**	**38.8055**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	902052	199.0909	0.0119	2.4500e-003	200.1191
Total		**199.0909**	**0.0119**	**2.4500e-003**	**200.1191**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	902052	199.0909	0.0119	2.4500e-003	200.1191
Total		**199.0909**	**0.0119**	**2.4500e-003**	**200.1191**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2832	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003
Unmitigated	0.2832	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0322					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2509					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003
Total	**0.2832**	**1.0000e-005**	**8.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7200e-003**	**1.7200e-003**	**0.0000**	**0.0000**	**1.8400e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0322					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2509					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8400e-003
Total	**0.2832**	**1.0000e-005**	**8.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7200e-003**	**1.7200e-003**	**0.0000**	**0.0000**	**1.8400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	57.9325	0.4054	0.0102	71.0952
Unmitigated	57.9325	0.4054	0.0102	71.0952

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	12.3418 / 7.56435	57.9325	0.4054	0.0102	71.0952
Total		**57.9325**	**0.4054**	**0.0102**	**71.0952**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	12.3418 / 7.56435	57.9325	0.4054	0.0102	71.0952
Total		**57.9325**	**0.4054**	**0.0102**	**71.0952**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.1092	0.7747	0.0000	32.4774
Unmitigated	13.1092	0.7747	0.0000	32.4774

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	64.58	13.1092	0.7747	0.0000	32.4774
Total		**13.1092**	**0.7747**	**0.0000**	**32.4774**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	64.58	13.1092	0.7747	0.0000	32.4774
Total		**13.1092**	**0.7747**	**0.0000**	**32.4774**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

E Green St Existing Unmit

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	69.44	1000sqft	1.59	69,442.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2020
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - operations only.

Off-road Equipment - Operations only.

Grading - Operations only.

Trips and VMT - Operations only.

Vehicle Trips - TIA

Energy Use - Existing emissions

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	4/8/2020	4/7/2020
tblEnergyUse	LightingElect	4.63	3.77
tblEnergyUse	T24E	5.99	4.60
tblEnergyUse	T24NG	12.05	10.02
tblGrading	AcresOfGrading	0.50	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	5.2693	0.0000	5.2693	2.8965	0.0000	2.8965	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	5.2693	0.0000	5.2693	2.8965	0.0000	2.8965	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Energy	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Mobile	1.3849	6.4461	18.6063	0.0602	4.6334	0.0601	4.6934	1.2401	0.0563	1.2964		6,119.1645	6,119.1645	0.3335		6,127.5007
Total	**2.9583**	**6.6404**	**18.7765**	**0.0614**	**4.6334**	**0.0749**	**4.7082**	**1.2401**	**0.0711**	**1.3112**		**6,352.1825**	**6,352.1825**	**0.3380**	**4.2700e-003**	**6,361.9043**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Energy	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Mobile	1.3849	6.4461	18.6063	0.0602	4.6334	0.0601	4.6934	1.2401	0.0563	1.2964		6,119.1645	6,119.1645	0.3335		6,127.5007
Total	**2.9583**	**6.6404**	**18.7765**	**0.0614**	**4.6334**	**0.0749**	**4.7082**	**1.2401**	**0.0711**	**1.3112**		**6,352.1825**	**6,352.1825**	**0.3380**	**4.2700e-003**	**6,361.9043**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/7/2020	4/7/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

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

3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3849	6.4461	18.6063	0.0602	4.6334	0.0601	4.6934	1.2401	0.0563	1.2964		6,119.1645	6,119.1645	0.3335		6,127.5007
Unmitigated	1.3849	6.4461	18.6063	0.0602	4.6334	0.0601	4.6934	1.2401	0.0563	1.2964		6,119.1645	6,119.1645	0.3335		6,127.5007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	676.37	150.69	64.58	1,655,415	1,655,415
Total	676.37	150.69	64.58	1,655,415	1,655,415

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
NaturalGas Unmitigated	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1980.52	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Total		**0.0214**	**0.1942**	**0.1631**	**1.1700e-003**		**0.0148**	**0.0148**		**0.0148**	**0.0148**		**233.0028**	**233.0028**	**4.4700e-003**	**4.2700e-003**	**234.3874**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.98052	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Total		**0.0214**	**0.1942**	**0.1631**	**1.1700e-003**		**0.0148**	**0.0148**		**0.0148**	**0.0148**		**233.0028**	**233.0028**	**4.4700e-003**	**4.2700e-003**	**234.3874**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Unmitigated	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Total	**1.5520**	**7.0000e-005**	**7.1400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0152**	**0.0152**	**4.0000e-005**		**0.0162**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Total	**1.5520**	**7.0000e-005**	**7.1400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0152**	**0.0152**	**4.0000e-005**		**0.0162**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

E Green St Existing Unmit

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	69.44	1000sqft	1.59	69,442.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2020
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - operations only.

Off-road Equipment - Operations only.

Grading - Operations only.

Trips and VMT - Operations only.

Vehicle Trips - TIA

Energy Use - Existing emissions

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	4/8/2020	4/7/2020
tblEnergyUse	LightingElect	4.63	3.77
tblEnergyUse	T24E	5.99	4.60
tblEnergyUse	T24NG	12.05	10.02
tblGrading	AcresOfGrading	0.50	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	5.2693	0.0000	5.2693	2.8965	0.0000	2.8965	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	5.2693	0.0000	5.2693	2.8965	0.0000	2.8965	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Energy	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Mobile	1.3477	6.6214	17.7205	0.0573	4.6334	0.0604	4.6937	1.2401	0.0566	1.2967		5,820.6968	5,820.6968	0.3320		5,828.9967
Total	**2.9211**	**6.8156**	**17.8908**	**0.0584**	**4.6334**	**0.0752**	**4.7085**	**1.2401**	**0.0714**	**1.3115**		**6,053.7148**	**6,053.7148**	**0.3365**	**4.2700e-003**	**6,063.4004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Energy	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Mobile	1.3477	6.6214	17.7205	0.0573	4.6334	0.0604	4.6937	1.2401	0.0566	1.2967		5,820.6968	5,820.6968	0.3320		5,828.9967
Total	**2.9211**	**6.8156**	**17.8908**	**0.0584**	**4.6334**	**0.0752**	**4.7085**	**1.2401**	**0.0714**	**1.3115**		**6,053.7148**	**6,053.7148**	**0.3365**	**4.2700e-003**	**6,063.4004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/7/2020	4/7/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

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

3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.2693**	**0.0000**	**5.2693**	**2.8965**	**0.0000**	**2.8965**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3477	6.6214	17.7205	0.0573	4.6334	0.0604	4.6937	1.2401	0.0566	1.2967		5,820.6968	5,820.6968	0.3320		5,828.9967
Unmitigated	1.3477	6.6214	17.7205	0.0573	4.6334	0.0604	4.6937	1.2401	0.0566	1.2967		5,820.6968	5,820.6968	0.3320		5,828.9967

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	676.37	150.69	64.58	1,655,415	1,655,415
Total	676.37	150.69	64.58	1,655,415	1,655,415

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
NaturalGas Unmitigated	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1980.52	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Total		**0.0214**	**0.1942**	**0.1631**	**1.1700e-003**		**0.0148**	**0.0148**		**0.0148**	**0.0148**		**233.0028**	**233.0028**	**4.4700e-003**	**4.2700e-003**	**234.3874**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.98052	0.0214	0.1942	0.1631	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.0028	233.0028	4.4700e-003	4.2700e-003	234.3874
Total		**0.0214**	**0.1942**	**0.1631**	**1.1700e-003**		**0.0148**	**0.0148**		**0.0148**	**0.0148**		**233.0028**	**233.0028**	**4.4700e-003**	**4.2700e-003**	**234.3874**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Unmitigated	1.5520	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Total	**1.5520**	**7.0000e-005**	**7.1400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0152**	**0.0152**	**4.0000e-005**		**0.0162**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.1400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0152	0.0152	4.0000e-005		0.0162
Total	**1.5520**	**7.0000e-005**	**7.1400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0152**	**0.0152**	**4.0000e-005**		**0.0162**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

E Green St Proposed Unmit

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	446.00	Space	4.01	178,400.00	0
City Park	0.90	Acre	0.90	39,204.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,496.00	0
Apartments Mid Rise	263.00	Dwelling Unit	6.92	263,000.00	752
Regional Shopping Center	10.95	1000sqft	0.25	10,954.00	0
Fast Food Restaurant w/o Drive Thru	2.03	1000sqft	0.05	2,031.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2026
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - Data provided by applicant.

Off-road Equipment -

Trips and VMT - Rounded to even numbers due to one way trip count.

Demolition -

Grading - Data provided by applicant.

Vehicle Trips - TIA and adjusted weekend trip rates.

Woodstoves - no hearths

Energy Use -

Water And Wastewater - All outdoor water use assumed under city park land use. Assumed 100% aerobic.

Solid Waste - City park land use represents open space.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Dust control measures.

Energy Mitigation - 2019 Title 24 standards

Water Mitigation - 2019 Calgreen standards

Waste Mitigation - AB341

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	300.00	327.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	88.00

tblConstructionPhase	PhaseEndDate	10/25/2024	12/31/2025
tblConstructionPhase	PhaseEndDate	8/30/2024	12/31/2024
tblConstructionPhase	PhaseEndDate	5/26/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	7/7/2023	9/29/2023
tblConstructionPhase	PhaseEndDate	9/27/2024	12/31/2025
tblConstructionPhase	PhaseStartDate	9/28/2024	1/1/2025
tblConstructionPhase	PhaseStartDate	7/8/2023	10/1/2023
tblConstructionPhase	PhaseStartDate	5/1/2023	6/1/2023
tblConstructionPhase	PhaseStartDate	5/27/2023	7/1/2023
tblConstructionPhase	PhaseStartDate	8/31/2024	9/1/2025
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	0.00
tblFireplaces	NumberNoFireplace	26.30	263.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	AcresOfGrading	162.50	2.33
tblGrading	MaterialExported	0.00	40,741.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblSequestration	NumberOfNewTrees	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	545.00	546.00
tblTripsAndVMT	HaulingTripNumber	5,093.00	5,094.00
tblTripsAndVMT	PhaseName		Trenching
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00

tblTripsAndVMT	WorkerTripNumber	287.00	288.00
tblTripsAndVMT	WorkerTripNumber	57.00	58.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	6.39	2.49
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	158.37	139.72
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	696.00	733.47
tblVehicleTrips	SU_TR	5.86	2.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	131.84	116.32
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	500.00	526.92
tblVehicleTrips	WD_TR	6.65	2.59
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	42.70	40.00
tblVehicleTrips	WD_TR	716.00	754.55
tblWoodstoves	NumberCatalytic	13.15	0.00
tblWoodstoves	NumberNoncatalytic	13.15	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2658	2.6927	2.3717	7.1900e-003	0.4347	0.0966	0.5313	0.1646	0.0895	0.2541	0.0000	659.7147	659.7147	0.1109	0.0000	662.4863
2024	0.3933	2.8827	3.7908	9.8400e-003	0.4736	0.1130	0.5867	0.1271	0.1057	0.2327	0.0000	887.3421	887.3421	0.1037	0.0000	889.9357
2025	1.0149	0.5460	1.1066	2.1700e-003	0.0907	0.0258	0.1165	0.0241	0.0243	0.0484	0.0000	192.2420	192.2420	0.0319	0.0000	193.0406
Maximum	**1.0149**	**2.8827**	**3.7908**	**9.8400e-003**	**0.4736**	**0.1130**	**0.5867**	**0.1646**	**0.1057**	**0.2541**	**0.0000**	**887.3421**	**887.3421**	**0.1109**	**0.0000**	**889.9357**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2658	2.6927	2.3717	7.1900e-003	0.2394	0.0966	0.3360	0.0840	0.0895	0.1735	0.0000	659.7143	659.7143	0.1109	0.0000	662.4860
2024	0.3933	2.8827	3.7908	9.8400e-003	0.3692	0.1130	0.4822	0.1014	0.1057	0.2071	0.0000	887.3417	887.3417	0.1037	0.0000	889.9353
2025	1.0149	0.5460	1.1066	2.1700e-003	0.0702	0.0258	0.0960	0.0191	0.0243	0.0434	0.0000	192.2419	192.2419	0.0319	0.0000	193.0404
Maximum	**1.0149**	**2.8827**	**3.7908**	**9.8400e-003**	**0.3692**	**0.1130**	**0.4822**	**0.1014**	**0.1057**	**0.2071**	**0.0000**	**887.3417**	**887.3417**	**0.1109**	**0.0000**	**889.9353**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	32.05	0.00	25.94	35.25	0.00	20.80	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.9082	0.9082
2	8-1-2023	10-31-2023	1.4685	1.4685
3	11-1-2023	1-31-2024	0.8505	0.8505
4	2-1-2024	4-30-2024	0.8029	0.8029
5	5-1-2024	7-31-2024	0.8167	0.8167
6	8-1-2024	10-31-2024	0.8188	0.8188
7	11-1-2024	1-31-2025	0.6424	0.6424
8	2-1-2025	4-30-2025	0.2776	0.2776
9	5-1-2025	7-31-2025	0.2862	0.2862
10	8-1-2025	9-30-2025	0.2924	0.2924
		Highest	1.4685	1.4685

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1961	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487
Energy	0.0225	0.1964	0.1099	1.2300e-003		0.0156	0.0156		0.0156	0.0156	0.0000	775.6108	775.6108	0.0372	0.0109	779.7901
Mobile	0.5944	2.8341	6.7911	0.0270	2.4250	0.0207	2.4457	0.6498	0.0192	0.6691	0.0000	2,505.3571	2,505.3571	0.1189	0.0000	2,508.3297
Waste						0.0000	0.0000		0.0000	0.0000	40.1090	0.0000	40.1090	2.3704	0.0000	99.3683
Water						0.0000	0.0000		0.0000	0.0000	6.2262	87.0002	93.2264	0.6447	0.0162	114.1626
Total	**1.8131**	**3.0618**	**9.6166**	**0.0284**	**2.4250**	**0.0513**	**2.4763**	**0.6498**	**0.0499**	**0.6997**	**46.3351**	**3,372.4100**	**3,418.7451**	**3.1754**	**0.0271**	**3,506.1994**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1961	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487
Energy	0.0201	0.1757	0.0995	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	695.1540	695.1540	0.0334	9.7700e-003	698.8993
Mobile	0.5944	2.8341	6.7911	0.0270	2.4250	0.0207	2.4457	0.6498	0.0192	0.6691	0.0000	2,505.3571	2,505.3571	0.1189	0.0000	2,508.3297
Waste						0.0000	0.0000		0.0000	0.0000	20.0545	0.0000	20.0545	1.1852	0.0000	49.6842
Water						0.0000	0.0000		0.0000	0.0000	4.9809	69.6002	74.5811	0.5157	0.0129	91.3300
Total	**1.8107**	**3.0411**	**9.6062**	**0.0283**	**2.4250**	**0.0497**	**2.4747**	**0.6498**	**0.0482**	**0.6980**	**25.0354**	**3,274.5532**	**3,299.5886**	**1.8575**	**0.0227**	**3,352.7919**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.13**	**0.68**	**0.11**	**0.46**	**0.00**	**3.23**	**0.07**	**0.00**	**3.33**	**0.24**	**45.97**	**2.90**	**3.49**	**41.50**	**16.11**	**4.38**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	14.1600
Vegetation Land Change	-23.3100
Total	**-9.1500**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2023	6/30/2023	5	22	
2	Grading	Grading	7/1/2023	9/29/2023	5	65	
3	Paving	Paving	9/1/2025	12/31/2025	5	88	
4	Architectural Coating	Architectural Coating	1/1/2025	12/31/2025	5	261	
5	Building Construction	Building Construction	10/1/2023	12/31/2024	5	327	
6	Trenching	Trenching	7/1/2023	12/31/2024	5	392	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.33

Acres of Paving: 4.01

Residential Indoor: 532,575; Residential Outdoor: 177,525; Non-Residential Indoor: 24,722; Non-Residential Outdoor: 8,241; Striped Parking Area: 10,704 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	546.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,094.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0590	0.0000	0.0590	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.2363	0.2161	4.3000e-004		0.0110	0.0110		0.0102	0.0102	0.0000	37.3913	37.3913	0.0105	0.0000	37.6531
Total	**0.0250**	**0.2363**	**0.2161**	**4.3000e-004**	**0.0590**	**0.0110**	**0.0700**	**8.9300e-003**	**0.0102**	**0.0191**	**0.0000**	**37.3913**	**37.3913**	**0.0105**	**0.0000**	**37.6531**

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4400e-003	0.0460	0.0158	2.0000e-004	4.6900e-003	8.0000e-005	4.7700e-003	1.2900e-003	8.0000e-005	1.3700e-003	0.0000	19.7068	19.7068	1.3200e-003	0.0000	19.7398
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.6400e-003	2.0000e-005	1.9300e-003	1.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.3000e-004	0.0000	1.6179	1.6179	4.0000e-005	0.0000	1.6189
Total	**2.1100e-003**	**0.0465**	**0.0215**	**2.2000e-004**	**6.6200e-003**	**9.0000e-005**	**6.7100e-003**	**1.8000e-003**	**9.0000e-005**	**1.9000e-003**	**0.0000**	**21.3247**	**21.3247**	**1.3600e-003**	**0.0000**	**21.3587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0230	0.0000	0.0230	3.4800e-003	0.0000	3.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.2363	0.2161	4.3000e-004		0.0110	0.0110		0.0102	0.0102	0.0000	37.3912	37.3912	0.0105	0.0000	37.6530
Total	**0.0250**	**0.2363**	**0.2161**	**4.3000e-004**	**0.0230**	**0.0110**	**0.0340**	**3.4800e-003**	**0.0102**	**0.0137**	**0.0000**	**37.3912**	**37.3912**	**0.0105**	**0.0000**	**37.6530**

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4400e-003	0.0460	0.0158	2.0000e-004	3.7800e-003	8.0000e-005	3.8600e-003	1.0600e-003	8.0000e-005	1.1400e-003	0.0000	19.7068	19.7068	1.3200e-003	0.0000	19.7398
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.6400e-003	2.0000e-005	1.4900e-003	1.0000e-005	1.5100e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.6179	1.6179	4.0000e-005	0.0000	1.6189
Total	**2.1100e-003**	**0.0465**	**0.0215**	**2.2000e-004**	**5.2700e-003**	**9.0000e-005**	**5.3700e-003**	**1.4700e-003**	**9.0000e-005**	**1.5600e-003**	**0.0000**	**21.3247**	**21.3247**	**1.3600e-003**	**0.0000**	**21.3587**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1993	0.0000	0.1993	0.1081	0.0000	0.1081	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1080	1.1218	0.9117	2.0200e-003		0.0463	0.0463		0.0426	0.0426	0.0000	177.2394	177.2394	0.0573	0.0000	178.6725
Total	**0.1080**	**1.1218**	**0.9117**	**2.0200e-003**	**0.1993**	**0.0463**	**0.2456**	**0.1081**	**0.0426**	**0.1507**	**0.0000**	**177.2394**	**177.2394**	**0.0573**	**0.0000**	**178.6725**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0134	0.4294	0.1475	1.8600e-003	0.0438	7.7000e-004	0.0446	0.0120	7.3000e-004	0.0128	0.0000	183.8580	183.8580	0.0123	0.0000	184.1660
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.7800e-003	0.0208	7.0000e-005	7.1200e-003	6.0000e-005	7.1800e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	5.9751	5.9751	1.5000e-004	0.0000	5.9789
Total	**0.0159**	**0.4311**	**0.1683**	**1.9300e-003**	**0.0509**	**8.3000e-004**	**0.0517**	**0.0139**	**7.8000e-004**	**0.0147**	**0.0000**	**189.8331**	**189.8331**	**0.0125**	**0.0000**	**190.1449**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0777	0.0000	0.0777	0.0422	0.0000	0.0422	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1080	1.1218	0.9117	2.0200e-003		0.0463	0.0463		0.0426	0.0426	0.0000	177.2392	177.2392	0.0573	0.0000	178.6723
Total	**0.1080**	**1.1218**	**0.9117**	**2.0200e-003**	**0.0777**	**0.0463**	**0.1240**	**0.0422**	**0.0426**	**0.0847**	**0.0000**	**177.2392**	**177.2392**	**0.0573**	**0.0000**	**178.6723**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0134	0.4294	0.1475	1.8600e-003	0.0352	7.7000e-004	0.0360	9.9200e-003	7.3000e-004	0.0107	0.0000	183.8580	183.8580	0.0123	0.0000	184.1660
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.7800e-003	0.0208	7.0000e-005	5.5200e-003	6.0000e-005	5.5700e-003	1.5000e-003	5.0000e-005	1.5500e-003	0.0000	5.9751	5.9751	1.5000e-004	0.0000	5.9789
Total	**0.0159**	**0.4311**	**0.1683**	**1.9300e-003**	**0.0407**	**8.3000e-004**	**0.0416**	**0.0114**	**7.8000e-004**	**0.0122**	**0.0000**	**189.8331**	**189.8331**	**0.0125**	**0.0000**	**190.1449**

3.4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0403	0.3776	0.6414	1.0000e-003		0.0184	0.0184		0.0169	0.0169	0.0000	88.0847	88.0847	0.0285	0.0000	88.7969
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0403**	**0.3776**	**0.6414**	**1.0000e-003**		**0.0184**	**0.0184**		**0.0169**	**0.0169**	**0.0000**	**88.0847**	**88.0847**	**0.0285**	**0.0000**	**88.7969**

3.4 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.6100e-003	0.0195	7.0000e-005	7.7100e-003	6.0000e-005	7.7700e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	6.0280	6.0280	1.4000e-004	0.0000	6.0315
Total	**2.4100e-003**	**1.6100e-003**	**0.0195**	**7.0000e-005**	**7.7100e-003**	**6.0000e-005**	**7.7700e-003**	**2.0500e-003**	**5.0000e-005**	**2.1000e-003**	**0.0000**	**6.0280**	**6.0280**	**1.4000e-004**	**0.0000**	**6.0315**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0403	0.3776	0.6414	1.0000e-003		0.0184	0.0184		0.0169	0.0169	0.0000	88.0846	88.0846	0.0285	0.0000	88.7968
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0403**	**0.3776**	**0.6414**	**1.0000e-003**		**0.0184**	**0.0184**		**0.0169**	**0.0169**	**0.0000**	**88.0846**	**88.0846**	**0.0285**	**0.0000**	**88.7968**

3.4 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.6100e-003	0.0195	7.0000e-005	5.9800e-003	6.0000e-005	6.0300e-003	1.6200e-003	5.0000e-005	1.6800e-003	0.0000	6.0280	6.0280	1.4000e-004	0.0000	6.0315
Total	**2.4100e-003**	**1.6100e-003**	**0.0195**	**7.0000e-005**	**5.9800e-003**	**6.0000e-005**	**6.0300e-003**	**1.6200e-003**	**5.0000e-005**	**1.6800e-003**	**0.0000**	**6.0280**	**6.0280**	**1.4000e-004**	**0.0000**	**6.0315**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.9463**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0259	0.0173	0.2096	7.2000e-004	0.0829	6.2000e-004	0.0836	0.0220	5.7000e-004	0.0226	0.0000	64.8094	64.8094	1.5000e-003	0.0000	64.8468
Total	**0.0259**	**0.0173**	**0.2096**	**7.2000e-004**	**0.0829**	**6.2000e-004**	**0.0836**	**0.0220**	**5.7000e-004**	**0.0226**	**0.0000**	**64.8094**	**64.8094**	**1.5000e-003**	**0.0000**	**64.8468**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.9463**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0259	0.0173	0.2096	7.2000e-004	0.0643	6.2000e-004	0.0649	0.0174	5.7000e-004	0.0180	0.0000	64.8094	64.8094	1.5000e-003	0.0000	64.8468
Total	**0.0259**	**0.0173**	**0.2096**	**7.2000e-004**	**0.0643**	**6.2000e-004**	**0.0649**	**0.0174**	**5.7000e-004**	**0.0180**	**0.0000**	**64.8094**	**64.8094**	**1.5000e-003**	**0.0000**	**64.8468**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0511	0.4675	0.5279	8.8000e-004		0.0227	0.0227		0.0214	0.0214	0.0000	75.3365	75.3365	0.0179	0.0000	75.7846
Total	**0.0511**	**0.4675**	**0.5279**	**8.8000e-004**		**0.0227**	**0.0227**		**0.0214**	**0.0214**	**0.0000**	**75.3365**	**75.3365**	**0.0179**	**0.0000**	**75.7846**

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6400e-003	0.1520	0.0487	5.2000e-004	0.0135	1.8000e-004	0.0137	3.9000e-003	1.7000e-004	4.0700e-003	0.0000	50.7684	50.7684	2.7700e-003	0.0000	50.8375
Worker	0.0355	0.0256	0.2999	9.5000e-004	0.1026	8.0000e-004	0.1034	0.0272	7.3000e-004	0.0280	0.0000	86.0408	86.0408	2.2200e-003	0.0000	86.0962
Total	**0.0402**	**0.1776**	**0.3486**	**1.4700e-003**	**0.1161**	**9.8000e-004**	**0.1171**	**0.0311**	**9.0000e-004**	**0.0320**	**0.0000**	**136.8092**	**136.8092**	**4.9900e-003**	**0.0000**	**136.9337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0511	0.4675	0.5279	8.8000e-004		0.0227	0.0227		0.0214	0.0214	0.0000	75.3365	75.3365	0.0179	0.0000	75.7845
Total	**0.0511**	**0.4675**	**0.5279**	**8.8000e-004**		**0.0227**	**0.0227**		**0.0214**	**0.0214**	**0.0000**	**75.3365**	**75.3365**	**0.0179**	**0.0000**	**75.7845**

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6400e-003	0.1520	0.0487	5.2000e-004	0.0110	1.8000e-004	0.0112	3.2900e-003	1.7000e-004	3.4600e-003	0.0000	50.7684	50.7684	2.7700e-003	0.0000	50.8375
Worker	0.0355	0.0256	0.2999	9.5000e-004	0.0795	8.0000e-004	0.0803	0.0216	7.3000e-004	0.0223	0.0000	86.0408	86.0408	2.2200e-003	0.0000	86.0962
Total	**0.0402**	**0.1776**	**0.3486**	**1.4700e-003**	**0.0905**	**9.8000e-004**	**0.0915**	**0.0249**	**9.0000e-004**	**0.0258**	**0.0000**	**136.8092**	**136.8092**	**4.9900e-003**	**0.0000**	**136.9337**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0183	0.6102	0.1904	2.1000e-003	0.0545	7.0000e-004	0.0552	0.0157	6.7000e-004	0.0164	0.0000	203.8204	203.8204	0.0110	0.0000	204.0950
Worker	0.1356	0.0942	1.1257	3.7200e-003	0.4134	3.1600e-003	0.4166	0.1098	2.9100e-003	0.1127	0.0000	336.0575	336.0575	8.1800e-003	0.0000	336.2620
Total	**0.1538**	**0.7043**	**1.3161**	**5.8200e-003**	**0.4679**	**3.8600e-003**	**0.4718**	**0.1255**	**3.5800e-003**	**0.1291**	**0.0000**	**539.8779**	**539.8779**	**0.0192**	**0.0000**	**540.3571**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0183	0.6102	0.1904	2.1000e-003	0.0444	7.0000e-004	0.0452	0.0133	6.7000e-004	0.0139	0.0000	203.8204	203.8204	0.0110	0.0000	204.0950
Worker	0.1356	0.0942	1.1257	3.7200e-003	0.3203	3.1600e-003	0.3234	0.0869	2.9100e-003	0.0899	0.0000	336.0575	336.0575	8.1800e-003	0.0000	336.2620
Total	**0.1538**	**0.7043**	**1.3161**	**5.8200e-003**	**0.3647**	**3.8600e-003**	**0.3686**	**0.1002**	**3.5800e-003**	**0.1038**	**0.0000**	**539.8779**	**539.8779**	**0.0192**	**0.0000**	**540.3571**

3.7 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2112	0.1693	2.2000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	19.3905	19.3905	6.2700e-003	0.0000	19.5473
Total	**0.0227**	**0.2112**	**0.1693**	**2.2000e-004**		**0.0147**	**0.0147**		**0.0135**	**0.0135**	**0.0000**	**19.3905**	**19.3905**	**6.2700e-003**	**0.0000**	**19.5473**

3.7 Trenching - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	7.1000e-004	8.3300e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3900	2.3900	6.0000e-005	0.0000	2.3916
Total	**9.9000e-004**	**7.1000e-004**	**8.3300e-003**	**3.0000e-005**	**2.8500e-003**	**2.0000e-005**	**2.8700e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.3900**	**2.3900**	**6.0000e-005**	**0.0000**	**2.3916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2112	0.1693	2.2000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	19.3904	19.3904	6.2700e-003	0.0000	19.5472
Total	**0.0227**	**0.2112**	**0.1693**	**2.2000e-004**		**0.0147**	**0.0147**		**0.0135**	**0.0135**	**0.0000**	**19.3904**	**19.3904**	**6.2700e-003**	**0.0000**	**19.5472**

3.7 Trenching - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	7.1000e-004	8.3300e-003	3.0000e-005	2.2100e-003	2.0000e-005	2.2300e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	2.3900	2.3900	6.0000e-005	0.0000	2.3916
Total	**9.9000e-004**	**7.1000e-004**	**8.3300e-003**	**3.0000e-005**	**2.2100e-003**	**2.0000e-005**	**2.2300e-003**	**6.0000e-004**	**2.0000e-005**	**6.2000e-004**	**0.0000**	**2.3900**	**2.3900**	**6.0000e-005**	**0.0000**	**2.3916**

3.7 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0448	0.4160	0.3413	4.4000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	39.0745	39.0745	0.0126	0.0000	39.3904
Total	**0.0448**	**0.4160**	**0.3413**	**4.4000e-004**		**0.0288**	**0.0288**		**0.0265**	**0.0265**	**0.0000**	**39.0745**	**39.0745**	**0.0126**	**0.0000**	**39.3904**

3.7 Trenching - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.3100e-003	0.0156	5.0000e-005	5.7400e-003	4.0000e-005	5.7900e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	4.6675	4.6675	1.1000e-004	0.0000	4.6703
Total	**1.8800e-003**	**1.3100e-003**	**0.0156**	**5.0000e-005**	**5.7400e-003**	**4.0000e-005**	**5.7900e-003**	**1.5300e-003**	**4.0000e-005**	**1.5700e-003**	**0.0000**	**4.6675**	**4.6675**	**1.1000e-004**	**0.0000**	**4.6703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0448	0.4160	0.3413	4.4000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	39.0745	39.0745	0.0126	0.0000	39.3904
Total	**0.0448**	**0.4160**	**0.3413**	**4.4000e-004**		**0.0288**	**0.0288**		**0.0265**	**0.0265**	**0.0000**	**39.0745**	**39.0745**	**0.0126**	**0.0000**	**39.3904**

3.7 Trenching - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.3100e-003	0.0156	5.0000e-005	4.4500e-003	4.0000e-005	4.4900e-003	1.2100e-003	4.0000e-005	1.2500e-003	0.0000	4.6675	4.6675	1.1000e-004	0.0000	4.6703
Total	**1.8800e-003**	**1.3100e-003**	**0.0156**	**5.0000e-005**	**4.4500e-003**	**4.0000e-005**	**4.4900e-003**	**1.2100e-003**	**4.0000e-005**	**1.2500e-003**	**0.0000**	**4.6675**	**4.6675**	**1.1000e-004**	**0.0000**	**4.6703**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	0.5944	2.8341	6.7911	0.0270	2.4250	0.0207	2.4457	0.6498	0.0192	0.6691	0.0000	2,505.357 1	2,505.357 1	0.1189	0.0000	2,508.329 7
Unmitigated	0.5944	2.8341	6.7911	0.0270	2.4250	0.0207	2.4457	0.6498	0.0192	0.6691	0.0000	2,505.357 1	2,505.357 1	0.1189	0.0000	2,508.329 7

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	681.17	654.87	599.64	2,275,023	2,275,023
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	392.18	488.46	406.65	556,039	556,039
Regional Shopping Center	438.16	512.76	258.95	915,349	915,349
Fast Food Restaurant w/o Drive Thru	1,532.49	1,489.68	1070.17	2,644,721	2,644,721
Total	3,044.00	3,145.77	2,335.42	6,391,132	6,391,132

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
City Park	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Enclosed Parking with Elevator	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
High Turnover (Sit Down Restaurant)	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Regional Shopping Center	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Fast Food Restaurant w/o Drive Thru	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	495.8410	495.8410	0.0296	6.1100e-003	498.4018
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	552.5161	552.5161	0.0329	6.8100e-003	555.3697
NaturalGas Mitigated	0.0201	0.1757	0.0995	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	199.3130	199.3130	3.8200e-003	3.6500e-003	200.4974
NaturalGas Unmitigated	0.0225	0.1964	0.1099	1.2300e-003		0.0156	0.0156		0.0156	0.0156	0.0000	223.0947	223.0947	4.2800e-003	4.0900e-003	224.4204

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.88726e+006	0.0156	0.1330	0.0566	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.0753	154.0753	2.9500e-003	2.8200e-003	154.9909
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	468674	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	25.0102	25.0102	4.8000e-004	4.6000e-004	25.1588
High Turnover (Sit Down Restaurant)	806737	4.3500e-003	0.0396	0.0332	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	43.0506	43.0506	8.3000e-004	7.9000e-004	43.3064
Regional Shopping Center	17964.6	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.9587	0.9587	2.0000e-005	2.0000e-005	0.9644
Total		**0.0226**	**0.1964**	**0.1099**	**1.2400e-003**		**0.0156**	**0.0156**		**0.0156**	**0.0156**	**0.0000**	**223.0947**	**223.0947**	**4.2800e-003**	**4.0900e-003**	**224.4204**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.51665e+006	0.0136	0.1160	0.0494	7.4000e-004		9.3800e-003	9.3800e-003		9.3800e-003	9.3800e-003	0.0000	134.2982	134.2982	2.5700e-003	2.4600e-003	135.0963
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	442486	2.3900e-003	0.0217	0.0182	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	23.6127	23.6127	4.5000e-004	4.3000e-004	23.7531
High Turnover (Sit Down Restaurant)	761660	4.1100e-003	0.0373	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003	0.0000	40.6451	40.6451	7.8000e-004	7.5000e-004	40.8866
Regional Shopping Center	14185.4	8.0000e-005	7.0000e-004	5.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7570	0.7570	1.0000e-005	1.0000e-005	0.7615
Total		**0.0202**	**0.1757**	**0.0995**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**199.3130**	**199.3130**	**3.8100e-003**	**3.6500e-003**	**200.4974**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0661e +006	235.2989	0.0140	2.9000e-003	236.5141
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.04542e +006	230.7345	0.0138	2.8500e-003	231.9261
Fast Food Restaurant w/o Drive Thru	89648.3	19.7862	1.1800e-003	2.4000e-004	19.8884
High Turnover (Sit Down Restaurant)	154313	34.0584	2.0300e-003	4.2000e-004	34.2343
Regional Shopping Center	147879	32.6382	1.9500e-003	4.0000e-004	32.8068
Total		**552.5161**	**0.0329**	**6.8100e-003**	**555.3697**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04574e +006	230.8045	0.0138	2.8500e-003	231.9965
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	835626	184.4301	0.0110	2.2700e-003	185.3826
Fast Food Restaurant w/o Drive Thru	84706.9	18.6956	1.1100e-003	2.3000e-004	18.7921
High Turnover (Sit Down Restaurant)	145808	32.1811	1.9200e-003	4.0000e-004	32.3473
Regional Shopping Center	134701	29.7298	1.7700e-003	3.7000e-004	29.8833
Total		**495.8410**	**0.0296**	**6.1200e-003**	**498.4018**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1961	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487
Unmitigated	1.1961	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0924					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0819	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487
Total	**1.1961**	**0.0313**	**2.7156**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4419**	**4.4419**	**4.2700e-003**	**0.0000**	**4.5487**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0924					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0819	0.0313	2.7156	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4419	4.4419	4.2700e-003	0.0000	4.5487
Total	**1.1961**	**0.0313**	**2.7156**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4419**	**4.4419**	**4.2700e-003**	**0.0000**	**4.5487**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	74.5811	0.5157	0.0129	91.3300
Unmitigated	93.2264	0.6447	0.0162	114.1626

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.8028	81.1706	0.5629	0.0141	99.4496
City Park	0 / 1.07233	2.6294	1.6000e-004	3.0000e-005	2.6430
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	0.616173 / 0.0393302	2.0627	0.0202	5.0000e-004	2.7156
High Turnover (Sit Down Restaurant)	1.06237 / 0.0678107	3.5564	0.0348	8.6000e-004	4.6821
Regional Shopping Center	0.811094 / 0.497122	3.8073	0.0266	6.7000e-004	4.6723
Total		**93.2264**	**0.6447**	**0.0162**	**114.1626**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	13.7084 / 8.64226	64.9365	0.4503	0.0113	79.5597
City Park	0 / 0.857867	2.1036	1.3000e-004	3.0000e-005	2.1144
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	0.492939 / 0.0314642	1.6502	0.0162	4.0000e-004	2.1725
High Turnover (Sit Down Restaurant)	0.849894 / 0.0542486	2.8451	0.0279	6.9000e-004	3.7456
Regional Shopping Center	0.648875 / 0.397698	3.0458	0.0213	5.3000e-004	3.7379
Total		**74.5811**	**0.5157**	**0.0129**	**91.3301**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.0545	1.1852	0.0000	49.6842
Unmitigated	40.1090	2.3704	0.0000	99.3683

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8410
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	23.38	4.7459	0.2805	0.0000	11.7578
High Turnover (Sit Down Restaurant)	41.65	8.4546	0.4997	0.0000	20.9459
Regional Shopping Center	11.5	2.3344	0.1380	0.0000	5.7834
Total		**40.1090**	**2.3704**	**0.0000**	**99.3683**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	60.49	12.2789	0.7257	0.0000	30.4205
City Park	0.04	8.1200e-003	4.8000e-004	0.0000	0.0201
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	11.69	2.3730	0.1402	0.0000	5.8789
High Turnover (Sit Down Restaurant)	20.825	4.2273	0.2498	0.0000	10.4729
Regional Shopping Center	5.75	1.1672	0.0690	0.0000	2.8917
Total		**20.0545**	**1.1852**	**0.0000**	**49.6842**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-9.1500	0.0000	0.0000	-9.1500

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	0.21 / 0	-23.3100	0.0000	0.0000	-23.3100
Total		**-23.3100**	**0.0000**	**0.0000**	**-23.3100**

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	20	14.1600	0.0000	0.0000	14.1600
Total		**14.1600**	**0.0000**	**0.0000**	**14.1600**

E Green St Proposed Unmit

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	446.00	Space	4.01	178,400.00	0
City Park	0.90	Acre	0.90	39,204.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,496.00	0
Apartments Mid Rise	263.00	Dwelling Unit	6.92	263,000.00	752
Regional Shopping Center	10.95	1000sqft	0.25	10,954.00	0
Fast Food Restaurant w/o Drive Thru	2.03	1000sqft	0.05	2,031.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2026
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - Data provided by applicant.

Off-road Equipment -

Trips and VMT - Rounded to even numbers due to one way trip count.

Demolition -

Grading - Data provided by applicant.

Vehicle Trips - TIA and adjusted weekend trip rates.

Woodstoves - no hearths

Energy Use -

Water And Wastewater - All outdoor water use assumed under city park land use. Assumed 100% aerobic.

Solid Waste - City park land use represents open space.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Dust control measures.

Energy Mitigation - 2019 Title 24 standards

Water Mitigation - 2019 Calgreen standards

Waste Mitigation - AB341

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	300.00	327.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	88.00

tblConstructionPhase	PhaseEndDate	10/25/2024	12/31/2025
tblConstructionPhase	PhaseEndDate	8/30/2024	12/31/2024
tblConstructionPhase	PhaseEndDate	5/26/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	7/7/2023	9/29/2023
tblConstructionPhase	PhaseEndDate	9/27/2024	12/31/2025
tblConstructionPhase	PhaseStartDate	9/28/2024	1/1/2025
tblConstructionPhase	PhaseStartDate	7/8/2023	10/1/2023
tblConstructionPhase	PhaseStartDate	5/1/2023	6/1/2023
tblConstructionPhase	PhaseStartDate	5/27/2023	7/1/2023
tblConstructionPhase	PhaseStartDate	8/31/2024	9/1/2025
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	0.00
tblFireplaces	NumberNoFireplace	26.30	263.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	AcresOfGrading	162.50	2.33
tblGrading	MaterialExported	0.00	40,741.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblSequestration	NumberOfNewTrees	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	545.00	546.00
tblTripsAndVMT	HaulingTripNumber	5,093.00	5,094.00
tblTripsAndVMT	PhaseName		Trenching
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00

tblTripsAndVMT	WorkerTripNumber	287.00	288.00
tblTripsAndVMT	WorkerTripNumber	57.00	58.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	6.39	2.49
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	158.37	139.72
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	696.00	733.47
tblVehicleTrips	SU_TR	5.86	2.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	131.84	116.32
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	500.00	526.92
tblVehicleTrips	WD_TR	6.65	2.59
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	42.70	40.00
tblVehicleTrips	WD_TR	716.00	754.55
tblWoodstoves	NumberCatalytic	13.15	0.00
tblWoodstoves	NumberNoncatalytic	13.15	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.1685	50.7058	35.9312	0.1257	7.7697	1.6753	9.4450	3.7719	1.5421	5.3140	0.0000	12,876.1511	12,876.1511	2.4699	0.0000	12,937.8974
2024	2.9911	21.8663	29.4752	0.0766	3.6864	0.8627	4.5492	0.9873	0.8066	1.7938	0.0000	7,614.1957	7,614.1957	0.8741	0.0000	7,636.0479
2025	8.4173	9.8758	18.5797	0.0331	0.8271	0.4761	1.3033	0.2194	0.4421	0.6615	0.0000	3,217.7851	3,217.7851	0.7460	0.0000	3,236.4349
Maximum	**8.4173**	**50.7058**	**35.9312**	**0.1257**	**7.7697**	**1.6753**	**9.4450**	**3.7719**	**1.5421**	**5.3140**	**0.0000**	**12,876.1511**	**12,876.1511**	**2.4699**	**0.0000**	**12,937.8974**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.1685	50.7058	35.9312	0.1257	3.6998	1.6753	5.3751	1.6626	1.5421	3.2047	0.0000	12,876.1511	12,876.1511	2.4699	0.0000	12,937.8974
2024	2.9911	21.8663	29.4752	0.0766	2.8704	0.8627	3.7331	0.7870	0.8066	1.5935	0.0000	7,614.1957	7,614.1957	0.8741	0.0000	7,636.0479
2025	8.4173	9.8758	18.5797	0.0331	0.6402	0.4761	1.1163	0.1735	0.4421	0.6156	0.0000	3,217.7851	3,217.7851	0.7460	0.0000	3,236.4349
Maximum	**8.4173**	**50.7058**	**35.9312**	**0.1257**	**3.6998**	**1.6753**	**5.3751**	**1.6626**	**1.5421**	**3.2047**	**0.0000**	**12,876.1511**	**12,876.1511**	**2.4699**	**0.0000**	**12,937.8974**

E Green St Proposed Unmit - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	41.30	0.00	33.16	47.31	0.00	30.32	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Energy	0.1235	1.0764	0.6020	6.7400e-003		0.0853	0.0853		0.0853	0.0853		1,347.5057	1,347.5057	0.0258	0.0247	1,355.5133
Mobile	3.7697	16.4021	41.3283	0.1656	14.6209	0.1225	14.7435	3.9117	0.1137	4.0254		16,919.4438	16,919.4438	0.7769		16,938.8657
Total	**10.6536**	**17.7286**	**63.6548**	**0.1735**	**14.6209**	**0.3283**	**14.9492**	**3.9117**	**0.3195**	**4.2312**	**0.0000**	**18,306.1202**	**18,306.1202**	**0.8404**	**0.0247**	**18,334.4916**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Energy	0.1104	0.9627	0.5453	6.0200e-003		0.0762	0.0762		0.0762	0.0762		1,203.8629	1,203.8629	0.0231	0.0221	1,211.0169
Mobile	3.7697	16.4021	41.3283	0.1656	14.6209	0.1225	14.7435	3.9117	0.1137	4.0254		16,919.4438	16,919.4438	0.7769		16,938.8657
Total	**10.6404**	**17.6149**	**63.5980**	**0.1727**	**14.6209**	**0.3192**	**14.9401**	**3.9117**	**0.3104**	**4.2221**	**0.0000**	**18,162.4774**	**18,162.4774**	**0.8376**	**0.0221**	**18,189.9952**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.12	0.64	0.09	0.42	0.00	2.77	0.06	0.00	2.85	0.22	0.00	0.78	0.78	0.33	10.65	0.79

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2023	6/30/2023	5	22	
2	Grading	Grading	7/1/2023	9/29/2023	5	65	
3	Paving	Paving	9/1/2025	12/31/2025	5	88	
4	Architectural Coating	Architectural Coating	1/1/2025	12/31/2025	5	261	
5	Building Construction	Building Construction	10/1/2023	12/31/2024	5	327	
6	Trenching	Trenching	7/1/2023	12/31/2024	5	392	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.33

Acres of Paving: 4.01

Residential Indoor: 532,575; Residential Outdoor: 177,525; Non-Residential Indoor: 24,722; Non-Residential Outdoor: 8,241; Striped Parking Area: 10,704 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	546.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,094.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3643	0.0000	5.3643	0.8122	0.0000	0.8122			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**5.3643**	**0.9975**	**6.3619**	**0.8122**	**0.9280**	**1.7402**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1292	4.0799	1.4104	0.0183	0.4340	7.3900e-003	0.4414	0.1190	7.0700e-003	0.1260		1,989.3381	1,989.3381	0.1307		1,992.6056
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0603	0.0385	0.5475	1.7000e-003	0.1788	1.3600e-003	0.1802	0.0474	1.2500e-003	0.0487		169.3571	169.3571	4.3700e-003		169.4665
Total	**0.1895**	**4.1184**	**1.9579**	**0.0200**	**0.6128**	**8.7500e-003**	**0.6216**	**0.1664**	**8.3200e-003**	**0.1747**		**2,158.6953**	**2,158.6953**	**0.1351**		**2,162.0721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0921	0.0000	2.0921	0.3168	0.0000	0.3168			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**2.0921**	**0.9975**	**3.0896**	**0.3168**	**0.9280**	**1.2448**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1292	4.0799	1.4104	0.0183	0.3487	7.3900e-003	0.3561	0.0980	7.0700e-003	0.1051		1,989.3381	1,989.3381	0.1307		1,992.6056
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0603	0.0385	0.5475	1.7000e-003	0.1384	1.3600e-003	0.1398	0.0375	1.2500e-003	0.0388		169.3571	169.3571	4.3700e-003		169.4665
Total	**0.1895**	**4.1184**	**1.9579**	**0.0200**	**0.4871**	**8.7500e-003**	**0.4959**	**0.1355**	**8.3200e-003**	**0.1439**		**2,158.6953**	**2,158.6953**	**0.1351**		**2,162.0721**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1310	0.0000	6.1310	3.3251	0.0000	3.3251			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**6.1310**	**1.4245**	**7.5555**	**3.3251**	**1.3105**	**4.6356**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4079	12.8831	4.4537	0.0577	1.3705	0.0233	1.3938	0.3757	0.0223	0.3980		6,281.8018	6,281.8018	0.4127		6,292.1195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0754	0.0482	0.6844	2.1200e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5700e-003	0.0609		211.6964	211.6964	5.4700e-003		211.8331
Total	**0.4833**	**12.9313**	**5.1381**	**0.0598**	**1.5940**	**0.0250**	**1.6190**	**0.4350**	**0.0239**	**0.4589**		**6,493.4982**	**6,493.4982**	**0.4182**		**6,503.9526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3911	0.0000	2.3911	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**2.3911**	**1.4245**	**3.8156**	**1.2968**	**1.3105**	**2.6073**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4079	12.8831	4.4537	0.0577	1.1011	0.0233	1.1244	0.3096	0.0223	0.3319		6,281.8018	6,281.8018	0.4127		6,292.1195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0754	0.0482	0.6844	2.1200e-003	0.1730	1.7000e-003	0.1747	0.0469	1.5700e-003	0.0485		211.6964	211.6964	5.4700e-003		211.8331
Total	**0.4833**	**12.9313**	**5.1381**	**0.0598**	**1.2741**	**0.0250**	**1.2991**	**0.3564**	**0.0239**	**0.3803**		**6,493.4982**	**6,493.4982**	**0.4182**		**6,503.9526**

3.4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.4 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0322	0.4741	1.5800e-003	0.1788	1.3100e-003	0.1802	0.0474	1.2100e-003	0.0486		157.7496	157.7496	3.6600e-003		157.8411
Total	**0.0542**	**0.0322**	**0.4741**	**1.5800e-003**	**0.1788**	**1.3100e-003**	**0.1802**	**0.0474**	**1.2100e-003**	**0.0486**		**157.7496**	**157.7496**	**3.6600e-003**		**157.8411**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.4 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0322	0.4741	1.5800e-003	0.1384	1.3100e-003	0.1397	0.0375	1.2100e-003	0.0387		157.7496	157.7496	3.6600e-003		157.8411
Total	**0.0542**	**0.0322**	**0.4741**	**1.5800e-003**	**0.1384**	**1.3100e-003**	**0.1397**	**0.0375**	**1.2100e-003**	**0.0387**		**157.7496**	**157.7496**	**3.6600e-003**		**157.8411**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**7.2515**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1964	0.1165	1.7185	5.7400e-003	0.6483	4.7600e-003	0.6531	0.1719	4.3800e-003	0.1763		571.8423	571.8423	0.0133		572.1741
Total	**0.1964**	**0.1165**	**1.7185**	**5.7400e-003**	**0.6483**	**4.7600e-003**	**0.6531**	**0.1719**	**4.3800e-003**	**0.1763**		**571.8423**	**571.8423**	**0.0133**		**572.1741**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**7.2515**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1964	0.1165	1.7185	5.7400e-003	0.5018	4.7600e-003	0.5065	0.1360	4.3800e-003	0.1403		571.8423	571.8423	0.0133		572.1741
Total	**0.1964**	**0.1165**	**1.7185**	**5.7400e-003**	**0.5018**	**4.7600e-003**	**0.5065**	**0.1360**	**4.3800e-003**	**0.1403**		**571.8423**	**571.8423**	**0.0133**		**572.1741**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1397	4.6237	1.4314	0.0163	0.4226	5.3400e-003	0.4279	0.1217	5.1100e-003	0.1268		1,741.7890	1,741.7890	0.0915		1,744.0754
Worker	1.0859	0.6935	9.8558	0.0306	3.2192	0.0245	3.2436	0.8537	0.0225	0.8763		3,048.4281	3,048.4281	0.0787		3,050.3968
Total	**1.2256**	**5.3172**	**11.2872**	**0.0469**	**3.6417**	**0.0298**	**3.6715**	**0.9754**	**0.0277**	**1.0031**		**4,790.2172**	**4,790.2172**	**0.1702**		**4,794.4722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1397	4.6237	1.4314	0.0163	0.3443	5.3400e-003	0.3496	0.1025	5.1100e-003	0.1076		1,741.7890	1,741.7890	0.0915		1,744.0754
Worker	1.0859	0.6935	9.8558	0.0306	2.4915	0.0245	2.5160	0.6751	0.0225	0.6977		3,048.4281	3,048.4281	0.0787		3,050.3968
Total	**1.2256**	**5.3172**	**11.2872**	**0.0469**	**2.8358**	**0.0298**	**2.8656**	**0.7776**	**0.0277**	**0.8052**		**4,790.2172**	**4,790.2172**	**0.1702**		**4,794.4722**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1363	4.6061	1.3878	0.0162	0.4226	5.2700e-003	0.4279	0.1217	5.0400e-003	0.1267		1,734.7204	1,734.7204	0.0902		1,736.9743
Worker	1.0273	0.6324	9.1878	0.0296	3.2192	0.0241	3.2433	0.8537	0.0222	0.8760		2,953.9534	2,953.9534	0.0722		2,955.7595
Total	**1.1636**	**5.2385**	**10.5757**	**0.0458**	**3.6417**	**0.0294**	**3.6711**	**0.9754**	**0.0273**	**1.0027**		**4,688.6738**	**4,688.6738**	**0.1624**		**4,692.7337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1363	4.6061	1.3878	0.0162	0.3443	5.2700e-003	0.3496	0.1025	5.0400e-003	0.1075		1,734.7204	1,734.7204	0.0902		1,736.9743
Worker	1.0273	0.6324	9.1878	0.0296	2.4915	0.0241	2.5156	0.6751	0.0222	0.6974		2,953.9534	2,953.9534	0.0722		2,955.7595
Total	**1.1636**	**5.2385**	**10.5757**	**0.0458**	**2.8358**	**0.0294**	**2.8652**	**0.7776**	**0.0273**	**0.8049**		**4,688.6738**	**4,688.6738**	**0.1624**		**4,692.7337**

3.7 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3484	3.2493	2.6050	3.3900e-003		0.2254	0.2254		0.2074	0.2074		328.8359	328.8359	0.1064		331.4947
Total	**0.3484**	**3.2493**	**2.6050**	**3.3900e-003**		**0.2254**	**0.2254**		**0.2074**	**0.2074**		**328.8359**	**328.8359**	**0.1064**		**331.4947**

3.7 Trenching - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	9.6300e-003	0.1369	4.2000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		42.3393	42.3393	1.0900e-003		42.3666
Total	**0.0151**	**9.6300e-003**	**0.1369**	**4.2000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**42.3393**	**42.3393**	**1.0900e-003**		**42.3666**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3484	3.2493	2.6050	3.3900e-003		0.2254	0.2254		0.2074	0.2074	0.0000	328.8359	328.8359	0.1064		331.4947
Total	**0.3484**	**3.2493**	**2.6050**	**3.3900e-003**		**0.2254**	**0.2254**		**0.2074**	**0.2074**	**0.0000**	**328.8359**	**328.8359**	**0.1064**		**331.4947**

3.7 Trenching - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	9.6300e-003	0.1369	4.2000e-004	0.0346	3.4000e-004	0.0349	9.3800e-003	3.1000e-004	9.6900e-003		42.3393	42.3393	1.0900e-003		42.3666
Total	**0.0151**	**9.6300e-003**	**0.1369**	**4.2000e-004**	**0.0346**	**3.4000e-004**	**0.0349**	**9.3800e-003**	**3.1000e-004**	**9.6900e-003**		**42.3393**	**42.3393**	**1.0900e-003**		**42.3666**

3.7 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3417	3.1752	2.6051	3.3900e-003		0.2197	0.2197		0.2021	0.2021		328.7959	328.7959	0.1063		331.4543
Total	**0.3417**	**3.1752**	**2.6051**	**3.3900e-003**		**0.2197**	**0.2197**		**0.2021**	**0.2021**		**328.7959**	**328.7959**	**0.1063**		**331.4543**

3.7 Trenching - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0143	8.7800e-003	0.1276	4.1000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		41.0271	41.0271	1.0000e-003		41.0522
Total	**0.0143**	**8.7800e-003**	**0.1276**	**4.1000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**41.0271**	**41.0271**	**1.0000e-003**		**41.0522**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3417	3.1752	2.6051	3.3900e-003		0.2197	0.2197		0.2021	0.2021	0.0000	328.7959	328.7959	0.1063		331.4543
Total	**0.3417**	**3.1752**	**2.6051**	**3.3900e-003**		**0.2197**	**0.2197**		**0.2021**	**0.2021**	**0.0000**	**328.7959**	**328.7959**	**0.1063**		**331.4543**

3.7 Trenching - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0143	8.7800e-003	0.1276	4.1000e-004	0.0346	3.4000e-004	0.0349	9.3800e-003	3.1000e-004	9.6900e-003		41.0271	41.0271	1.0000e-003		41.0522
Total	**0.0143**	**8.7800e-003**	**0.1276**	**4.1000e-004**	**0.0346**	**3.4000e-004**	**0.0349**	**9.3800e-003**	**3.1000e-004**	**9.6900e-003**		**41.0271**	**41.0271**	**1.0000e-003**		**41.0522**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7697	16.4021	41.3283	0.1656	14.6209	0.1225	14.7435	3.9117	0.1137	4.0254		16,919.4438	16,919.4438	0.7769		16,938.8657
Unmitigated	3.7697	16.4021	41.3283	0.1656	14.6209	0.1225	14.7435	3.9117	0.1137	4.0254		16,919.4438	16,919.4438	0.7769		16,938.8657

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	681.17	654.87	599.64	2,275,023	2,275,023
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	392.18	488.46	406.65	556,039	556,039
Regional Shopping Center	438.16	512.76	258.95	915,349	915,349
Fast Food Restaurant w/o Drive Thru	1,532.49	1,489.68	1070.17	2,644,721	2,644,721
Total	3,044.00	3,145.77	2,335.42	6,391,132	6,391,132

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
City Park	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Enclosed Parking with Elevator	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
High Turnover (Sit Down Restaurant)	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Regional Shopping Center	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Fast Food Restaurant w/o Drive Thru	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1104	0.9627	0.5453	6.0200e-003		0.0762	0.0762		0.0762	0.0762		1,203.8629	1,203.8629	0.0231	0.0221	1,211.0169
NaturalGas Unmitigated	0.1235	1.0764	0.6020	6.7400e-003		0.0853	0.0853		0.0853	0.0853		1,347.5057	1,347.5057	0.0258	0.0247	1,355.5133

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	7910.31	0.0853	0.7290	0.3102	4.6500e-003		0.0589	0.0589		0.0589	0.0589		930.6241	930.6241	0.0178	0.0171	936.1544
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	1284.04	0.0139	0.1259	0.1057	7.6000e-004		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003		151.0632	151.0632	2.9000e-003	2.7700e-003	151.9609
High Turnover (Sit Down Restaurant)	2210.24	0.0238	0.2167	0.1820	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.0280	260.0280	4.9800e-003	4.7700e-003	261.5733
Regional Shopping Center	49.218	5.3000e-004	4.8300e-003	4.0500e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.7904	5.7904	1.1000e-004	1.1000e-004	5.8248
Total		**0.1235**	**1.0764**	**0.6020**	**6.7400e-003**		**0.0854**	**0.0854**		**0.0854**	**0.0854**		**1,347.5057**	**1,347.5057**	**0.0258**	**0.0247**	**1,355.5133**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	6.89494	0.0744	0.6354	0.2704	4.0600e-003		0.0514	0.0514		0.0514	0.0514		811.1697	811.1697	0.0156	0.0149	815.9900
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	1.21229	0.0131	0.1189	0.0998	7.1000e-004		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003		142.6224	142.6224	2.7300e-003	2.6100e-003	143.4699
High Turnover (Sit Down Restaurant)	2.08674	0.0225	0.2046	0.1719	1.2300e-003		0.0156	0.0156		0.0156	0.0156		245.4986	245.4986	4.7100e-003	4.5000e-003	246.9575
Regional Shopping Center	0.0388642	4.2000e-004	3.8100e-003	3.2000e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		4.5723	4.5723	9.0000e-005	8.0000e-005	4.5994
Total		**0.1104**	**0.9627**	**0.5453**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,203.8629**	**1,203.8629**	**0.0231**	**0.0221**	**1,211.0169**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Unmitigated	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5989					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6552	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205		39.1707	39.1707	0.0377		40.1126
Total	**6.7605**	**0.2501**	**21.7245**	**1.1500e-003**		**0.1205**	**0.1205**		**0.1205**	**0.1205**	**0.0000**	**39.1707**	**39.1707**	**0.0377**	**0.0000**	**40.1126**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5989					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6552	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205		39.1707	39.1707	0.0377		40.1126
Total	**6.7605**	**0.2501**	**21.7245**	**1.1500e-003**		**0.1205**	**0.1205**		**0.1205**	**0.1205**	**0.0000**	**39.1707**	**39.1707**	**0.0377**	**0.0000**	**40.1126**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

E Green St Proposed Unmit

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	446.00	Space	4.01	178,400.00	0
City Park	0.90	Acre	0.90	39,204.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,496.00	0
Apartments Mid Rise	263.00	Dwelling Unit	6.92	263,000.00	752
Regional Shopping Center	10.95	1000sqft	0.25	10,954.00	0
Fast Food Restaurant w/o Drive Thru	2.03	1000sqft	0.05	2,031.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2026
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	486.58	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 PCL

Land Use -

Construction Phase - Data provided by applicant.

Off-road Equipment -

Trips and VMT - Rounded to even numbers due to one way trip count.

Demolition -

Grading - Data provided by applicant.

Vehicle Trips - TIA and adjusted weekend trip rates.

Woodstoves - no hearths

Energy Use -

Water And Wastewater - All outdoor water use assumed under city park land use. Assumed 100% aerobic.

Solid Waste - City park land use represents open space.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Dust control measures.

Energy Mitigation - 2019 Title 24 standards

Water Mitigation - 2019 Calgreen standards

Waste Mitigation - AB341

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	300.00	327.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	88.00

tblConstructionPhase	PhaseEndDate	10/25/2024	12/31/2025
tblConstructionPhase	PhaseEndDate	8/30/2024	12/31/2024
tblConstructionPhase	PhaseEndDate	5/26/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	7/7/2023	9/29/2023
tblConstructionPhase	PhaseEndDate	9/27/2024	12/31/2025
tblConstructionPhase	PhaseStartDate	9/28/2024	1/1/2025
tblConstructionPhase	PhaseStartDate	7/8/2023	10/1/2023
tblConstructionPhase	PhaseStartDate	5/1/2023	6/1/2023
tblConstructionPhase	PhaseStartDate	5/27/2023	7/1/2023
tblConstructionPhase	PhaseStartDate	8/31/2024	9/1/2025
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	0.00
tblFireplaces	NumberNoFireplace	26.30	263.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	AcresOfGrading	162.50	2.33
tblGrading	MaterialExported	0.00	40,741.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblProjectCharacteristics	CO2IntensityFactor	1664.14	486.58
tblSequestration	NumberOfNewTrees	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	545.00	546.00
tblTripsAndVMT	HaulingTripNumber	5,093.00	5,094.00
tblTripsAndVMT	PhaseName		Trenching
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00

tblTripsAndVMT	WorkerTripNumber	287.00	288.00
tblTripsAndVMT	WorkerTripNumber	57.00	58.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	6.39	2.49
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	158.37	139.72
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	696.00	733.47
tblVehicleTrips	SU_TR	5.86	2.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	131.84	116.32
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	500.00	526.92
tblVehicleTrips	WD_TR	6.65	2.59
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	42.70	40.00
tblVehicleTrips	WD_TR	716.00	754.55
tblWoodstoves	NumberCatalytic	13.15	0.00
tblWoodstoves	NumberNoncatalytic	13.15	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.1895	50.8025	36.0485	0.1246	7.7697	1.6759	9.4456	3.7719	1.5428	5.3146	0.0000	12,752.1866	12,752.1866	2.4813	0.0000	12,814.2181
2024	3.1256	21.9144	28.7584	0.0744	3.6864	0.8630	4.5494	0.9873	0.8068	1.7941	0.0000	7,392.5626	7,392.5626	0.8746	0.0000	7,414.4277
2025	8.4489	9.8915	18.3800	0.0327	0.8271	0.4761	1.3033	0.2194	0.4421	0.6615	0.0000	3,175.2217	3,175.2217	0.7449	0.0000	3,193.8444
Maximum	**8.4489**	**50.8025**	**36.0485**	**0.1246**	**7.7697**	**1.6759**	**9.4456**	**3.7719**	**1.5428**	**5.3146**	**0.0000**	**12,752.1866**	**12,752.1866**	**2.4813**	**0.0000**	**12,814.2181**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.1895	50.8025	36.0485	0.1246	3.6998	1.6759	5.3757	1.6626	1.5428	3.2053	0.0000	12,752.1866	12,752.1866	2.4813	0.0000	12,814.2181
2024	3.1256	21.9144	28.7584	0.0744	2.8704	0.8630	3.7334	0.7870	0.8068	1.5938	0.0000	7,392.5626	7,392.5626	0.8746	0.0000	7,414.4277
2025	8.4489	9.8915	18.3800	0.0327	0.6402	0.4761	1.1163	0.1735	0.4421	0.6156	0.0000	3,175.2217	3,175.2217	0.7449	0.0000	3,193.8444
Maximum	**8.4489**	**50.8025**	**36.0485**	**0.1246**	**3.6998**	**1.6759**	**5.3757**	**1.6626**	**1.5428**	**3.2053**	**0.0000**	**12,752.1866**	**12,752.1866**	**2.4813**	**0.0000**	**12,814.2181**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	41.30	0.00	33.16	47.31	0.00	30.31	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Energy	0.1235	1.0764	0.6020	6.7400e-003		0.0853	0.0853		0.0853	0.0853		1,347.5057	1,347.5057	0.0258	0.0247	1,355.5133
Mobile	3.6428	16.5964	39.8502	0.1575	14.6209	0.1231	14.7441	3.9117	0.1143	4.0260		16,097.7258	16,097.7258	0.7833		16,117.3073
Total	**10.5268**	**17.9229**	**62.1767**	**0.1654**	**14.6209**	**0.3289**	**14.9499**	**3.9117**	**0.3201**	**4.2318**	**0.0000**	**17,484.4021**	**17,484.4021**	**0.8468**	**0.0247**	**17,512.9332**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Energy	0.1104	0.9627	0.5453	6.0200e-003		0.0762	0.0762		0.0762	0.0762		1,203.8629	1,203.8629	0.0231	0.0221	1,211.0169
Mobile	3.6428	16.5964	39.8502	0.1575	14.6209	0.1231	14.7441	3.9117	0.1143	4.0260		16,097.7258	16,097.7258	0.7833		16,117.3073
Total	**10.5136**	**17.8091**	**62.1200**	**0.1646**	**14.6209**	**0.3198**	**14.9408**	**3.9117**	**0.3110**	**4.2227**	**0.0000**	**17,340.7593**	**17,340.7593**	**0.8440**	**0.0221**	**17,368.4368**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.13	0.63	0.09	0.44	0.00	2.77	0.06	0.00	2.84	0.22	0.00	0.82	0.82	0.33	10.65	0.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2023	6/30/2023	5	22	
2	Grading	Grading	7/1/2023	9/29/2023	5	65	
3	Paving	Paving	9/1/2025	12/31/2025	5	88	
4	Architectural Coating	Architectural Coating	1/1/2025	12/31/2025	5	261	
5	Building Construction	Building Construction	10/1/2023	12/31/2024	5	327	
6	Trenching	Trenching	7/1/2023	12/31/2024	5	392	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.33

Acres of Paving: 4.01

Residential Indoor: 532,575; Residential Outdoor: 177,525; Non-Residential Indoor: 24,722; Non-Residential Outdoor: 8,241; Striped Parking Area: 10,704 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	546.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,094.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2023

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3643	0.0000	5.3643	0.8122	0.0000	0.8122			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**5.3643**	**0.9975**	**6.3619**	**0.8122**	**0.9280**	**1.7402**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1324	4.1085	1.4707	0.0180	0.4340	7.6000e-003	0.4416	0.1190	7.2700e-003	0.1262		1,954.7748	1,954.7748	0.1344		1,958.1358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0426	0.4988	1.6000e-003	0.1788	1.3600e-003	0.1802	0.0474	1.2500e-003	0.0487		159.4753	159.4753	4.1000e-003		159.5779
Total	**0.1999**	**4.1512**	**1.9695**	**0.0196**	**0.6128**	**8.9600e-003**	**0.6218**	**0.1664**	**8.5200e-003**	**0.1749**		**2,114.2501**	**2,114.2501**	**0.1385**		**2,117.7137**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0921	0.0000	2.0921	0.3168	0.0000	0.3168			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**2.0921**	**0.9975**	**3.0896**	**0.3168**	**0.9280**	**1.2448**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day							lb/day			
Hauling	0.1324	4.1085	1.4707	0.0180	0.3487	7.6000e-003	0.3563	0.0980	7.2700e-003	0.1053		1,954.7748	1,954.7748	0.1344		1,958.1358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0426	0.4988	1.6000e-003	0.1384	1.3600e-003	0.1398	0.0375	1.2500e-003	0.0388		159.4753	159.4753	4.1000e-003		159.5779
Total	**0.1999**	**4.1512**	**1.9695**	**0.0196**	**0.4871**	**8.9600e-003**	**0.4961**	**0.1355**	**8.5200e-003**	**0.1441**		**2,114.2501**	**2,114.2501**	**0.1385**		**2,117.7137**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day							lb/day			
Fugitive Dust					6.1310	0.0000	6.1310	3.3251	0.0000	3.3251			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**6.1310**	**1.4245**	**7.5555**	**3.3251**	**1.3105**	**4.6356**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4181	12.9736	4.6440	0.0567	1.3705	0.0240	1.3944	0.3757	0.0230	0.3986		6,172.660 1	6,172.660 1	0.4245		6,183.273 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0844	0.0533	0.6235	2.0000e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5700e-003	0.0609		199.3441	199.3441	5.1300e-003		199.4724
Total	**0.5025**	**13.0269**	**5.2676**	**0.0587**	**1.5940**	**0.0257**	**1.6197**	**0.4350**	**0.0245**	**0.4595**		**6,372.004 2**	**6,372.004 2**	**0.4297**		**6,382.745 4**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3911	0.0000	2.3911	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.083 6
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**2.3911**	**1.4245**	**3.8156**	**1.2968**	**1.3105**	**2.6073**	**0.0000**	**6,011.477 7**	**6,011.477 7**	**1.9442**		**6,060.083 6**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4181	12.9736	4.6440	0.0567	1.1011	0.0240	1.1251	0.3096	0.0230	0.3325		6,172.660 1	6,172.660 1	0.4245		6,183.273 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0844	0.0533	0.6235	2.0000e-003	0.1730	1.7000e-003	0.1747	0.0469	1.5700e-003	0.0485		199.3441	199.3441	5.1300e-003		199.4724
Total	**0.5025**	**13.0269**	**5.2676**	**0.0587**	**1.2741**	**0.0257**	**1.2998**	**0.3564**	**0.0245**	**0.3810**		**6,372.004 2**	**6,372.004 2**	**0.4297**		**6,382.745 4**

3.4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745 2**	**2,206.745 2**	**0.7137**		**2,224.587 8**

3.4 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0610	0.0356	0.4309	1.4900e-003	0.1788	1.3100e-003	0.1802	0.0474	1.2100e-003	0.0486		148.5467	148.5467	3.4300e-003		148.6324
Total	**0.0610**	**0.0356**	**0.4309**	**1.4900e-003**	**0.1788**	**1.3100e-003**	**0.1802**	**0.0474**	**1.2100e-003**	**0.0486**		**148.5467**	**148.5467**	**3.4300e-003**		**148.6324**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.4 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0610	0.0356	0.4309	1.4900e-003	0.1384	1.3100e-003	0.1397	0.0375	1.2100e-003	0.0387		148.5467	148.5467	3.4300e-003		148.6324
Total	**0.0610**	**0.0356**	**0.4309**	**1.4900e-003**	**0.1384**	**1.3100e-003**	**0.1397**	**0.0375**	**1.2100e-003**	**0.0387**		**148.5467**	**148.5467**	**3.4300e-003**		**148.6324**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**7.2515**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2212	0.1289	1.5620	5.4000e-003	0.6483	4.7600e-003	0.6531	0.1719	4.3800e-003	0.1763		538.4818	538.4818	0.0124		538.7924
Total	**0.2212**	**0.1289**	**1.5620**	**5.4000e-003**	**0.6483**	**4.7600e-003**	**0.6531**	**0.1719**	**4.3800e-003**	**0.1763**		**538.4818**	**538.4818**	**0.0124**		**538.7924**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**7.2515**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2212	0.1289	1.5620	5.4000e-003	0.5018	4.7600e-003	0.5065	0.1360	4.3800e-003	0.1403		538.4818	538.4818	0.0124		538.7924
Total	**0.2212**	**0.1289**	**1.5620**	**5.4000e-003**	**0.5018**	**4.7600e-003**	**0.5065**	**0.1360**	**4.3800e-003**	**0.1403**		**538.4818**	**538.4818**	**0.0124**		**538.7924**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1469	4.6028	1.5587	0.0158	0.4226	5.6200e-003	0.4282	0.1217	5.3700e-003	0.1270		1,694.4926	1,694.4926	0.0968		1,696.9115
Worker	1.2151	0.7672	8.9789	0.0288	3.2192	0.0245	3.2436	0.8537	0.0225	0.8763		2,870.5553	2,870.5553	0.0739		2,872.4021
Total	**1.3620**	**5.3700**	**10.5376**	**0.0446**	**3.6417**	**0.0301**	**3.6718**	**0.9754**	**0.0279**	**1.0033**		**4,565.0479**	**4,565.0479**	**0.1706**		**4,569.3136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1469	4.6028	1.5587	0.0158	0.3443	5.6200e-003	0.3499	0.1025	5.3700e-003	0.1078		1,694.4926	1,694.4926	0.0968		1,696.9115
Worker	1.2151	0.7672	8.9789	0.0288	2.4915	0.0245	2.5160	0.6751	0.0225	0.6977		2,870.5553	2,870.5553	0.0739		2,872.4021
Total	**1.3620**	**5.3700**	**10.5376**	**0.0446**	**2.8358**	**0.0301**	**2.8659**	**0.7776**	**0.0279**	**0.8055**		**4,565.0479**	**4,565.0479**	**0.1706**		**4,569.3136**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1433	4.5862	1.5114	0.0158	0.4226	5.5200e-003	0.4281	0.1217	5.2800e-003	0.1269		1,687.9208	1,687.9208	0.0953		1,690.3030
Worker	1.1531	0.6995	8.3590	0.0279	3.2192	0.0241	3.2433	0.8537	0.0222	0.8760		2,781.5149	2,781.5149	0.0677		2,783.2071
Total	**1.2963**	**5.2857**	**9.8704**	**0.0437**	**3.6417**	**0.0297**	**3.6714**	**0.9754**	**0.0275**	**1.0029**		**4,469.4357**	**4,469.4357**	**0.1630**		**4,473.5101**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1433	4.5862	1.5114	0.0158	0.3443	5.5200e-003	0.3498	0.1025	5.2800e-003	0.1077		1,687.9208	1,687.9208	0.0953		1,690.3030
Worker	1.1531	0.6995	8.3590	0.0279	2.4915	0.0241	2.5156	0.6751	0.0222	0.6974		2,781.5149	2,781.5149	0.0677		2,783.2071
Total	**1.2963**	**5.2857**	**9.8704**	**0.0437**	**2.8358**	**0.0297**	**2.8655**	**0.7776**	**0.0275**	**0.8051**		**4,469.4357**	**4,469.4357**	**0.1630**		**4,473.5101**

3.7 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3484	3.2493	2.6050	3.3900e-003		0.2254	0.2254		0.2074	0.2074		328.8359	328.8359	0.1064		331.4947
Total	**0.3484**	**3.2493**	**2.6050**	**3.3900e-003**		**0.2254**	**0.2254**		**0.2074**	**0.2074**		**328.8359**	**328.8359**	**0.1064**		**331.4947**

3.7 Trenching - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0169	0.0107	0.1247	4.0000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		39.8688	39.8688	1.0300e-003		39.8945
Total	**0.0169**	**0.0107**	**0.1247**	**4.0000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**39.8688**	**39.8688**	**1.0300e-003**		**39.8945**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3484	3.2493	2.6050	3.3900e-003		0.2254	0.2254		0.2074	0.2074	0.0000	328.8359	328.8359	0.1064		331.4947
Total	**0.3484**	**3.2493**	**2.6050**	**3.3900e-003**		**0.2254**	**0.2254**		**0.2074**	**0.2074**	**0.0000**	**328.8359**	**328.8359**	**0.1064**		**331.4947**

3.7 Trenching - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0169	0.0107	0.1247	4.0000e-004	0.0346	3.4000e-004	0.0349	9.3800e-003	3.1000e-004	9.6900e-003		39.8688	39.8688	1.0300e-003		39.8945
Total	**0.0169**	**0.0107**	**0.1247**	**4.0000e-004**	**0.0346**	**3.4000e-004**	**0.0349**	**9.3800e-003**	**3.1000e-004**	**9.6900e-003**		**39.8688**	**39.8688**	**1.0300e-003**		**39.8945**

3.7 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3417	3.1752	2.6051	3.3900e-003		0.2197	0.2197		0.2021	0.2021		328.7959	328.7959	0.1063		331.4543
Total	**0.3417**	**3.1752**	**2.6051**	**3.3900e-003**		**0.2197**	**0.2197**		**0.2021**	**0.2021**		**328.7959**	**328.7959**	**0.1063**		**331.4543**

3.7 Trenching - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0160	9.7200e-003	0.1161	3.9000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		38.6322	38.6322	9.4000e-004		38.6557
Total	**0.0160**	**9.7200e-003**	**0.1161**	**3.9000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**38.6322**	**38.6322**	**9.4000e-004**		**38.6557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3417	3.1752	2.6051	3.3900e-003		0.2197	0.2197		0.2021	0.2021	0.0000	328.7959	328.7959	0.1063		331.4543
Total	**0.3417**	**3.1752**	**2.6051**	**3.3900e-003**		**0.2197**	**0.2197**		**0.2021**	**0.2021**	**0.0000**	**328.7959**	**328.7959**	**0.1063**		**331.4543**

3.7 Trenching - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0160	9.7200e-003	0.1161	3.9000e-004	0.0346	3.4000e-004	0.0349	9.3800e-003	3.1000e-004	9.6900e-003		38.6322	38.6322	9.4000e-004		38.6557
Total	**0.0160**	**9.7200e-003**	**0.1161**	**3.9000e-004**	**0.0346**	**3.4000e-004**	**0.0349**	**9.3800e-003**	**3.1000e-004**	**9.6900e-003**		**38.6322**	**38.6322**	**9.4000e-004**		**38.6557**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6428	16.5964	39.8502	0.1575	14.6209	0.1231	14.7441	3.9117	0.1143	4.0260		16,097.7258	16,097.7258	0.7833		16,117.3073
Unmitigated	3.6428	16.5964	39.8502	0.1575	14.6209	0.1231	14.7441	3.9117	0.1143	4.0260		16,097.7258	16,097.7258	0.7833		16,117.3073

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	681.17	654.87	599.64	2,275,023	2,275,023
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	392.18	488.46	406.65	556,039	556,039
Regional Shopping Center	438.16	512.76	258.95	915,349	915,349
Fast Food Restaurant w/o Drive Thru	1,532.49	1,489.68	1070.17	2,644,721	2,644,721
Total	3,044.00	3,145.77	2,335.42	6,391,132	6,391,132

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
City Park	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Enclosed Parking with Elevator	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
High Turnover (Sit Down Restaurant)	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Regional Shopping Center	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Fast Food Restaurant w/o Drive Thru	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1104	0.9627	0.5453	6.0200e-003		0.0762	0.0762		0.0762	0.0762		1,203.8629	1,203.8629	0.0231	0.0221	1,211.0169
NaturalGas Unmitigated	0.1235	1.0764	0.6020	6.7400e-003		0.0853	0.0853		0.0853	0.0853		1,347.5057	1,347.5057	0.0258	0.0247	1,355.5133

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	7910.31	0.0853	0.7290	0.3102	4.6500e-003		0.0589	0.0589		0.0589	0.0589		930.6241	930.6241	0.0178	0.0171	936.1544
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	1284.04	0.0139	0.1259	0.1057	7.6000e-004		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003		151.0632	151.0632	2.9000e-003	2.7700e-003	151.9609
High Turnover (Sit Down Restaurant)	2210.24	0.0238	0.2167	0.1820	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.0280	260.0280	4.9800e-003	4.7700e-003	261.5733
Regional Shopping Center	49.218	5.3000e-004	4.8300e-003	4.0500e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.7904	5.7904	1.1000e-004	1.1000e-004	5.8248
Total		**0.1235**	**1.0764**	**0.6020**	**6.7400e-003**		**0.0854**	**0.0854**		**0.0854**	**0.0854**		**1,347.5057**	**1,347.5057**	**0.0258**	**0.0247**	**1,355.5133**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	6.89494	0.0744	0.6354	0.2704	4.0600e-003		0.0514	0.0514		0.0514	0.0514		811.1697	811.1697	0.0156	0.0149	815.9900
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	1.21229	0.0131	0.1189	0.0998	7.1000e-004		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003		142.6224	142.6224	2.7300e-003	2.6100e-003	143.4699
High Turnover (Sit Down Restaurant)	2.08674	0.0225	0.2046	0.1719	1.2300e-003		0.0156	0.0156		0.0156	0.0156		245.4986	245.4986	4.7100e-003	4.5000e-003	246.9575
Regional Shopping Center	0.0388642	4.2000e-004	3.8100e-003	3.2000e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		4.5723	4.5723	9.0000e-005	8.0000e-005	4.5994
Total		**0.1104**	**0.9627**	**0.5453**	**6.0200e-003**		**0.0762**	**0.0762**		**0.0762**	**0.0762**		**1,203.8629**	**1,203.8629**	**0.0231**	**0.0221**	**1,211.0169**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126
Unmitigated	6.7604	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205	0.0000	39.1707	39.1707	0.0377	0.0000	40.1126

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5989					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6552	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205		39.1707	39.1707	0.0377		40.1126
Total	**6.7605**	**0.2501**	**21.7245**	**1.1500e-003**		**0.1205**	**0.1205**		**0.1205**	**0.1205**	**0.0000**	**39.1707**	**39.1707**	**0.0377**	**0.0000**	**40.1126**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5989					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6552	0.2501	21.7245	1.1500e-003		0.1205	0.1205		0.1205	0.1205		39.1707	39.1707	0.0377		40.1126
Total	**6.7605**	**0.2501**	**21.7245**	**1.1500e-003**		**0.1205**	**0.1205**		**0.1205**	**0.1205**	**0.0000**	**39.1707**	**39.1707**	**0.0377**	**0.0000**	**40.1126**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Cultural Resources Technical Report

CULTURAL RESOURCES TECHNICAL REPORT FOR THE 740-790 EAST GREEN STREET MIXED-USE PROJECT PASADENA, CALIFORNIA

Prepared for:

City of Pasadena Planning and Community Development Department
175 North Garfield Avenue
Pasadena, California 91101
Contact: Luis Rocha, Senior Planner

Prepared by:

Sarah Corder, MFA, Nicole Frank, MSHP, Adriane Dorrler, BA, Makayla Murillo, BA, Linda Kry, BA, and Samantha Murray, MA

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

JANUARY 2020

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Executive Summary

Dudek was retained by the City of Pasadena to complete a cultural resources technical report for the 740-790 East Green Street Mixed-Use Project (Project) in the City of Pasadena, California. This report includes the results of a pedestrian survey of the Project site by a qualified architectural historian; a California Historical Resources Information System (CHRIS) records search; coordination with the Native American Heritage Commission (NAHC) and tribal contacts; building development and archival research, development of an appropriate historic context for the Project site; and recordation and evaluation of five commercial properties over 45 years old for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Pasadena designation criteria and integrity requirements. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources and all applicable local guidelines and regulations.

Dudek conducted a CHRIS records search at the South Central Coastal Information Center (SCCIC) on August 16, 2019. No cultural resources were identified within the Project site as a result. The records search identified 18 previously conducted cultural resources technical investigations within the records search area. Two of these studies are adjacent to the Project site. Neither study identified impacts to cultural resources within the vicinity of the Project site. Additionally, the SCCIC records indicate that 52 previously recorded cultural resources exist within the surrounding 0.5-mile search radius. All 52 resources identified consist of built environment resources, none of which intersect or are adjacent to the Project site. No previously recorded prehistoric or historic-era archaeological resources were identified within 0.5-mile of the Project site as a result of the records search.

Dudek contacted the California Native American Heritage Commission (NAHC) on August 13, 2019 to request a search of the Sacred Lands File (SLF). Results of the SLF (received September 13, 2019) were positive. The NAHC recommended contacting the Gabrieleno Band of Mission Indians – Kizh Nation for specific information regarding the positive findings. The NAHC also suggested contacting an additional six Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the Project site. Details of the SLF request and results are presented in Section 2.3 and provided in Appendix C. The proposed Project is subject to compliance with Assembly Bill (AB) 52. Native American consultation pursuant to AB 52 between the City and NAHC-listed traditionally geographically affiliated tribal representatives that have requested project notification is on-going.

The five commercial properties located at 740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue do not appear eligible under any NRHP, CRHR, or City of Pasadena designation criteria due to a lack of significant historical associations and architectural merit. Therefore, these properties are not historical resource for the purposes of CEQA.

As a result of Dudek's extensive archival research, field survey, tribal coordination, and property significance evaluations, no historical or tribal cultural resources were identified within the Project site. Nor were any adjacent resources identified that could be indirectly impacted by proposed project activities. Therefore, the Project would result in a less than significant impact to historical resources under CEQA.

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1 Introduction

Dudek was retained by the City of Pasadena to complete a cultural resources technical report for the 740-790 East Green Street Mixed-Use Project (Project) in the City of Pasadena, California. This report includes the results of a pedestrian survey of the Project site by a qualified architectural historian; a California Historical Resources Information System (CHRIS) records search; coordination with the California Native American Heritage Commission (NAHC) and tribal contacts; building development and archival research, development of an appropriate historic context for the Project site; and recordation and evaluation of five commercial properties over 45 years old for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Pasadena designation criteria and integrity requirements. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources.

1.1 Project Location and Description

Project Location

The Project site is located within the City of Pasadena, California and is bound by East Green Street to the north, South Hudson Avenue to the east, South Oak Knoll Avenue to the west, and other commercial buildings to the south with the block terminating at Cordova Street (Figure 1). Specifically, the Project site includes the following five addresses and associated Assessor's Identification Numbers (AINs) (Figure 2):

1. 740-750 E. Green Street (AIN: 5743-025-024)
2. 770-784 East Green Street (AIN: 5743-025-014)
3. 790 East Green Street (AIN: 5743-025-026)
4. 111 South Hudson Avenue (AIN: 5743-025-029
5. 118 South Oak Knoll Avenue (AIN: 5743-025-027)

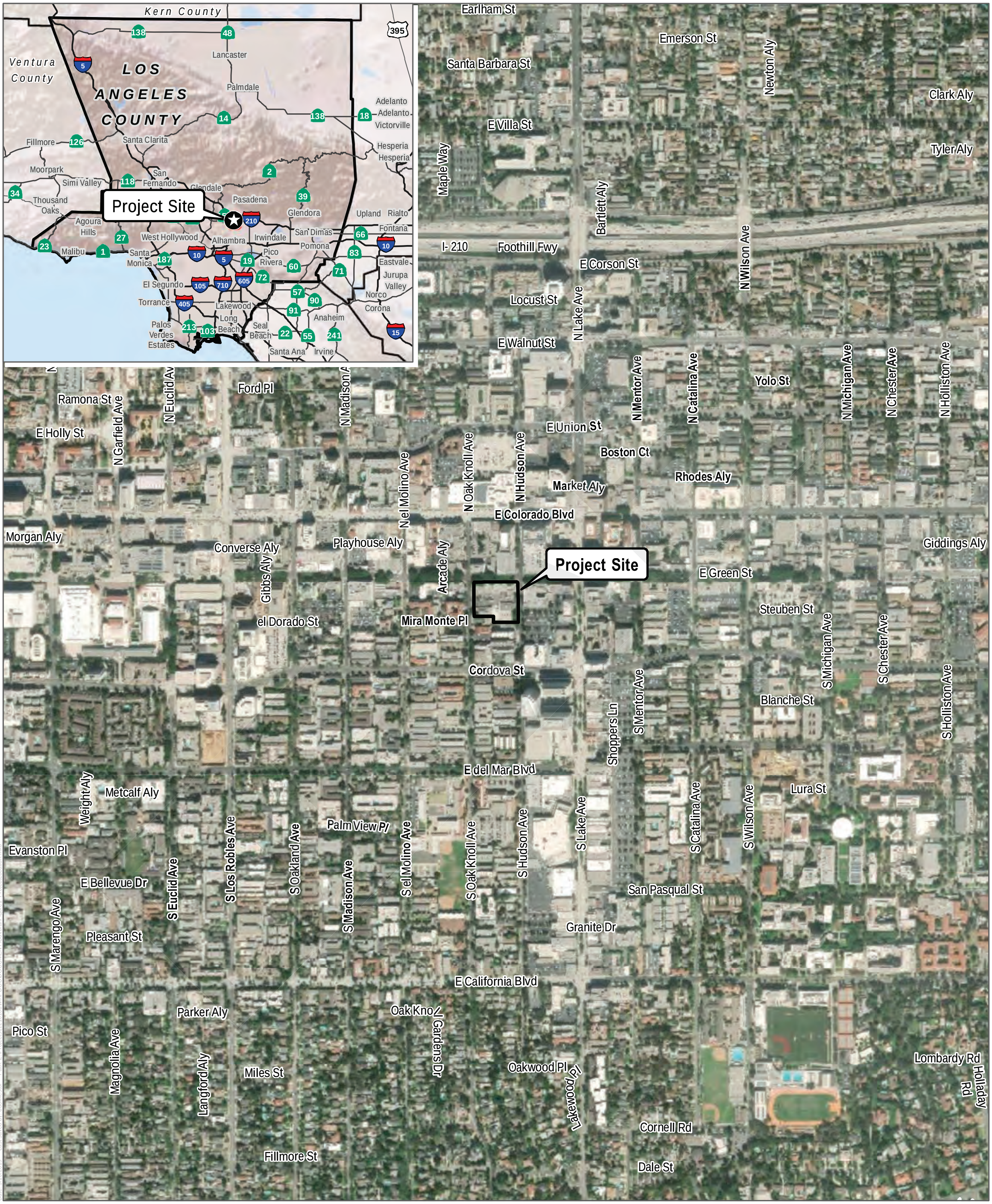
Project Description

The proposed Project involves the demolition of five commercial buildings in order to accommodate the development of a new 3- to 6-story, mixed-use building. The proposed Project includes 273 for-rent units (including 23 units designated for Very Low-Income households), 18,392 square feet (sf) of commercial use (e.g., retail, restaurant), a two-level subterranean parking garage with 492 parking spaces, and a 6,694-sf publicly accessible pocket park. Access to the parking garage would be from Oak Knoll Avenue and Hudson Avenue, via a private driveway on each street frontage. In addition to the proposed pocket park, open space areas include ground-level courtyards, pool courtyards, indoor recreational space, rooftop terraces, and private decks/patios.

Adjacent land uses include single- and multi-family residential and commercial to the west across Oak Knoll Avenue; commercial and parking to the north across Green Street; multi-family residential and parking to the east across

Hudson Avenue; and offices and a church immediately to the south, with multi-family and office uses beyond. The Project site is located within the CD-4 (Central District, Pasadena Playhouse) zoning district. The nearest light rail stations are the Lake Metro Gold Line Station located at the Interstate (I) 210 approximately 0.5-mile to the north, and the Del Mar Metro Gold Line Station located approximately 0.8-mile to the west near Central Park.

The proposed Project would establish a Planned Development (PD) zoning district (via a Zone Change) for the site and requires adoption of a PD Plan that prescribes the development standards and allowed or conditionally allowed uses in the PD. The Project proposes to use the State Density Bonus to develop 273 units, which would be allowed after applying a 35 percent density bonus based on the inclusion of 23 very low-income units. The Applicant is also requesting a building height of up to 82 feet at South Hudson Avenue, which requires approval of an Affordable Housing Concession Permit. The project would also require Design Review approval.



SOURCE: ESRI 2018

0 500 1,000 Feet
0 140 280 Meters
1:12,000

FIGURE 1

Project Location

740-790 East Green Street Mixed-Use Project

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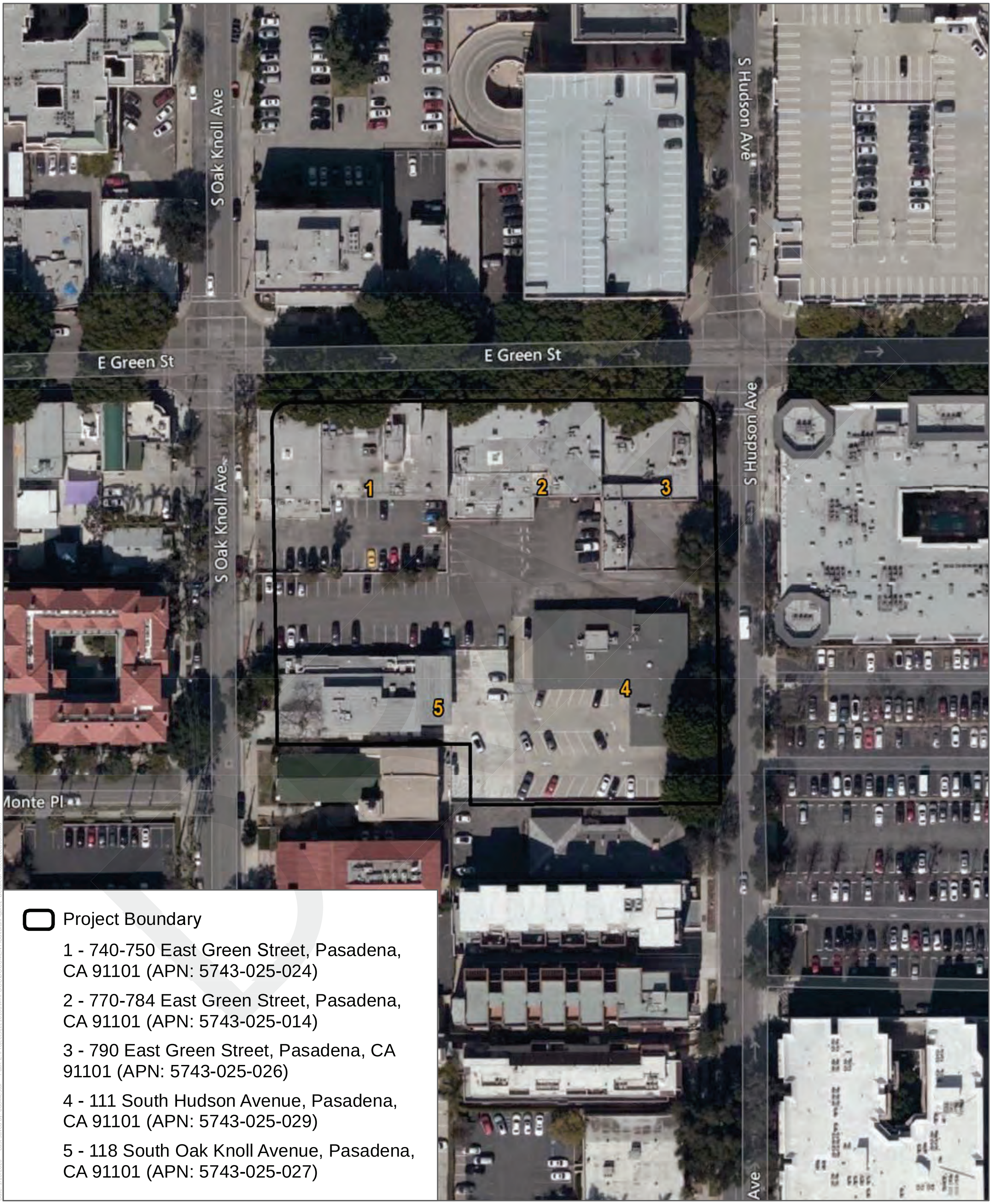

SOURCE: ESRI 2018

DUDEK

0 50 100 Feet
0 12.5 25 Meters
1:1,200

FIGURE 2
Detailed Project Location
740-790 East Green Street Mixed-Use Project

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1.2 Project Personnel

This report and associated property significance evaluations was prepared by Dudek Architectural Historians Sarah Corder, MFA and Nicole Frank, MSHP. Dudek Archaeologist Adriane Dorrler, BA, completed the CHRIS records search, the NAHC Sacred Lands File (SLF) request, and coordinated Native American outreach. Dudek Archaeologist Makayla Murillo, BA, contributed to the report. This report was reviewed by for quality assurance/quality control by Dudek Principal Architectural Historian Samantha Murray, MA and Dudek Lead Archaeologist Linda Kry, BA. Resumes for all key personnel are provided in Appendix D.

1.3 Regulatory Setting

Federal

National Register of Historic Places

While there is no federal nexus for this project, the subject property was evaluated in consideration of NRHP designation criteria. The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be “exceptionally important” (criteria consideration to be considered for listing.

State

California Register of Historical Resources

In California, the term “historical resource” includes but is not limited to “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (California Public Resources Code Section 5020.1(j)). In 1992, the California legislature established the CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (California Public Resources Code Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California Public Resources Code Section 21083.2(g) defines “unique archaeological resource.”

- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.

- California Public Resources Code Section 21074(a) defines "tribal cultural resources."

- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.

- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); California Public Resources Code Section 5020.1(q)). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (California Public Resources Code Section 21083.2[a], [b], and [c]).

California Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (California Public Resources Code section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (California Public Resources Code Section 21074(c), 21083.2(h)), further consideration of significant impacts is required. CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Public Resources Code Section 5097.98.

Local

City of Pasadena Historic Preservation Ordinance (Chapter 17.62)

This study was completed in consideration of all sections of the Pasadena Historic Preservation Ordinance (Chapter 17.62). Sections most relevant to this study are provided below.

<u>17.62.010 - Purpose of Chapter</u>

The purpose of this Chapter is to specify significance criteria for the designation of historic resources, procedures for designation, and review procedures to:

A. Encourage and promote the adaptive reuse of the City's historic resources;

B. Enhance, perpetuate, and preserve architecturally and historically significant structures and promote revitalization of historic neighborhoods and commercial areas;

C. Ensure that the rights of the owners of historic resources and owners of properties adjacent to historic resources are safeguarded;

D. Foster civic pride in the beauty and noble accomplishments of the past by promoting private stewardship of historic resources that represent these accomplishments;

E. Fulfill the City's responsibilities:

1. As a Certified Local Government under Federal preservation laws; and

2. For Federal Section 106 reviews and for the California Environmental Quality Act regarding historic resources.

F. Promote the identification, documentation, and evaluation of the significance of individual historic resources and districts;

G. Implement the historic preservation goals, policies, and programs of the General Plan;

H. Promote the City as a destination for tourists and as a desirable location for business;

I. Promote public awareness of the value of rehabilitation, restoration, and maintenance of the existing building stock as a means to conserve reusable material and energy resources;

J. Recognize the City's historic resources as economic assets; and

K. Stabilize and improve property values, and enhance the aesthetic and visual character and environmental amenities of the City's historic properties and areas.

17.62.040 - Criteria for Designation of Historic Resources

A. Evaluation of Historic Resources.

When considering applications to designate a historic monument, landmark, historic sign, landmark tree or landmark district, the Historic Preservation Commission shall apply the criteria below according to applicable National Register of Historic Places Bulletins for evaluating historic properties, including the seven aspects of integrity: location, design, setting, materials, workmanship, feeling and association (National Register of Historic Places Bulletin #15: "How to Apply the National Register Criteria for Evaluation").

B. Historic monuments.

1. A historic monument shall include all historic resources previously designated as historic treasures before adoption of this Chapter, historic resources that are listed in the National Register at the State-wide or Federal level of significance (including National Historic Landmarks) and any historic resource that is significant at a regional, State, or Federal level, and is an exemplary representation of a particular type of historic resource and meets one or more of the following criteria:

a. It is associated with events that have made a significant contribution to the broad patterns of the history of the region, State, or nation.

b. It is associated with the lives of persons who are significant in the history of the region, State, or nation.

c. It is exceptional in the embodiment of the distinctive characteristics of a historic resource property type, period, architectural style, or method of construction, or that is an exceptional representation of the work of an architect, designer, engineer, or builder whose work is significant to the region, State, or nation, or that possesses high artistic values that are of regional, State-wide or national significance.

d. It has yielded, or may be likely to yield, information important in prehistory or history of the region, State, or nation.

2. A historic monument designation may include significant public or semi-public interior spaces and features.

C. Landmarks.

1. A landmark shall include all properties previously designated a landmark before adoption of this Chapter and any historic resource that is of a local level of significance and meets one or more of the criteria listed in Subparagraph 2., below.

2. A landmark may be the best representation in the City of a type of historic resource or it may be one of several historic resources in the City that have common architectural attributes that represent a particular type of historic resource. A landmark shall meet one or more of the following criteria:

a. It is associated with events that have made a significant contribution to the broad patterns of the history of the City, region, or State.

b. It is associated with the lives of persons who are significant in the history of the City, region, or State.

c. It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the City or, to the region or possesses artistic values of significance to the City or to the region.

d. It has yielded, or may be likely to yield, information important locally in prehistory or history.

D. Historic signs.

1. A historic sign shall include all signs in the sign inventory as of the date of adoption of this Zoning Code and any sign subsequently designated historically significant by the Historic Preservation Commission that possesses high artistic values. A historic sign shall meet one or more or the following criteria:

a. The sign is exemplary of technology, craftsmanship or design of the period when it was constructed, uses historic sign materials and means of illumination, and is not significantly altered from its historic period. Historic sign materials shall include metal or wood facings, or paint directly on the façade of a building. Historic means of illumination shall include incandescent light fixtures or neon tubing on the exterior of the sign. If the sign has been altered, it must be restorable to its historic function and appearance.

b. The sign is integrated with the architecture of the building.

c. A sign not meeting criteria a or b above may be considered for inclusion in the inventory if it demonstrates extraordinary aesthetic quality, creativity, or innovation.

2. All other regulations relating to signs shall comply with Chapter 17.48 (Signs).

E. Landmark trees.

A tree shall qualify to be of historic or cultural significance and of importance to the community if it meets any one of the following criteria:

1. It is one of the largest or oldest trees of the species located in the City;
2. It has historical significance due to an association with a historic event, person, site, street, or structure; or
3. It is a defining landmark or significant outstanding feature of a neighborhood.

F. Landmark districts.

1. A landmark district shall include all landmark districts previously designated before adoption of this Chapter and any grouping of contiguous properties that also meet the following criteria:

   a. Within its boundaries, a minimum of 60 percent of the properties qualify as contributing; and

   b. The grouping represents a significant and distinguishable entity of Citywide importance and one or more of a defined historic, cultural, development and/or architectural context(s) (e.g., 1991 Citywide historic context, as amended, historic context prepared in an intensive-level survey or historic context prepared specifically for the nominated landmark district).

2. When determining the boundaries of a landmark district, the Historic Preservation Commission shall use the National Register of Historic Places Bulletin #21: "Defining Boundaries for National Register Properties".

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2 Background Research

2.1 CHRIS Records Search

On August 16, 2019, Dudek completed a CHRIS records search of the Project site and a 0.5-mile search radius at the South Central Coastal Information Center (SCCIC), located on the campus of California State University, Fullerton. This search included mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation (DPR) site records; technical reports; archival resources; and ethnographic references. The confidential records search results are also provide in Confidential Appendix A.

Previously Conducted Cultural Resources Studies

Results of the cultural resources records search indicated that 18 previous cultural resource studies have been conducted within 0.5-mile of the Project site between 1993 and 2013. While no previous studies have been conducted within the Project site, two studies (LA-04909 and LA-08816) are adjacent to the Project's northern boundary. Table 1, below, summarizes all 18 previous cultural resources studies followed by a brief summary of the two studies that are adjacent to the Project site.

Table 1. Previously Conducted Cultural Resources Studies Within a 0.5-Mile Radius of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
LA-03497	Tetra Tech, Inc.	1994	Draft Supplemental Environmental Impact Report Pasadena-Los Angeles Light Rail Transit Project	Outside
LA-03498	Tetra Tech, Inc.	1994	Final Supplemental Environmental Impact Report Pasadena-Los Angeles Light Rail Transit Project	Outside
LA-04386	Caltrans	1993	Cultural Resources Overview Los Angeles County Metropolitan Transportation Authority's Interstate Commerce Commission Abandonment Exemption Pasadena-Los Angeles Light Rail Transit Project	Outside
LA-04909	Atchley, Sara M.	2000	Cultural Resources Investigation for the Nextlink Fiber Optic Project, Los Angeles and Orange Counties, California	Adjacent
LA-05635	Duke, Curt	2001	Cultural Resource Assessment: Cingular Wireless Facility No. VY 106-01 Los Angeles County, California	Outside
LA-06961	Duke, Curt and Judith Marvin	2002	Cultural Resource Assessment AT&T Wireless Services Facility No. D493C Los Angeles County, California	Outside
LA-07459	Metzer, Valerie A.	2006	FCC 060420b 336 East Colorado Boulevard, Pasadena, Los Angeles County, California 91101	Outside
LA-08813	Bonner, Wayne H. and Kathleen A. Crawford	2007	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate LE04861E (Nouri Rugs), 634 East Colorado Boulevard, Pasadena, Los Angeles County, California	Outside

Table 1. Previously Conducted Cultural Resources Studies Within a 0.5-Mile Radius of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
LA-08816	Padon, Beth	2007	Archaeological Survey Report Playhouse District Streetscapes, Walkways and Alleys Project, Pasadena Playhouse Historic District, City of Pasadena, Los Angeles County, California (Local Assistance Project, District 07 Los Angeles, EA 07-4U3734)	Adjacent
LA-09050	Thai, Sean and Lorna Billat	2005	Los Robles / CA-7103J	Outside
LA-09681	Supernowicz, Dana E.	2007	Cultural Resources Study of the Charles Company Pasadena Project, Royal Street Communications Site No. LA2367B, 532 E. Colorado Boulevard, Pasadena, Los Angeles County, California 91101	Outside
LA-10845	Judd, Bruce	2002	Photographs Partial Plan Drawings	Outside
LA-10991	Grimes, T.	2001	East Colorado Boulevard, Specific Plan, Historic Resources Survey	Outside
LA-11420	McKenna, Jeanette A.	2011	A Cultural Resources Assessment and Evaluation of Potential Impacts to the William McKinley Elementary School in the City of Pasadena, Los Angeles County, California	Outside
LA-11534	Supernowicz, Dana	2010	Cultural Resources Study of the Scottish Rite Project AT&T Site No. LAD493, 150 North Madison Avenue Pasadena, Los Angeles County, California 91101	Outside
LA-11725	Puckett, Heathe	2012	E. Walnut, 532 E. Colorado Boulevard, Pasadena, CA 91101	Outside
LA-12196	Bonner, Wayne, Sarah Williams, and Kathleen Crawford	2012	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate IE04861E (IE861 Nouri Rugs), 634 East Colorado Boulevard, Pasadena, Los Angeles County, California	Outside
LA-12613	Perez, Don	2013	Los Robles/Ensite #13890 (120735), 80 South Lake Avenue, Pasadena, Los Angeles County, CA 91101	Outside

LA-04909

Nextlink retained Jones & Stokes to conduct a cultural resources study in support of the Nextlink Fiber Optic Project. The project consisted of the installation of miles of buried fiber optic cable throughout residential and business districts in Los Angeles and Orange Counties. The project alignment was discontiguous and occurred entirely within asphalt-paved roadways. A section of the alignment traversed Green Street in the City of Pasadena, adjacent to the northern boundary of the current Project site. The study identified four NRHP listed properties adjacent to the project alignment, none of which was in the vicinity of the current Project site. No additional cultural resources were identified within the project alignment as a result of the records search, NAHC SLF search, and windshield survey. Management recommendations consisted of the standard measures for the unanticipated discovery of cultural resources and human remains.

LA-08816

Caltrans, District 07 retained Discovery Works, Inc. to prepare an Archaeological Survey Report (ASR) in support of Playhouse District Streetscapes, Walkways and Alleys Project in the City of Pasadena. The project proposed the installation of amenities along sidewalks within the NRHP listed Pasadena Playhouse Historic District (District), Proposed amenities included new pedestrian lighting, enhanced landscaping, street furniture, public signage, and public art. Ground disturbance was not expected to exceed 18-inches below the existing sidewalk. The Area of Potential Effect (APE) was limited to the extent of the District, which is bound by Union Street to the north, Lake Avenue to the east, Los Robles Avenue to the west, and Green Street to the South. The project APE is adjacent to the current Project site at Green Street.

The ASR focused on project affects to archaeological resources only. Built environment resources were not considered during the study. No archaeological resources were identified within or immediately adjacent to the APE as a result of the CHRIS search, SLF search, Native American outreach, and intensive survey. The management recommendation consisted of the standard measure for the unanticipated discovery of cultural resources during project construction.

Previously Recorded Cultural Resources

The CHRIS records search indicates that 52 cultural resources have been previously recorded within 0.5-mile of the Project site, none of which intersect or are adjacent to the Project site. All of the previously recorded cultural resources within the records search area consist of built environment resources. These resources generally date to early twentieth century Pasadena and showcase the City Beautiful Movement, which is discussed in Section 3.3 Historic Period Overview. The built environment resources consist of three NRHP listed districts; one government building; four educational buildings including one specified as a “woman’s property”; five community buildings including one specified as a “woman’s property”; four religious buildings; 19 commercial buildings; three hotels; six multi-family properties including one with a commercial property component and one consisting of 40 bungalow courts; and seven single-family properties. Table 2, below, provides details of these previously recorded resources. No prehistoric or historic-era archaeological resources were identified within the Project site or 0.5-mile search radius as a result of the CHRIS search.

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
180417	—	Historic: Single-family property	Ernest W. Smith House: 272 South Los Robles Avenue (built 1910)	1S: Listed in the NR (1988) OHP HRI No. 031123	1979 (Pomeroy, E.); 1986 (Milkovich, A.)	Outside
180418	—	Historic: Religious building	Throop Memorial Universalist Church: 300 South Los Robles Avenue (built 1922-1923)	3S: Appears eligible for NR through survey evaluation (1979) OHP HRI No. 031124	1979 (Pomeroy, E.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
180424	—	Historic: Single-family property	Benshoff House: 205 South Oakland Avenue (built 1896)	3S: Appears eligible for NR through survey evaluation (1979) OHP HRI No. 031130	1979 (Sullivan, G.)	Outside
180465	—	Historic: Government building	Pasadena City Hall: 100 North Garfield Avenue (built 1926)	3: Appears eligible for NR (1985, 1984) 1D: Contributor to a NR listed district (1979) 3D: Appears eligible for NR as a contributor to an NR eligible district OHP HRI No. 031172	1985 (Unknown)	Outside
180473	—	Historic: Community building	Odds Fellows Temple: 175 North Los Robles Avenue (built 1933)	1S: Listed in the NR (1985) 1D: Contributor to a NR listed district (1980) OHP HRI No. 031180	1983 (Long, M. and R. Sicha)	Outside
180476	—	Historic: Commercial building	Pitzer & Warwick Clothing Store: 325 East Colorado Boulevard (built 1925)	3D: Appears eligible for NR as a contributor to an NR eligible district (1979) OHP HRI No. 031183	1979 (Unknown)	Outside
180485	—	Historic: Single-family property	Pinney House: 180 South Euclid Avenue (built 1906) HRI#031192	3S: Appears eligible for NR through survey evaluation (1979) OHP HRI No. 031192	1979 (Scheid, A.)	Outside
180486	—	Historic: Community building	The Masonic Temple: 200 South Euclid Avenue (built 1926)	2S2: Eligible for the NR/Listed in the CR (1986) OHP HRI No. 031193	1985 (Long, M., L. Melton, and D. Hlava)	Outside
180489	—	Historic: Hotel/Multiple-family property	Livingstone Hotel and Apartments: 131-139 South Los Robles Avenue (built 1927)	3S: Appears eligible for NR through survey evaluation (2002) OHP HRI No. 031196	2002 (Moruzzi, P.)	Outside
180490	—	Historic: Multiple-family property	Stanley Apartments: 141 South Los Robles Avenue (built 1926) ; Multiple family property;HRI#031197	3S: Appears eligible for NR through survey evaluation (2002) OHP HRI No. 031197	2002 (Moruzzi, P.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
180495	—	Historic: Office buildings/Multiple-family properties	Row of 1920s era office buildings and apartments: 127, 139, 149, 157, 171-175, 191, 197-201 South Los Robles Avenue (built circa 1904-1927)	6: Determined ineligible for the NR (1979)	1979 (Link, J.)	Outside
180496	—	Historic: Commercial building	F.W. Woolworth Co.: 387-399 East Colorado Boulevard (built 1941)	6: Determined ineligible for the NR (1979) 7R: Not evaluated (n.d.) OHP HRI No. 031203	1979 (DeMayo, D., N. Timpastato, and A. Scheid)	Outside
180521	—	Historic: Educational building	Grace Nicholson Building: 46 North Los Robles Avenue (built 1925)	1CL: Automatically listed in the CR (1989) as California Registered Landmark No. 988 7L: Needs to be reevaluated (1989) OHP HRI No. 031228	1976 (Brewer, P.)	Outside
180522	—	Historic: Commercial building	Walter W. Gerlach Building: 464-468 East Colorado Boulevard (built 1922)	1D: Contributor to a NR listed district (1979) OHP HRI No. 031229	1979 (Scheid, A.)	Outside
180523	—	Historic: Commercial building	Harry Fitzgerald Building: 489 East Colorado Boulevard (built 1926)	3: Appears eligible for NR (1979) 1D: Contributor to a NR listed district (1994) OHP HRI No. 031230	1979 (Scheid, A.)	Outside
180524	—	Historic: Commercial building	Star-News Building: 525 East Colorado Boulevard (built 1924-1925)	3: Appears eligible for NR (1979) 1D: Contributor to a NR listed district (1994) 2S2: Eligible for NR/Listed in CR (1998) OHP HRI No. 031231	1979 (Scheid, A.)	Outside
180525	—	Historic: Religious building	Pasadena Presbyterian Church: 585 East Colorado Boulevard (built 1962)	6: Determined ineligible for the NR (1979) 7N: Needs to be reevaluated (n.d.) OHP HRI No. 031232	1979 (Scheid, A.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
180526	—	Historic: Commercial building	First Trust Building and Garage: 587 East Colorado Boulevard and 34-44 North Madison Avenue (built 1927)	1D: Contributor to a NR listed district (1994) 1S: Listed in the NR (1987) OHP HRI No. 031233	1979 (Scheid, A.); 1986 (Milkovich, A.); 1987 (Gualtieri, K.); 1993 (Kliwinski, L. and J.C. Wilson)	Outside
180527	—	Historic: Community building	Pasadena Playhouse: 39 South El Molino Avenue (built 1924)	1D: Contributor to a NR listed district (1994) 7K: Resubmitted to CHP but not reevaluated (1985, 1980) 7L: Needs to be reevaluated (1983, 1977) 1S: Listed in NR and CR (1975) 1CL: Automatically listed in the CR (1975) as California Registered Landmark No. 887 OHP HRI No. 031234	1980 (Arbuckle, J.)	Outside
180530	—	Historic: Commercial building	Singer Building: 520 East Colorado Boulevard (built 1926)	1D: Contributor to a NR listed district (1994) 1S: Listed in NR and CR (1985) OHP HRI No. 031237	1984 (Heumann, L. and L. Melton)	Outside
180548	—	Historic: Multiple-family property	Herkimer Arms: 527 East Union Street (built 1894-1912)	3S: Appears eligible for NR through survey evaluation (1980) OHP HRI No. 031255	1980 (Gregory, T.)	Outside
180557	—	Historic: Community building/Women's property	Edward Blinn House: 160 North Oakland Avenue (built 1905)	1D: Contributor to a NR listed district (2010) 3S: Appears eligible for NR through survey evaluation (2001) 1S: Listed in NR and CR (2001) OHP HRI No. 031264	2000 (Gregory, T.); 2001 (Gregory, T.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
180565	—	Historic: District	Ford Place Historic District: 110-175 North Oakland Avenue; 450-465 Ford Place; and 144 North Los Robles Avenue (built circa 1902)	1S: Listed in NR and CR (2010) OHP HRI No. 031272	2010 (Beall, E.)	Outside
180570	—	Historic: Community building	Scottish Rite Cathedral: 150 North Madison Avenue (built 1925) ; Community center/social hall; Religious building; HRI#031277	2S2: Eligible for the NR/Listed in the CR (2005, 1984) 1D: Contributor to a NR listed district (1994) 1S: Listed in NR and CR (1984) OHP HRI No. 031277	1983 (Long, M.)	Outside
180579	—	Historic: Single-family property	Theodore Parker Lukens House: 267 North El Molino Avenue (built 1886-1887)	1S: Listed in NR and CR (1984) OHP HRI No. 031286	1983 (Graunke, C.)	Outside
180698	—	Historic: Single-family properties	Harnetiaux Court: 48 North Catalina Avenue (built 1922)	1S: Listed in NR and CR (1994) OHP HRI No. 083076	1994 (Kliwinski, L.)	Outside
180706	—	Historic: District	Pasadena Playhouse Historic District: 464-611 East Colorado Boulevard; 550-655 East Green Street; 21-127 South El Molino Avenue; and 150 North-101 South Madison Avenue (built circa 1920s and 1930s)	1S: Listed in NR and CR (1994) OHP HRI No. 084048	1992 (Howse, C.); 1993 (Kliwinski, L.)	Outside
180736	—	Historic: Commercial building	Kindel Building: 1095 East Colorado Boulevard (built 1927)	1S: Listed in NR and CR (1996) OHP HRI No. 064617	1995 (Goeken, B.); 2000 (Grimes, T.)	Outside
180759	—	Historic: Commercial building	Bullock's Pasadena: 401 South Lake Avenue (built 1947)	1S: Listed in NR and CR (2009, 1996) OHP HRI No. 032770	1996 (Hess, A.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
181075	—	Historic: Religious building	Pasadena First Congregational Church: 464 East Walnut Street (built 1927)	6: Determined ineligible for the NR (1980) 7R: Not evaluated (n.d.) OHP HRI No. 031311	1980 (Pope, P. and A. Scheid)	Outside
181857	—	Historic: Single-family property	A.C. Stanley Home: 326-328 South Los Robles Avenue (built 1893)	7R: Not evaluated (n.d.) OHP HRI No. 032333	1983 (Miller, D.)	Outside
181879	—	Historic: Educational building	McKinley Junior High School: 325 South Oak Knoll Avenue (built 1923-1927)	3: Appears eligible for NR, CR, and Local listing (1999, 2011) OHP HRI No. 032355	1999 (Grimes, T. and L. Heumann); 2011 (McKenna, J.A.)	Outside
182902	—	Historic: Single-family property	Forster House: 1114 Del Mar Boulevard (built 1923)	6Z: Determined ineligible for the CR, not evaluated for NR or Local (2017) OHP HRI No. 033380	2017 (Nayyar, M.)	Outside
182903	—	Historic: Multiple-family property	1124 East Del Mar Boulevard (built circa 1920 and 1952)	6Z: Determined ineligible for the CR, not evaluated for NR or Local (2017) OHP HRI No. 033381	2017 (Nayyar, M.)	Outside
183133	—	Historic: Commercial building	McDaneld Motor Co.: 1021 East Colorado Boulevard (built 1922) ; 1-3 Story commercial building; HRI#064616	7R: Not evaluated (1991) OHP HRI No. 064616	1991 (Unknown)	Outside
183139	—	Historic: Commercial building	Lieberg Building: 909-911 East Colorado Boulevard (built 1926)	7R: Not evaluated (1991) OHP HRI No. 064622	1987 (Impastato, N.)	Outside
183140	—	Historic: Hotel	Hotel Constance: 940 East Colorado Boulevard (built 1926)	2S3: Determined eligible for NR by Part I Tas Certification/Listed in CR (n.d.) 7R: Not evaluated (1991) OHP HRI No. 064623	1987 (Impastato, N.)	Outside
183141	—	Historic: Hotel	Hotel Mentor: 953-965 East Colorado Boulevard (built 1923)	7R: Not evaluated (1991) OHP HRI No. 064624	1987 (Impastato, N.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
183142	—	Historic: Commercial building	Beverly Pasadena Bowling Co.: 968-972 East Colorado Boulevard (built 1929)	7R: Not evaluated (1991) OHP HRI No. 064625	1987 (Impastato, N.)	Outside
183143	—	Historic: Commercial building	Frank Collins Company: 985-993 East Colorado Boulevard (built 1928)	7R: Not evaluated (1991) OHP HRI No. 064626	1987 (Impastato, N.)	Outside
183144	—	Historic: Commercial building	Allied Auto Supply: 1060 East Colorado Boulevard (built 1952)	7R: Not evaluated (1991) OHP HRI No. 064627	1987 (Impastato, N.)	Outside
183145	—	Historic: Commercial building	Firestone: 1100 Colorado Boulevard (built 1945-1948) ; 1-3 Story commercial building; HRI#064628	7R: Not evaluated (1991) OHP HRI No. 064628	1987 (Impastato, N.)	Outside
183146	—	Historic: Educational building	Parkers/Watterson College: 1155 East Colorado Boulevard (built 1939 and 1950)	7R: Not evaluated (1991) OHP HRI No. 064629	1987 (Impastato, N.); 2000 (Grimes, T.)	Outside
183600	—	Historic: District	Pasadena Civic Center District: Garfield Avenue (built circa 1920s)	1S: Listed in NR and CR (1979) OHP HRI No. 075183	1978 (Hays, C.S.); 1979 (Brown, D.)	Outside
184671	—	Historic: Commercial building	Smith's Upholstery: 1055 East Walnut Street (built 1936)	7R: Not evaluated (1990) OHP HRI No. 087683	1990 (DeWolfe, S.)	Outside
184963	—	Historic: Educational building/Women's property	Miss Orton's Classical School for Girls: 154 South Euclid Avenue (built 1900)	1D: Contributor to a NR listed district (1995) 3D: Appears eligible for NR as a contributor to an NR eligible district (1995) OHP HRI No. 097179	1993 (Gerber, M. and J. Harlan)	Outside
188270	—	Historic: Commercial building	Sears Roebuck & Company: 530-532 East Colorado Boulevard (built 1924)	6Y: Determined ineligible for NR, not evaluated for CR or Local listing (2007)	2007 (Supernowicz, D.)	Outside

Table 2. Previously Recorded Cultural Resources Within a 0.5-Mile Radius of the Project Site

Primary (P-19-)	Trinomial (CA-LAN-)	Resource Age and Type	Resource Description	NRHP Eligibility	Recording Events	Proximity to Project Site
189213	—	Historic: Commercial building	Pep Boys: 1135 East Colorado Boulevard (built 1970)	5S3: Appears eligible for Local listing (2000) 6L: Determined ineligible for Local listing/May warrant special consideration in planning (n.d.) OHP HRI No. 139891	2000 (Grimes, T.)	Outside
190483	—	Historic: Single-family property	216 West Palm Drive (built 1950)	7R: Not evaluated (2012)	2012 (Bechtel, E. and C. Tibbet)	Outside
190680	—	Historic: Multi-family properties	Study of 40 bungalow courts in Pasadena: (built circa 1910s through 1930s)	1S: Listed in NR are 27 of the bungalow courts (1981) OHP HRI No. 030783	1981 (Sicha, R.J.)	Outside
190777	—	Historic: Commercial building	Los Robles: 80 South Lake Avenue (built 1967)	6Y: Determined ineligible for NR, not evaluated for CR or Local listing (2013)	2013 (Francisco, S.)	Outside
192477	—	Historic: Religious building	Ahiah Center for Spiritual Living: 277 North El Molino Avenue (built 1912 and 1959)	6Z: Ineligible for NR, CR, or Local listing (2015)	2015 (Ehringer, C.)	Outside

2.2 CHRID Records Search

Dudek also conducted a review of the California Historical Resources Inventory Database (CHRID), specifically for properties entered by the City of Pasadena. The CHRID promotes and protects cultural heritage through documenting and sharing information on historical resources. CHRID was developed through the California State Office of Historic Preservation's Certified Local Government (CLG) Grant Program and partially funded through the Federal Historic Preservation Fund Program.

All properties within the Project site were searched in the online CHRID. As a result, none of the properties located within the Project site are listed in the online CHRID and therefore have not been previously evaluated. A review of Pasadena's Historic and Landmark Districts indicates that the Project site does not fall within any existing historic districts. The Project site is approximately two blocks east of the NRHP-listed Pasadena Playhouse district, and several blocks west of the Green Street Village Landmark District. A review of the CHRID confirmed that no properties within the Project site have been previously evaluated for historical significance.

2.3 Native American Coordination

NAHC Sacred Lands File Search

Dudek contacted the NAHC on August 13, 2019, and requested a review of the SLF. The NAHC replied via email on September 13, 2019, stating that the results of the SLF search were positive. The NAHC recommended contacting the Gabrieleno Band of Mission Indians – Kizh Nation for more information. The NAHC also suggested contacting an additional six Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the Project site. No additional tribal outreach was conducted by Dudek; however, in compliance with AB 52, the City has contacted all NAHC-listed traditionally geographically affiliated tribal representatives that have requested project notification. AB 52 consultation efforts conducted by the City are discussed in the following paragraph. Documentation of Dudek's coordination with Native American groups and individuals is provided in Appendix C.

Assembly Bill 52 Consultation

The Project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed Project. All NAHC-listed California Native American Tribal representatives that have requested project notification pursuant to AB 52 were sent letters by the City on January 2, 2020. The letters contained a project description, outline of AB 52 timing, request for consultation, and contact information for the appropriate lead agency representative. Documents related to AB 52 consultation are on file with the City of Pasadena.

2.4 Building Development and Archival Research

Building development and archival research were conducted for the Project site in an effort to establish a thorough and accurate historic context for the significance evaluations, and to confirm the building development history of the Project site and associated parcels.

City of Pasadena Permit Center

On August 20, 2019, Dudek visited the City of Pasadena Permit Center and obtained all building permits and records for properties within the Project site for new construction, demolition, alteration, and additions.

Los Angeles County Office of the Assessor

On August 20, 2019, Dudek researched property characteristic records for the Project site in order to establish dates of construction.

Historical Newspaper Search

Dudek reviewed historical newspapers covering the City of Pasadena and overall County of Los Angeles in an effort to understand the development of the Project site. All information obtained from the historical newspaper search was incorporated into the historic context.

Historical Aerial Photographs

Historic aerial photographs of the Project site were available from Nationwide Environmental Title Research LLC (NETR) maps for the years 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016 and from the University of California, Santa Barbara (UCSB), FrameFinder Maps for the years 1927, 1936, 1944, 1956, 1968, and 1971. The earliest aerial photograph dates from 1927 and indicates that the project area was located just east of the center of Old Pasadena. The surrounding area has been fully developed with residential and commercial properties. The Project site is also fully developed besides one lot facing onto East Green Street. The buildings along South Oak Knoll Avenue and South Hudson Avenue appear to be single-family residences. The 1936 and 1944 aerials display very little noticeable changes to the project area and its surrounding area. The 1952 and 1953 photographs shows several changes from the 1944 aerial in the replacement of the residences along South Hudson Avenue for a large L-shaped building and parking lots, and the removal of the majority of the trees along the open lot facing onto East Green Street. The residence located at 118 South Oak Knoll Avenue was replaced with a multi-story rectangular building. An additional change is seen in the demolition of the two buildings at the corner of East Green Street and South Hudson Avenue. The 1956 aerial shows the construction of a square building and parking lot along East Green Street replacing the only open plot of land on the subject property.

The 1964 photograph displays the removal of the residences located at 760-762 East Green Street and 106 South Oak Knoll Avenue. The buildings on South Oak Knoll Avenue were replaced with a parking lot and the buildings on South Green Street were replaced with a commercial property. An irregularly shaped structure was constructed on the open lot at the corner of East Green Street and South Hudson Avenue. The block from South Oak Knoll Avenue and South Hudson Avenue contains a solid row of buildings. The Project site appears to have undergone little change since this period in comparison with modern aerial photographs. In the 1972 aerial, a large highway interchange between CA-134 and CA-710 was constructed west of the project area and is one of the last noticeable changes to the surrounding area (NETR 2019; UCSB 2019).

Sanborn Fire Insurance Maps

The Project site was reviewed on City of Pasadena Sanborn Fire Insurance Maps for the years 1887, 1888, 1889, 1890, 1894, 1903, 1910, 1931, and 1951. The Project site is visible on two maps from the years 1931 and 1951.

1931 Sanborn Map

The 1931 Sanborn displays 11 lots, the majority of which are developed with residential properties.

The properties at 116 and 106 South Oak Knoll Avenue display similar two-story dwellings with a side front entry porch, wood shingle roofs, and one-story rear wings with composition roofs. The dwelling at 106 South Oak Knoll also displays a one-and-a-half-story auxiliary building at the rear of the property with a wood shingle roof.

The property at 740 East Green Street displays two buildings: the first is located on the corner of South Oak Knoll Avenue and East Green Street and is a two-story composition roof commercial picture framing and paints shop. The building is labeled as a store that is wood frame with wood posts and a brick wall on the first floor only. This building also features two wire glass skylights and a wire glass rear addition. The second building on the property is a one-story auxiliary structure with a composition roof.

The property at 760-762 East Green Street displays three structures: the building closest to East Green Street is a one-story wood frame dwelling with a wood shingle roof and entry porch, the next building is a one-story auxiliary building with a composition roof, and the third building is a one-story dwelling with a composition roof, terra cotta chimney, and one-story entry porch. The next lot to the left is vacant.

The property at 776 East Green Street contains a single, one-story dwelling with a wood shingle roof and two wood frame sections and the rear section displays a composition roof.

The property at 790-796 East Green Street contains two buildings the first is a one-story wood frame gas and oil building the other is a “Battery, Vulcanizing, and Greasing” commercial wood frame structure with a composition roof.

The properties at 95, 101-103, 113, and 123 South Hudson Avenue all contain dwellings. The building located at 95 South Hudson Avenue is one-story with a wood shingle roof and two wood frame extensions. The lot containing 101-103 South Hudson Avenue displays four buildings, the one closest to the street is the largest at one-and-one-half-story with a shingle roof and three wood frame one-story rooms. The next house is one-story with a composition roof, and the two other building are one-story auxiliary structures. The properties at 113 and 123 South Hudson Avenue both display two-story dwellings and both main buildings have a one-story auxiliary structure at the rear of their properties with composition roofs, and a front one-story porch (Sanborn 1931).

1951 Sanborn Map

The 1951 Sanborn Map does not indicate any changes to the following properties: 790-790 East Green Street and 95 South Hudson Avenue. The properties at 750 East Green Street and 760-762 East Green Street indicate only minor changes. Both 116 and 106 South Oak Knoll Avenue have been replaced. The home at 116 is replaced with a one- and two-story office buildings and 106 South Oak Knoll Avenue is replaced with two one-and-a-half-story dwellings with composition roofs and a one-story hollow cement block auxiliary building. The dwelling at 776 East Green Street was replaced with a small one-story wood frame restaurant with a composition roof. All three dwellings located at 101-103, 113, and 123 East Green Street have been replaced with a large L-shaped one-story office building with a composition roof and wood posts. Around the building is a series of wood frame eaves and eleven windows (Sanborn 1951).

3 Cultural Setting

3.1 Prehistoric Overview

Evidence for continuous human occupation in Southern California spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad period have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. To be more inclusive, this research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1769), and Ethnohistoric (post-AD 1769).

Paleoindian Period (pre-5500 BC)

Evidence for Paleoindian occupation in the region is tenuous. Our knowledge of associated cultural pattern(s) is informed by a relatively sparse body of data that has been collected from within an area extending from coastal San Diego, through the Mojave Desert, and beyond. One of the earliest dated archaeological assemblages in the region is located in coastal Southern California (though contemporaneous sites are present in the Channel Islands) derives from SDI-4669/W-12 in La Jolla. A human burial from SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (95.4% probability) (Hector 2006). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of ground stone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of ground stone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on Naval Air Weapons Station China Lake near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multi-component fluted point site, and MNO-680—a single component Great Basined Stemmed point site (see Basgall et al. 2002). At MNO-679 and -680, ground stone tools were rare while finely made projectile points were common.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the region that possibly dates between 10,365 and 8,200 BC (Warren et al. 2004). Termed San Dieguito (see also Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (see also Warren 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos's interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

San Dieguito sites are rare in the inland valleys, with one possible candidate, RIV-2798/H, located on the shore of Lake Elsinore. Excavations at Locus B at RIV-2798/H produced a toolkit consisting predominately of flaked stone tools, including crescents, points, and bifaces, and lesser amounts of groundstone tools, among other items (Grenda 1997). A calibrated and reservoir-corrected radiocarbon date from a shell produced a date of 6630 BC. Grenda (1997) suggested this site represents seasonal exploitation of lacustrine resources and small game and resembles coastal San Dieguito assemblages and spatial patterning.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in Southern California deserts, where hunting-related tools were replaced by processing tools during the early Holocene (see Basgall and Hall 1990).

Archaic Period (8000 BC – AD 500)

The more than 2,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in Southern California. If San Dieguito is the only recognized Paleoindian component in the coastal Southern California, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the region (see Hale 2001, 2009).

The Archaic pattern, which has also been termed the Millingstone Horizon (among others), is relatively easy to define with assemblages that consist primarily of processing tools, such as millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the region with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (see Basgall and Hall 1990; Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurred until the bow and arrow was adopted around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remained low. After the bow was adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decreased in proportion relative to expedient, unshaped ground stone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complemented only by the addition of the bow and ceramics.

Late Prehistoric Period (AD 500-1769)

The period of time following the Archaic and before Ethnohistoric times (AD 1769) is commonly referred to as the Late Prehistoric (Rogers 1945; Wallace 1955; Warren et al. 2004); however, several other subdivisions continue to be used to describe various shifts in assemblage composition. In general, this period is defined by the addition of arrow points and ceramics, as well as the widespread use of bedrock mortars. The fundamental Late Prehistoric assemblage is very similar to the Archaic pattern, but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred before AD 1400. Millingstones and handstones persisted in higher frequencies than mortars and pestles until the last 500 years (Basgall and Hall 1990); even then, weighing the economic significance of millingstone-handstone versus mortar-pestle technology is tenuous due to incomplete information on archaeological assemblages.

3.2 Ethnographic Overview

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Geiger and Meighan 1976; Harrington 1934; Laylander 2000; Sparkman 1908; White 1963). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his "memory culture" approach (Lightfoot 2005: 32) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p.

34). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007: 80) A large amount of variation within the language of a group represents a greater time depth then a group's language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates (2007:71). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

The tribes of this area have traditionally spoken Takic languages that may be assigned to the larger Uto–Aztecan family (Golla 2007, p. 74). These groups include the Gabrielino (alternately Gabrieleño), Cahuilla, and Serrano. Golla has interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2000).

Gabrielino (Gabrieleño)/Tongva

The archaeological record indicates that project site and vicinity was occupied by the Gabrieleño, who arrived in the Los Angeles Basin around 500 B.C. Surrounding cultural groups included the Chumash and Tataviam to the northwest, the Serrano and Cahuilla to the northeast, and the Juaneño and Luiseño to the southeast.

The name "Gabrieliño" or "Gabrieleño" denotes those people who were administered by the Spanish from the San Gabriel Mission, which included people from the Gabrieleño area proper as well as other social groups (Bean and Smith 1978; Kroeber 1925). Therefore, in the post-Contact period, the name does not necessarily identify a specific ethnic or tribal group. The names by which Native Americans in southern California identified themselves have, in some cases, been lost. Many modern Gabrieleño identify themselves as the Tongva (King 1994), within which there are a number of regional bands. Though the names "Tongva" or "Gabrieleño" are the most common names used by modern Native American groups, and are recognized by the Native American Heritage Commission, there are groups within the region that self-identify differently, such as the Gabrielino Band of Mission Indians - Kizh Nation. In order to be inclusive of the majority of tribal entities within the region, the name "Tongva" or "Gabrieleño" are used within this report.

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands, San Clemente, San Nicolas, and Santa Catalina. The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000 (Bean and Smith 1978), but recent ethnohistoric work suggests a number approaching 10,000 (O'Neil 2002). Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Cleared fields for races and games, such as lacrosse and pole throwing, were created adjacent to Tongva villages (McCawley 1996). Archaeological sites composed of villages with various sized structures have been identified.

The largest, and best documented, ethnographic Tongva village in the vicinity was that of *Yanga* (also known as Yaangna, Janga, and Yabit), which was in the vicinity of the downtown Los Angeles (McCawley 1996:56-57; NEA and King 2004). This village was reportedly first encountered by the Portola expedition in 1769. In 1771, Mission San Gabriel was established. Yanga provided a large number of the recruitments to this mission; however, following the founding of the Pueblo of Los Angeles in 1781, opportunities for local paid work became increasingly common, which had the result of reducing the number of Native American neophytes from the immediately surrounding area (NEA and King 2004). Mission records indicate that 179 Gabrieleno inhabitants of Yanga were recruited to San Gabriel Mission (King 2000; NEA and King 2004: 104). Based on this information, Yanga may have been the most populated village in the Western Gabrieleno territory. Second in size, and less thoroughly documented, the village of Cahuenga was located slightly closer, just north of the Cahuenga Pass.

Father Juan Crespi passed through the area near Yanga on August 2-3, 1769. The pertinent sections from his translated diary are provided here:

> Sage for refreshment is very plentiful at all three rivers and very good here at the Porciúncula [the Los Angeles River]. At once on our reaching here, eight heathens came over from a good sized village encamped at this pleasing spot among some trees. They came bringing two or three large bowls or baskets half-full of very good sage with other sorts of grass seeds that they consume; all brought their bows and arrows but with the strings removed from the bows. In his hands the chief bore strings of shell beads of the sort that they use, and on reaching the camp they threw the handfuls of these beads at each of us. Some of the heathens came up smoking on pipes made of baked clay, and they blew three mouthfuls of smoke into the air toward each one of us. The Captain and myself gave them tobacco, and he gave them our own kind of beads, and accepted the sage from them and gave us a share of it for refreshment; and very delicious sage it is for that purpose.
>
> We set out at a half past six in the morning from this pleasing, lush river and valley of Our Lady of Angeles of La Porciúncula. We crossed the river here where it is carrying a good deal of water almost at ground level, and on crossing it, came into a great vineyard of grapevines and countless rose bushes having a great many open blossoms, all of it very dark friable soil. Keeping upon a westerly course over very grass-grown, entirely level soils with grand grasses, on going about half a league we came upon the village belonging to this place, where they came out to meet and see us, and men, women, and children in good numbers, on approaching they commenced howling at us though they had been wolves, just as before back at the spot called San Francisco Solano. We greeted them and they wished to give us seeds. As we had nothing at hand to carry them in, we refused [Brown 2002:339-341, 343].

The Portola party passed westward through the La Brea Tar Pits area (CA-LAN-159) the following day. This was a known area of Native American use for hunting and the gathering of tar and other area-specific resources (Westec 1983). A pertinent excerpt from Father Juan Crespi's August 3, 1769 diary entry is provided here:

> The Captain told me that when they scouted here, in a ravine about half a league to the westward they came upon about forty springs of pitch, or tar, boiling in great surges up out of the ground, and saw very large swamps of this tar, enough to have caulked many ships. [Brown 2002:341]

Upon leaving the La Brea Tar Pits, the Portola expedition continued westward, camping on August 4, 1769 near what is now the route Interstate 405 before heading northward into the mountains. Details of the day's travels are provided below:

> At a quarter past six in the morning we set out from this copious spring at the San Esteban Sycamores .... We pursued our way northwestward and on going about a quarter-league [0.85 mile], we came into a little flat hollow between small knolls, and then onward across level tablelands of dark friable soil....we turned west-northwestward and on going two hours, all over level soil, came to the watering place: two springs rising at the foot of a high tableland, their origin being higher up on the large plain here....At this spot we came upon a village at the aforesaid tableland and as soon as we arrived and set up camp, six very friendly, compliant tractable heathens came over, who had their little houses roofed with grass, the first we have been seeing of this sort. They brought four or six bowls of the usual seeds and good sage which they presented to our Captain. On me they bestowed a good-sized string of the sort of beads they all have, made of white seashells and red ones, though not very bright-colored, that look to be coral. [Brown 2002:345-349]

The name of this village referenced to be near the August 4, 1769 Portola camp is unknown, and would have been located approximately 3 miles from the named village near Santa Monica (*Kuruvunga*) and 5 miles from *Sa'anga* near the mouth of Ballona Creek. Sa'anga, likely within a mile of the present project site, has also been commonly referred to as *Guaspet* or *Guashna*, (NEA and King 2004), *Saan* (Kroeber 1925), or *Saa'anga* or *Waachnga* (McCawley 1996). Ethnohistoric research completed by John Johnson (1988) pertaining to the inhabitants of San Clemente Island and Santa Catalina Island has indicated that there were many marriage ties between these islands and this village in the vicinity of the Ballona wetlands. Mission records indicate that a total of 95 neophytes came from this village; 87 of these individuals at Mission San Gabriel and the remaining eight at Mission San Fernando (NEA and King 2004). These records further suggest that marriage was common with the surrounding outside villages, but perhaps most often occurring with members of the large village of Yanga.

The Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate Period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh water and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978: 546; Kroeber 1925; McCawley 1996).

A wide variety of tools and implements were used by the Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996).

Tongva people processed food with a variety of tools, including hammerstones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925; McCawley 1996).

At the time of Spanish contact, the basis of Tongva religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices (McCawley 1996).

Deceased Tongva were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966), as well as scattered among broken ground stone implements (Cleland et al. 2007). Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Johnston 1962; McCawley 1996; Reid 1926). At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period (McCawley 1996).

3.3 Historic Period Overview

Post-Contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1821), Mexican Period (1821–1848), and American Period (1846–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named "the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula" or "Our Lady the Queen of the Angels of the Porciúncula." Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena

Like many cities in the San Gabriel Valley, the City of Pasadena's history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O'Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O'Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O'Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City's landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large- scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O'Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena's development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O'Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like

Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O'Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city's Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena's election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro's Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city's population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

3.4 Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

Building 1: 740-750 East Green Street (1963)

Historic aerial photographs and maps indicate that throughout the course of its history, this building has largely retained its original scale and massing. For instance, in the 1952, 1953 and 1956 aerials, the property at 740-750 East Green Street displays a thin rectangular building. By 1964, the building is replaced by the current building, which is consistent with its 1963 date of construction. (NETR 2019; UCSB 2019).

Archival research found that Lane and Schlick originally designed the building for Rosay Investments Corporation in 1963. City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. City Directory and map research lists the following tenants from the 1960s until 2019: Sherwin Williams Paint Company; Paine, Webber, Jackson, and Curtis; and Thomas R Capehart. Subsequent years in City Directories show that the building continued to change tenants including Remax; Triecta Fit; Fred Astaire; and A1A Topsoil in more recent years.

Building 2: 770-784 East Green Street (1956)

Historic aerial photographs and maps indicate in the 1952, 1953, 1956 aerial photographs, the property at 770-784 East Green Street displays three small structures running north to south along the length of the property. The 1964 aerial photograph displays the replacement of these structures with a square plan commercial building, which is consistent with the 1956 date of construction listed on the original building permit. (NETR 2019; UCSB 2019).

Archival research found that architect William Leo Rudolph originally designed the two-story office building, called the Wilhite Building in 1956 for the Wilhite Trust of which F. Dane Wilhite was the trustee. The 11,400 square foot building and the land cost $200,000 and featured a large decorative panel of Italian tile veneer (Figure 3). Research indicates that the Prudential Insurance Company were the first tenants of the building upon its completion (LAT 1955b). Archival research, including City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. City Directory entries for the property lists the following tenants for the office building: Prudential Insurance Company of America; Mitchum, Jones, and Templeton Incorporated, and State Farm. Subsequent years in City Directories show that the building continued to change tenants frequently.


IN PASADENA—Shown above is the Wilhite Building, now under construction at 770 E Green St., Pasadena. The project, including land and building, represents investment of $200,000. Designed by William L. Rudolph, the two-story 11,400-square-foot structure will feature a large decorative panel of Italian tile veneer. Owner of the property is the Wilhite Trust of which F. Dane Wilhite is trustee. Space in the new structure has been leased by the Prudential Insurance Co.

Figure 3. 770-784 East Green Street architectural drawing, 1955, Los Angeles Times

Building 3: 790 East Green Street (1967)

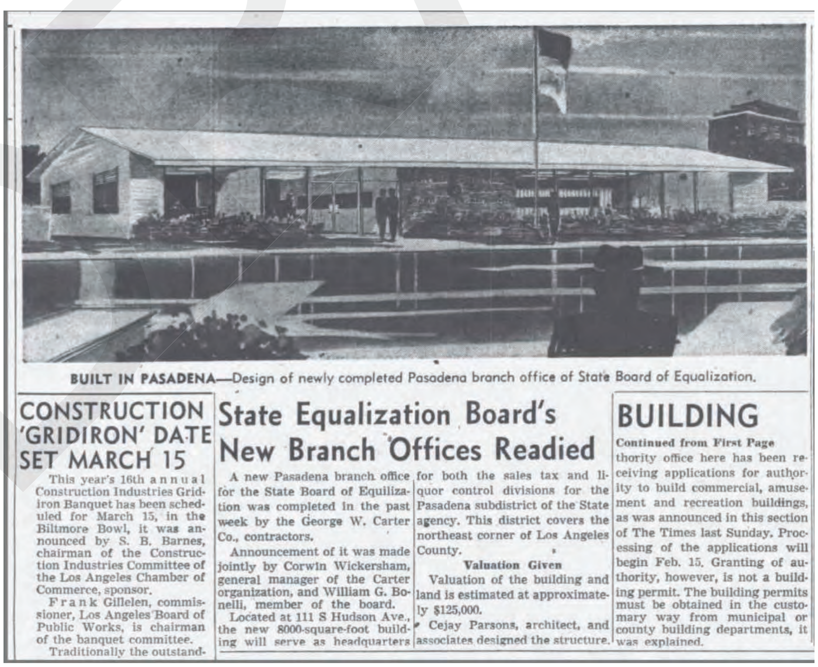
Historic aerial photographs and maps indicate that the history of the subject property pre-dates the current building located at 790 East Green Street. In the 1952, 1953, 1956, and 1964 aerials the property at 790 East Green Street is vacant and then paved by 1956 to be a small corner parking lot. However, by the 1972 aerial photograph an irregularly shaped building appears on the lot, which is consistent with the 1967 date of construction (NETR 2019; UCSB 2019).

Archival research found that contractor Evald C. Moller originally designed the building for K. Robey and E. Messer in 1967. Archival research, including City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. The first City Directory entry for the property lists the following tenants for the office building: Marble Mortgage Company; U.S. Life Systems Corporation; and United California Bank. Subsequent years in City Directories show that the building continued to change tenants.

Building 4: 111 South Hudson Avenue (1951)

Historic aerial photographs and maps indicate that the current building at 111 South Hudson Avenue first appears in a 1952 aerial photography, which is consistent with the 1951 date of construction (NETR 2019; UCSB 2019).

The contractors the George W. Carter Company constructed the building at 111 South Hudson Avenue in 1951 as the new Pasadena branch office for the State Board of Equalization for $125,000 (Figure 4). The building was 8,000 square feet and designed by Cejay Parsons and Associates. Its original purpose was to serve as the headquarters for both the sales tax and liquor control divisions for the Pasadena sub district of the State agency, which covered the northeast corner of Los Angeles County (LAT 1951).



BUILT IN PASADENA—Design of newly completed Pasadena branch office of State Board of Equalization.

CONSTRUCTION 'GRIDIRON' DATE SET MARCH 15

This year's 16th annual Construction Industries Gridiron Banquet has been scheduled for March 15, in the Biltmore Bowl, it was announced by S. B. Barnes, chairman of the Construction Industries Committee of the Los Angeles Chamber of Commerce, sponsor.

Frank Gillelen, commissioner, Los Angeles Board of Public Works, is chairman of the banquet committee.

Traditionally the outstand-

State Equalization Board's New Branch Offices Readied

A new Pasadena branch office for the State Board of Equiliza-tion was completed in the past week by the George W. Carter Co., contractors.

Announcement of it was made jointly by Corwin Wickersham, general manager of the Carter organization, and William G. Bonelli, member of the board.

Located at 111 S Hudson Ave., the new 8000-square-foot building will serve as headquarters for both the sales tax and liquor control divisions for the Pasadena subdistrict of the State agency. This district covers the northeast corner of Los Angeles County.

Valuation Given

Valuation of the building and land is estimated at approximately $125,000.

Cejay Parsons, architect, and associates designed the structure.

BUILDING

Continued from First Page

thority office here has been receiving applications for authority to build commercial, amusement and recreation buildings, as was announced in this section of The Times last Sunday. Processing of the applications will begin Feb. 15. Granting of authority, however, is not a building permit. The building permits must be obtained in the customary way from municipal or county building departments, it was explained.

Figure 4. 111 South Hudson Ave architectural drawing, 1951, Los Angeles Times

Building 5: 118 South Oak Knoll Avenue (1951)

Historic aerial photographs and maps indicate that the current building at 118 South Oak Knoll Avenue first appears in a 1952 aerial photography, which is consistent with the 1951 date of construction (NETR 2019; UCSB 2019).

Archival research indicates that the building at 118 South Oak Knoll was constructed in 1951 for $55,000 as the area's Community Service Center, with special bequest funds rather than charitable contributions. Architect Curtis Chambers designed the building. The family of Joseph M. and Irene C. Hixon, and the estates of Ella B. DeLyons and Walter Davis made bequests for the building. The center was to house the activities of the Pasadena area's Community Chest and Council as well as the Catholic Welfare Bureau, Family Service and Volunteer Placement Bureau agencies, the Boy' and Girls' Clubs of Pasadena, and all Red Feather services. By the 1960s the building was renamed the Foothill Family Service, which served as a family counselling center (LAT 1951a, 1951b; PI 1967).

3.5 Project Site Architectural Styles

Mid-Century Modern (1933-1965)

Mid-century Modern style is reflective of International and Bauhaus styles popular in Europe in the early 20th century. This style and its living designers (e.g., Mies Van der Rohe and Gropius) were disrupted by WWII and moved to the United States. During WWII, the United States established itself as a burgeoning manufacturing and industrial leader, with incredible demand for modern buildings to reflect modern products in the mid-20th century. As a result, many industrial buildings are often "decorated boxes"—plain buildings with applied ornament to suit the era and appear more modern without detracting from the importance of the activity inside the building. Following WWII, the United States had a focus on forward thinking, which sparked architectural movements like Mid-Century Modern. Practitioners of the style were focused on the most cutting-edge materials and techniques. Architects throughout Southern California implemented the design aesthetics made famous by early Modernists like Richard Neutra and Frank Lloyd Wright, who created a variety of modern architectural forms. Like other buildings of this era, Mid-century Modern buildings had to be quickly assembled, and use modern materials that could be mass-produced. Both residences and offices designed in this style expressed its structure and materials, displayed large expanses of glass, and had an open interior plan (McAlester 2013; Morgan 2004; HRG 2007).

Characteristics of the Mid-Century Modern style:

- One- to two-stories in height
- Low, boxy, horizontal proportions
- Simple geometric forms with a lack of exterior decoration
- Commonly asymmetrical
- Flat roofed without coping at roof line; flat roofs hidden behind parapets or cantilevered canopies
- Expressed post-and-beam construction in wood or steel
- Exterior walls are flat with smooth sheathing and typically display whites, buffs, and pale pastel colors
- Mass-produced materials
- Simple windows (metal or wood) flush-mounted and clerestory
- Industrially plain doors
- Large window groupings

Corporate Modern (1955-1970)

The Corporate Modern Style is stylistically linked to the International Style, as such the two style's history is intricately linked. Corporate Modernism came to the United States in the 1930s after gaining popularity in Germany, Holland and France through architects such as Walter Gropius and Ludwig Mies van der Rohe. The style soon spread to the United States in the 1930s, due in part to Henry-Russell Hitchcock and Philip Johnson's 1932 book titled *The International Style: Architecture Since 1922* for the New York Museum of Modern Art's exhibition. In their book, Hitchcock and Johnson introduced the term International and identified the three principles as architecture as volume, regularity, and avoiding the application of ornament. These three principles have been the baseline for American International Style architects such as Richard Neutra and Philip Johnson. The style became very popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. The most common application was as the corporate office, creating walls of glass with sharp angles located in the downtowns of many cities.

The main difference between Corporate Modern buildings and their predecessors was a lack of exterior support of solid masonry. They often depended on a metal interior skeleton and utilized the curtain wall to clad walls in glass. This dependency on the metal frame resulted in windows hung in repeating patterns and brought another level of order to these already stripped down buildings. Mies's designs specifically focused on perfection through mathematics, generating rectangular curtail wall designs displaying strong roots in the philosophy of the Bauhaus. This movement incorporated simple and precise designs and incorporated mass-produced materials such as concrete, steel, and glass paired with functionality in design (SFPD 2010; McAlester 2015; HRG 2007).

Characteristics of the Corporate Modern Style:

- One- to three-stories in height
- Square and rectangular building footprints with open interior floor plans
- Asymmetrical facades with simple cubic forms and strong right angles
- Horizontally oriented rectangular boxes
- Flat roofs with flush parapet or cantilevered overhang
- Tower over a parking podium, often screened
- Use of concrete, brick, steel, stucco and glass as exterior materials
- Lack of exterior ornamentation
- Design dictated by steel framing system with vertical fins or louvers
- Fenestration includes ribbon windows, corner windows, or glass curtain walls

3.6 Project Site Architects and Designers

Architect: Lane and Schlick, AIA (1922-1988, 1926-2010)

Howard Raymond Lane was born on October 13, 1922 in Illinois. During World War II, Lane served in the Third Armored Division of the United States Army in Europe. After the war ended, he returned to Illinois to study architecture at the Illinois Institute of Technology (IIT) under renowned architect Mies van der Rohe. Lane graduated IIT in 1947 and worked for a short time as a draftsman for Skidmore, Owings and Merrill in Chicago. A year later

Lane moved to Los Angeles, California and worked as a draftsman for Martin and Associates and later as a Project Architect for Pereira and Luckman until 1952. In 1953, Lane established his own architectural firm, the Lane Architectural Group based in Woodland Hills, California. Within the next year, Lane met architect Edward Ray Schlick and the two formed a partnership under the name Lane and Schlick, AIA.

Schlick was born on July 6, 1926 in Los Angeles. After spending two years in the Navy, he graduated from UC Berkeley with a degree in architecture in 1953. Schlick and his wife Fran moved to Studio City in 1953 when he began practicing with Lane. The firm was prolific around the Los Angeles area and designed a wide range of buildings including residences, commercial buildings, educational institutions, medical centers, and religious buildings. Lane and Schlick practiced for nine years and moved offices in 1962 into 15840 Ventura Boulevard in Encino. In 1963, the firm changed names from Lane and Schlick, AIA to Howard R. Lane, AIA and Associates due to Schlick moving to Ivanhoe, Texas and opening his own firm with seven partners named Octagon Associates in the early 1970s. Lane died on November 3, 1988 in Santa Monica. He was a fellow of the American Institute of Architects, 1959 president of the Architects of San Fernando Valley, and 1977 president of the California Council of AIA. Schick continued to practice architecture until a month before his death in 2010 (LAT 1962a, 1963, 1988; VT 1959; VTD 2010; archINFORM 2019).

A sample of Lane and Schlick's known work is included below (LAT 1962; archINFORM 2019; LAC 2019):

- 17100 Ventura Boulevard, Los Angeles, CA (1953)
- 16035 Ventura Boulevard, Los Angeles, CA (1959)
- 4419 Van Nuys, Los Angeles, CA (1961)
- 4416 S. Normandie Avenue, Los Angeles, CA (1961)
- 14044 Ventura Boulevard, Sherman Oaks, CA (1961)
- King Solomon Restaurant, Ventura Boulevard and Gloria Avenue, Los Angeles, CA (1962)
- 5251 Sepulveda Boulevard, Van Nuys, CA (1962)
- 1745 N. Sycamore, Los Angeles, CA (1962)
- 5400 Van Nuys Boulevard, Los Angeles, CA (1962)
- 11139 Acama Street, Los Angeles, CA (1962)
- 740-750 East Green Street, Pasadena, CA (1963)
- 15739 Ventura Boulevard, Valley Beth Shalom, Los Angeles, CA (1964)

Architect: William Leo Rudolph (1923-1981)

William L. Rudolph was an American architect born in Los Angeles on September 25, 1923. He attended college at the University of California Berkley for architecture. Little is known about Rudolph's early life and career. He is known to have practiced architecture between the 1960s and 1980 in Southern California specifically in the Los Angeles and Pasadena areas. Rudolph was head of the Los Angeles firm William L. Rudolph and Associates, which was known for their ability to design resorts that reflect the character of the area where they are located and their environmental settings. The firm's most well-known commissions were the Acapulco Princess resort in Mexico and the Southampton Princess in Bermuda. Rudolph died in Los Angeles in 1981 (DS 1974; AIA 1962).

A sample of William L. Rudolph's known work is included below (LAT 1962c, 1972):

- 770-784 East Green Street, Pasadena, CA (1956)
- Bowling Center at Astoria and Foothill Boulevard, Los Angeles, CA (1960)
- Carpinteria Shopping Center, Los Angeles, CA (1962)
- 725 Ocean Avenue, Santa Monica, CA (1962)
- Caruso's Restaurant, Canandaigua Lake, New York (1962)
- Acapulco Princess Hotel, Mexico (1969)
- Southampton Princess Hotel, Bermuda (1972)
- Lake, California planned community, CA (1972)
- Westlake Village offices, Westlake Village, CA (1974)
- The Springs Clubhouse, Palm Springs, CA (1974)
- Green Tree Inn addition, Victorville, Los Angeles, CA (1980)

Contractor: Evald C. Moller (1905-1996)

Evald C. Moller was born in Michigan on January 30, 1905. In 1906, Moller and his family moved to Pasadena, California where he started his own general contracting firm in 1928 called E. C. Moller Inc. Throughout his time living in Pasadena, Moller was heavily involved with local politics and trade organizations. In 1950, he was elected president of the Pasadena Chamber of Commerce after serving as president of the Building Contractors of California, Inc. and president of the Pasadena Kiwanis Club. Moller continued to participate in local organizations and in 1961 was given the role of chairman of the Pasadena Recreation Commission. In 1963, Moller's term in the Recreation Commission ended after also serving as director of the Tournament of Roses Association in 1962. Moller retired from the construction business in 1976 after working for 47 years in Pasadena. In 1986, Moller moved to Gleneden Beach, Oregon and became a member of the board of North Lincoln Hospital. Moller died on May 22, 1996 while living in North Lincoln, Oregon (LAT 1950b, 1976; PI 1961, 1963; SJ 1996).

Architect: Charles Jeffries "Cejay" Parsons (1916-1975)

Cejay Parsons was born in February 18, 1916 in Oakland, California. Parsons was a prolific architect of commercial, medical and industrial buildings in the Mid-Century Modern style in the Los Angeles area and Hawaii. In 1959, Parsons formed a new enterprise known as Cejay Parsons, AIA, Architects and Associates with offices in the Mission Insurance Building at 300 S. Hobart Boulevard in Los Angeles. Parson's firm prior to that was Jack H. MacDonald and Cejay Parsons, Associated Architects and Engineers. Parsons worked closely with engineer Jack H. MacDonald who specialized in industrial buildings. In Los Angeles, Parsons designed more than 60 buildings between the late 1940s and 1966. Four of these early projects were published in Architectural Record including a church, a single-family residence from the late 1940s, and two commercial buildings from 1950. Parsons was known for the extensive development of the W. 6th Street insurance center area where he designed the Gianinni-Falabrino buildings, the Phoenix Connecticut and Phoenix London buildings, Manufacturer's Life, Scandinavian Air Service and Travelers buildings in Beverly Hills. In the late 1960s, Parsons moved to Honolulu and designed condominiums and hotels in Honolulu, Princeville, Kauai, and Guam throughout the 1970s. Parsons died on July 19, 1975 in Queen's Hospital in Honolulu (HRG 2010; THA 1975; LAT 1959; HSB 1975).

A sample of Parsons' known work is included below (HRG 2010; THA 1972, 1972):

- 601 S. Ardmore Avenue, Los Angeles, CA (1951)
- 111 S. Hudson Avenue, Pasadena, CA (1951)
- 601 S. Kingsley Drive, Los Angeles, CA (1952)
- 610 Shatto Place, Los Angeles, CA (1952)
- 3750 W. 6th Street, Los Angeles, CA (1953)
- 3535 W. 6th Street, Los Angeles, CA (1954)
- 241 South Rimpau Boulevard, Los Angeles, CA (1955)
- Bank of America Building, Los Angeles, CA (1955)
- 3850 Wilshire Boulevard, Los Angeles, CA (1956)
- 611 S. Catalina Street, Los Angeles, CA (1957)
- 3400 W. 6th Street, Los Angeles, CA (1957)
- 548 S. Kingsley Drive, Los Angeles, CA (1958)
- 300 S. Hobart Boulevard, Los Angeles, CA (1959)
- 5820 Wilshire Boulevard, Los Angeles, CA (1959)
- Hale Moani Condominiums, Launiu Street, Honolulu, HI (1971)
- Alii Kai Condominiums, Princeville, Kauai, HI (1974)

Architect: John Curtis Chambers (1904-2003)

John Curtis Chambers was born on October 4, 1904 in Riverside, California. Little is known about the early life and career of Chambers aside from his residential work in the Los Angeles and Pasadena area. Curtis frequently designed Ranch style tract homes and apartments in Pasadena. He was a member of the Pasadena Chapter of the American Institute of Architects in 1962. Chambers died on April 18, 2003 (Ancestry 2019; AIA 1062).

A sample of Chambers' known work is included below (LAT 1938, 1940, 1941, 1942, 1950a, 1955a):

- Rancho House, Pasadena, CA (1938)
- Foothill Boulevard, Rancho Santa Anita, CA (1940)
- 956 Coronado Drive, Santa Anita Village, Arcadia, CA (1941)
- Foothill Boulevard district, Rancho Santa Anita, CA (1942)
- 424-30 San Vicente Boulevard, Pasadena, CA (1950)
- Buena Berry Park development, Long Beach, CA (1955)

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4 Field Survey

4.1 Methods

Dudek Senior Architectural Historian Sarah Corder, MFA, conducted a pedestrian survey of the Project site for historic built environment resources on August 9 and 19, 2019. The survey entailed walking the exteriors of five commercial properties within the Project site, documenting each building with notes and photographs, specifically noting character-defining features, spatial relationships, observed alterations, and examining any historic landscape features on the property. The Project site is entirely developed and contains no exposed sediment, therefore, an archaeological survey was not completed. Dudek documented the fieldwork using field notes, digital photography, close-scale field maps, and aerial photographs. Photographs of the subject property were taken with a digital camera. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California, office.

4.2 Results

During the course of the pedestrian survey, Dudek identified five buildings over 45 years old requiring recordation and evaluation for historical significance, including the following addresses: 740-750 East Green Street, 770 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue. Section 5 (Significance Evaluations) provides a detailed physical description of each of these properties and the associated significance evaluations under all applicable national, state, and local designation criteria and integrity requirements.

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5 Significance Evaluations

In order to determine if the proposed Project will impact historical resources under CEQA, all five previously unevaluated properties within the Project site were evaluated for historical significance and integrity in consideration of NRHP, CRHR, and City of Pasadena designation criteria and integrity requirements. A detailed physical description of each property is also provided.

5.1 Building 1 (740-750 East Green Street)

Property Description

Building 1 (740-750 E. Green Street) is a three-story Corporate Modern rectangular office building with exterior walls clad in white rough textured stucco, plate glass, square off-white tiles, smooth concrete, and running bond brick (Figure 5). The building is situated on the southeast corner of E Green Street and S Oak Knoll Avenue. Underneath the center of the building is an open parking lot supported by concrete posts. The roof of the building is flat and sheathed in rolled asphalt. The main (north) elevation presents as four sections from left the right. The first features smooth concrete wall with a grid of 25 plate glass windows separated by a metal frame above, the next section extends out approximately five feet from the main building with a storefront entry and double-leaf door on the first-floor and monolithic wall divided into four vertical sections with square tiles. The next section is over a open garage and features a wall of plate glass windows divided by metal frames; the final section continues the wall of plate glass and metal framing with a projecting glass storefront below with a double leaf entry door. The west elevation (Figure 6) displays five brick columns separating two metal frame storefront windows one with two windows the other with three, and sections of rough painted stucco between. The second and third floors display a monolithic wall of painted rough textured stucco. The south elevation (Figure 7) displays as two sections and is primarily clad in painted rough textured stucco. The left portion of the elevation features a projecting one-story entry with a single leaf entry door and two sets of vertically oriented bands of plate glass windows, three windows wide with a projecting metal frame. The two sections are divided by a three-story tall brick and stucco projection. The right portion of the elevation displays the open garage on the first-story with a series of eight horizontal bands of metal frame sliding windows and a building height thin brick wall.

Figure 5. Building 1: North Elevation, View looking southwest (IMG_0362)

Figure 6. Building 1: West Elevation, View looking northeast (IMG_0384)

Figure 7. Building 1: South Elevation, View looking north (IMG_0414)

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-024).

- 1963. Permit to construct a new 15,800-sf concrete and brick office building with a composition roof. (#909820)
- 1963. Permit to instill 24" number wall sign "750". (#05374)
- 1966. Permit to cut 4' x 7' in brick wall of office. (#6035)
- 1966. Permit to replace non-bearing interior office partitions. (#3539)
- 1966. Permit to remove and add partitions and add electrical outlets. (no permit #)
- 1966. Permit to add interior wall partitions and doors and relocate lighting. (no permit #)
- 1982. Permit to replace evaporative condenser. (#82164)
- Date Unknown: Observed window and door replacements on north elevation.

NRHP/CRHR Statement of Significance

The property located at 740-750 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1963, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building which hosted multiple tenants throughout its history, beginning with Rosay Investments Corporation. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 1 is a modest example of a Corporate Modern office building designed by Los Angeles-based architectural firm Lane and Schlick, AIA in 1963. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. Building 1 includes the following characteristics of the Corporate Modern style: three-stories in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of concrete, brick, steel, and glass as exterior materials, lack of exterior ornamentation, design dictated by steel framing system with vertical fins or louvers, fenestration includes glass curtain walls. Lane and Schlick, AIA was prolific around the Los Angeles area and designed a wide range of buildings including residences, commercial buildings, educational institutions, medical centers, and religious buildings during the 1950s and 1960s. Despite the building's ability to convey the most basic elements of the Corporate Modern style of architecture, Building 1 does not stand as a distinctive or important example of the style and does not represent the work of a master architect. For these reasons, 740-750 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 1 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street had already been developed with commercial properties and this has not substantially changed since 1963. The building maintains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. Several windows and a set of doors on the north elevation were replaced over time but the majority of the building's original materials are existant. The building also retains integrity of feeling and association, where the property retains the ability to express itself as an office building constructed in the 1960s. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

5.2 Building 2 (770-784 East Green Street)

Property Description

Building 2 (770-784 East Green Street) is a two-story Corporate Modern mixed-use relatively rectangular building that abuts buildings 1 and 3 on its east and west elevations. Exterior walls are clad in a variety of materials including stucco, running bond brick, plate glass, and terrazzo panels. The roof of the building is flat and sheathed in rolled asphalt. The main (north) elevation is separated into two sections by a series of three brick pilasters and walls. The left section displays two sets of metal-frame storefront windows with glass entry doors under a rounded awning separated by a section of terrazzo panels (Figure 8). The second-story displays two bands of plate glass ribbon windows divided by horizontal bands of painted rough textured stucco. The right section displays two integral metal-frame storefront entries separated by terrazzo panels. A two-story band of plate glass windows is connected to a series of second-story ribbon windows that continue the band of stucco from the left section of the elevation (Figure 9). The other visible elevation is the south, which displays running bond brick and variety of fenestration types including single-pane, horizontal sliding, and one over three windows and single and double-leaf metal entry doors (Figure 10). The left section extends out approximately 15 feet from the main building and features a two-story metal staircase.

Figure 8. Building 2: Left section of North Elevation, View looking southwest (IMG_0489)

Figure 9. Building 2: Right section of North Elevation, View looking southeast (IMG_0496)

Figure 10. Building 2: South Elevation, View looking northeast (IMG_0455)

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-014).

- 1956. Permit to construct a two-story concrete, brick, and stucco building for $100,000. (#9682779)
- 1956. Install 18" metal letters mounted on stucco wall. (#15170)
- 1960. Permit to add 6,000 square foot of office. (#48446)
- 1960. Permit for repairs of fire damage, no structural member's involved or exterior work needed. (#2343)
- 1960. Permit to install interior partitions with no exterior work. (#6185)
- 1962. Permit to cut a doorway. (#8475-0)
- 1963. Permit to add one room to the second floor. (#01669)
- 1966. Permit to relocate interior partitions. (#09782)
- 1973. Permit to add partitions and counter and new rear stair. (#44556)
- 1977. Permit to partition office area 10' x 12'. (#37579)

- 1978. Permit to reroof composition roof with 30 felts and glaskap. (#86522)
- 1981. Permit to install interior partitions, "non-structural". (#188560)
- 1987. Permit to re-roof business with class A GAF built up. (#0016471)
- Date Unknown: Observed window and door replacements on north elevation.

NRHP/CRHR Statement of Significance

The property located at 770-784 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district. Addresses associated with this property include: 770, 772, 774, 776, 780, and 784 East Green Street.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1956, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building, which hosted multiple tenants throughout its history beginning with Prudential Insurance Company. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 2 is a modest example of a Corporate Modern office building designed by Los Angeles-based architect William Leo Rudolph in 1956. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. This building includes the following characteristics of the Corporate Modern style: two-stories in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of brick, steel, and glass as exterior materials, lack of exterior ornamentation, design dictated by steel framing system with vertical fins or louvers, fenestration includes glass curtain walls and ribbon windows. Rudolph is known to have practiced architecture between the 1960s and 1980 in southern California specifically in the Los Angeles and Pasadena area. Building 2 is not a distinctive or important example of the Corporate Modern style, nor is it the work of a master architect. Additionally, the building has undergone several alterations since its construction including replacement of windows and doors on the north elevation (date unknown), the addition of 6,000 square feet of office (1960), and reroofed (1987). For these reasons, 770-784 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 2 retains integrity of location, as it remains in its original location. The building does not retain integrity of design due to several large-scale exterior alterations including the addition of 6,000 square feet of office space in 1960 and the replacement of several windows and doors on the main elevation on an unknown date. The essential features of form, plan, space, structure, and style have not all been retained. The building retains integrity of setting, upon its construction the majority of East Green Street had already been developed with commercial properties and this has not substantially changed since 1956. The building does not retain integrity of materials and workmanship due to the lack of retention of the physical elements that date from its construction from subsequent alterations. The building no longer retains integrity of feeling and association, where the property retains the ability to express itself as an office building constructed in the 1950s. In summary, while the building does not retain the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

5.3 Building 3 (790 East Green Street)

Property Description

Building 3 (790 East Green Street) is a two-story Corporate Modern office building located on the southwest corner of E Green Street and S Hudson Avenue with the corner of the building accentuated by a rectangular painted stucco overhang. The building's exterior walls are primarily clad in running bond brick with every forth course raised approximately half an inch and sections of rough texture painted stucco and square gray tiles. The roof is flat and sheathed in rolled asphalt. The main (north) elevation presents as three sections (Figure 11). The left section displays a series of seven vertical plate glass windows separated by stepped back brick walls, the middle section is distinguished a square gray tile walls and an inset storefront window with a double leaf entry door, the right displays two plate glass windows with a square stucco surround and a single left glass entry door each with a fabric awing above. The west elevation displays no fenestration. The south elevation presents as two sections: the left has no fenestration and the right has two metal entry doors on both floors (Figure 12). The east elevation presents as two sections: the left is recessed approximately 40 feet with a small asphalt parking lot outlined by a low brick wall and a double leaf metal entry door on the first floor and a single leaf and single pane window on the second story. The right section displays a series of windows with a decorative surrounding of painted stucco, the first has three windowpanes followed by four single pane windows all with a fabric awning above (Figure 13).

Figure 11. Building 3: North elevation, View looking south (IMG_0484)

Figure 12. Building 3: South elevation, View looking northwest (IMG_0463)

Figure 13. Building 3: East Elevation, View looking northwest (IMG_0475)

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-026).

- 1967. Permit to construct a 6,780 square foot concrete and masonry office building for $60,000. (#4126N)
- 1972. Permit to cut through back wall and rear parking lot to install a door opening for a pair of 2'6" x 7' doors. (#37501)
- 1973. Permit to install non-load bearing partitions. (#38645)
- 1981. Permit to add air conditioning to existing building. (#6031)
- 1982. Permit to remove walls and ceiling and replace with new interior walls and ceilings. (#8615)
- 1999. Permit to change sill material. (#99-01668)
- 2000. Permit to tear off and re-roof capsheet rood class A. (#00-01387)
- 2009. Permit to remove and prohibit signs from public view and right of way. (#2009-00561)
- 2013. Permit to replace two wall signs within a stucco wall.
- Dates Unknown: Observed alterations include window and door replacement on the north and east elevations.

NRHP/CRHR Statement of Significance

The property located at 790 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district. Addresses associated with this property include: 788 East Green Street, and 101 and 103 South Hudson Avenue.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1958, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building which hosted multiple tenants throughout its history beginning with the Marble Mortgage Company. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 3 is a modest example of a Corporate Modern office building designed by contractor Evald C. Moller in 1958. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. This building includes the following characteristics of the Corporate Modern style: one-story in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of brick and glass as exterior materials, lack of exterior ornamentation, fenestration includes ribbon and corner windows.. Despite the building's ability to convey the most basic elements of the Corporate Modern style of architecture, Building 3 does not stand as distinctive or important example of the style and does not represent the work of a master architect. Alterations to the building include changing the sill material in 1999 and observed alterations including replacement of windows and doors on the north and east elevations. For these reasons, 790 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 3 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street had been developed with commercial properties and this has not substantially changed since 1958. The building does not maintain integrity of materials and workmanship due to the replacement of several windows and doors that do not date for the buildings construction. The building retains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants Marble Mortgage Company. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

5.4 Building 4 (111 South Hudson Avenue)

Property Description

Building 4 (111 South Hudson Avenue) is a one-story L-shaped Modern brick commercial/office building facing onto South Hudson Avenue with a parking lot to its southwest. Exterior walls are clad in common bond brick with one section of roman brick. The roof is a combination side-gable and hipped roof with a Dutch gable facing west sheathed in composition shingles. All windows have metal frames. The main (east) elevation displays at three sections (Figure 14). The left contains three square plate glass windows and a pair of two glass entry doors with a transom and sidelight accessed by three concrete steps leading to the sidewalk. The middle section is distinguished by a section of tan roman brick and a concrete ADA ramp leading to the main entry. The right section displays a row of six plate glass windows. The north elevation displays a series of eight paired windows. Each pair contains an awning window over two-fixed panes (Figure 15). The west elevation displays as two sections. The left section contains one three-part awning over two fixed windows, an inset single leaf entry door, and two sets of three awning over two fixed pane windows. The right section displays a single leaf entry door with transom window above, two large plate glass windows, and a pair of two awning over fixed pane windows (Figure 16). The north elevation displays as two sections. The left section displays a series of five sets of awning over two fixed panes windows the first four contain three windows the last has two. The right section contains a pair of double awning over two fixed pane windows (Figure 17).

Figure 14. Building 4: East Elevation, View looking northwest (IMG_8528)

Figure 15. Building 4: North Elevation, View looking southwest (IMG_8521)

Figure 16. Building 4: West and South Elevations, View looking northeast (IMG_8541)

Figure 17. Building 4: South Elevation, View looking north (IMG_8534)

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-029).

- 1950. Permit to construct a one-story masonry office building with off street parking. (2C2847)
- 1951. Permit to install sign. (#31535)
- 1960. Permit to replace air conditioning units. (#17757)
- 1977. Permit to cut out door and remove inner wall, non-structural. (#75547)
- 1977. Permit to install T-bar ceiling approximately 6,000 square feet. (#75142)
- 1999. Permit to tear off and re-roof composition roofing with class A hot mop. (#99-00551)
- 2002. Permit to improve one hour rated corridor new ceiling joist and beams at east wing of building. (#BLD2001-01525)
- 2002. Permit to install two roof top package heat-pumping units with ductwork and three ceiling mounted exhaust fans (must be screened from public view). (#MEC2002-00264)
- Unknown date: Observed alterations include door replacement on east elevation.

NRHP/CRHR Statement of Significance

The property located at 111 South Hudson Avenue does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1951, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The subject property was constructed to house the branch office for the State Board of Equalization, which served as headquarters for both the sales tax and liquor control divisions for the Pasadena sub district of the State agency. Although the property served as a governmental headquarters, there is no indication that the construction of the building had a broad effect on the history of the State Board of Equalization. The building's construction was to fulfill a role of adding support to this area of Pasadena and there is no indication that it marked an important moment in history. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 4 is a Modern commercial brick office building designed by Los Angeles-based architectural firm Cejay Parsons and Associates in 1951. In Los Angeles, Parsons designed more than 60 buildings between the late 1940s and 1966. Four of these early projects were published in Architectural Record including a church, a single-family residence from the late 1940s and two commercial buildings from 1950. The building at 111 South Hudson Avenue was not one of Parson's well-known or publicized commission and is not a distinctive or important example of the Modern style used for an office building. The building displays several aspects of the Modern style including large plate glass windows, mix of exterior materials, and a lack of ornamentation. Despite the building's ability to convey the most basic elements of the Modern style of architecture, Building 4 does not stand as an exceptional example of the style and does not represent the work of a master architect. For these reasons, the building does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 4 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street and the blocks to its direct north and south had been developed with commercial and residential properties and this has not substantially changed since 1951. The building retains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. The building also retains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants the State Board of Equalization. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

5.5 Building 5 (118 South Oak Knoll Avenue)

Property Description

Building 5 (118 South Oak Knoll Avenue) is a one- and two-story rectangular in plan Mid-Century Modern childcare center facing onto South Oak Knoll Avenue. A parking lot is located to the east of the building. Exterior walls are clad in rough textured painted stucco with one section of concrete masonry units. The roof is combination flat and angled roof sheathed in rolled asphalt with wide overhanging eaves and exposed rafters. The main (west) elevation displays as two sections (Figure 18). Two angled roofs held up by eight square wooden posts distinguish the left section. Fenestration includes two wood frame horizontal sliding windows. The right section is two-stories with full two-story wooden posts and features four fixed wood frame windows on the second and first story, and a single glass entry door and sidelight. The north elevation presents as two sections. The left is one-story with an overhang held up by six wooden posts. Fenestration includes three wood horizontal sliding windows and a single leaf metal entry door. The right section is divided by a two-story exterior staircase with two rows of six wood horizontal sliding windows to the left and a pair of fixed pane windows on the right (Figure 19). The east elevation is cantilevered over a parking lot with a series of metal posts and displays three paired fixed pane windows on the second-story (Figure 20). The north elevation displays as two sections. The left is a cantilevered angled wall without fenestration. The right displays a series of three roof levels with multiple types of fenestration including horizontal sliding windows, sets of two and four fixed pane windows, single leaf metal entry door, and a single leaf entry door. A large HVAC unit is on the lower roof level. The far right of the first-story displays a series of nine wooden posts supporting the overhang.

Figure 18. Building 5: West Elevation, View looking northeast (IMG_8491)

Figure 19. Building 5: South and East Elevations, View looking northwest (IMG_8497)

Figure 20. Building 5: North Elevation, View looking southwest (IMG_8506)

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-027).

- 1950. Permit to construct second floor offices above existing first floor plan and extend the second floor as an overhang approximately 20 feet above existing parking area. (#2813)
- 1951. Permit to construct a two-story 6,000 square foot building for $61,000. (#15271)
- 1951. Permit to add asphalt roofing. (#63375)
- 1981. Permit to reroof using 2 40's and rock. (#8302)
- 1993. Permit to re-roof commercial building with built up class B roofing. (#00153121)
- 1995. Permit to alter approximately 2,150 square feet of space, work includes new partitions, doors, and ceiling patching and finishes. (#95-02626)
- 2016. Permit to install new monument 5'-6" x 6'-0'. (#BMN2016-00798)
- 2016. Permit to replace existing sign with new freestanding pylon sign. (#PLN2016-00094)

NRHP/CRHR Statement of Significance

The property located at 118 South Oak Knoll Avenue does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1951, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The subject property was constructed for the Pasadena area's Community Chest and Council as well as the Catholic Welfare Bureau, Family Service and Volunteer Placement Bureau agencies, the Boy' and Girls' Clubs of Pasadena, and all Red Feather services. Although the property served as a community services headquarters, there is no indication that the construction of the building had a broad effect on the history of the Community Chest and Council as well as the other organizations it housed. The building's construction was to fulfill a role of adding support to this area of Pasadena and there is no indication that it marked an important moment in history. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, Los Angeles County, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 5 is a modest example of an Mid-Century Modern style building designed by Los Angeles-area architect John Curtis Chambers in 1951. Like other buildings of the post-WWII era, Mid-century Modern buildings had to be quickly assembled, and use modern materials that could be mass-produced. The subject property includes the following features: one- and two-stories in height, low, boxy, horizontal proportions, simple geometric forms with a lack of exterior decoration, asymmetrical, cantilevered canopies, flat roofed without coping at roof line, expressed post-and-beam construction in wood, exterior walls are flat with smooth sheathing in pale pastel color, mass-produced materials, simple windows, industrially plain doors, and large window groupings. John Curtis Chambers does not appear to have had a substantial influence on the field of architecture to the extent that he could be called a Master Architect. Overall, the building is not a distinctive or important example of the Mid-Century Modern style, nor is it the work of a master architect. For these reasons, the property does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 5 maintains integrity of location, as it remains in its original location. The building maintains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street and the blocks to its direct north and south had been developed with commercial and residential properties and this has not substantially changed since 1951. The building maintains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. The building also maintains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants the Community Chest and Council. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

5.6 Summary of Evaluation Findings

The five commercial properties within the Project site, 740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue, do not appear eligible for listing in the NRHP, CRHR, or local register. All five properties lack important historical associations and architectural significance and do not appear eligible as contributors to an historic district. As such, these properties are not considered historical resources for the purposes of CEQA.

6 Findings and Conclusions

6.1 Summary of Findings

No cultural resources were identified within the Project site as a result of the CHRIS records search, SLF search, extensive archival research, field survey, and property significance evaluations. The properties located at 740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue do not appear eligible for NRHP, CRHR, or City designation due to a lack of significant historical associations and architectural merit. Therefore, these properties are not considered historical resources for the purposes of CEQA. Further, no potential indirect impacts to historical resources were identified.

While no surface evidence of cultural resources was identified as a result of this study, it is possible that subsurface resources could be encountered/impacted by ground disturbing activities associated with the Project. Recommendations to reduce impacts to undiscovered, subsurface cultural resources are provided below.

6.2 Recommendations

In consideration of the cultural resources investigation, impacts to cultural resources would be less-than-significant. No previous or new cultural resources were identified within the Project site as a result of the current study; therefore, no further management recommendations are necessary beyond standard protection measures to address unanticipated discoveries of cultural resources and human remains (listed below).

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA or Section 106 of the NHPA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

7 Bibliography

AIA Historical Directory of American Architects. 1962. "AIA Historical Directory of American Architects, 1962." Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. "Howard Raymond Lane, architect (1922-1988)." Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. "John Curtis Chambers." Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. "Luiseño," in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. "Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002. Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. "Heritage: A Short History of Pasadena." Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. "Plans Underway for Project's Clubhouse." Newspapers.com: *The Desert Sun* (Palm Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. "Linguistic Prehistory." In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple

Property Documentation Form.

Griset, S. 1996. “Southern California Brown Ware.” Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. “Technological Organization of the Millingstone Pattern in Southern California.” Master’s thesis; California State University, Sacramento.

Hale, M. 2009. “San Diego and Santa Barbara: Socioeconomic Divergence in Southern California.” PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. “A New Original Version of Boscana’s Historical Account of the San Juan Capistrano Indians of Southern California.” Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. “Introduction.” In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. “Charles Parsons.” Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. “LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975.” Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994. *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. "Office Building." Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. "Also Attractive." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. "Design of New Home." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. "Cheerful." Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. "Higher-Priced Houses Sought." Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. "Two Apartment Project Started." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. "Moller Heads Pasadena CC." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. "New Community Service Center Given Preview." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. "Retiring Chest Leader Honored by Pasadenans." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. "Contemporary Style Homes Spearhead Sales at Tract." Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. "In Pasadena." Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. "New Company Established by L.A. Architect." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. "Firm Marks Anniversary." Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. "Architect Firm of Lane-Schlick Changes Name." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. "Apartment Building to Rise in Studio City." Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 134.

LAT. 1962c. "15-Story Apartment Hotel Planned for Santa Monica." Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. "Rudolph will Design Lake California." Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. "Builder Evald C. Moller." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. "Services Held for Architect Howard Lane." Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O'Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. "History of Old Pasadena." Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. "Evald C. Moller Heads Group for Recreation." Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. "Rancho San Francisco: A Study of a California Land Grant." The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. "E.C. Moller Commission Term Ends." Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. "Foothill Group Gives Family Safety Valves." Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. "Pasadena." Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. "Pasadena." Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. "Pasadena." Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. "Pasadena." Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. "Pasadena." Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. "Pasadena." Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. "Pasadena." Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. "Evald C. Moller." Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. "Important Grand Opening." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. "Come Home to Paradise." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. "Parsons." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. "Valley Architects Elect Officers." Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. "Edward Ray Schlick." Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Appendix A

Confidential Records Search Results

Appendix B

DPR forms for 740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue

State of California ♦ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** (Assigned by recorder) 740-750 East Green Street
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted**
***a. County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Pasadena **Date** 1995 (1999 ed.) **T** 1N ; **R** 12W; ☐ **of Sec** ; San Bernardino **B.M.**
c. Address 750 East Green Street City Pasadena Zip 91101
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 395378 mE/ 3778744 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
AIN: 5734-025-024; Latitude: 34°08'39.7"N, Longitude: 118°08'05.3"W

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

740-750 E. Green Street is a three-story Corporate Modern rectangular office building with exterior walls clad in white rough textured stucco, plate glass, square off-white tiles, smooth concrete, and running bond brick (Figure 1). The building is situated on the southeast corner of E Green Street and S Oak Knoll Avenue. Underneath the center of the building is an open parking lot supported by concrete posts. The roof of the building is flat and sheathed in rolled asphalt. **See Continuation Sheet.**

***P3b. Resource Attributes:** (List attributes and codes) HP6. 1-3 story commercial building
***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #) View to southwest, 7/29/2019, IMG_0361

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1963 (Building Permit)

***P7. Owner and Address:**
Stanford Pasadena LLC
888 S. Figueroa St, 1900
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder
Dudek
38 N Marengo Ave
Pasadena, CA 91101

***P9. Date Recorded:** 7/29/2019
***P10. Survey Type:** (Describe)
Pedestrian

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report for the 740-790 Green Street Mixed-Use Project, Pasadena, California. Prepared by Dudek, 2019.

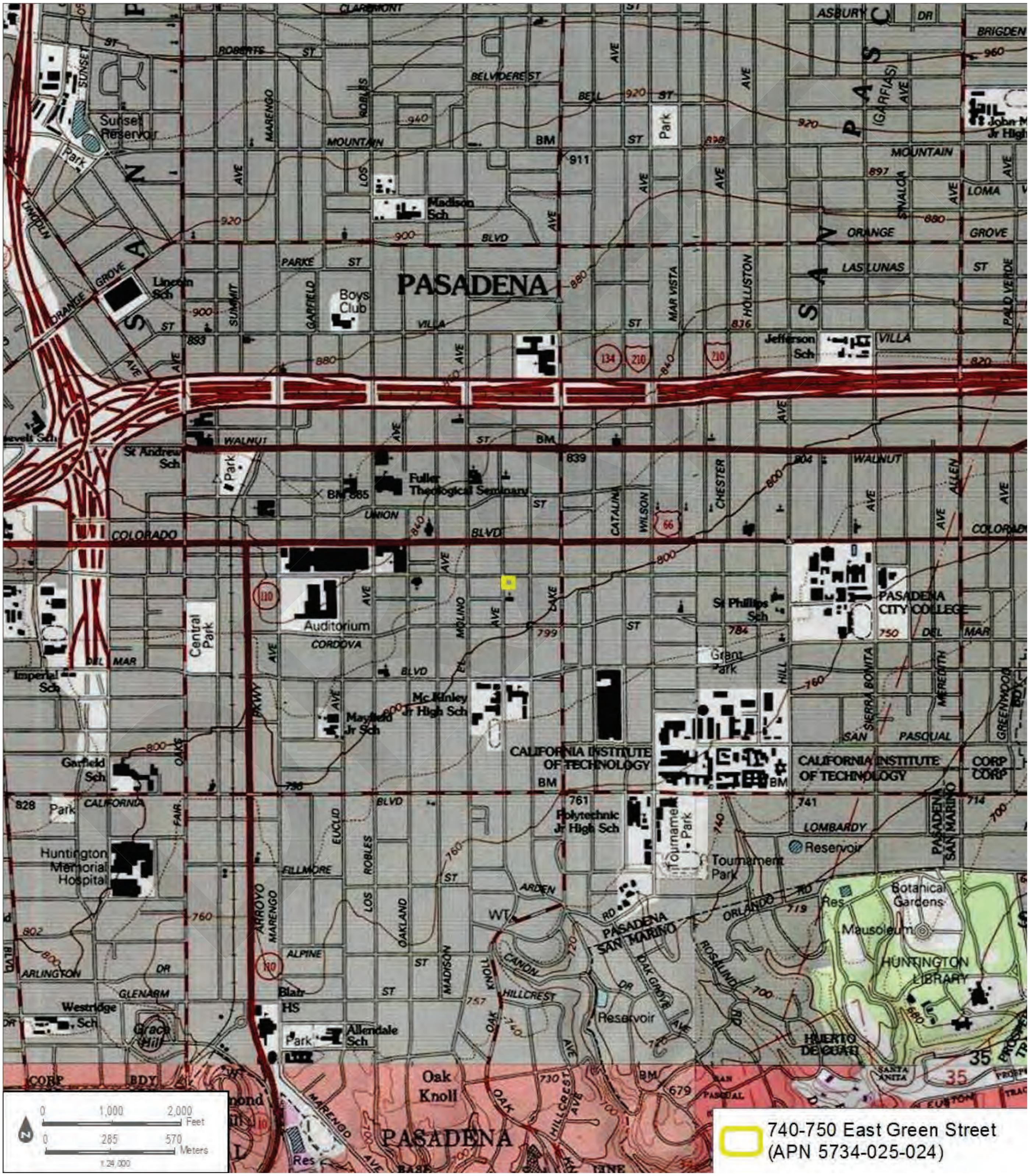
***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California ♁ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

 ***Resource Name or #** (Assigned by recorder) 740-750 East Green Street

***Map Name:** Pasadena, California ***Scale:** 1:24,000 ***Date of map:** 1995 (1999 ed.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 740-750 East Green Street ***NRHP Status Code** 6Z

B1. Historic Name: 740-750 East Green Street
B2. Common Name: N/A
B3. Original Use: Office building B4. Present Use: Office building
***B5. Architectural Style:** Corporate Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed 1963. Date Unknown: Observed window and door replacements on north elevation.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**

B9a. Architect: Lane and Schlick b. Builder: unknown
***B10. Significance: Theme** N/A **Area**

Period of Significance N/A **Property Type** **Applicable Criteria**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

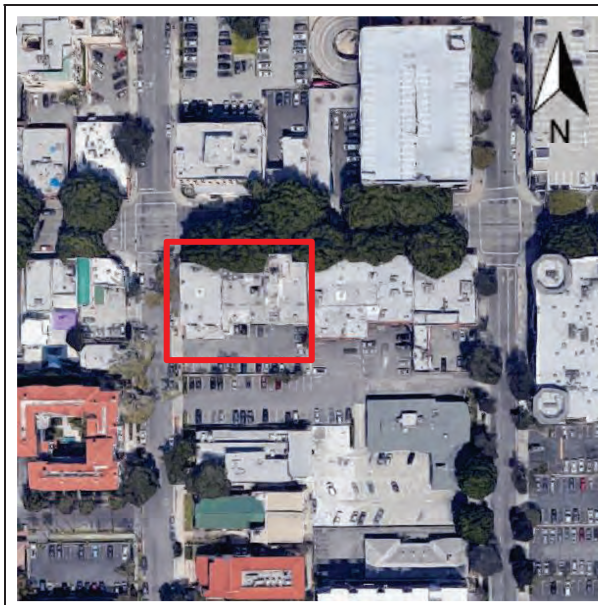
Historic Period Overview

Spanish Period
Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999). **See Continuation Sheet.**

B11. Additional Resource Attributes: (List attributes and codes)
***B12. References:**

See Continuation Sheet.

B13. Remarks:



***B14. Evaluator:** Nicole Frank, MSHP
***Date of Evaluation:** 9/29/2019

(This space reserved for official comments.)

***P3a. Description (Continued):**

The main (north) elevation presents as four sections from left the right. The first features smooth concrete wall with a grid of 25 plate glass windows separated by a metal frame above, the next section extends out approximately five feet from the main building with a storefront entry and double-leaf door on the first-floor and monolithic wall divided into four vertical sections with square tiles. The next section is over a open garage and features a wall of plate glass windows divided by metal frames; the final section continues the wall of plate glass and metal framing with a projecting glass storefront below with a double leaf entry door. The west elevation (Figure 2) displays five brick columns separating two metal frame storefront windows one with two windows the other with three, and sections of rough painted stucco between. The second and third floors display a monolithic wall of painted rough textured stucco. The south elevation (Figure 3) displays as two sections and is primarily clad in painted rough textured stucco. The left portion of the elevation features a projecting one-story entry with a single leaf entry door and two sets of vertically oriented bands of plate glass windows, three windows wide with a projecting metal frame. The two sections are divided by a three-story tall brick and stucco projection. The right portion of the elevation displays the open garage on the first-story with a series of eight horizontal bands of metal frame sliding windows and a building height thin brick wall.

Identified Alterations

Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-024).

- 1963. Permit to construct a new 15,800-sf concrete and brick office building with a composition roof. (#909820)
- 1963. Permit to instill 24” number wall sign “750”. (#05374)
- 1966. Permit to cut 4’ x 7’ in brick wall of office. (#6035)
- 1966. Permit to replace non-bearing interior office partitions. (#3539)
- 1966. Permit to remove and add partitions and add electrical outlets. (no permit #)
- 1966. Permit to add interior wall partitions and doors and relocate lighting. (no permit #)
- 1982. Permit to replace evaporative condenser. (#82164)
- Date Unknown: Observed window and door replacements on north elevation

***B10. Significance (Continued):**

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angels of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region’s burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena

Like many cities in the San Gabriel Valley, the City of Pasadena’s history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O'Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O'Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O'Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided

solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City’s landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large-scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O’Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena’s development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O’Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O’Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city’s Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena’s election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro’s Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city’s population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During

this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

740-750 East Green Street (1963)
Historic aerial photographs and maps indicate that throughout the course of its history, this building has largely retained its original scale and massing. For instance, in the 1952, 1953 and 1956 aerials, the property at 740-750 East Green Street displays a thin rectangular building. By 1964, the building is replaced by the current building, which is consistent with its 1963 date of construction. (NETR 2019; UCSB 2019).

Archival research found that Lane and Schlick originally designed the building for Rosay Investments Corporation in 1963. City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. City Directory and map research lists the following tenants from the 1960s until 2019: Sherwin Williams Paint Company; Paine, Webber, Jackson, and Curtis; and Thomas R Capehart. Subsequent years in City Directories show that the building continued to change tenants including Remax; Triecta Fit; Fred Astaire; and A1A Topsoil in more recent years.

Architectural Style: Corporate Modern (1955-1970)
The Corporate Modern Style is stylistically linked to the International Style, as such the two style's history is intricately linked. Corporate Modernism came to the United States in the 1930s after gaining popularity in Germany, Holland and France through architects such as Walter Gropius and Ludwig Mies van der Rohe. The style soon spread to the United States in the 1930s, due in part to Henry-Russell Hitchcock and Philip Johnson's 1932 book titled The International Style: Architecture Since 1922 for the New York Museum of Modern Art's exhibition. In their book, Hitchcock and Johnson introduced the term International and identified the three principles as architecture as volume, regularity, and avoiding the application of ornament. These three principles have been the baseline for American International Style architects such as Richard Neutra and Philip Johnson. The style became very popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. The most common application was as the corporate office, creating walls of glass with sharp angles located in the downtowns of many cities.

The main difference between Corporate Modern buildings and their predecessors was a lack of exterior support of solid masonry. They often depended on a metal interior skeleton and utilized the curtain wall to clad walls in glass. This dependency on the metal frame resulted in windows hung in repeating patterns and brought another level of order to these already stripped down buildings. Mies's designs specifically focused on perfection through mathematics, generating rectangular curtail wall designs displaying strong roots in the philosophy of the Bauhaus. This movement incorporated simple and precise designs and incorporated mass-produced materials such as concrete, steel, and glass paired with functionality in design (SFPD 2010; McAlester 2015; HRG 2007).

Characteristics of the Corporate Modern Style:

- One- to three-stories in height
- Square and rectangular building footprints with open interior floor plans
- Asymmetrical facades with simple cubic forms and strong right angles
- Horizontally oriented rectangular boxes
- Flat roofs with flush parapet or cantilevered overhang
- Tower over a parking podium, often screened
- Use of concrete, brick, steel, stucco and glass as exterior materials
- Lack of exterior ornamentation
- Design dictated by steel framing system with vertical fins or louvers
- Fenestration includes ribbon windows, corner windows, or glass curtain walls

Architect: Lane and Schlick, AIA (1922-1988, 1926-2010)
Howard Raymond Lane was born on October 13, 1922 in Illinois. During World War II, Lane served in the Third Armored Division of the United States Army in Europe. After the war ended, he returned to Illinois to study architecture at the Illinois Institute of Technology (IIT) under renowned architect Mies van der Rohe. Lane graduated IIT in 1947 and worked for a short time as a draftsman for Skidmore, Ownings and Merrill in Chicago. A year later Lane moved to Los Angeles, California and worked as a draftsman for Martin and Associates and later as a Project Architect for Pereira and Luckman until 1952. In 1953, Lane established his own architectural firm, the Lane Architectural Group based in Woodland Hills, California. Within the next year, Lane met architect Edward Ray Schlick and the two formed a partnership under the name Lane and Schlick, AIA.

Schlick was born on July 6, 1926 in Los Angeles. After spending two years in the Navy, he graduated from UC Berkeley with a degree in architecture in 1953. Schlick and his wife Fran moved to Studio City in 1953 when he began practicing with Lane. The firm was prolific around the Los Angeles area and designed a wide range of buildings including residences, commercial buildings, educational institutions, medical centers, and religious buildings. Lane and Schlick practiced for nine years and moved offices in 1962 into 15840 Ventura Boulevard in Encino. In 1963, the firm changed names from Lane and Schlick, AIA to Howard R. Lane, AIA and Associates due to Schlick moving to Ivanhoe, Texas and opening his own firm with seven partners named Octagon Associates in the early 1970s. Lane died on November 3, 1988 in Santa Monica. He was a fellow of the American Institute of Architects, 1959 president of the Architects of San Fernando Valley, and 1977 president of the California Council of AIA. Schick continued to practice architecture until a month before his death in 2010 (LAT 1962a, 1963, 1988; VT 1959; VTD 2010; archINFORM 2019).

A sample of Lane and Schlick's known work is included below (LAT 1962; archINFORM 2019; LAC 2019):

- 17100 Ventura Boulevard, Los Angeles, CA (1953)
- 16035 Ventura Boulevard, Los Angeles, CA (1959)
- 4419 Van Nuys, Los Angeles, CA (1961)
- 4416 S. Normandie Avenue, Los Angeles, CA (1961)
- 14044 Ventura Boulevard, Sherman Oaks, CA (1961)
- King Solomon Restaurant, Ventura Boulevard and Gloria Avenue, Los Angeles, CA (1962)
- 5251 Sepulveda Boulevard, Van Nuys, CA (1962)
- 1745 N. Sycamore, Los Angeles, CA (1962)
- 5400 Van Nuys Boulevard, Los Angeles, CA (1962)
- 11139 Acama Street, Los Angeles, CA (1962)
- 740-750 East Green Street, Pasadena, CA (1963)
- 15739 Ventura Boulevard, Valley Beth Shalom, Los Angeles, CA (1964)

Significance Evaluation

NRHP/CRHR Statement of Significance

The property located at 740-750 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1963, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building which hosted multiple tenants throughout its history, beginning with Rosay Investments Corporation. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 1 is a modest example of a Corporate Modern office building designed by Los Angeles-based architectural firm Lane and Schlick, AIA in 1963. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. Building 1 includes the following characteristics of the Corporate Modern style: three-stories in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of concrete, brick, steel, and glass as exterior materials, lack of exterior ornamentation, design dictated by steel framing system with vertical fins or louvers, fenestration includes glass curtain walls. Lane and Schlick, AIA was prolific around the Los Angeles area and designed a wide range of buildings including residences, commercial buildings, educational institutions, medical centers, and religious buildings during the 1950s and 1960s. Despite the building's ability to convey the most basic elements of the Corporate Modern style of architecture, Building 1 does not stand as a distinctive or important example of the style and does not represent the work of a master architect. For these reasons, 740-750 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 1 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street had already been developed with commercial properties and this has not substantially changed since 1963. The building maintains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. Several windows and a set of doors on the north elevation were replaced over time but the majority of the building's original materials are existant. The building also retains integrity of feeling and association, where the property retains the ability to express itself as an office building constructed in the 1960s. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

***B12. References:**

AIA Historical Directory of American Architects. 1962. "AIA Historical Directory of American Architects, 1962." Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. "Howard Raymond Lane, architect (1922-1988)." Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. "John Curtis Chambers." Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. “Luiseño,” in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. “Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California.” In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002.Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. “Heritage: A Short History of Pasadena.” Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. “Plans Underway for Project’s Clubhouse.” Newspapers.com: *The Desert Sun* (Palm
Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. “San Dieguito-La Jolla: Chronology and Controversy.” San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. "Linguistic Prehistory." In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple Property Documentation Form.

Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. "Technological Organization of the Millingstone Pattern in Southern California." Master's thesis; California State University, Sacramento.

Hale, M. 2009. "San Diego and Santa Barbara: Socioeconomic Divergence in Southern California." PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. "Introduction." In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. "Charles Parsons." Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. "LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975." Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994*. Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. "Office Building." Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. "Also Attractive." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. "Design of New Home." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. "Cheerful." Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. "Higher-Priced Houses Sought." Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. "Two Apartment Project Started." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. "Moller Heads Pasadena CC." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. “New Community Service Center Given Preview.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. “Retiring Chest Leader Honored by Pasadenans.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. “Contemporary Style Homes Spearhead Sales at Tract.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. “In Pasadena.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. “New Company Established by L.A. Architect.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. “Firm Marks Anniversary.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. “Architect Firm of Lane-Schlick Changes Name.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. “Apartment Building to Rise in Studio City.” Newspapers.com: *Los Angeles Times* (Los Angeles, California).
October 21, 1962, pg. 134.

LAT. 1962c. “15-Story Apartment Hotel Planned for Santa Monica.” Newspapers.com: *Los Angeles Times* (Los
Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. “Rudolph will Design Lake California.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. “Builder Evald C. Moller.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. “Services Held for Architect Howard Lane.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O'Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. "History of Old Pasadena." Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. "Evald C. Moller Heads Group for Recreation." Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. "Rancho San Francisco: A Study of a California Land Grant." The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. "E.C. Moller Commission Term Ends." Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. "Foothill Group Gives Family Safety Valves." Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. "Pasadena." Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. "Pasadena." Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. "Pasadena." Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. "Pasadena." Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. "Pasadena." Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. "Pasadena." Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. "Pasadena." Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. “Evald C. Moller.” Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. “Important Grand Opening.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. “Come Home to Paradise.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. “Parsons.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. “Valley Architects Elect Officers.” Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. “Edward Ray Schlick.” Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. “Cultural Tradition and Ecological Adaptation on the Southern California Coast.” In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. “Paleoindian and Early Archaic Periods.” In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Figure 1. Building 1: North Elevation, View looking southwest (IMG_0362)

Figure 2. Building 1: West Elevation, View looking northeast (IMG_0384)

CONTINUATION SHEET

Figure 3. Building 1: South Elevation, View looking north (IMG_0414)

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code   Reviewer   Date

 ***Resource Name or #:** (Assigned by recorder) 770-784 East Green Street
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted**
***a. County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Pasadena **Date** 1995 (1999 ed.) **T** 1N ; **R** 12W; ☐ **of Sec** ; San Bernardino **B.M.**
c. Address 770 East Green Street City Pasadena Zip 91101
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 395411 mE/ 3778740 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
AIN: 5734-025-014; Latitude: 34°08'39.6"N, Longitude: 118°08'04.0"W

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

770-784 East Green Street is a two-story Corporate Modern mixed-use relatively rectangular building that abuts buildings 1 and 3 on its east and west elevations. Exterior walls are clad in a variety of materials including stucco, running bond brick, plate glass, and terrazzo panels. The roof of the building is flat and sheathed in rolled asphalt. The main (north) elevation is separated into two sections by a series of three brick pilasters and walls. The left section displays two sets of metal-frame storefront windows with glass entry doors under a rounded awning separated by a section of terrazzo panels (Figure 1). **See Continuation Sheet.**

***P3b. Resource Attributes:** (List attributes and codes) HP6. 1-3 story commercial building
***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #) View to southeast, 7/29/2019, IMG_0496

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1956 (Building Permit)

***P7. Owner and Address:**
Stanford Pasadena LLC
888 S. Figueroa St, 1900
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder
Dudek
38 N Marengo Ave
Pasadena, CA 91101

***P9. Date Recorded:** 7/29/2019
***P10. Survey Type:** (Describe)
Pedestrian

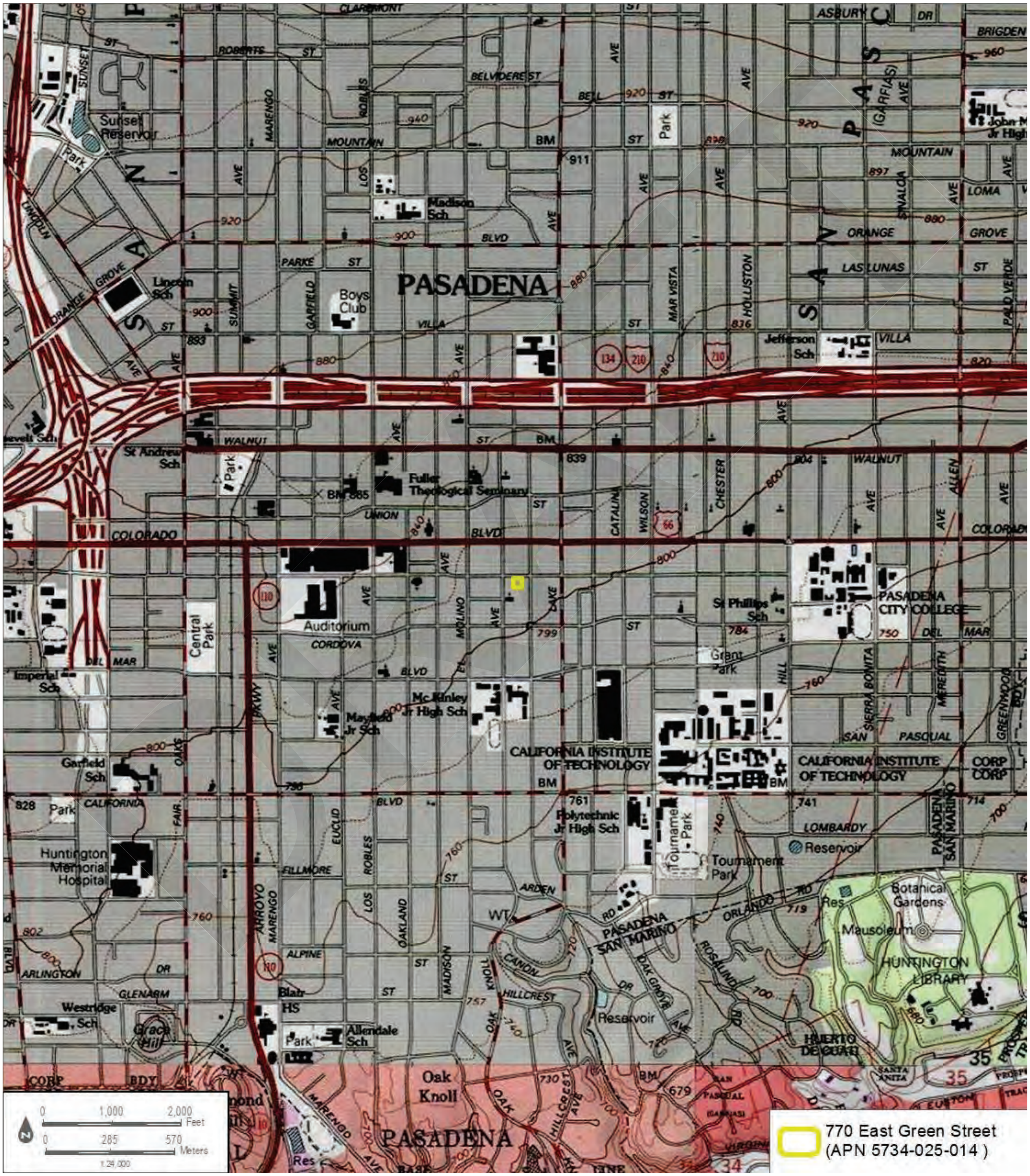
***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report for the 740-790 Green Street Mixed-Use Project, Pasadena, California. Prepared by Dudek, 2019.

***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

Page 2 of 20 *Resource Name or # (Assigned by recorder) 770-784 East Green Street
*Map Name: Pasadena, California *Scale: 1:24,000 *Date of map: 1995 (1999 ed.)



BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 770-784 East Green Street ***NRHP Status Code** 6Z

B1. Historic Name: 770-784 East Green Street
B2. Common Name: N/A
B3. Original Use: Office building B4. Present Use: Office Building
***B5. Architectural Style:** Corporate Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed in 1956. Date Unknown: Observed window and door replacements on north elevation.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**

B9a. Architect: William Leo Rudolph b. Builder: N/A
***B10. Significance: Theme** N/A **Area**
Period of Significance N/A **Property Type** **Applicable Criteria**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historic Period Overview

Spanish Period

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999). **See Continuation Sheet.**

B11. Additional Resource Attributes: (List attributes and codes)
***B12. References:**

See Continuation Sheet.

B13. Remarks:

***B14. Evaluator:** Nicole Frank, MSHP
***Date of Evaluation:** 9/29/2019

(This space reserved for official comments.)

***P3a. Description (Continued):**
The second-story displays two bands of plate glass ribbon windows divided by horizontal bands of painted rough textured stucco. The right section displays two integral metal-frame storefront entries separated by terrazzo panels. A two-story band of plate glass windows is connected to a series of second-story ribbon windows that continue the band of stucco from the left section of the elevation (Figure 2). The other visible elevation is the south, which displays running bond brick and variety of fenestration types including single-pane, horizontal sliding, and one over three windows and single and double-leaf metal entry doors (Figure 3). The left section extends out approximately 15 feet from the main building and features a two-story metal staircase.

Identified Alterations
Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-014).

- 1956. Permit to construct a two-story concrete, brick, and stucco building for $100,000. (#9682779)
- 1956. Install 18” metal letters mounted on stucco wall. (#15170)
- 1960. Permit to add 6,000 square foot of office. (#48446)
- 1960. Permit for repairs of fire damage, no structural member’s involved or exterior work needed. (#2343)
- 1960. Permit to install interior partitions with no exterior work. (#6185)
- 1962. Permit to cut a doorway. (#8475-0)
- 1963. Permit to add one room to the second floor. (#01669)
- 1966. Permit to relocate interior partitions. (#09782)
- 1973. Permit to add partitions and counter and new rear stair. (#44556)
- 1977. Permit to partition office area 10’ x 12’. (#37579)
- 1978. Permit to reroof composition roof with 30 felts and glaskap. (#86522)
- 1981. Permit to install interior partitions, “non-structural”. (#188560)
- 1987. Permit to re-roof business with class A GAF built up. (#0016471)
- Date Unknown: Observed window and door replacements on north elevation.

***B10. Significance (Continued):**
More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angels of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period
War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region’s burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena
Like many cities in the San Gabriel Valley, the City of Pasadena’s history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O'Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O'Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O'Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City's landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large-scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O'Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena's development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O'Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O'Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city’s Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena’s election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro’s Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city’s population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

770-784 East Green Street (1956)
Historic aerial photographs and maps indicate in the 1952, 1953, 1956 aerial photographs, the property at 770-784 East Green Street displays three small structures running north to south along the length of the property. The 1964 aerial photograph displays the replacement of these structures with a square plan commercial building, which is consistent with the 1956 date of construction listed on the original building permit. (NETR 2019; UCSB 2019).

Archival research found that architect William Leo Rudolph originally designed the two-story office building, called the Wilhite Building in 1956 for the Wilhite Trust of which F. Dane Wilhite was the trustee. The 11,400 square foot building and the land cost $200,000 and featured a large decorative panel of Italian tile veneer (Figure 4). Research indicates that the Prudential Insurance Company were the first tenants of the building upon its completion (LAT 1955b). Archival research, including City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. City Directory entries for the property lists the following tenants for the office building: Prudential Insurance Company of America; Mitchum, Jones, and Templeton Incorporated, and State Farm. Subsequent years in City Directories show that the building continued to change tenants frequently.

Architectural Style: Corporate Modern (1955-1970)
The Corporate Modern Style is stylistically linked to the International Style, as such the two style's history is intricately linked. Corporate Modernism came to the United States in the 1930s after gaining popularity in Germany, Holland and France through architects such as Walter Gropius and Ludwig Mies van der Rohe. The style soon spread to the United States in the 1930s, due in part to Henry-Russell Hitchcock and Philip Johnson's 1932 book titled *The International Style: Architecture Since 1922* for the New York Museum of Modern Art's exhibition. In their book, Hitchcock and Johnson introduced the term International and identified the three principles as architecture as volume, regularity, and avoiding the application of ornament. These three principles have been the baseline for American International Style architects such as Richard Neutra and Philip Johnson. The style became very popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. The most common application was as the corporate office, creating walls of glass with sharp angles located in the downtowns of many cities.

The main difference between Corporate Modern buildings and their predecessors was a lack of exterior support of solid masonry. They often depended on a metal interior skeleton and utilized the curtain wall to clad walls in glass. This dependency on the metal frame resulted in windows hung in repeating patterns and brought another level of order to these already stripped down buildings. Mies's designs specifically focused on perfection through mathematics, generating rectangular curtail wall designs displaying strong roots in the philosophy of the Bauhaus. This movement incorporated simple and precise designs and incorporated mass-produced materials such as concrete, steel, and glass paired with functionality in design (SFPD 2010; McAlester 2015; HRG 2007).

Characteristics of the Corporate Modern Style:

- One- to three-stories in height
- Square and rectangular building footprints with open interior floor plans
- Asymmetrical facades with simple cubic forms and strong right angles
- Horizontally oriented rectangular boxes
- Flat roofs with flush parapet or cantilevered overhang
- Tower over a parking podium, often screened
- Use of concrete, brick, steel, stucco and glass as exterior materials
- Lack of exterior ornamentation
- Design dictated by steel framing system with vertical fins or louvers
- Fenestration includes ribbon windows, corner windows, or glass curtain walls

Architect: William Leo Rudolph (1923-1981)
William L. Rudolph was an American architect born in Los Angeles on September 25, 1923. He attended college at the University of California Berkley for architecture. Little is known about Rudolph's early life and career. He is known to have practiced architecture between the 1960s and 1980 in Southern California specifically in the Los Angeles and Pasadena areas. Rudolph was head of the Los Angeles firm William L. Rudolph and Associates, which was known for their ability to design resorts that reflect the character of the area where they are located and their environmental settings. The firm's most well-known commissions were the Acapulco Princess resort in Mexico and the Southampton Princess in Bermuda. Rudolph died in Los Angeles in 1981 (DS 1974; AIA 1962).

A sample of William L. Rudolph's known work is included below (LAT 1962c, 1972):

- 770-784 East Green Street, Pasadena, CA (1956)
- Bowling Center at Astoria and Foothill Boulevard, Los Angeles, CA (1960)
- Carpinteria Shopping Center, Los Angeles, CA (1962)
- 725 Ocean Avenue, Santa Monica, CA (1962)
- Caruso's Restaurant, Canandaigua Lake, New York (1962)
- Acapulco Princess Hotel, Mexico (1969)
- Southampton Princess Hotel, Bermuda (1972)
- Lake, California planned community, CA (1972)
- Westlake Village offices, Westlake Village, CA (1974)
- The Springs Clubhouse, Palm Springs, CA (1974)
- Green Tree Inn addition, Victorville, Los Angeles, CA (1980)

Significance Evaluation

NRHP/CRHR Statement of Significance

The property located at 770-784 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district. Addresses associated with this property include: 770, 772, 774, 776, 780, and 784 East Green Street.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1956, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building, which hosted multiple tenants throughout its history beginning with Prudential Insurance Company. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 2 is a modest example of a Corporate Modern office building designed by Los Angeles-based architect William Leo Rudolph in 1956. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. This building includes the following characteristics of the Corporate Modern style: two-stories in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of brick, steel, and glass as exterior materials, lack of exterior ornamentation, design dictated by steel framing system with vertical fins or louvers, fenestration includes glass curtain walls and ribbon windows. Rudolph is known to have practiced architecture between the 1960s and 1980 in southern California specifically in the Los Angeles and Pasadena area. Building 2 is not a distinctive or important example of the Corporate Modern style, nor is it the work of a master architect. Additionally, the building has undergone several alterations since its construction including replacement of windows and doors on the north elevation (date unknown), the addition of 6,000 square feet of office (1960), and reroofed (1987). For these reasons, 770-784 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 2 retains integrity of location, as it remains in its original location. The building does not retain integrity of design due to several large-scale exterior alterations including the addition of 6,000 square feet of office space in 1960 and the replacement of several windows and doors on the main elevation on an unknown date. The essential features of form, plan, space, structure, and style have not all been retained. The building retains integrity of setting, upon its construction the majority of East Green Street had already been developed with commercial properties and this has not substantially changed since 1956. The building does not retain integrity of materials and workmanship due to the lack of retention of the physical elements that date from its construction from subsequent alterations. The building no longer retains integrity of feeling and association, where the property retains the ability to express itself as an office building constructed in the 1950s. In summary, while the building does not retain the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

***B12. References:**

AIA Historical Directory of American Architects. 1962. "AIA Historical Directory of American Architects, 1962." Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. "Howard Raymond Lane, architect (1922-1988)." Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. "John Curtis Chambers." Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. "Luiseño," in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. "Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002.Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. "Heritage: A Short History of Pasadena." Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. "Plans Underway for Project's Clubhouse." Newspapers.com: *The Desert Sun* (Palm
Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. "Linguistic Prehistory." In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple Property Documentation Form.

Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. "Technological Organization of the Millingstone Pattern in Southern California." Master's thesis; California State University, Sacramento.

Hale, M. 2009. "San Diego and Santa Barbara: Socioeconomic Divergence in Southern California." PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. "Introduction." In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. "Charles Parsons." Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. "LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch

House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975." Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994*. Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. "Office Building." Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. "Also Attractive." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. "Design of New Home." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. "Cheerful." Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. "Higher-Priced Houses Sought." Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. "Two Apartment Project Started." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. "Moller Heads Pasadena CC." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. "New Community Service Center Given Preview." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. "Retiring Chest Leader Honored by Pasadenans." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. “Contemporary Style Homes Spearhead Sales at Tract.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. “In Pasadena.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. “New Company Established by L.A. Architect.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. “Firm Marks Anniversary.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. “Architect Firm of Lane-Schlick Changes Name.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. “Apartment Building to Rise in Studio City.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 134.

LAT. 1962c. “15-Story Apartment Hotel Planned for Santa Monica.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. “Rudolph will Design Lake California.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. “Builder Evald C. Moller.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. “Services Held for Architect Howard Lane.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O’Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. "History of Old Pasadena." Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. "Evald C. Moller Heads Group for Recreation." Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. "Rancho San Francisco: A Study of a California Land Grant." The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. "E.C. Moller Commission Term Ends." Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. "Foothill Group Gives Family Safety Valves." Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. "Pasadena." Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. "Pasadena." Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. "Pasadena." Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. "Pasadena." Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. "Pasadena." Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. "Pasadena." Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. "Pasadena." Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. “Evald C. Moller.” Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. “Important Grand Opening.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. “Come Home to Paradise.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. “Parsons.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. “Valley Architects Elect Officers.” Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. “Edward Ray Schlick.” Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. “Cultural Tradition and Ecological Adaptation on the Southern California Coast.” In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. “Paleoindian and Early Archaic Periods.” In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Figure 1. Building 2: Left section of North Elevation, View looking southwest (IMG_0489)

Figure 2. Building 2: Right section of North Elevation, View looking southeast (IMG_0496)

CONTINUATION SHEET

Property Name: 770-784 East Green Street

Figure 3. Building 2: South Elevation, View looking northeast (IMG_0455)

IN PASADENA—Shown above is the Wilhite Building, now under construction at 770 E Green St., Pasadena. The project, including land and building, represents investment of $200,000. Designed by William L. Rudolph, the two-story 11,400-square-foot structure will feature a large decorative panel of Italian tile veneer. Owner of the property is the Wilhite Trust of which F. Dane Wilhite is trustee. Space in the new structure has been leased by the Prudential Insurance Co.

Figure 4. 770-784 East Green Street architectural drawing, 1955, Los Angeles Times

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** (Assigned by recorder) 790 East Green Street
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted**
***a. County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Pasadena **Date** 1995 (1999 ed.) **T** 1N ; **R** 12W; S27 ☐ **of Sec** ; San Bernardino **B.M.**
c. Address 790 East Green Street City Pasadena Zip 91101
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 395442 mE/ 3778743 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
AIN: 5734-025-026; Latitude: 34°08'39.7"N, Longitude: 118°08'02.8"W

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

790 East Green Street is a two-story Corporate Modern office building located on the southwest corner of E Green Street and S Hudson Avenue with the corner of the building accentuated by a rectangular painted stucco overhang. The building's exterior walls are primarily clad in running bond brick with every forth course raised approximately half an inch and sections of rough texture painted stucco and square gray tiles. The roof is flat and sheathed in rolled asphalt. The main (north) elevation presents as three sections (Figure 1). **See Continuation Sheet.**

***P3b. Resource Attributes:** (List attributes and codes) HP6. 1-3 story commercial building
***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #) View to south, July 29, 2019, IMG_0484

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1967 (Building Permit)

***P7. Owner and Address:**
Stanford Pasadena LLC
888 S. Figueroa St, 1900
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder
Dudek
38 N Marengo Ave
Pasadena, CA 91101

***P9. Date Recorded:** 7/29/2019

***P10. Survey Type:** (Describe)
Pedestrian

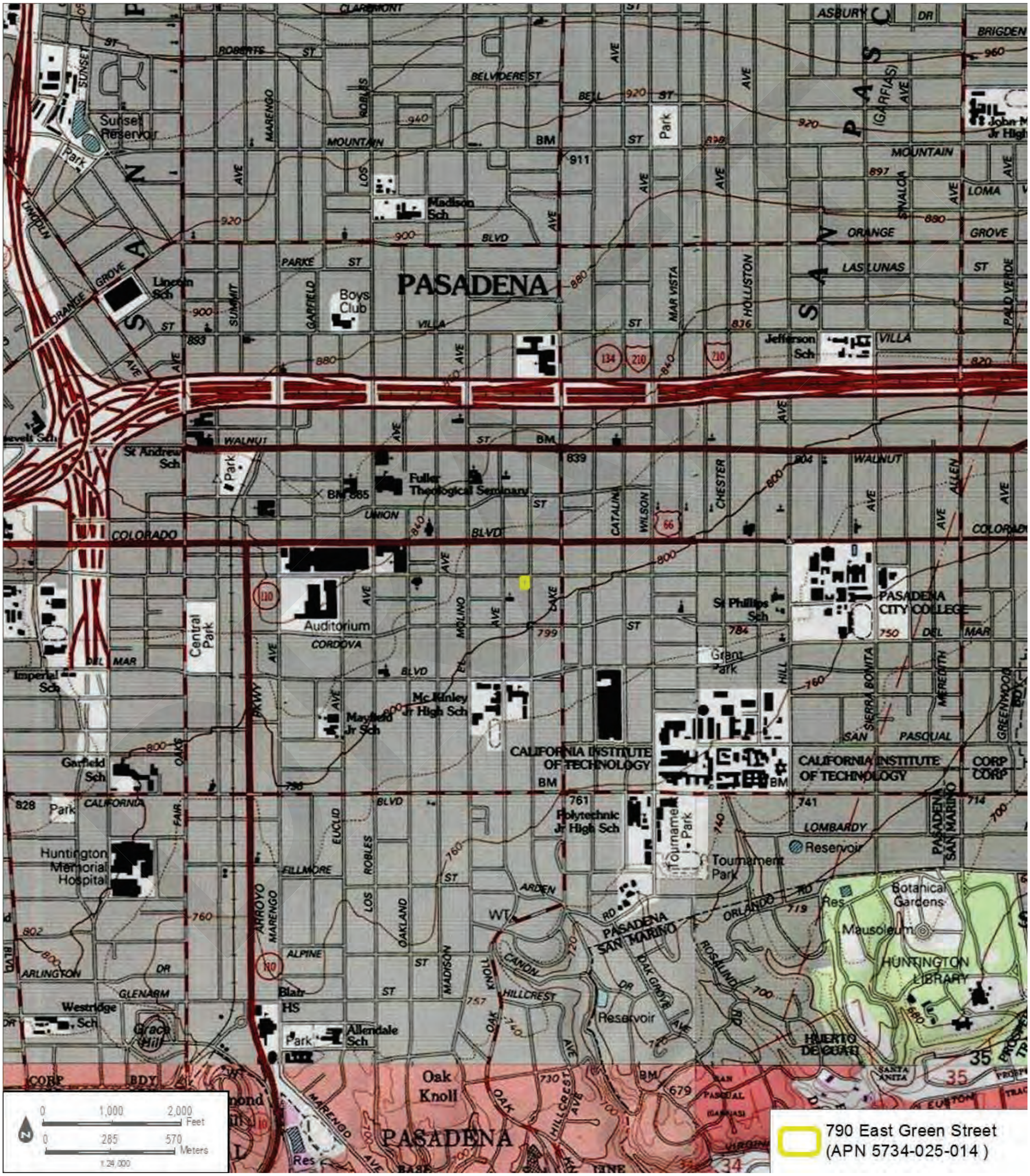
***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report for the 740-790 Green Street Mixed-Use Project, Pasadena, California. Prepared by Dudek, 2019.

***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California – Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

Page 2 **of** 20 ***Resource Name or #** (Assigned by recorder) 790 East Green Street
***Map Name:** Pasadena, California ***Scale:** 1:24,000 ***Date of map:** 1995 (1999 ed.)



State of California ♁ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 790 East Green Street ***NRHP Status Code** 6Z

B1. Historic Name: 790 East Green Street
B2. Common Name: N/A
B3. Original Use: Office building B4. Present Use: Office building
***B5. Architectural Style:** Corporate Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed in 1958.

***B7. Moved?** ■No □Yes □Unknown **Date:** **Original Location:**
***B8. Related Features:**

B9a. Architect: Evald C. Moller b. Builder: unknown
***B10. Significance: Theme** N/A **Area**
Period of Significance N/A **Property Type** **Applicable Criteria**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historic Period Overview

Spanish Period

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999). **See Continuation Sheet.**

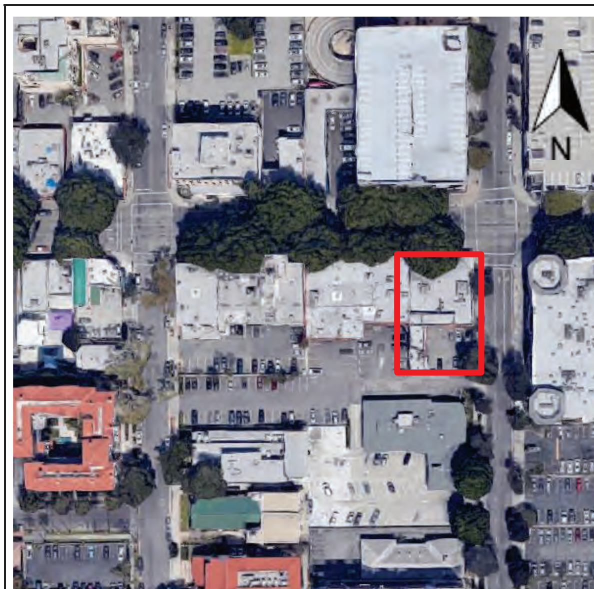
B11. Additional Resource Attributes: (List attributes and codes)
***B12. References:**

See Continuation Sheet.

B13. Remarks:

***B14. Evaluator:** Nicole Frank, MSHP
***Date of Evaluation:** 9/29/2019

(This space reserved for official comments.)



***P3a. Description (Continued):**
The left section displays a series of seven vertical plate glass windows separated by stepped back brick walls, the middle section is distinguished a square gray tile walls and an inset storefront window with a double leaf entry door, the right displays two plate glass windows with a square stucco surround and a single left glass entry door each with a fabric awing above. The west elevation displays no fenestration. The south elevation presents as two sections: the left has no fenestration and the right has two metal entry doors on both floors (Figure 2). The east elevation presents as two sections: the left is recessed approximately 40 feet with a small asphalt parking lot outlined by a low brick wall and a double leaf metal entry door on the first floor and a single leaf and single pane window on the second story. The right section displays a series of windows with a decorative surrounding of painted stucco, the first has three windowpanes followed by four single pane windows all with a fabric awning above (Figure 3).

Identified Alterations
Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-026).

- 1967. Permit to construct a 6,780 square foot concrete and masonry office building for $60,000. (#4126N)
- 1972. Permit to cut through back wall and rear parking lot to install a door opening for a pair of 2’6” x 7’ doors. (#37501)
- 1973. Permit to install non-load bearing partitions. (#38645)
- 1981. Permit to add air conditioning to existing building. (#6031)
- 1982. Permit to remove walls and ceiling and replace with new interior walls and ceilings. (#8615)
- 1999. Permit to change sill material. (#99-01668)
- 2000. Permit to tear off and re-roof capsheet rood class A. (#00-01387)
- 2009. Permit to remove and prohibit signs from public view and right of way. (#2009-00561)
- 2013. Permit to replace two wall signs within a stucco wall.
- Dates Unknown: Observed alterations include window and door replacement on the north and east elevations

***B10. Significance (Continued):**
More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angels of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).
Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region’s burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena

Like many cities in the San Gabriel Valley, the City of Pasadena’s history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O’Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O’Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O’Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided

solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City's landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large-scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O'Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena's development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O'Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O'Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city’s Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena’s election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro’s Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city’s population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During

this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

790 East Green Street (1967)
Historic aerial photographs and maps indicate that the history of the subject property pre-dates the current building located at 790 East Green Street. In the 1952, 1953, 1956, and 1964 aerials the property at 790 East Green Street is vacant and then paved by 1956 to be a small corner parking lot. However, by the 1972 aerial photograph an irregularly shaped building appears on the lot, which is consistent with the 1967 date of construction (NETR 2019; UCSB 2019).

Archival research found that contractor Evald C. Moller originally designed the building for K. Robey and E. Messer in 1967. Archival research, including City Directory research, indicates that the building was an office building throughout its history with multiple tenants, addresses, and suite numbers. The first City Directory entry for the property lists the following tenants for the office building: Marble Mortgage Company; U.S. Life Systems Corporation; and United California Bank. Subsequent years in City Directories show that the building continued to change tenants.

Architectural Style: Corporate Modern (1955-1970)
The Corporate Modern Style is stylistically linked to the International Style, as such the two style's history is intricately linked. Corporate Modernism came to the United States in the 1930s after gaining popularity in Germany, Holland and France through architects such as Walter Gropius and Ludwig Mies van der Rohe. The style soon spread to the United States in the 1930s, due in part to Henry-Russell Hitchcock and Philip Johnson's 1932 book titled The International Style: Architecture Since 1922 for the New York Museum of Modern Art's exhibition. In their book, Hitchcock and Johnson introduced the term International and identified the three principles as architecture as volume, regularity, and avoiding the application of ornament. These three principles have been the baseline for American International Style architects such as Richard Neutra and Philip Johnson. The style became very popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. The most common application was as the corporate office, creating walls of glass with sharp angles located in the downtowns of many cities.

The main difference between Corporate Modern buildings and their predecessors was a lack of exterior support of solid masonry. They often depended on a metal interior skeleton and utilized the curtain wall to clad walls in glass. This dependency on the metal frame resulted in windows hung in repeating patterns and brought another level of order to these already stripped down buildings. Mies's designs specifically focused on perfection through mathematics, generating rectangular curtail wall designs displaying strong roots in the philosophy of the Bauhaus. This movement incorporated simple and precise designs and incorporated mass-produced materials such as concrete, steel, and glass paired with functionality in design (SFPD 2010; McAlester 2015; HRG 2007).

Characteristics of the Corporate Modern Style:

- One- to three-stories in height
- Square and rectangular building footprints with open interior floor plans
- Asymmetrical facades with simple cubic forms and strong right angles
- Horizontally oriented rectangular boxes
- Flat roofs with flush parapet or cantilevered overhang
- Tower over a parking podium, often screened
- Use of concrete, brick, steel, stucco and glass as exterior materials
- Lack of exterior ornamentation
- Design dictated by steel framing system with vertical fins or louvers
- Fenestration includes ribbon windows, corner windows, or glass curtain walls

Contractor: Evald C. Moller (1905-1996)
Evald C. Moller was born in Michigan on January 30, 1905. In 1906, Moller and his family moved to Pasadena, California where he started his own general contracting firm in 1928 called E. C. Moller Inc. Throughout his time living in Pasadena, Moller was heavily involved with local politics and trade organizations. In 1950, he was elected president of the Pasadena Chamber of Commerce after serving as president of the Building Contractors of California, Inc. and president of the Pasadena Kiwanis Club. Moller continued to participate in local organizations and in 1961 was given the role of chairman of the Pasadena Recreation Commission. In 1963, Moller's term in the Recreation Commission ended after also serving as director of the Tournament of Roses Association in 1962. Moller retired from the construction business in 1976 after working for 47 years in Pasadena. In 1986, Moller moved to Gleneden Beach, Oregon and became a member of the board of North Lincoln Hospital. Moller died on May 22, 1996 while living in North Lincoln, Oregon (LAT 1950b, 1976; PI 1961, 1963; SJ 1996).

Significance Evaluation

NRHP/CRHR Statement of Significance

The property located at 790 East Green does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district. Addresses associated with this property include: 788 East Green Street, and 101 and 103 South Hudson Avenue.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1958, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The property was constructed as an office building which hosted multiple tenants throughout its history beginning with the Marble Mortgage Company. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 3 is a modest example of a Corporate Modern office building designed by contractor Evald C. Moller in 1958. It displays several design elements associated with the Corporate Modern architectural style, which is linked stylistically to the International Style. The Corporate Modern style became popular in the mid-20th century in almost all forms of architecture, using precise and universal materials and techniques that allowed the style to be used anywhere in the world. This building includes the following characteristics of the Corporate Modern style: one-story in height, rectangular building footprint with open interior floor plan, asymmetrical facade with simple cubic forms and strong right angles, horizontally oriented rectangular boxes, flat roof with flush parapet, use of brick and glass as exterior materials, lack of exterior ornamentation, fenestration includes ribbon and corner windows.. Despite the building's ability to convey the most basic elements of the Corporate Modern style of architecture, Building 3 does not stand as distinctive or important example of the style and does not represent the work of a master architect. Alterations to the building include changing the sill material in 1999 and observed alterations including replacement of windows and doors on the north and east elevations. For these reasons, 790 East Green Street does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 3 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street had been developed with commercial properties and this has not substantially changed since 1958. The building does not maintain integrity of materials and workmanship due to the replacement of several windows and doors that do not date for the buildings construction. The building retains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants Marble Mortgage Company. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

***B12. References:**

AIA Historical Directory of American Architects. 1962. “AIA Historical Directory of American Architects, 1962.” Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. “Howard Raymond Lane, architect (1922-1988).” Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. “John Curtis Chambers.” Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. “How to Apply the National Register Criteria for Evaluation.” National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. “An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California.” Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. “Luiseño,” in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. “Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California.” In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002.Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. “Heritage: A Short History of Pasadena.” Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. “Plans Underway for Project’s Clubhouse.” Newspapers.com: *The Desert Sun* (Palm Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. “San Dieguito-La Jolla: Chronology and Controversy.” San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. “Linguistic Prehistory.” In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple Property Documentation Form.

Griset, S. 1996. “Southern California Brown Ware.” Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. “Technological Organization of the Millingstone Pattern in Southern California.” Master’s thesis; California State University, Sacramento.

Hale, M. 2009. “San Diego and Santa Barbara: Socioeconomic Divergence in Southern California.” PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. “A New Original Version of Boscana’s Historical Account of the San Juan Capistrano Indians of Southern California.” Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. “Introduction.” In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. “Charles Parsons.” Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. “LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975.” Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. “Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages.” Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California’s Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994. *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. "Office Building." Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. "Also Attractive." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. "Design of New Home." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. "Cheerful." Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. "Higher-Priced Houses Sought." Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. "Two Apartment Project Started." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. "Moller Heads Pasadena CC." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. "New Community Service Center Given Preview." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. "Retiring Chest Leader Honored by Pasadenans." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. "Contemporary Style Homes Spearhead Sales at Tract." Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. "In Pasadena." Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. "New Company Established by L.A. Architect." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. "Firm Marks Anniversary." Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. "Architect Firm of Lane-Schlick Changes Name." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. "Apartment Building to Rise in Studio City." Newspapers.com: *Los Angeles Times* (Los Angeles, California).
October 21, 1962, pg. 134.

LAT. 1962c. "15-Story Apartment Hotel Planned for Santa Monica." Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. "Rudolph will Design Lake California." Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. "Builder Evald C. Moller." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. "Services Held for Architect Howard Lane." Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O'Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. "History of Old Pasadena." Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. "Evald C. Moller Heads Group for Recreation." Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. "Rancho San Francisco: A Study of a California Land Grant." The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. "E.C. Moller Commission Term Ends." Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. "Foothill Group Gives Family Safety Valves." Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. “An Outline of Yuman Prehistory.” *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. “Pasadena.” Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. “Pasadena.” Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. “Pasadena.” Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. “Pasadena.” Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. “Pasadena.” Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. “Pasadena.” Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. “Pasadena.” Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. “Pasadena.” Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. “Pasadena.” Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. “Evald C. Moller.” Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. “Important Grand Opening.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. “Come Home to Paradise.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. “Parsons.” Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. "Valley Architects Elect Officers." Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. "Edward Ray Schlick." Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Figure 1. Building 3: North elevation, View looking south (IMG_0484)

Figure 2. Building 3: South elevation, View looking northwest (IMG_0463)

Figure 3. Building 3: East Elevation, View looking northwest (IMG_0475)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code   Reviewer   Date

 ***Resource Name or #:** (Assigned by recorder) 111 South Hudson Avenue
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted**
***a. County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Pasadena **Date** 1995 (1999 ed.) **T** 1N; **R** 12W; ☐ **of Sec** ; San Bernardino **B.M.**
c. Address 111 South Hudson Avenue City Pasadena Zip 91101
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 395444 mE/ 3778688 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
APN: 5734-025-029; Latitude: 34°08'37.9"N, Longitude: 118°08'02.7"W

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

111 South Hudson Avenue is a one-story L-shaped Modern brick commercial/office building facing onto South Hudson Avenue with a parking lot to its southwest. Exterior walls are clad in common bond brick with one section of roman brick. The roof is a combination side-gable and hipped roof with a Dutch gable facing west sheathed in composition shingles. All windows have metal frames. The main (east) elevation displays at three sections (Figure 1). The left contains three square plate glass windows and a pair of two glass entry doors with a transom and sidelight accessed by three concrete steps leading to the sidewalk. **See Continuation Sheet.**

***P3b. Resource Attributes:** (List attributes and codes) HP13. Community center/social hall

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) View to west, 8/19/2019, IMG_8528

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1951 (Building Permit)

***P7. Owner and Address:**
Foothill Family Service
118 S. Oak Knoll Ave.
Pasadena, CA 91101

***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder
Dudek
38 North Marengo Ave,
Pasadena CA 91101

***P9. Date Recorded:** 8/19/2019

***P10. Survey Type:** (Describe)
Pedestrian

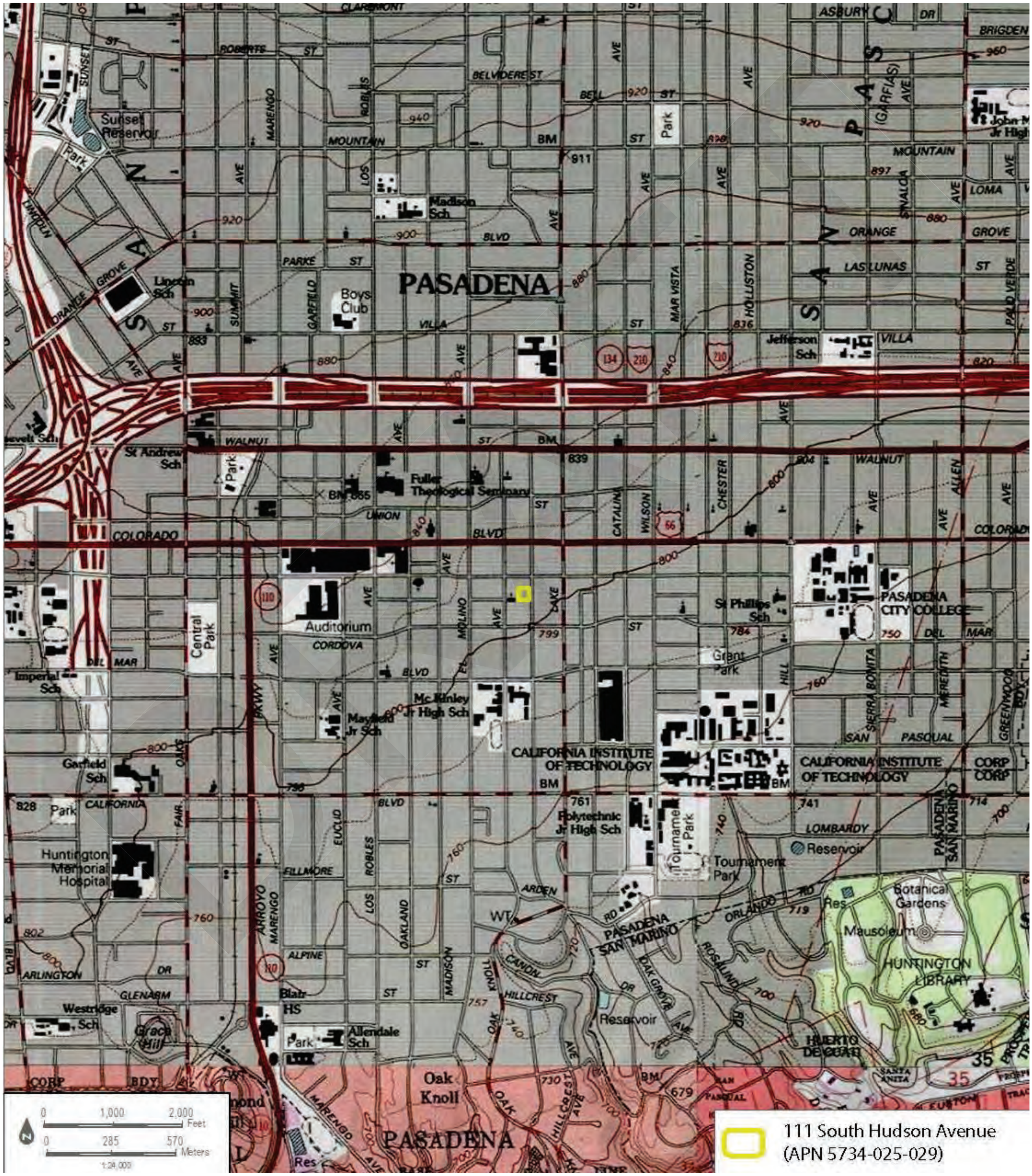
***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report for the 740-790 Green Street Mixed-Use Project, Pasadena, California. Prepared by Dudek, 2019.

***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California ♁ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

Page 2 **of** 20 ***Resource Name or #** (Assigned by recorder) 111 South Hudson Avenue
***Map Name:** Pasadena, California ***Scale:** 1:24,000 ***Date of map:** 1995 (1999 ed.)



BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 111 South Hudson Avenue ***NRHP Status Code** 6Z

B1. Historic Name: 111 South Hudson Avenue

B2. Common Name: N/A

B3. Original Use: State Board of Equalization office building B4. Present Use: Office building

***B5. Architectural Style:** Commercial Modern

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Constructed in 1951. Unknown date door replacement on east elevation.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**

B9a. Architect: Charles Jeffries "Cejay" Parsons b. Builder: Unknown

***B10. Significance: Theme** N/A **Area**

Period of Significance N/A **Property Type** **Applicable Criteria**

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historic Period Overview

Spanish Period

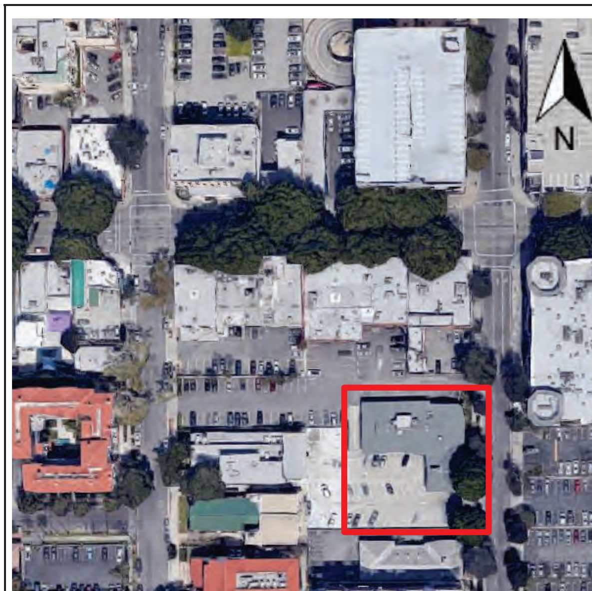
Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999). **See Continuation Sheet.**

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

See Continuation Sheet.

B13. Remarks:



***B14. Evaluator:** Nicole Frank, MSHP

***Date of Evaluation:** 9/29/2019

(This space reserved for official comments.)

***P3a. Description (Continued):**
The middle section is distinguished by a section of tan roman brick and a concrete ADA ramp leading to the main entry. The right section displays a row of six plate glass windows. The north elevation displays a series of eight paired windows. Each pair contains an awning window over two-fixed panes (Figure 2). The west elevation displays as two sections. The left section contains one three-part awning over two fixed windows, an inset single leaf entry door, and two sets of three awning over two fixed pane windows. The right section displays a single leaf entry door with transom window above, two large plate glass windows, and a pair of two awning over fixed pane windows (Figure 3). The north elevation displays as two sections. The left section displays a series of five sets of awning over two fixed panes windows the first four contain three windows the last has two. The right section contains a pair of double awning over two fixed pane windows (Figure 4).

Identified Alterations
Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-029).

- 1950. Permit to construct a one-story masonry office building with off street parking. (2C2847)
- 1951. Permit to install sign. (#31535)
- 1960. Permit to replace air conditioning units. (#17757)
- 1977. Permit to cut out door and remove inner wall, non-structural. (#75547)
- 1977. Permit to install T-bar ceiling approximately 6,000 square feet. (#75142)
- 1999. Permit to tear off and re-roof composition roofing with class A hot mop. (#99-00551)
- 2002. Permit to improve one hour rated corridor new ceiling joist and beams at east wing of building. (#BLD2001-01525)
- 2002. Permit to install two roof top package heat-pumping units with ductwork and three ceiling mounted exhaust fans (must be screened from public view). (#MEC2002-00264)
- Unknown date: Observed alterations include door replacement on east elevation.

***B10. Significance (Continued):**
More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angels of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period
A major emphasis during the Spanish Period in California was the construction of missions

and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).
Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period
War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region’s burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena
Like many cities in the San Gabriel Valley, the City of Pasadena’s history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O'Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O'Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O'Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City's landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large-scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O'Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena's development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O'Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O'Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the

Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city’s Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena’s election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro’s Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city’s population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

111 South Hudson Avenue (1951)
Historic aerial photographs and maps indicate that the current building at 111 South Hudson Avenue first appears in a 1952 aerial photography, which is consistent with the 1951 date of construction (NETR 2019; UCSB 2019).

The contractors the George W. Carter Company constructed the building at 111 South Hudson Avenue in 1951 as the new Pasadena branch office for the State Board of Equalization for $125,000 (Figure 5). The building was 8,000 square feet and designed by Cejay Parsons and Associates. Its original purpose was to serve as the headquarters for both the sales tax and liquor control divisions for the Pasadena sub district of the State agency, which covered the northeast corner of Los Angeles County (LAT 1951).

Architect: Charles Jeffries “Cejay” Parsons (1916-1975)
Cejay Parsons was born in February 18, 1916 in Oakland, California. Parsons was a prolific architect of commercial, medical and industrial buildings in the Mid-Century Modern style in the Los Angeles area and Hawaii. In 1959, Parsons formed a new enterprise known as Cejay Parsons, AIA, Architects and Associates with offices in the Mission Insurance Building at 300 S. Hobart Boulevard in Los Angeles. Parson’s firm prior to that was Jack H. MacDonald and Cejay Parsons, Associated Architects and Engineers. Parsons worked closely with engineer Jack H. MacDonald who specialized in industrial buildings. In Los Angeles, Parsons designed more than 60 buildings between the late 1940s and 1966. Four of these early projects were published in Architectural Record including a church, a single-family residence from the late 1940s, and two commercial buildings from 1950. Parsons was known for the extensive development of the W. 6th Street insurance center area where he designed the Gianinni-Falabrino buildings, the Phoenix Connecticut and Phoenix London buildings, Manufacturer’s Life, Scandinavian Air Service and Travelers buildings in Beverly Hills. In the late 1960s, Parsons moved to Honolulu and designed condominiums and hotels in Honolulu, Princeville, Kauai, and Guam throughout the 1970s. Parsons died on July 19, 1975 in Queen’s Hospital in Honolulu (HRG 2010; THA 1975; LAT 1959; HSB 1975).

A sample of Parsons’ known work is included below (HRG 2010; THA 1972, 1972):

- 601 S. Ardmore Avenue, Los Angeles, CA (1951)
- 111 S. Hudson Avenue, Pasadena, CA (1951)
- 601 S. Kingsley Drive, Los Angeles, CA (1952)
- 610 Shatto Place, Los Angeles, CA (1952)
- 3750 W. 6th Street, Los Angeles, CA (1953)
- 3535 W. 6th Street, Los Angeles, CA (1954)
- 241 South Rimpau Boulevard, Los Angeles, CA (1955)
- Bank of America Building, Los Angeles, CA (1955)
- 3850 Wilshire Boulevard, Los Angeles, CA (1956)
- 611 S. Catalina Street, Los Angeles, CA (1957)
- 3400 W. 6th Street, Los Angeles, CA (1957)

- 548 S. Kingsley Drive, Los Angeles, CA (1958)
- 300 S. Hobart Boulevard, Los Angeles, CA (1959)
- 5820 Wilshire Boulevard, Los Angeles, CA (1959)
- Hale Moani Condominiums, Launiu Street, Honolulu, HI (1971)
- Alii Kai Condominiums, Princeville, Kauai, HI (1974)

Significance Evaluation

NRHP/CRHR Statement of Significance

The property located at 111 South Hudson Avenue does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1951, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The subject property was constructed to house the branch office for the State Board of Equalization, which served as headquarters for both the sales tax and liquor control divisions for the Pasadena sub district of the State agency. Although the property served as a governmental headquarters, there is no indication that the construction of the building had a broad effect on the history of the State Board of Equalization. The building's construction was to fulfill a role of adding support to this area of Pasadena and there is no indication that it marked an important moment in history. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 4 is a Modern commercial brick office building designed by Los Angeles-based architectural firm Cejay Parsons and Associates in 1951. In Los Angeles, Parsons designed more than 60 buildings between the late 1940s and 1966. Four of these early projects were published in Architectural Record including a church, a single-family residence from the late 1940s and two commercial buildings from 1950. The building at 111 South Hudson Avenue was not one of Parson's well-known or publicized commission and is not a distinctive or important example of the Modern style used for an office building. The building displays several aspects of the Modern style including large plate glass windows, mix of exterior materials, and a lack of ornamentation. Despite the building's ability to convey the most basic elements of the Modern style of architecture, Building 4 does not stand as an exceptional example of the style and does not represent the work of a master architect. For these reasons, the building does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.
The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance
The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion
Building 4 maintains integrity of location, as it remains in its original location. The building retains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street and the blocks to its direct north and south had been developed with commercial and residential properties and this has not substantially changed since 1951. The building retains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. The building also retains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants the State Board of Equalization. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

***B12. References:**

AIA Historical Directory of American Architects. 1962. "AIA Historical Directory of American Architects, 1962." Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. "Howard Raymond Lane, architect (1922-1988)." Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. "John Curtis Chambers." Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. “An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California.” Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. “Luiseño,” in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. “Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California.” In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002.Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. “Heritage: A Short History of Pasadena.” Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. “Plans Underway for Project’s Clubhouse.” Newspapers.com: *The Desert Sun* (Palm Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. “San Dieguito-La Jolla: Chronology and Controversy.” San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. “Linguistic Prehistory.” In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple Property Documentation Form.

Griset, S. 1996. “Southern California Brown Ware.” Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. “Technological Organization of the Millingstone Pattern in Southern California.” Master’s thesis; California State University, Sacramento.

Hale, M. 2009. “San Diego and Santa Barbara: Socioeconomic Divergence in Southern California.” PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. “A New Original Version of Boscana’s Historical Account of the San Juan Capistrano Indians of Southern California.” Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. “Introduction.” In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. “Charles Parsons.” Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. “LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975.” Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. “Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages.” Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California’s Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994. *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. “Office Building.” Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. “Also Attractive.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. “Design of New Home.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. “Cheerful.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. “Higher-Priced Houses Sought.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. “Two Apartment Project Started.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. “Moller Heads Pasadena CC.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. “New Community Service Center Given Preview.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. “Retiring Chest Leader Honored by Pasadenans.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. “Contemporary Style Homes Spearhead Sales at Tract.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. “In Pasadena.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. “New Company Established by L.A. Architect.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. “Firm Marks Anniversary.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. “Architect Firm of Lane-Schlick Changes Name.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. “Apartment Building to Rise in Studio City.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 134.

LAT. 1962c. “15-Story Apartment Hotel Planned for Santa Monica.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. “Rudolph will Design Lake California.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. “Builder Evald C. Moller.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. “Services Held for Architect Howard Lane.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O'Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. "History of Old Pasadena." Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. "Evald C. Moller Heads Group for Recreation." Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. "Rancho San Francisco: A Study of a California Land Grant." The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. "E.C. Moller Commission Term Ends." Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. "Foothill Group Gives Family Safety Valves." Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. "Pasadena." Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. "Pasadena." Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. "Pasadena." Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. "Pasadena." Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. "Pasadena." Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. "Pasadena." Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. "Pasadena." Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. "Evald C. Moller." Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. "Important Grand Opening." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. "Come Home to Paradise." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. "Parsons." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. "Valley Architects Elect Officers." Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. "Edward Ray Schlick." Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Figure 1. Building 4: East Elevation, View looking northwest (IMG_8528)

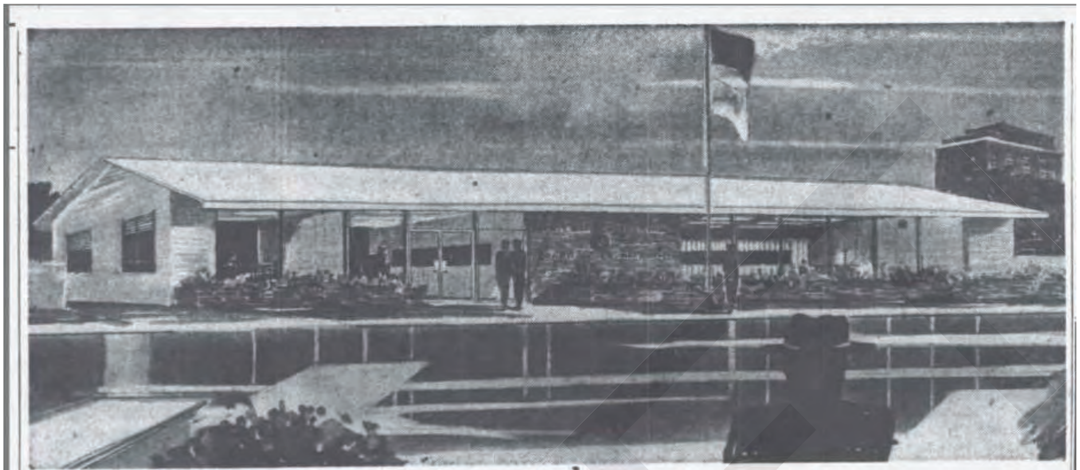
Figure 2. Building 4: North Elevation, View looking southwest (IMG_8521)

Figure 3. Building 4: West and South Elevations, View looking northeast (IMG_8541)

Figure 4. Building 4: South Elevation, View looking north (IMG_8534)

CONTINUATION SHEET

Property Name: 111 South Hudson Avenue



BUILT IN PASADENA—Design of newly completed Pasadena branch office of State Board of Equalization.

Figure 5. 111 South Hudson Ave architectural drawing, 1951, Los Angeles Times

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** (Assigned by recorder) 118 South Oak Knoll Avenue

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted**

***a. County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Pasadena **Date** 1995 (1999 ed.) **T** 1N ; **R** 12W ; ☐ **of Sec** ; San Bernardino **B.M.**

c. Address 118 South Oak Knoll Avenue City Pasadena Zip 91101

d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 395372 mE/ 3778685 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

APN: 5734-025-027; Latitude: 34°08'37.8"N, Longitude: 118°08'05.5"W

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

118 South Oak Knoll Avenue is a one- and two-story rectangular in plan Mid-Century Modern childcare center facing onto South Oak Knoll Avenue. A parking lot is located to the east of the building. Exterior walls are clad in rough textured painted stucco with one section of concrete masonry units. The roof is combination flat and angled roof sheathed in rolled asphalt with wide overhanging eaves and exposed rafters. The main (west) elevation displays as two sections (Figure 1). Two angled roofs held up by eight square wooden posts distinguish the left section. Fenestration includes two wood frame horizontal sliding windows. **See Continuation Sheet.**

***P3b. Resource Attributes:** (List attributes and codes) HP13. Community center/social hall

***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #) View to northeast, 8/19/2019, IMG_8486

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1951 (Building Permit)

***P7. Owner and Address:**
Foothill Family Service
118 S. Oak Knoll Ave.
Pasadena, CA 91101

***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder
Dudek
38 North Marengo Ave,
Pasadena CA 91101

***P9. Date Recorded:** 8/19/2019

***P10. Survey Type:** (Describe)
Pedestrian

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report for the 740-790 Green Street Mixed-Use Project, Pasadena, California. Prepared by Dudek, 2019.

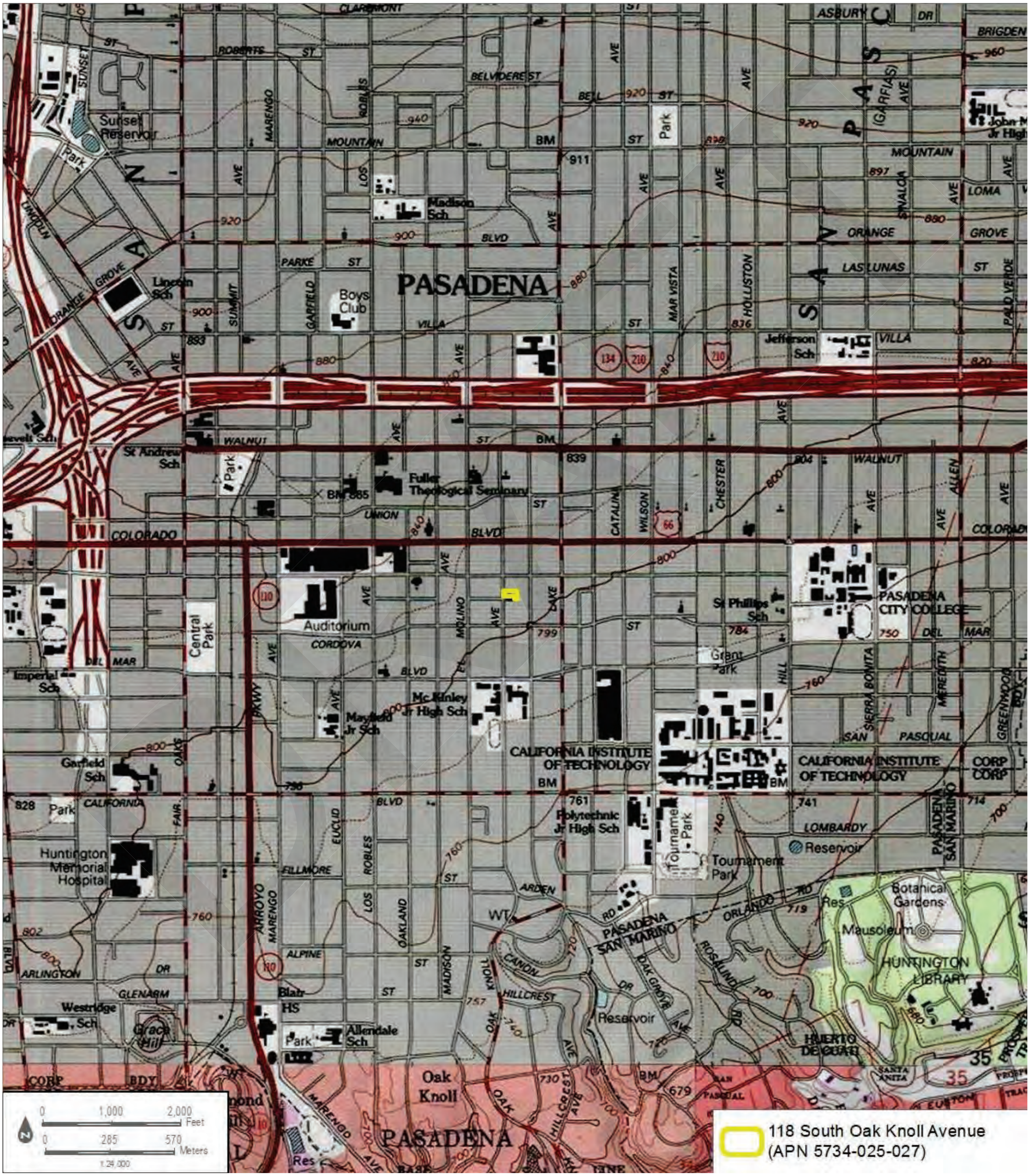
***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California ♁ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 2 **of** 20 ***Resource Name or #** (Assigned by recorder) 118 South Oak Knoll Avenue
***Map Name:** Pasadena, California ***Scale:** 1:24,000 ***Date of map:** 1995 (1999 ed.)



State of California ♁ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 118 South Oak Knoll Avenue ***NRHP Status Code** 6Z

B1. Historic Name: 118 South Oak Knoll Avenue

B2. Common Name: N/A

B3. Original Use: Community Service Center B4. Present Use: Foothill Family

***B5. Architectural Style:** Mid-Century Modern

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Constructed in 1951.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**

B9a. Architect: Curtis Chambers b. Builder: Unknown

***B10. Significance: Theme** N/A **Area**

Period of Significance N/A **Property Type** **Applicable Criteria**

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historic Period Overview

Spanish Period

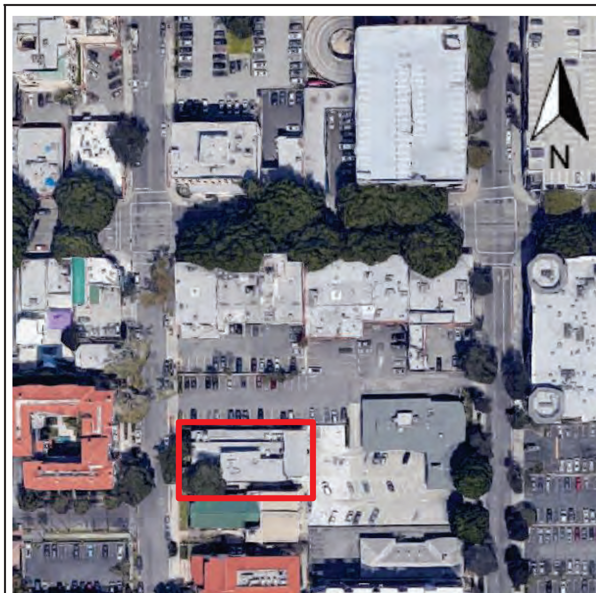
Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885; Gumprecht 1999). **See Continuation Sheet.**

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

See Continuation Sheet.

B13. Remarks:



***B14. Evaluator:** Nicole Frank, MSHP

***Date of Evaluation:** 9/29/2019

(This space reserved for official comments.)

***P3a. Description (Continued):**
The right section is two-stories with full two-story wooden posts and features four fixed wood frame windows on the second and first story, and a single glass entry door and sidelight. The north elevation presents as two sections. The left is one-story with an overhang held up by six wooden posts. Fenestration includes three wood horizontal sliding windows and a single leaf metal entry door. The right section is divided by a two-story exterior staircase with two rows of six wood horizontal sliding windows to the left and a pair of fixed pane windows on the right (Figure 2). The east elevation is cantilevered over a parking lot with a series of metal posts and displays three paired fixed pane windows on the second-story (Figure 3). The north elevation displays as two sections. The left is a cantilevered angled wall without fenestration. The right displays a series of three roof levels with multiple types of fenestration including horizontal sliding windows, sets of two and four fixed pane windows, single leaf metal entry door, and a single leaf entry door. A large HVAC unit is on the lower roof level. The far right of the first-story displays a series of nine wooden posts supporting the overhang.

Identified Alterations
Dudek staff visited the City of Pasadena Building Department on September 9, 2019 and viewed all permits pertaining to the subject property (AIN 5734-025-027).

- 1950. Permit to construct second floor offices above existing first floor plan and extend the second floor as an overhang approximately 20 feet above existing parking area. (#2813)
- 1951. Permit to construct a two-story 6,000 square foot building for $61,000. (#15271)
- 1951. Permit to add asphalt roofing. (#63375)
- 1981. Permit to reroof using 2 40’s and rock. (#8302)
- 1993. Permit to re-roof commercial building with built up class B roofing. (#00153121)
- 1995. Permit to alter approximately 2,150 square feet of space, work includes new partitions, doors, and ceiling patching and finishes. (#95-02626)
- 2016. Permit to install new monument 5’-6” x 6’-0’. (#BMN2016-00798)
- 2016. Permit to replace existing sign with new freestanding pylon sign. (#PLN2016-00094)

***B10. Significance (Continued):**
More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angels of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). In 1795 Fr. Fermin Lasuen ordered a new report on possible mission sites, and the Francisco Reyes Rancho was ultimately chosen as the new mission site, with Mission San Fernando Rey de España being formally founded in 1797 (Perkins 1957). Shortly thereafter, many of the local Gabrielino and Tataviam people were removed from their homeland, relocated to the mission, and their native lifeways taken away.

Mexican Period

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).
Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Rancho San Vicente y Santa Monica, where the project site is located, was granted by Governor Juan Alvarado to Francisco Sepulveda in 1838. The Rancho encompasses present day Santa Monica, Brentwood, Mandeville Canyon, portions of the Santa Monica Mountains, and parts of West Los Angeles (Hoffman 1862: 63).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region’s burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

Historical Overview of Pasadena

Like many cities in the San Gabriel Valley, the City of Pasadena’s history is linked to the Mission San Gabriel and the subsequent privatization of ranchos once owned by the Mission in the eighteenth and nineteenth centuries. By 1827, the Mission ranchos began to be sold off and developed independent of the Mission. The first rancho sold was Rancho San Pasqual in 1827, followed by Rancho Santa Anita and Rancho San Rafael. Portions of these three ranchos would later become the City of Pasadena.

In 1874 Benjamin Davis Wilson, owner of a portion of the Rancho San Pasqual, negotiated a deal with Daniel Berry from Indiana. Berry, like many Americans at the time, was caught up in the concept of Manifest Destiny and sought land in the west with his fellow farmers from Indiana. He hoped to cultivate the warm climate crops that were not possible to grow in his home state. Berry secured a deal with Wilson for a portion of the Rancho San Pasqual and immediately surveyed and subdivided the property into 100 parcels. Quick development of the parcels and the establishment of a water conveyance system made the area conducive to farming and development. By 1875, the name Pasadena was chosen for the area. Growth and development continued rapidly in Pasadena and by 1880 the population had reached 383.

Growth and development continued in Pasadena throughout the 1880s and like other areas of Southern California, Pasadena experienced a land speculation boom. The land speculation boom was a result of the development of the railroad in Southern California and cities like Pasadena saw increases in land values with land selling for $1,000 per acre in 1886. The boom of the 1880s gave way to huge property subdivisions and population increases in Pasadena, as evidenced by the fact that more than 400 new buildings were constructed during this time(Grimes 2010; O'Conner 1993).

During the 1880s, Pasadena also became a desirable destination and greatly benefited from the tourism industry and grew to support temporary visitors. Events like the Tournament of Roses parade and East-West football game, which began in 1902 as the first of its kind in the nation introduced visitors to a mild winter climate and the beauty of the city. By 1900, Pasadena was supporting approximately 60,000 visitors during the winter months. The once agricultural community quickly became a tourist destination, which led to the development of the commercial center, but also the hotel industry and other supporting service industries for seasonal visitors (HRG 2007; O'Conner 1993).

In addition to becoming a tourist destination, advancements in transportation including rail and trolley lines, made Pasadena a desirable place to live outside of the city of Los Angeles. Although the population boom precipitated the need for residential buildings, it also created a need for a more substantial commercial district in Pasadena. Colorado Boulevard became the main commercial thoroughfare with subsequent development on streets intersecting Colorado Boulevard like Fair Oaks Avenue and Raymond Avenue (Grimes 2010; HRG 2007).

By the 1890s, the population of the City reached 4,882 and expansion from the central city core led to development in all directions. Population increases and continued increases in tourism led to expanded cultural and social services in the city including an opera house, firehouse, and public library. The most remarkable institutions from the 1890s however, were the Tournament of Roses in 1890 and California Institute of Technology in 1891 (which became Caltech). Transportation also improved greatly during the 1890s with the electric streetcar service from Los Angeles to Pasadena established in 1895. The social and technological growth of the City in the 1890s led to the annexation of East Pasadena in 1904 and North Pasadena in 1906 (Grimes 2010; HRG 2007; O'Conner 1993).

Architectural history development patterns in Pasadena ran parallel to the population growth and development going on in the late 1800s. By the 1880s, large mansions began to emerge and prominent architects began to design homes for the wealthy residents of the City. One of the most significant movements of the time seen in Pasadena is the Arts and Crafts Movement, which dominated the architectural development of Southern California for years to come. Leading the movement in Pasadena were Charles and Henry Greene, who revolutionized the architectural development of Southern California with their high style California Bungalows. Population growth and development also warranted a switch in Pasadena from only single-family residential living to higher density urban options. Pulling from the traditions of Greene and Greene, the Bungalow Court emerged to meet the growing housing needs of Pasadena. The Bungalow Court became a modern for middle class architecture throughout Southern California and provided

solutions to housing issues for many years to come (Grimes 2010; HRG 2007; Makinson 1977).

Technology was also increasingly important at the turn of the century and Pasadena like other cities saw the influence of the motor vehicle start to change the City's landscape and development. Pasadena embraced the automobile and by 1915 there was one automobile for every four residents of the City, which was significantly higher than other cities in the United States. Growing dependency on automobiles led to major thoroughfares like Colorado Boulevard developing to support the new industry with numerous car dealerships and related services. Infrastructure projects also began during the early years of the twentieth century with large-scale projects like the Colorado Street bridge in 1913, which connected the east and west sides of the Arroyo Seco. Subsequent road constructions and bridge constructions continued in the 1920s and 1930s to support the influx of people to Pasadena and California (HRG 2007; O'Conner 1993).

Like other cities in the 1920s, Pasadena saw another population boom. The population of the city began the decade at 45,000 and ended the decade in 1930 with a population of 76,000. Pasadena's development at this time was largely influenced by the City Beautiful Movement and this period of growth led to the erection of the City Hall building. As seen in the previous population boom, Pasadena also experienced cultural expansion during this time with the erection of the Pasadena Playhouse in 1925 and the Rose Bowl Stadium in 1922. Despite these grand additions to the City in the 1920s, the City was also effected by the Great Depression and experienced a brief economic downturn. The Great Depression marked a slower economic period in Pasadena, but the city favored well in comparison to other cities throughout California. One of the hardest hit industries in Pasadena at the time was the tourism industry, as many people lacked the money for extravagant vacations and resorts. By the late 1930s the tourism industry was devastated and most of the resort hotels and amenities were closed (O'Conner 1993).

Although the post-war and depression years marked a bleak time in American history, the shift in architectural design during this period forever changed the American landscape. The work of early Modernists like Richard Neutra and Rudolph M. Schindler set the stage for Modernism to grow in Los Angeles with their use of International Style. The International Style combined economical materials, forward thinking and innovation. Important architects like Irving Gill, Frank Lloyd Wright, and Harwell Hamilton Harris made significant contributions to the Modernist movement in California (HRG 2007; O'Conner 1993).

The importance of innovation and forward thinking worked well for Pasadena once the United States entered World War II. Resort era hotels remaining in the city were converted to military functions and with Caltech and Jet Propulsion Laboratory (JPL) research and development going toward the war effort, Pasadena was revived. Innovation and forward thinking also became a huge factor in the housing market once the war concluded as there was an influx of returning soldiers who required housing. Government agencies like the Federal Housing Administration (FHA) provided instructions for developers and builders for the best ways to deal with the population boom. They stressed the importance of proper planning, mass produced materials, and small house types. Following the war, these ideas were heavily implemented throughout the United States.

Victory in World War II also ushered in a new era of hope and prosperity for the United States and from an architectural perspective, designers and architects embraced this optimism and saw it as a chance to move design forward. The focus on economical materials started by the early Modernists had a resurgence, as did the mass production of materials perfected during the war years. The other factor that became so important was the relationship between the automobile and commercial and residential living. New technologies and population increases made automobiles more prevalent than ever, and architectural development moved ahead, making Pasadena a key location for these modern movements (HRG 2007).

In the 1940s and 1950s, new industries including manufacturing and science companies came to the city, the population continued to boom, and the city developed at a rapid speed. Culture remained a high priority in Pasadena during this time of growth and development with the Pasadena Playhouse and the Pasadena Art Museum. However, this growth and development came with a host of logistical problems as the city began to run out of space and experienced major issues with traffic congestion. For these reasons, many industries felt they could no longer grow and expand in Pasadena and they sought land elsewhere.

The City of Pasadena responded to this industrial exodus with the establishment of the Chamber of Commerce in 1959 and the formation of a redevelopment agency. Attracting new forms of business was key for Pasadena and the first step in preserving the vast historical resources of the city. The primary business district moved east of Fair Oaks and Colorado leaving the downtown full of empty storefronts and dilapidation. The older portions of the city constructed pre-1929 experienced high levels of white flight, where middle-income families moved out and low-income families moved in. In 1969, the Pasadena Art Museum of Modern Art (now the Norton Simon Museum of Art) opened while the renowned Pasadena Playhouse closed and was sold at auction (HRG 2007; City of Pasadena 2019).

Pasadena began to experience a period of economic revitalization at the start of the 1970s. Plans were made for the construction of the Foothill and Long Beach Freeways that would link Pasadena to other major freeways to the east, west, and south. Old Pasadena was slated for demolition in 1971 under the city's Central District Improvement Plan despite strong opposition to save it. Groups like the Pasadena Development Agency and Pasadena Heritage worked to protect the architectural history of the city, including Old Pasadena, and bring back economic stability. Large corporations began to relocate their headquarters to Pasadena. Development restarted with the construction of the Conference Center, the Plaza Pasadena Mall, condominiums, office space, and commercial buildings. In 1979, the city passed the Urban Conservation Overlay Zone, which saved the historic structures of Old Pasadena from demolition (City of Pasadena 2019; Old Pasadena 2016).

Between 1980 and 1990, the population of Pasadena increased by 11% and with the increase in population came a surge in development and ethnic diversity. In 1980, a charter amendment approved by voters changed Pasadena's election system to district only elections allowing for more diversity in the local government. In 1993, the Board of Directors changed their name to the City Council and a mayor was elected on a rotating basis from the senior City Councilmembers. Throughout the 1990s, Pasadena continued to experience civic beautification campaigns including the 1993 Old Pasadena Streetscape and Alleyways Project. Newly installed parking meters in Old Pasadena and a borrowed $5 million payed for the construction of new sidewalks, street furniture, trees, and lighting. The city turned the alleys info functional walkways that granted easy access to restaurants and shops. Old Pasadena boomed and encouraged other business districts to install parking meters in order to finance public improvements. In 2002, the Los Angeles County Metro's Gold Line reopened Pasadena for rapid transit. High-density condominiums began to be constructed throughout the city, which only increased the city's population (Shoup 2018; City of Pasadena 2019; Old Pasadena 2016).

Project Site History

Development History of Green Street

In the 1880s Colorado Boulevard was the main commercial thoroughfare in Pasadena. Running parallel to, and one block south of Colorado Boulevard was a six block long street named East and West Kansas Street. Kansas Street began at Vernon Avenue to the west and ended at North Marengo Avenue to the east. The buildings located on East Kansas Street were primarily single-family dwellings, with multiple buildings located on the same large lot. The buildings located on West Kansas Street were a combination of residential and commercial buildings. By 1888, the western end of Kansas Street had several commercial properties including a hardware store, tin shop, upholstering shop, and offices. The 1894 Sanborn Map shows the construction of the Hotel Green at the corner of East Kansas and South Raymond Avenue. During

this period, Colorado Boulevard was almost entirely developed, resulting in new commercial development to the north and south (Sanborn 1887, 1888, 1889, 1890, 1894).

By 1903, East and West Kansas Street was renamed East and West Green Street and extended to seven blocks from North Pasadena Avenue to the west and North Euclid Avenue to the east. At the eastern end of the street, the Atchison, Topeka and Santa Fe Railway and Southern Pacific Company ran through East Green Street and both had stops at the lumberyard located on Green Street between South Raymond Avenue and South Broadway. The Hotel Green continued to expand and the amount of commercial and residential properties along Green Street had almost doubled since 1888. The 1931 Sanborn Map shows Green Street as extending 24 blocks from North Orange Grove to the west and South Hill Avenue to the east. Development of commercial, residential, and institutional properties continued to grow and by this time, Green Street had established itself as its own commercial district. This district continued to expand during the 1950s with the majority of open lots being filled in and density increasing (Sanborn 1903, 1910, 1931, 1951).

118 South Oak Knoll Avenue (1951)
Historic aerial photographs and maps indicate that the current building at 118 South Oak Knoll Avenue first appears in a 1952 aerial photography, which is consistent with the 1951 date of construction (NETR 2019; UCSB 2019).

Archival research indicates that the building at 118 South Oak Knoll was constructed in 1951 for $55,000 as the area’s Community Service Center, with special bequest funds rather than charitable contributions. Architect Curtis Chambers designed the building. The family of Joseph M. and Irene C. Hixon, and the estates of Ella B. DeLyons and Walter Davis made bequests for the building. The center was to house the activities of the Pasadena area’s Community Chest and Council as well as the Catholic Welfare Bureau, Family Service and Volunteer Placement Bureau agencies, the Boy’ and Girls’ Clubs of Pasadena, and all Red Feather services. By the 1960s the building was renamed the Foothill Family Service, which served as a family counselling center (LAT 1951a, 1951b; PI 1967).

Mid-Century Modern (1933-1965)
Mid-century Modern style is reflective of International and Bauhaus styles popular in Europe in the early 20th century. This style and its living designers (e.g., Mies Van der Rohe and Gropius) were disrupted by WWII and moved to the United States. During WWII, the United States established itself as a burgeoning manufacturing and industrial leader, with incredible demand for modern buildings to reflect modern products in the mid-20th century. As a result, many industrial buildings are often “decorated boxes”—plain buildings with applied ornament to suit the era and appear more modern without detracting from the importance of the activity inside the building. Following WWII, the United States had a focus on forward thinking, which sparked architectural movements like Mid-Century Modern. Practitioners of the style were focused on the most cutting-edge materials and techniques. Architects throughout Southern California implemented the design aesthetics made famous by early Modernists like Richard Neutra and Frank Lloyd Wright, who created a variety of modern architectural forms. Like other buildings of this era, Mid-century Modern buildings had to be quickly assembled, and use modern materials that could be mass-produced. Both residences and offices designed in this style expressed its structure and materials, displayed large expanses of glass, and had an open interior plan (McAlester 2013; Morgan 2004; HRG 2007).

Characteristics of the Mid-Century Modern style:

- One- to two-stories in height
- Low, boxy, horizontal proportions
- Simple geometric forms with a lack of exterior decoration
- Commonly asymmetrical

- Flat roofed without coping at roof line; flat roofs hidden behind parapets or cantilevered canopies
- Expressed post-and-beam construction in wood or steel
- Exterior walls are flat with smooth sheathing and typically display whites, buffs, and pale pastel colors
- Mass-produced materials
- Simple windows (metal or wood) flush-mounted and clerestory
- Industrially plain doors
- Large window groupings

Architect: John Curtis Chambers (1904-2003)
John Curtis Chambers was born on October 4, 1904 in Riverside, California. Little is known about the early life and career of Chambers aside from his residential work in the Los Angeles and Pasadena area. Curtis frequently designed Ranch style tract homes and apartments in Pasadena. He was a member of the Pasadena Chapter of the American Institute of Architects in 1962. Chambers died on April 18, 2003 (Ancestry 2019; AIA 1062).

A sample of Chambers' known work is included below (LAT 1938, 1940, 1941, 1942, 1950a, 1955a):

- Rancho House, Pasadena, CA (1938)
- Foothill Boulevard, Rancho Santa Anita, CA (1940)
- 956 Coronado Drive, Santa Anita Village, Arcadia, CA (1941)
- Foothill Boulevard district, Rancho Santa Anita, CA (1942)
- 424-30 San Vicente Boulevard, Pasadena, CA (1950)
- Buena Berry Park development, Long Beach, CA (1955)

Significance Evaluation

NRHP/CRHR Statement of Significance

The property located at 118 South Oak Knoll Avenue does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of an existing historic district.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.
Archival research did not find any associations with events that have made a significant contribution to the broad patterns of our history. The subject property was completed in 1951, during the period of commercial and institutional growth along Pasadena's Green Street and prior to a period of economic downturn that came with the end of the 1960s. The subject property was constructed for the Pasadena area's Community Chest and Council as well as the Catholic Welfare Bureau, Family Service and Volunteer Placement Bureau agencies, the Boy' and Girls' Clubs of Pasadena, and all Red Feather services. Although the property served as a community services headquarters, there is no indication that the construction of the building had a broad effect on the history of the Community Chest and Council as well as the other organizations it housed. The building's construction was to fulfill a role of adding support to this area of Pasadena and there is no indication that it marked an important moment in history. Although the property is broadly representative of the city's mid-century growth, it has no direct association with events that have made a significant contribution to the history of the City of Pasadena, Los Angeles County, the State of California, or the Nation. Therefore, the property does not appear eligible under Criterion A of the NRHP or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research did not indicate that any previous property owners or people who have worked at this property are known to be historically significant figures at the national, state, or local level. As such, this property is not known to have any historical associations with people important to the nation's or state's past. Furthermore, to be found eligible under B/2 the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. This property does not appear to be associated with any individual's important historic work and does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 5 is a modest example of an Mid-Century Modern style building designed by Los Angeles-area architect John Curtis Chambers in 1951. Like other buildings of the post-WWII era, Mid-century Modern buildings had to be quickly assembled, and use modern materials that could be mass-produced. The subject property includes the following features: one- and two-stories in height, low, boxy, horizontal proportions, simple geometric forms with a lack of exterior decoration, asymmetrical, cantilevered canopies, flat roofed without coping at roof line, expressed post-and-beam construction in wood, exterior walls are flat with smooth sheathing in pale pastel color, mass-produced materials, simple windows, industrially plain doors, and large window groupings. John Curtis Chambers does not appear to have had a substantial influence on the field of architecture to the extent that he could be called a Master Architect. Overall, the building is not a distinctive or important example of the Mid-Century Modern style, nor is it the work of a master architect. For these reasons, the property does not appear eligible for listing in the NRHP under Criterion C or CRHR under Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

Pasadena Statement of Significance

The City of Pasadena's landmark designation criteria is based on the NRHP/CRHR designation criteria and integrity requirements, Therefore, for all of the reasons identified in the discussion of NRHP and CRHR eligibility, the subject property does not appear eligible under any local designation criteria, either individually or as part of a district.

Integrity Discussion

Building 5 maintains integrity of location, as it remains in its original location. The building maintains integrity of design as it has not undergone any large-scale exterior alterations since its construction and maintains the essential features of form, plan, space, structure, and style. The building retains integrity of setting, upon its construction the majority of East Green Street and the blocks to its direct north and south had been developed with commercial and residential properties and this has not substantially changed since 1951. The building maintains integrity of materials and workmanship due to the retention of the physical elements that date from its construction. The building also maintains integrity of feeling, where the property retains the ability to express itself as an office building constructed in the 1950s. The building no longer retains integrity of association, since its construction the property has changed tenants multiple times, disassociating it with the original tenants the Community Chest and Council. In summary, while the building retains the requisite integrity for designation, it does not rise to the level of significance required for designation at the national, state or local levels.

***B12. References:**

AIA Historical Directory of American Architects. 1962. "AIA Historical Directory of American Architects, 1962." Accessed September 10, 2019. https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/20677106/1962+American+Architects+Directory

ArchInformation. 2019. "Howard Raymond Lane, architect (1922-1988)." Accessed August 27, 2019. https://www.archinform.net/arch/109310.htm

Ancestry.com. 2019. "John Curtis Chambers." Accessed September 10, 2019. https://search.ancestry.com/cgi-bin/sse.dll?indiv=1&dbid=3693&h=70390730&tid=&pid=&usePUB=true&_phsrc=JCs1953&_phstart=successSource

Andrus, Patrick W. and Rebecca H. Shrimpton. 2002. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed April 1, 2019. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):3-52.

Bancroft, Hubert Howe. 1885. *History of California, Volume III: 1825-1840*. A.L. Bancroft & Co., San Francisco.

Basgall, M. E., L. Johnson, and M. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.

Basgall, M. E., and M. Hall. 1990. Adaptive Variation in the North-Central Mojave Desert. Paper Presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas.

Bean, Lowell, J., and Florence C. Shipek, 1978. "Luiseño," in California, Robert F. Hazier (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538-549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.

Brown, Alan. 2002. A Description of Distant Roads. Original Journals of the First Expedition into California, 1769-1770 by Juan Crespi. San Diego State University Press.

Boscana, G. 1846. "Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In Life in California, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.

Byrd, Brian F., and Seetha N. Reddy, 2002.Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms. In Catalysts to Complexity: Late Holocene Societies of the California Coast, edited by Jon M. Erlandson and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles.

City of Pasadena. 2019. "Heritage: A Short History of Pasadena." Accessed August 22, 2019. https://www.cityofpasadena.net/about-pasadena/history-of-pasadena/#1970-Present

Cleland, Robert Glass. 2005. *The Cattle on a Thousand Hills: Southern California, 1850-80*, second ed., sixth printing. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.

Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Ph.D. dissertation, Indiana University, Bloomington

Davis, E.L. 1978. *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Los Angeles, California: Natural History Museum of Los Angeles County.

The Desert Sun (DS). 1974. "Plans Underway for Project's Clubhouse." Newspapers.com: *The Desert Sun* (Palm Springs, California). May 10, 1974, pg. 23.

Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.

Geiger, M., and C. W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813-1815. Santa Barbara, California: Santa Barbara Mission Archive Library.

Golla, V. 2007. "Linguistic Prehistory." In California Prehistory: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.

Grenda, D. R. 1997. *Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore: Archaeological Investigations at a Stratified Site in Southern California.* Statistical Research, Inc. Technical Series 59. Tucson, Arizona.

Grimes, Teresa and Christina Chiang. 2009. City of Riverside Modernism Context Statement. Prepared by Christopher A. Joseph & Associates. Accessed August 11, 2019. https://www.riversideca.gov/historic/pdf/Modernism.pdf

Grimes, Teresa. 2010. Late 19th and Early 20th Century Development and Architect in Pasadena NRHP Multiple Property Documentation Form.

Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Hale, M. 2001. “Technological Organization of the Millingstone Pattern in Southern California.” Master’s thesis; California State University, Sacramento.

Hale, M. 2009. “San Diego and Santa Barbara: Socioeconomic Divergence in Southern California.” PhD dissertation; University of California, Davis.

Harrington, J.P. 1934. “A New Original Version of Boscana’s Historical Account of the San Juan Capistrano Indians of Southern California.” Smithsonian Miscellaneous Collections 92(4).

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press: Berkeley.

Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

Heizer, R. 1978. “Introduction.” In California, edited by R.F. Heizer, 1–6. Handbook of North American Indians, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Heizer, R. and K.M. Nissen. 1973. The Human Sources of California Ethnography. Berkeley, California: University of California Archaeological Research Facility, Berkeley.

HRG (Historic Resources Group). 2007. *Cultural Resources of the Recent Past Historic Context Report*. The City of Pasadena, California.

HRG. 2010. *Cultural Resources Technical Report: Wilshire Boulevard Temple Master Plan, Los Angeles, California*. December 2010.

Honolulu Star-Bulletin. 1975. “Charles Parsons.” Newspapers.com: *The Honolulu* Star-Bulletin (Honolulu, Hawaii). July 28, 1975, pg. 36.

Hoffman, Ogden. 1862. Reports of Land Cases Determined in the United States District Court for the Northern District of California: June Term 1853 to June Term 1858, Inclusive. Numa Hubert Publishers, San Francisco, California.

Horak, Katie E., Andrew Goodrich, Alan Hess, and John English. 2015. “LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT; Context: Architecture and Engineering; Theme: The Ranch House, 1930-1975; Theme: Housing the Masses, 1880-1975; Sub-Theme: Ranch House Neighborhoods, 1938-1975.” Prepared for City of Los Angeles, Department of City Planning, Office of Historic Resources. Accessed September 11, 2019.

Johnson, J.R., and J.G. Lorenz. 2006. “Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages.” Journal of California and Great Basin Anthropology 26:33–64.

Johnston, Bernice E. 1962. *California’s Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

King, Chester D. 1994. *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills.* Topanga Anthropological Consultants, California.

Kroeber, Alfred J. 1925. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.

Kyle, Douglas E. 2002. *Historic Spots in California*. 5th ed. Stanford University Press, Stanford, California.

Laylander, D. 2000. Early Ethnography of the Californias, 1533-1825. Salinas, California: Coyote Press Archives of California Prehistory.

Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers.* Berkeley, California: University of California Press.

Los Angeles Conservancy. 2019. "Office Building." Accessed August 27, 2019. https://www.laconservancy.org/locations/office-building

Los Angeles Times (LAT). 1938. "Also Attractive." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 13, 1938, pg. 63.

LAT. 1940. "Design of New Home." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 28, 1940, pg. 67.

LAT. 1941. "Cheerful." Newspapers.com: *Los Angeles Times* (Los Angeles, California). September 29, 1941, pg. 73.

LAT. 1942. "Higher-Priced Houses Sought." Newspapers.com: *Los Angeles Times* (Los Angeles, California). June 21, 1942, pg. 34.

LAT. 1950a. "Two Apartment Project Started." Newspapers.com: *Los Angeles Times* (Los Angeles, California). February 26, 1950, pg. 109.

LAT. 1950b. "Moller Heads Pasadena CC." Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 8, 1950, pg. 50.

LAT. 1951a. "New Community Service Center Given Preview." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 6, 1951, pg. 44

LAT. 1951b. "Retiring Chest Leader Honored by Pasadenans." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 8, 1951, pg. 48.

LAT. 1955a. "Contemporary Style Homes Spearhead Sales at Tract." Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 17, 1955, pg. 153.

LAT. 1955b. "In Pasadena." Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 25, 1955, pg. 22.

LAT. 1959. "New Company Established by L.A. Architect." Newspapers.com: *Los Angeles Times* (Los Angeles, California). July 26, 1959, pg. 119.

LAT. 1962. "Firm Marks Anniversary." Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 137.

LAT. 1962a. "Architect Firm of Lane-Schlick Changes Name." Newspapers.com: *Los Angeles Times* (Los Angeles, California). May 26, 1963, pg. 116.

LAT. 1962b. "Apartment Building to Rise in Studio City." Newspapers.com: *Los Angeles Times* (Los Angeles, California). October 21, 1962, pg. 134.

LAT. 1962c. “15-Story Apartment Hotel Planned for Santa Monica.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). December 9, 1962, pg. 151.

LAT. 1972. “Rudolph will Design Lake California.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). April 23, 1971, pg. 143.

LAT. 1976. “Builder Evald C. Moller.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). March 28, 1976, pg. 115.

LAT.1988. “Services Held for Architect Howard Lane.” Newspapers.com: *Los Angeles Times* (Los Angeles, California). November 13, 1988, pg. 157.

McAlester, V.S. 2015. *A Field Guide to American Houses (Revised): The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York City, New York: Alfred A Knopf.

McCawley, William 1996. The First Angelinos, the Gabrielino Indians of Los Angeles. Malki Museum Press, Banning.

Morgan, W. 2004. *The Abrams Guide to American House Styles*. New York City, New York: Harry N Abrams Inc.

NETR (Nationwide Environmental Title Research LLC). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1952, 1953, 1964, 1972, 1977, 1980, 1994, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, and 2016. Accessed August 14, 2019. https://www.historicaerials.com/viewer

Northwest Economic Associates (NEA) and Chester King. 2004. Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for the U.S. Department of Agriculture.

O’Conner, P. 1993. Architectural/Historical Development of the City of Pasadena: Historic Context/Property Type Report.

Old Pasadena. 2016. “History of Old Pasadena.” Accessed August 22, 2019. https://www.oldpasadena.org/about/history-of-old-pasadena/

O’Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.

Pasadena Independent (PI). 1961. “Evald C. Moller Heads Group for Recreation.” Newspapers.com: *Pasadena Independent* (Pasadena, California). July 10, 1961, pg. 20.

Perkins, Arthur, B. 1957. “Rancho San Francisco: A Study of a California Land Grant.” The Historical Society of Southern California Quarterly. June 1957. Electronic document:

PI. 1963. “E.C. Moller Commission Term Ends.” Newspapers.com: *Pasadena Independent* (Pasadena, California). June 22, 1963, pg. 3.

PI. 1967. “Foothill Group Gives Family Safety Valves.” Newspapers.com: *Pasadena Independent* (Pasadena, California). October 19, 1967, pg. 26.

Reid, Hugo. 1926. *The Indians of Los Angeles County.* Privately printed, Los Angeles.

Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.

Sanborn Fire Insurance Maps. 1887. "Pasadena." Edition June 1887. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1888. "Pasadena." Edition March 1888. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1889. "Pasadena." Edition March 1889. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1890. "Pasadena." Edition June 1890. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1894. "Pasadena." Edition October 1894. Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1903. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1910. "Pasadena." Accessed September 10, 2019.

Sanborn Fire Insurance Maps. 1931. "Pasadena." Edition 1930-1931. Sheet 132. Accessed August 14, 2019.

Sanborn Fire Insurance Maps. 1951. "Pasadena." Edition 1930-October 1951. Sheet 132. Accessed August 14, 2019.

San Francisco Planning Department. 2010. *San Francisco Modern Architecture and Landscape Design: 1935-1970 Historic Context Statement*. The City of San Francisco Planning Department. San Francisco, California.

Shoup, Donald. 2018. *Parking and the City*. New York, New York: Routledge.

Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.

Statesman Journal (SJ). 1996. "Evald C. Moller." Newspapers.com: *Statesman Journal* (Salem, Oregon). May 25, 1996, pg. 20.

The Honolulu Advertiser (THA). 1972. "Important Grand Opening." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). June 24, 1972, pg. 48.

THA. 1974. "Come Home to Paradise." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). September 1, 1974, pg. 81.

THA. 1975. "Parsons." Newspapers.com: *The Honolulu Advertiser* (Honolulu, Hawaii). July 26, 1975, pg. 10.

UCSB (University of California, Santa Barbra). 2019. Historic Aerial Photographs of East Green Street, South Oak Knoll Ave, and South Hudson Avenue, Pasadena, CA dating from 1927, 1936, 1944, 1956, 1968, and 1971. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed August 14, 2019.

Valley Times. 1959. “Valley Architects Elect Officers.” Newspapers.com: Valley Times (North Hollywood, CA). January 5, 1959, pg. 12.

Visalia Times Delta. 2010. “Edward Ray Schlick.” Accessed August 27, 2019. https://www.legacy.com/obituaries/visaliatimesdelta/obituary.aspx?n=edward-ray-schlick&pid=146831967

Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214–230.

Warren, Claude N. 1968. “Cultural Tradition and Ecological Adaptation on the Southern California Coast.” In Archaic Prehistory in the Western United States, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C.N., G. Siegler, and F. Dittmer. 2004. “Paleoindian and Early Archaic Periods.” In Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Waugh, John C. 2003. On the Brink of Civil War: The Compromise of 1850 and How It Changed the Course of American History. Scholarly Resources Inc., Wilmington, Delaware.

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

Figure 1. Building 5: West Elevation, View looking northeast (IMG_8491)

Figure 2. Building 5: South and East Elevations, View looking northwest (IMG_8497)

Figure 3. Building 5: North Elevation, View looking southwest (IMG_8506)

Appendix C

Native American Communication

Linda Kry

From:	Adriane Dorrler
Sent:	Tuesday, August 13, 2019 2:02 PM
To:	nahc@nahc.ca.gov
Cc:	Linda Kry
Subject:	Request for a Sacred Lands File Search_Dudek (#12101)
Attachments:	12101_NAHC SLF_Request_PDF.pdf; 12101_Records_Search_Map.pdf

Dear NAHC,

Please find attached the NAHC Sacred Lands File Search request and project location map for the proposed 740-790 East Green Street Project (Dudek #12101). Dudek is requesting a NAHC search for any sacred sites, tribal cultural resources, or other places of Native American community value that may fall within a one-mile radius of the proposed Project site.

Please let me know if you have any questions regarding this project. You can email the results to me at adorrler@dudek.com.

Thank you in advance,

Adriane Gusick
Associate Archaeologist

DUDEK
mobile: (760) 840-7556
www.dudek.com / www.facebook.com/dudeknews

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 740-790 East Green Street Project (12101)

County: Los Angeles

USGS Quadrangle
Name: Mt. Wilson and Pasadena

Township: 1N Range: 12W Section(s): 27

Company/Firm/Agency:
Dudek

Contact Person: Adriane Gusick

Street Address: 38 N Marengo Avenue

City: Pasadena Zip: 91101

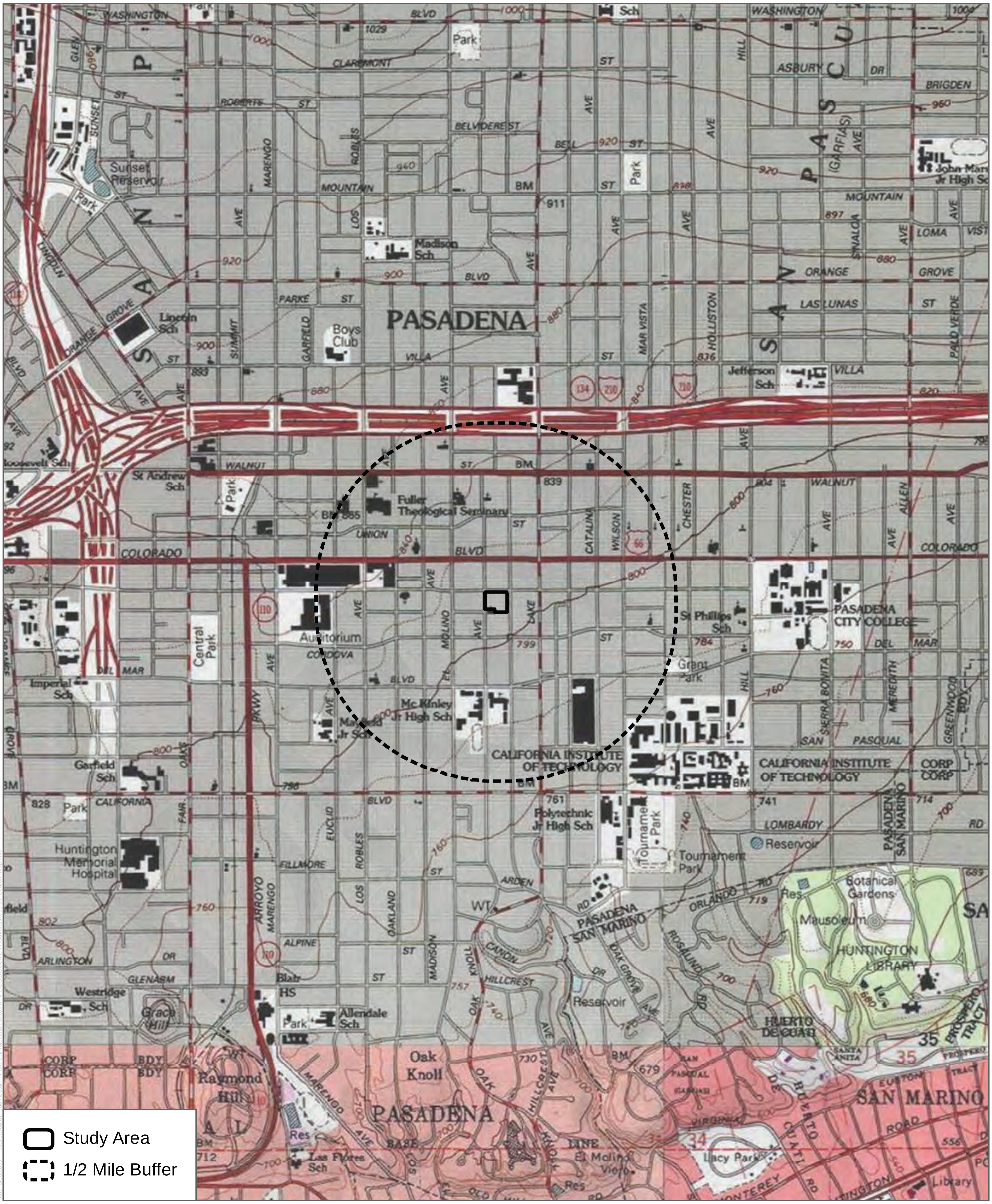
Phone: (760) 840-7556 Extension:

Fax: (760) 632-0164

Email: adorrler@dudek.com

Project Description:
The 740-790 East Green Street Project involves the demolition of five commercial buildings in order to accommodate the development of a new 3-to 8-story, mixed-use building. The proposed Project includes 273 for-rent units (including 23 units designated for Very Low-Income households), 18,392 sf of commercial use, and a two-level subterranean parking garage with 492 parking spaces. Open space areas include ground-level courtyards, pool courtyards, indoor recreational space, rooftop terraces, and private decks/patios, as well as a 6,694 square-foot pocket park that would be developed on-site and accessible to the general public. The Project site totals 2.33 acres.

☑ Project Location Map is attached



SOURCE: USGS 7.5-Minute Series Mt Wilson & Pasadena Quadrangles
Township 1N; Range 12W; Sections 21, 22, 27, 28, 33, 34

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

Records Search

740-790 East Green Street Mixed-Use Project

Linda Kry

From: Quinn, Steven@NAHC <Steven.Quinn@nahc.ca.gov>
Sent: Friday, September 13, 2019 9:37 AM
To: Adriane Dorrler
Subject: 740-790 East Green Street Project
Attachments: SLFYes740790EastGreen 9.13.2019.pdf; 740790EastGreen 9.13.2019.pdf

Good Morning,

Attached is the response to the project referenced above. If you have any additional questions, please feel free to contact our office email at nahc@nahc.ca.gov.

Regards,

Steven Quinn
Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Steven.Quinn@nahc.ca.gov
Direct Line: (916) 573-1033
Office: (916) 373-3710

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

September 13, 2019

Adriane Gusick
Dudek

VIA Email to: adorrler@dudek.com

RE: 740-790 East Green Street Project, Los Angeles County

Dear Ms. Gusick:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the Gabrieleno Band of Mission Indians – Kizh Nation on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn

Steven Quinn
Associate Governmental Program Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Los Angeles County
9/13/2019

Gabrieleno Band of Mission Indians - Kizh Nation Andrew Salas, Chairperson P.O. Box 393 Covina, CA, 91723 Phone: (626) 926 - 4131 admin@gabrielenoindians.org	Gabrieleno
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA, 91778 Phone: (626) 483 - 3564 Fax: (626) 286-1262 GTTribalcouncil@aol.com	Gabrieleno
Gabrielino /Tongva Nation Sandonne Goad, Chairperson 106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012 Phone: (951) 807 - 0479 sgoad@gabrielino-tongva.com	Gabrielino
Gabrielino Tongva Indians of California Tribal Council Robert Dorame, Chairperson P.O. Box 490 Bellflower, CA, 90707 Phone: (562) 761 - 6417 Fax: (562) 761-6417 gtongva@gmail.com	Gabrielino
Gabrielino-Tongva Tribe Charles Alvarez, 23454 Vanowen Street West Hills, CA, 91307 Phone: (310) 403 - 6048 roadkingcharles@aol.com	Gabrielino
San Fernando Band of Mission Indians Donna Yocum, Chairperson P.O. Box 221838 Newhall, CA, 91322 Phone: (503) 539 - 0933 Fax: (503) 574-3308 ddyocum@comcast.net	Kitanemuk Vanyume Tataviam

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 740-790 East Green Street Project, Los Angeles County.

Appendix D

Preparer's Qualifications

Samantha Murray, MA

Historic Built Environment Lead / Senior Architectural Historian

Samantha Murray is a senior architectural historian with 13 years' professional experience in in all elements of cultural resources management, including project management, intensive-level field investigations, architectural history studies, and historical significance evaluations in consideration of the California Register of Historical Resources (CRHR), the National Register of Historic Places (NRHP), and local-level evaluation criteria. Ms. Murray has conducted hundreds of historical resource evaluations and developed detailed historic context statements for a multitude of property types and architectural styles, including private residential, commercial, industrial, educational, medical, ranching, mining, airport, and cemetery properties, as well as a variety of engineering structures and objects. She has also provided expertise on numerous projects requiring conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Education

California State University, Los Angeles
MA, Anthropology, 2013

California State University, Northridge
BA, Anthropology, 2003

Professional Affiliations

California Preservation Foundation

Society of Architectural Historians

National Trust for Historic Preservation

Registered Professional Archaeologist

Ms. Murray meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and Archaeology. She is experienced managing multidisciplinary projects in the lines of transportation, transmission and generation, federal land management, land development, state and local government, and the private sector. She has experience preparing environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA). She also prepared numerous Historic Resources Evaluation Reports (HRERs) and Historic Property Survey Reports (HPSRs) for the California Department of Transportation (Caltrans).

Dudek Project Experience (2014-2019)

Development

Birch Specific Plan 32-Unit Condo Project, City of Carson, Los Angeles County, California (2018). Dudek was retained by the City of Carson to prepare a cultural resources report for a project that proposes to demolish approximately 6,200 square feet of existing residential buildings and roughly 5,850 square feet of pavement on the project site, and construct a 32-unit residential condominium community with on-grade parking, landscaping, and other associated improvements. The historical significance evaluation included three residential properties proposed for demolition. All properties were found not eligible under all designation criteria and integrity requirements. Ms. Murray provided QA/QC of the final cultural resources report.

Stickleback Movie Ranch Property Evaluation, Los Angeles County, California (2018). Dudek was retained by the Metropolitan Water District of Southern California to complete a historical resource significance evaluation of the Stickleback Movie Ranch property, located in unincorporated Los Angeles County near Santa Clarita, California.

The study included a CHRIS records search of the Stickleback Movie Ranch property and a 0.25-mile radius; a pedestrian survey of the subject property for cultural resources; building development and archival research; recordation and evaluation of cultural resources identified within and around the Stickleback Movie Ranch portion of the study area; and an assessment of potential impacts to historical resources in conformance with CEQA and all applicable local municipal code and planning documents. The former Stickleback Movie Ranch and all associated buildings and structures were found not eligible under all NRHP, CRHR, and Los Angeles County designation criteria.

Healthcare

Kaiser Permanente Los Angeles Specialty Medical Center Project, Los Angeles, Los Angeles County, California (2019). Dudek prepared a Historical Resource Assessment for the Kaiser Permanente Los Angeles Specialty Medical Center at 755-765 W. College Street in Los Angeles. Preparation of the report involved extensive archival research, reconnaissance level fieldwork, historic context development, building development descriptions, historical significance evaluations for buildings greater than 45-years in age, and DPR forms for the medical center buildings and structures that are proposed for demolition as part of the multi-phase project. As a result of the evaluations, all buildings were found not eligible for designation under all applicable national, state, and local designation criteria and integrity requirements. Ms. Murray provided QA/QC of the report and guidance on approach.

Municipal

LACSD Gardena Pumping Station Project, Sanitation Districts of Los Angeles County, Gardena, California (2019). Dudek prepared a Cultural Resources Technical Report for the Gardena Pumping Project. Preparation of the report involved site recordation, extensive archival research, historic context development, engineering feature development descriptions, historical significance evaluations, and State of California Department of Parks and Recreation Series 523 forms (DPR forms) for each building of the project. The project proposed to remove the 1929 and 1960 pumping plant above and below-ground structures, and two adjacent parcels containing commercial buildings (1954, 1957) and replace them with a larger capacity pumping plant facility. Ms. Murray provided oversight of all built environment components and provided QA/QC of all documents.

LADWP De Soto Trunk Line Project, City of Los Angeles, Los Angeles County, California (2018). Dudek was retained by Los Angeles Department of Water and Power (LADWP) to complete a cultural resources study for the De Soto Trunk Line Project. LADWP is proposing the replacement of portions of four existing water pipelines: De Soto, Roscoe, Canoga Topham, and Ventura Trunk Lines. The portions of the existing trunk lines that are proposed for replacement are aging, deteriorating, and nearing the end of their service life. As such, LADWP is proposing to replace these segments with new pipeline. The regulatory framework is CEQA Plus, as such the project was also subject to compliance with Section 106 of the NHPA. Ms. Murray provided QA/QC of the cultural resources report.

148 North Huntington Street, City of Pomona, Los Angeles County, California (2017). Dudek was retained by the City of Pomona to conduct a cultural resources study for the remediation of the project site located at 148 North Huntington Street. The proposed project involves the excavation, removal, and off-site treatment of approximately 10,000 Cubic Yards (CYs) of contaminated soil due to the former presence of a manufactured gas plant (MGP) at the project site (currently the City of Pomona Water and Wastewater Yards). All buildings over 45 years of age within the project site were evaluated for the CRHR and local landmark eligibility as part of the Pomona Gas Plant site. The site was found not eligible with concurrence from the historic resources commission. Ms. Murray conducted the survey, prepared the evaluation, and authored the cultural resources report.

LADWP West Los Angeles District Yard Project, City of Los Angeles, Los Angeles County, California (2017). Dudek was retained by Los Angeles Department of Water and Power (LADWP) to complete a cultural resources study for a project that proposes demolition of five LADWP-owned administrative buildings and warehouses at the West Los Angeles District Headquarters located at 12300 West Nebraska Avenue. Dudek evaluated the yard for historical significance in consideration of NRHP, CRHR, and City of Los Angeles HCM criteria and integrity requirements. Ms. Murray co-authored the significance evaluation and provided QA/QC of the cultural resources report.

State of California

Judicial Council of California Historical Resource Evaluation Report for the Stanley Mosk Courthouse, City of Los Angeles, Los Angeles County, California (2019). Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Stanley Mosk Courthouse building, located at 111 N. Hill Street in the City of Los Angeles, California. To comply with Public Resources Code Section 5024(b), the JCC must submit to the State Historic Preservation Officer (SHPO) an inventory of all structures over 50 years of age under the JCC's jurisdiction that are listed in or that may be eligible for inclusion in the National Register of Historic Places (NRHP), or registered or that may be eligible for registration as a California Historical Landmark (CHL). Extensive research indicates that the building meets NRHP Criteria A and C; CRHR Criteria 1 and 3; the "important events" and "architecture" criteria for CHL; the "important to Los Angeles history" and "architecture" criteria for Los Angeles HCM; and Criteria 1, 2, and 3 for Los Angeles HPOZ for listing in any of these registration programs. Therefore, the Stanley Mosk Courthouse appears to be a historic resource for the purposes of California Public Resources Code 5024 and 5024.5. Ms. Murray managed the project and provided QA/QC of the final report.

Judicial Council of California Historical Resource Evaluation Report for the Santa Monica Courthouse, City of Santa Monica, Los Angeles County, California (2017). Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Santa Monica Courthouse building, located at 1725 Main Street in the City of Santa Monica, California. To comply with Public Resources Code Section 5024(b), the JCC must submit to the State Historic Preservation Officer (SHPO) an inventory of all structures over 50 years of age under the JCC's jurisdiction that are listed in or that may be eligible for inclusion in the National Register of Historic Places (NRHP), or registered or that may be eligible for registration as a California Historical Landmark (CHL). The Santa Monica Courthouse was found not eligible for designation under all applicable criteria. Ms. Murray co-authored the report and provided QA/QC of the final cultural resources report.

Presentations

***Historical Resources under CEQA*. Prepared for the Orange County Historic Preservation Planner Working Group. Presented by Samantha Murray, Dudek. December 1, 2016.** Ms. Murray delivered a one-hour PowerPoint presentation to the Orange County Historic Preservation Planner Working Group, which included planners from different municipalities in Orange County, regarding the treatment of historical resources under CEQA. Topics of discussion included identification of historical resources, assessing impacts, avoiding or mitigating impacts, overcoming the challenges associated with impacts to historical resources, and developing effective preservation alternatives.

***Knowing What You're Asking For: Evaluation of Historic Resources*. Prepared for Lorman Education Services. Presented by Samantha Murray and Stephanie Standerfer, Dudek. September 19, 2014.** Ms. Murray and Ms. Standerfer delivered a one-hour PowerPoint presentation to paying workshop attendees from various cities and counties in Southern California. The workshop focused on outlining the basics of historical resources under CEQA, and delved into issues/challenges frequently encountered on preservation projects.

Sarah Corder, MFA

Senior Architectural Historian

Sarah Corder is an architectural historian with more than 13 years of professional experience throughout the United States in all elements of cultural resources management, including project management, intensive-level field investigations, architectural history studies, and historical significance evaluations in consideration of the California Register of Historical Resources (CRHR) Register, and the National Register of Historic Places (NRHP), and local-level evaluation criteria. Ms. Corder has conducted numerous historical resource evaluations and developed detailed historic context statements for a multitude of property types and architectural styles, including private residential, commercial, industrial, educational, and agricultural properties. She has also provided expertise on numerous projects requiring conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Education

Savannah College of Art and Design
MFA, Historic Preservation, 2004

Bridgewater College
BA, History, 2002

Professional Affiliations

National Trust for Historic Preservation

Los Angeles Conservancy

California Preservation Foundation

Society for Architectural Historians

Ms. Corder meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and History. She has experience preparing environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA).

Dudek Project Experience (2017-Present)

Municipal

Gilroy Citywide Historic Resources Inventory and Historic Context Statement, City of Gilroy, Gilroy, California (May 2018 – present, estimated completion date October 2019). Dudek is currently working with the City of Gilroy to prepare a citywide historic context statement and update its 1986 historic resource inventory. As survey lead, Ms. Corder has already successfully completed reconnaissance-level survey of over 3,400 properties on time and within budget, submitted a draft historic context statement to the city, and has hosted a public kick-off meeting/outreach session that was well received by the community. Dudek has developed highly detailed and efficient iPad field forms that allow surveyors to record a property in less than 5 minutes and provide the City with real-time survey data.

San Diego Dam and Reservoir Citywide Inventory, City of San Diego Public Utilities Department, San Diego, California (January 2017 – present, estimated completion date March 2019). Dudek is currently in the process of preparing a historic context statement and significance evaluation of all dam infrastructure owned by the City's Public Utilities Department. The project involves evaluation of at least 10 dam complexes for historical significance in consideration of NRHP, CRHR, and City designation criteria and integrity requirements. While the project is still in progress, Ms. Corder has contributed extensively to archival research and has authored individual historic resource reports for Lower Otay Dam and El Capitan Dam.

The Santa Monica City Yards Master Plan Project, City of Santa Monica, Los Angeles County, California (2017). The City of Santa Monica retained Dudek to complete a cultural resources study for the proposed City Yards

Master Plan project site located at 2500 Michigan Avenue in the City of Santa Monica. The study involved evaluation of the entire City Yards site, including two murals and a set of concrete carvings for historical significance and integrity. As a result, the City Yards and its associated public art work was found ineligible under all designation criteria. Ms. Corder conducted building permit research and co-authored the technical report.

LADWP West Los Angeles District Yard Project, City of Los Angeles, Los Angeles County, California (2017). Dudek was retained by Los Angeles Department of Water and Power (LADWP) to complete a cultural resources study for a project that proposes demolition of five LADWP-owned administrative buildings and warehouses at the West Los Angeles District Headquarters located at 12300 West Nebraska Avenue. Dudek evaluated the yard for historical significance in consideration of NRHP, CRHR, and City of Los Angeles HCM criteria and integrity requirements. Ms. Corder's responsibilities for the project included the following: architectural history field survey and background research.

Development

Carol Kimmelman Sports and Academic Center Project, City of Carson, Los Angeles County, California (2018). Dudek was retained to conduct a cultural resources study on the Victoria County Golf Course and associated recreation buildings for the proposed Kimmelman Sports and Academic Center. For the project, Ms. Corder conducted a record search, a pedestrian survey, archival and building development research, NRHP and CRHR evaluations, and impacts analysis. As a result of the historic significance evaluation, all golf course components associated with the Victoria County Golf Course were found not eligible under designation requirements. The project proposed to redevelop 87 acres of the northeastern portion Victoria Golf Course site for public recreation purposes, including 75,000 sq. ft. recreational buildings, and 22,000 sq. ft. of support buildings.

Victoria Greens Project, City of Carson, Los Angeles County, California (2018). Dudek was retained by the City of Carson Planning Division for a cultural resource inventory of three parcels at the intersection of Central Avenue and Victoria Street. Ms. Corder's responsibilities for the project included the following: architectural history field survey, building permit research, background research, preparation of DPR forms and authoring the cultural resources report. The project proposed to develop 176 new three-story townhomes on currently unused land on the northeast corner of Central Avenue and Victoria Street in the City of Carson.

Education

John Adams Middle School Auditorium Replacement Project, City of Santa Monica, Los Angeles County, California (2018). The Santa Monica-Malibu Unified School District retained Dudek write the Final Mitigated Negative Declaration for the John Adams Middle School Auditorium Replacement Project for the Santa Monica-Malibu Unified School District. The project proposed to demolish the existing auditorium and music building and replace them with a new performing arts center.

Fullerton College Facilities Master Plan Program EIR, North Orange County Community College District, City of Fullerton, Orange County, California (2017). The North Orange County Community College District (NOCCCD) contracted Dudek to evaluate all buildings and structures on campus over 45 years old that were proposed for demolition or substantial alteration as part of the proposed Master Plan Program. The study entailed conducting archival and building development research, a records search, detailed impacts assessment, and development of mitigation measures for project conformance with the Secretary of the Interior's Standards for Rehabilitation. As a result of the significance evaluation, three historic districts and one individually eligible building were identified within the project area.

Education

Judicial Council of California Historical Resource Evaluation Report for the Santa Monica Courthouse, City of Santa Monica, Los Angeles County, California (2017). Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Santa Monica Courthouse building, located at 1725 Main Street in the City of Santa Monica, California. To comply with Public Resources Code Section 5024(b), the JCC must submit to the State Historic Preservation Officer (SHPO) an inventory of all structures over 50 years of age under the JCC's jurisdiction that are listed in or that may be eligible for inclusion in the National Register of Historic Places (NRHP), or registered or that may be eligible for registration as a California Historical Landmark (CHL). The Santa Monica Courthouse was found not eligible for designation under all applicable criteria. Ms. Corder's responsibilities for the project included archival research and co-authoring the cultural resources report.

Judicial Council of California Historical Resource Evaluation Report for the Figueroa Division Courthouse, City of Santa Barbara, Santa Barbara County, California (2017). Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Santa Monica Courthouse building, located at 118 E. Figueroa Street in the City of Santa Barbara, California. To comply with Public Resources Code Section 5024(b), the JCC must submit to the State Historic Preservation Officer (SHPO) an inventory of all structures over 50 years of age under the JCC's jurisdiction that are listed in or that may be eligible for inclusion in the National Register of Historic Places (NRHP), or registered or that may be eligible for registration as a California Historical Landmark (CHL). The Figueroa Division Courthouse was found not eligible for designation under all applicable criteria. Ms. Corder's responsibilities for the project included the following: background research and co-authoring of the final cultural resources report.

Transportation

Princeton Avenue Road Widening Project, City of Moorpark, Ventura County, California (2017). Dudek was retained by Stantec and the City of Moorpark to prepare Caltrans-compliant cultural resource documentation for the Princeton Avenue Road Widening Project. The project includes approximately 0.75-miles of roadway widening and improvements, including sidewalks and bicycle lanes. Dudek prepared an ASR, HRER, and HPSR in support of this effort. Both properties were found ineligible under all designation criteria and integrity requirements. The reports are currently pending Caltrans District 7 approval. Ms. Corder's responsibilities for the project included background research for the required reports.

Relevant Training

- *Practitioner's Implementation of the U.S. Secretary of the Interior's Standards and Guidelines, 2019*
- *A Commissioner and Planner's Primer to the California Environmental Quality Act, CPF, 2018*
- *Innovative Approaches to Section 106 Mitigation, ACRA, 2018*
- *Crowdfunding Historic Preservation: Direct Public Offerings and Other Ways to Raise Funds, CPF, 2018*
- *From Nuclear Waste to Manholes – the What, Why and How of Surveys, CPF, 2018*
- *Historic Districts: New Processes, SOI Standards for Districts, Infill Construction, Additions & ADU's, CPF, 2017*
- *Focus on Modernism: Design, Materials Conservation & Review, CPF, 2017*
- *Certified Historic Preservation Consulting Commonwealth of Virginia, 2004*

Nicole Frank, MSHP

Architectural Historian

Nicole Frank is an architectural historian with 3 years' professional experience as an architectural historian conducting historic research, writing landmark designations, performing conditions assessments and working hands-on in building restoration projects throughout the United States. Ms. Frank also has governmental experience with the City of San Francisco's Planning Department and the City of Chicago's Landmark Designations Department. She meets the Secretary of the Interior's Professional Qualification Standards for Architectural History.

Education

The School of the Art Institute of Chicago, MS
Historic Preservation, 2018

The College of Charleston, BA, Historic Preservation and Art History, 2016

Dudek Project Experience

Historical Resources Evaluation Report for the 740-790 East Green Street Mixed-Use Project, Pasadena, California (In Progress).
Dudek was retained by the City of Pasadena to complete a historical significance evaluation report for five commercial buildings located in the City of Pasadena, California (AINs 5734-025-014, 024, 026, 029, 027). The study included a pedestrian survey of the proposed project area, building development and archival research, development of an appropriate historic context for the property, and recordation and evaluation of the property for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and local eligibility requirements. Ms. Frank acting as architectural historian updated the Pasadena historic context, conducted archival research, and wrote the significance evaluations for the five buildings over 45 years old.

Cultural Resources Technical Report for 8850 Sunset Boulevard Project, West Hollywood, California (In Progress).
Dudek was retained by the City of West Hollywood (City) to complete a Cultural Resources Technical Report for the 8850 Sunset Boulevard Project (Project). The proposed project consists of the demolition of existing buildings and the construction and operation of a new mixed-use hotel and residential building on a property along the south side of Sunset Boulevard, extending the full city block between Larrabee Street and San Vicente Boulevard, in the City of West Hollywood (project site). Acting as architectural historian Ms. Frank assisted in the completion of the technical report as the primary writer.

As Needed Historic Research Consulting Services, City of Coronado, Coronado, California (In Progress).
Acting as architectural historian, Ms. Frank was the primary writer of the historical resource evaluation reports for 936 J Avenue, 310 2nd Street, 718 B Avenue, 1027-1029 Orange Avenue, 735 Margarita Avenue, 519 Ocean Boulevard, and 1901 Monterey Avenue. Each evaluation involved creation of an occupancy timeline, supplemental research on occupants, architect/builder, and property, building development research, a pedestrian survey of the project area, a description of the surveyed resource, and completion of a historical significance evaluation report in consideration of designation criteria and integrity requirements.

City of San Diego Public Utility Department, Historical Context Report for the Dulzura Conduit, Upper Otay Dam, Murray Dam, Sutherland Dam, and Miramar Dam. City of San Diego, San Diego County, California (In Progress).

Ms. Frank served as architectural historian and author of the cultural resources report for the City of San Diego Public Utility Department. Preparation of the historical context statement involved archival research, historic context development, engineering feature development descriptions, and historical significance evaluations. Ms. Frank evaluated five resources including the Dulzura Conduit, Upper Otay Dam, Murray Dam, Sutherland Dam, and Miramar Dam.

Cultural Resources Report for the Palmetto Avenue Warehouse Project, City of Rialto, San Bernardino County, California, 2019. Dudek was retained by Patriot Development Partners to conduct a cultural resources inventory in support of the proposed Palmetto Avenue Warehouse Project (proposed Project). The Project proposes to demolish buildings on six (6) parcels in the City of Rialto, and construct an industrial/warehouse building on an approximately 4.24-acre property located at the northeast corner of Palmetto Avenue and Baseline Road. Ms. Frank acted as evaluator for three of the six properties, which were 45 years or older for historical significance.

Historical Resources Impact Assessment for Maintenance on the Morena Dam Spillway, City of San Diego, California, 2019. Ms. Frank acted as the primary author for an impacts assessment of proposed project activities including maintenance to the Morena Dam, which is considered an historical resource under CEQA and an historic property under Section 106 of the NHPA.

Historical Resources Evaluation Report for 14545 Lanark Street Project, Panorama City, California, 2019. Dudek was retained by Clifford Beers Housing, Inc. to complete a historical significance evaluation report for a property located at 14545 Lanark Street in the City of Los Angeles, California (APN: 2210-011-900). Ms. Frank served as architectural historian and authored the historical resources evaluation report for the subject property, a Public Social Services Department building constructed in 1967.

Historical Resources Technical Report for Jacumba Valley Ranch Solar Energy Park, Jacumba, California. 2019. Dudek was retained by BayWa to complete a historical resources technical report for a project that proposes to develop a solar energy project consisting of up to 90 megawatts (MW) of alternating current (ac) and a 20 MW energy storage facility that can supply electricity to indirectly reduce the need to emit greenhouse gases (GHGs). Acting as architectural historian, Ms. Frank authored a cultural resources technical report evaluating a complex of twenty dairy buildings, the Mountain Meadow Dairy and Creamery's Sunshine Ranch Complex for historical significance.

Vista E Reservoir Replacement and Pump Station Project, Vista Irrigation District, Vista, California. 2019. Dudek was retained by the Vista Irrigation District (VID) to complete a cultural resources study for a project that proposes to replace the existing oval shaped E Reservoir with a new reservoir and construct a new pump station on the existing E Reservoir site located on Edgehill Road in the County of San Diego. Acting as architectural historian, Ms. Frank authored a cultural resources technical report evaluating a 1929 reservoir in Vista, California for replacement. Ms. Frank also conducted a site survey of the property to be used in her technical report.

California State University, San Francisco Master Plan Update EIR, San Francisco, California. 2019. Acting as architectural historian, Ms. Frank participated in a survey of CSU San Francisco's Phycology and Ethnic Studies Building and conducted archival research in order to prepare an appropriate historic context for San Francisco, CSU San Francisco and the Phycology and Ethnic Studies Building. Ms. Frank conducted research on 18 buildings located on the SFSU campus, and wrote historic contexts, descriptions and lists of alterations for each.

Pacific Grand Project, Honolulu, Hawai'i County, Hawai'i, 2019. Ms. Frank acted as architectural historian, co-authoring of the reconnaissance level survey form for the Pacific Grand in Honolulu, constructed in 1968. Ms. Frank's report included building development descriptions and historical significance evaluations. The project proposed to modify an existing telecommunication equipment tower atop one of the condominium building.

Adriane Gusick

Associate Archaeologist

Adriane Gusick is an associate archaeologist with more than 18 years of experience in cultural resource management specializing in cultural resource studies with private, state, and federal regulatory agencies including National Historic Preservation Act (NHPA) Sections 106 and 110 and California Environmental Quality Act (CEQA) compliance extending primarily throughout Southern California. She has worked directly with Bureau of Land Management, the California Public Utilities Commission, California State Parks, and various military installations including the Marine Corps Air Ground Combat Center at Twentynine Palms, Marine Corps Base (MCB) Camp Pendleton, Naval Base Coronado, and Navy Installation San Clemente Island. She has experience in all aspects of project development from initial research, planning, and development to interpreting and synthesizing data in technical reports. Ms. Gusick has acted as project manager and field director on complex data recovery programs, managed multiple archaeology laboratories, worked as liaison between Native American tribes and clients, and engaged in education and public outreach programs. In addition to Southern California, Ms. Gusick has worked as a consulting archaeologist in the southwestern United States, the Mid-Atlantic region, and New England.

Education

Catholic University of America, BA Anthropology, 2001

University of Oklahoma, BS Nursing, 2011

Certifications

City of San Diego Certified Archaeology and Paleontology Monitor

City of San Diego Certified Archaeology Crew Chief

Occupational Safety and Health Administration (OSHA) 10-Hour Construction Safety Training

OSHA 40-Hour Hazardous Waste Operations Worker (HAZWOPER) training

Registered Nurse

Wilderness First Responder

Relevant Project Experience

LADWP PP1&2 Transmission Line Conversion Project, Santa Clarita Valley, Los Angeles County, California. Dudek was retained by the Los Angeles Department of Water and Power (LADWP) to complete a cultural resources study for the Power Plant #1 and #2 to Olive #1 Transmission Line Conversion Project. LADWP is proposing to replace and convert an existing 120-mile length of 115 kilovolt (kV) double circuit transmission line between Haskell Canyon Switching Station and Olive Switching Station to a new 230 kV transmission line between Haskell Canyon Switching Station and Sylmar Switching Station. Ms. Gusick co-authored the report, in addition to performing archival research, conducting the pedestrian survey, providing Native American coordination, and recording newly identified cultural resources.

LADWP North Hollywood West Well Field Water Treatment Project, City of Los Angeles, Los Angeles County, California. Dudek was retained by LADWP to complete a cultural resources study for the North Hollywood West Well Field Water Treatment Project. LADWP proposes to implement a response action to address releases of 1,4-dioxane in groundwater that are migrating to the North Hollywood West Well Field by installing water treatment equipment at the well field capable of removing the 1,4-dioxane to below the identified cleanup levels. The regulatory framework is CEQA Plus, as such the project was also subject to compliance with Section 106 of the NHPA. Ms. Gusick co-authored the report, in addition to performing archival research, conducting the pedestrian survey, and providing Native American coordination.

LADWP Power Plant 1 Long Term Maintenance Program Project, Los Angeles County, California. Dudek was retained by LADWP to complete a cultural resources study for the Power Plant 1 Long Term Maintenance Program Project. LADWP proposes to develop a long-term operations and maintenance program for the Power Plant 1 hydroelectric facility, Power Plant 1, and its existing flood control infrastructure located in San Francisquito Canyon north of Santa Clarita. Ms. Gusick was lead author on the report, performed archival research, conducted the pedestrian survey, and recorded newly identified cultural resources.

LADWP Upper Stone Canyon Reservation Water Quality Improvement Project, City of Los Angeles, Los Angeles County, California. Dudek was retained by LADWP to complete a cultural resources study for the Upper Stone Canyon Reservation Water Quality Improvement Project. LADWP proposes to install an approximately 700,000-square-foot flexible membrane floating cover over the entire water surface of Upper Stone Canyon Reservoir and remove and replace the existing reservoir liner and appurtenant facilities. Ms. Gusick co-authored the report and conducted the intensive-level pedestrian survey.

LADWP Fish Creek Canyon Road Repair Project, Los Angeles County, California. Dudek was retained by LADWP to complete a cultural resources study for the Fish Creek Canyon Road Repair Project near Castaic, within the Angeles National Forest. LADWP proposes to repair a portion of Fish creek Canyon Road by removing the existing asphalt along the 84-feet length portion of the road and filling the area with compacted native materials. Ms. Gusick performed the archival research, provided Native American coordination, and conducted the intensive-level pedestrian survey.

Little Lake MDP Line B, Stage 1, Riverside County Flood Control and Water Conservation District, Riverside County, California. Ms. Gusick served as project archaeologist for the archaeological monitoring program during construction and maintenance of approximately 9,000 linear feet of storm drain facilities in San Jacinto and Hemet. Ms. Gusick was responsible for the evaluation and treatment of unanticipated discoveries and contributed to the Cultural Resources Monitoring Report.

Elsinore Valley Municipal Water District's Flagler Wells Conversion, Corona, California. Ms. Gusick served as cultural resources project director for the proposed construction of a potable water pipeline servicing the City of Corona, Riverside County. Ms. Gusick performed the CHRIS records search, Native American coordination, conducted the pedestrian survey, and authored the constraints report in accordance with CEQA guidelines.

Cultural Resource Study, Padre Dam Municipal Water District, San Diego County, California. Ms. Gusick served as associate archaeologist tasked with field excavation, GIS mapping, site recordation, strategy coordination with Native American groups, and laboratory analysis.

Cultural and Paleontological Resource Study for the City of San Diego Reclaimed Water Distribution System Project, San Diego, California. Ms. Gusick served as archaeological and paleontological monitor for the City of San Diego's continuing annual water and sewer main replacement program. Examples of projects include:

- Sewer and Water Group 683A
- Sewer and Water Group 676
- Sewer and Water Group 796
- Sewer and Water Group 741
- Sewer and Water Group 718
- Sewer Pump Station 19 Replacement

Makayla Murillo

Archaeologist

Makayla Murillo is an archaeologist with more than 4 years' experience as an archaeological field technician, laboratory technician, and Native American Representative. She has conducted numerous surveys, excavations, and data recoveries, primarily in Southern California. She has extensive experience in North County, with additional experience in Riverside County, San Diego County, Orange County, San Bernardino County, Kern County, and Imperial County. Her research interests include the role of experimentation in archaeology, protection and preservation of Native American sites, shell bead production and pottery production.

EDUCATION

University of California, Davis

Field School, 2018

California State University, San Marcos

BA, Anthropology, 2017

MiraCosta College

AA, Anthropology, 2015

CERTIFICATIONS

San Diego City Certified Archaeologist, 2018

National Safety Council First Aid Certified, 2018

National Safety Council CPR Certified, 2018

Roadway Worker Protection Certified, 2017-2018

Worker Environmental Awareness Program, 2018

Project Experience

Development

Corona Tract Project, Van Daele, Riverside County, California. As an archaeological monitor, conducted 10 meter pedestrian surveys coordinated with two Native American monitors; monitored clearing of vegetation; monitored grading for housing pads and water retention basin.

Villa Storia Project, Beazer Homes Holding Corporation, Oceanside, North County, California.
As an archaeological monitor, monitored grading; monitored water and electrical lines; monitored storm water reservoir; monitored housing pads. Participated in shovel test pits near previously recorded archaeological site. Recorded and collected artifacts during construction activities; Recorded and sorted artifacts during the shovel test pits.

Villa Storia Affordable Housing Project, Emerson Construction, Oceanside, North County, California. As archaeological monitor, monitored grading and trenching activities for construction of a subdivision lower income housing.

600 East Mission Avenue Project, Apollo Development Group LLC, Escondido, North County, California. As an archaeological monitor, responsible for monitoring, documenting, and photographing to ensure construction activities are in compliance.

Hidden Ridge Project, CTS Properties LLC, Rancho Margarita, Orange County, California. As archaeological monitor, monitored trenching excavations for water lines near previously recorded cultural sensitive site.

Air Resources Board Southern California Consolidation Project, City of Riverside, Riverside County, California. As archaeological monitor, monitored grading to ensure construction activities are in compliance. Documented and photographed construction activities.

Discovery South Project, City of San Marcos Planning Division, San Marcos, North County, California. As archaeological field technician, conducted shovel test pits, documented shovel test pit with forms and photography, and performed laboratory tasks.

Laurel Creek, Warmington Residential California, Incorporated, Vista, North County, California. As archaeological field technician, monitored all grading and trenching activities to ensure construction activity are in compliance.

Orion Pacific Vista Project, Vista, North County, California. As the lead archaeological field technician, monitored all grading and trenching activities to ensure construction activity are in compliance. Identified and evaluated prehistoric features on site. Documented and photographed all construction activities.

Lone Oak Project, Vista, North County, California. As archaeological and paleontological field technician, monitored all grading and trenching activities to ensure construction activity are in compliance. Documented and photographed construction activities.

Crouch Street Due Diligence Project, Oceanside, North County, California. As archaeological field technician, developed constraints letter and conducted site visit. Photographed and recorded the site visit.

Pointsettia Due Diligence Project, Carlsbad, North County, California. As archaeological and paleontological field technician, monitored all grading and trenching activities to ensure construction activity are in compliance.

Hotel Del Coronado North Parking Gage Project, Coronado, San Diego County, California. As archaeological field technician, helped perform excavation of a historical feature on site during construction activities. Photographed and recorded the feature on site.

Education

Palomar College Project, Palomar Community College District, Oceanside, North County, California. As a Native American monitor, monitored controlled grading near historic deposit; monitored mass grading and trenching excavations, coordinated with archaeologist during testing units; monitored transplanting of endangered species by biologists prior to construction grading of site. Recorded and sorted artifacts with archaeologist.

Hillsdale Middle School Field Lighting Project, Cajon Valley Union School District, El Cajon, San Diego County, California. As a laboratory technician, performed developing Sacred Lands File Contact forms; created Tribal request letters; assembled location and project maps to request letters and report; developed the report tables for reports and resources.

Energy

Jacumba Solar Project, BayWa Renewable Energy LLC, Jacumba, San Diego County, California. As an archaeological technician, conducted artifact analysis, excavated, photographed, and documented shovel test units.

Jacumba Valley Ranch Solar Project, BayWa Renewable Energy LLC, Jacumba, San Diego County, California. As an archaeological technician, conducted intensive pedestrian survey. Conducted Archaeological Pedestrian Survey, recorded, and photographed surface inventory of newly identified cultural resources, sites, and site updates. Created site forms for site updates and new sites. Evaluated the sites within the project area, collected, and documented artifacts recovered. As a laboratory technician; processed the artifacts and cataloged them.

Valley Center Pole Replacement, San Diego Gas & Electric, Valley Center, North County, California. As a Native American Representative, performed pedestrian survey with archaeologists, biologists, and construction managers for an electrical transmission line pole replacement; monitored previously recorded sites near pole replacements; monitored new pole locations to avoid site impacts.

Imperial Solar Energy Center West Project, CSolar IV West LLC, Imperial County, California. As an archaeological field technician, performed site visits, recorded artifact inventory, photographed artifacts, and environmental conditions as a part of the Long Term Archaeological Management Plan. Workers Environmental Awareness Protection Certified.

Campo Wind Project, Terra-Gen Development Company, LLC, Jacumba, San Diego County, California. As an archaeological field technician, conducted archaeological pedestrian survey. Recorded and photographed surface inventory of newly identified and previously recorded cultural resources and sites. As a laboratory technician, processed artifacts, cataloging artifacts, developed Department of California and Recreational Forms, submissions to the South Coastal Information Center, and developed site descriptions for evaluations for the report.

Calcite Solar Project, Lendlease Energy Development LLC, Lucerne Valley, San Bernardino County, California. As an archaeological field and laboratory technician, performed test excavations. Recorded and documented artifacts and environmental conditions. Laboratory work consisted of processing artifacts, historic analysis, lithic analysis, curation, identification, photography of artifacts, as well as developing site inventory tables and creating site summaries for the report.

California Flats Project, First Solar, San Miguel, Monterey, California. As an archaeological laboratory technician, assembled California Department Parks and Recreation archaeological forms.

Torrey Wind Project, Terra-Gen Power LLC, Campo, San Diego County, California. As an archaeological field technician, conducted intensive 15 meter pedestrian survey; responsible for documenting and photographing prehistoric artifact and feature inventories. Performed testing in multiple prehistoric and historic sites, collecting, recording, and photographing artifacts and test pits. As a laboratory technician, completed processing of artifacts, cataloging artifacts, site descriptions, Department of Parks and Recreation forms, submissions to the South Coastal Information Center, and developed site descriptions for evaluations for the report.

Sanborn Archaeological Significant Evaluation Project, Sanborn, Kern County, Mojave, California. As archaeological field technician, involved with evaluation of sensitive prehistoric sites. Photographing and recording the evaluations on site. Laboratory analysis consisted of artifact processing and cataloging artifacts.

Transportation

Mid Coast Transit Conductors Project Monitor, SANDAG, La Jolla, San Diego County, California. As an archaeological field technician, monitored excavations to ensure construction activities are in compliance; monitored railway expansion, including installation of a second mainline track, and a new light rail trolley double track. Roadway Worker Production Certified.

San Elijo Lagoon Double Track Project, SANDAG, Cardiff, San Diego County, California. As an archaeological laboratory technician; developed the report for the project.

Water/Wastewater

Monte Vista Sewer Construction Project, Monte Vista Water District, North County, California. As an archaeological field technician, monitored construction activities of the reconstruction of the water line near residential housing.

City of San Diego – Transportation and Storm Water, La Jolla, San Diego County, California. As an archaeological field technician, monitored construction activities of undergrounding of utilities. Documented and photographed construction activities.

Awards/Commendations

2017 - Lilian Sherman Scholarship

Relevant Previous Experience

- 2014 – Present Associate Archaeologist, DUDEK, Encinitas, California
- 2017 – 2018 Native American Representative, Saving Sacred Sites, Vista, California
- 2014 – Temporary Assistant, Habitat Restoration Sciences, Vista, California
- 2012 – Temporary Assistant, Larry Seeman Associates, Carlsbad California

Linda Kry

Archaeologist

Linda Kry is an archaeologist with 13 years' experience in cultural resource management specializing in various aspects of cultural resources investigations within Los Angeles County, Orange County, San Bernardino County, Kern County, Imperial County, Inyo County, Riverside County, and the Mojave Desert. Ms. Kry's experience includes archival research, reconnaissance surveys, artifact analysis, assisting CEQA lead agencies with AB-52 notification and consultation process, and authoring technical reports pursuant to CEQA and Section 106 of the NHPA. Ms. Kry's extensive experience includes the management of cultural resources specialists in support of various aspects of cultural resources compliance, including Phase I surveys, construction monitoring, Native American consultation, archaeological testing and treatment, and prehistoric and historical resource significance evaluations.

Education

University of California, Los Angeles
BA, Anthropology, 2006
Cerritos College
AA, Anthropology, 2004

Project Experience

De Soto Trunk Line Project, Los Angeles Department of Water and Power, Los Angeles, California. Archaeological lead for a cultural resources study pursuant to CEQA and Section 106. Los Angeles Department of Water and Power LADWP is proposing to replace the portions of the De Soto Trunk Line located in West San Fernando Valley. Approximately 13,700 feet of riveted steel pipe, will be replaced along portions of De Soto Street and Roscoe Boulevard. The proposed project would increase the safety, capacity and reliability of LADWP's water system in the western San Fernando Valley. (August 2019-present)

Haynes Generating Station Demolition Project, Los Angeles County Department of Public Works, Malibu, California. Archaeological lead and monitoring coordinator. The project included the demolition of Units 3, 4, 5, and 6 at the Haynes Generating Station (HnGS), which were originally constructed more than five decades ago, to minimize health and safety risks and reduce future maintenance. (August 2019-September 2019)

City Trunk Line South Project, Los Angeles Department of Water and Power, Los Angeles, California. Archaeological lead for a cultural resources study pursuant to CEQA and Section 106. Los Angeles Department of Water and Power LADWP is proposing proposing to replace an old and deteriorating trunk line that was built in 1914 and has a history of leaks and breaks. The proposed trunk link will improve capacity, reliability, and flexibility in the water system. (May 2019-Septembetr 2019)

February 2019 Storm Repair Project, Los Angeles County Department of Public Works, Malibu, California. Archaeological lead responsible for managing the cultural resources inventory and assessment of cultural resources within the project area in support of emergency guardrail replacement work in the Woolsey Fire burn area. Responsibilities also include coordinating Native American monitoring needs for the project. (September 2019-present)

FLOR 401 E 7th Street Construction Monitoring, Skid Row Housing Trust, Los Angeles, California. Project manager for construction monitoring for the development of 99 units of permanent supportive housing for homeless veterans and/or special needs populations, and affordable housing for low-income individuals in Downtown Los Angeles. (February 2019-present)

Woolsey Fire Guardrails Replacement Project, Los Angeles County Department of Public Works, Malibu, California. Archaeological lead responsible for managing the cultural resources inventory and assessment of cultural resources within the project area in support of emergency guardrail replacement work in the Woolsey Fire burn area. Responsibilities also include coordinating Native American monitoring needs for the project. (January 2019-present)

Coronado Trunk Line Project, Los Angeles Department of Water and Power, Los Angeles, California. Technical lead for a Phase I cultural resources study pursuant to CEQA and Section 106. Los Angeles Department of Water and Power is proposing to construct a new 30-inch diameter welded steel pipe, approximately 7,200 feet in length, along with a regulating and relief station vault and flow master vault. The proposed trunk line would add reliability and redundancy to the system. (September 2018-March 2019)

River Supply Conduit Unit 7 Project, Los Angeles Department of Water and Power, Los Angeles and Burbank, California. Technical lead and monitoring coordinator for the River Supply Conduit (RSC) Unit 7 Project. The existing River Supply Conduit (RSC) is a major transmission pipeline in the LADWP water distribution system. The Project is critical to meet safety of water supplies, reliability of water infrastructure, and sustainability of water supply. (August 2018-present)

Relevant Previous Experience

Los Angeles International Airport (LAX) Midfield Satellite Concourse, California. Served as field director for archaeological and paleontological monitoring project associated with the creation of a new aircraft passenger concourse and associated elements at LAX. Responsibilities included coordinating with company personnel and project contractors, scheduling, and recordation and collection of field data. (April 2017–December 2017)

Los Angeles Metropolitan Transportation Authority Compliance Monitoring, California. Served as archaeological and paleontological monitor for the multiyear and multisite project within the greater Los Angeles area, including the Crenshaw rail transit corridor and the 1.9-mile Regional Connector subway corridor, as well as their associated stations. In addition, served as monitoring coordinator for the Regional Connector Archaeological and Paleontological Monitoring Project. Responsibilities as Monitoring Coordinator included coordinating and scheduling various contractors and archaeologists; developing and providing cultural resources training for new contractors and archaeologists; monthly project updates to client; invoice and budget reviews; lab analysis of all resources collected and preparation of those resources for curation. (April 2013–January 2018)

Los Angeles Department of Water and Power Division Creek, Inyo County, California. Served as deputy project manager providing consultation and support in U.S. Forest Service and Bureau of Land Management consultation for the assessment of historical structures associated with the Division Creek Power Plant and Los Angeles Aqueduct. Responsibilities included assisting with work plans, project permitting, budgeting, and reporting. In addition, served as crew chief for archaeological surveys and testing. Conducted lab analysis of artifacts, prepared these resources for curation, and co-authored reports on the results of all findings. (July 2013–November 2017)

Appendix C

Energy Calculations

740 - 790 East Green Street, City of Pasadena

Project Construction Energy Demand

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	Kg CO2/Gallon	Gallons
Demolition	352	1.62	8.78	184.27
Grading	1,300	5.98	8.78	680.54
Trenching	1,568	7.06	8.78	803.82
Building Construction	94,176	422.10	8.78	48,074.98
Architectural Coating	4,176	64.81	8.78	7,381.48
Paving	5,104	6.03	8.78	686.56
Total				**57,811.64**

Construction Haul Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	Kg CO2/Gallon	Gallons
Demolition	546	19.71	10.21	1,930.15
Grading	5,094	183.86	10.21	18,007.64
Trenching	0	0.00	10.21	0.00
Building Construction	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Total				**19,937.79**

Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	Kg CO2/Gallon	Gallons
Demolition	0	0.00	10.21	0.00
Grading	0	0.00	10.21	0.00
Trenching	0	0.00	10.21	0.00
Building Construction	22,236	256.13	10.21	25,085.92
Architectural Coating	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Total				**25,085.92**

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	Kg CO2/Gallon	Gallons
Demolition	6	37.39	10.21	3,662.21
Grading	8	177.24	10.21	17,359.37
Trenching	1	58.46	10.21	5,726.24
Building Construction	9	379.06	10.21	37,126.20
Architectural Coating	1	33.32	10.21	3,263.46
Paving	6	88.08	10.21	8,627.29
Total				**75,764.77**

Construction Equipment Usage

Phase	Hours of Use
Demolition	1,056
Grading	4,160
Trenching	3,136
Building Construction	22,236
Architectural Coating	1,566
Paving	4,224
Total	**36,378**

740 - 790 East Green Street, City of Pasadena

Project Operational Energy Demand

Mobile Source Gasoline Demand

Scenario	Vehicle MT CO_2	Kg CO2/Gallon	Gallons
Project	2,317.83	8.78	263,990.22
Existing	687.03	8.78	78,249.83
		Net Increase	**185,740.40**

Mobile Source Diesel Demand

Scenario	Vehicle MT CO_2	Kg CO2/Gallon	Gallons
Project	187.52	10.21	18,366.59
Existing	53.45	10.21	5,234.68
		Net Increase	**13,131.92**

Electricity Demand

Project Facility	kWh/Year
Proposed Project	
Buildings	2,027,174.00
Water/Wastewater	275,489.24
Total	**2,302,663.24**
Existing	
Buildings	902,052.00
Water/Wastewater	244,742.90
Total	**1,146,794.90**
Net Increase in Electricity Demand	**1,155,868.34**

Natural Gas Demand

Scenario	kBTu/Year
Project Buildings	3,734,981.40
Existing Buildings	722,891.00
Net Increase in Natural Gas Demand	**3,012,090.40**

740 - 790 East Green Street, City of Pasadena
Construction Emissions of CO_2

Phase Name	Equipment CO2 MT/yr	Hauling CO2 MT/yr	Vendor CO2 MT/yr	Worker CO2 MT/yr	(from CalEEMod outputs)
Demolition	37.3912	19.7068	0	1.6179	
Grading	177.2392	183.858	0	5.9751	
Trenching	58.4649	0	0	7.0575	
Building Constru	379.0585	0	256.1272	422.0983	
Architectural Coa	33.3199	0	0	64.8094	
Paving	88.0846	0	0	6.028	
2023					
Demolition	37.3912	19.7068	0	1.6179	
Grading	177.2392	183.858	0	5.9751	
Building Constru	75.3365	0	52.3068	86.0408	
Trenching	19.3904	0	0	2.39	
2024					
Building Constru	303.722	0	203.8204	336.0575	
Trenching	39.0745	0	0	4.6675	
2025					
Paving	88.0846	0	0	6.028	
Architectural Coa	33.3199	0	0	64.8094	

740 - 790 East Green Street, City of Pasadena

Project Construction Assumptions

PhaseName	OffRoadEquipmentType	OffRoadEquipmentU	UsageHours	Days	Total Hours	Pieces of Equ	Equip Hours
Demolition	Concrete/Industrial Saws	1	8	22	176	6	1056
Demolition	Excavators	3	8	22	528		
Demolition	Rubber Tired Dozers	2	8	22	352		
Grading	Excavators	2	8	65	1040	8	4160
Grading	Graders	1	8	65	520		
Grading	Rubber Tired Dozers	1	8	65	520		
Grading	Scrapers	2	8	65	1040		
Grading	Tractors/Loaders/Backhoes	2	8	65	1040		
Building Construction	Cranes	1	7	327	2289	9	22236
Building Construction	Forklifts	3	8	327	7848		
Building Construction	Generator Sets	1	8	327	2616		
Building Construction	Tractors/Loaders/Backhoes	3	7	327	6867		
Building Construction	Welders	1	8	327	2616		
Paving	Pavers	2	8	88	1408	6	4224
Paving	Paving Equipment	2	8	88	1408		
Paving	Rollers	2	8	88	1408		
Architectural Coating	Air Compressors	1	6	261	1566	1	1566
Trenching	Trenchers	1	8	392	3136	1	3136
						Total	36,378

PhaseName	PhaseType	PhaseStartDate	PhaseEndDate	NumDaysV	NumDays
Demolition	Demolition	2023/06/01	2023/06/30	5	22
Grading	Grading	2023/07/01	2023/09/30	5	65
Trenching	Trenching	2023/07/01	2024/12/31	5	392
Building Construction	Building Construction	2023/10/01	2024/12/31	5	327
Architectural Coating	Architectural Coating	2025/01/01	2025/12/31	5	261
Paving	Paving	2025/09/01	2025/12/31	5	88

PhaseName							
Site Preparation	WorkerTripNumber	VendorTripNumber	HaulingTripNumber	Days	Worker Trips	Vendor Tri	Hauling
Demolition	16	0	546	22	352	0	546
Grading	20	0	5094	65	1,300	0	5,094
Trenching	4	0	0	392	1,568	0	0
Building Construction	288	68	0	327	94,176	22,236	0
Paving	16	0	0	261	4,176	0	0
Architectural Coating	58	0	0	88	5,104	0	0

Mobile Source Petroleum Demand

Project	Vehicle MT CO_2		
Project Mobile Sources	2,505.36		
Fuel Type	**Vehicle MT CO_2**	**Kg/CO2/Gallon**	**Gallons**
Gasoline	2,317.83	8.78	263,990.22
Diesel	187.52	10.21	18,366.59
		Total	282,356.82

Natural Gas	Land Use
2,516,650.00	Apartments
0.00	City Park
0.00	Parking
761,660.00	Restaurant
442,486.00	food w/o drivethru
14,185.40	Retail
3,734,981.40	**Total kbtu/year**

8850 Sunset Blvd, West Hollywood
On-Road Emission Factors - Project

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Lookup	Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	Proportion	CO2_TOTEX
HHDTGAS	Los Angeles (SC)	2024	HHDT	Aggregated	Aggregated	GAS	75673.11805	0.99%	142.3707688
HHDTDSL	Los Angeles (SC)	2024	HHDT	Aggregated	Aggregated	DSL	7571797.12	99.01%	13772.132
LDAGAS	Los Angeles (SC)	2024	LDA	Aggregated	Aggregated	GAS	120863359.9	98.85%	37879.54282
LDADSL	Los Angeles (SC)	2024	LDA	Aggregated	Aggregated	DSL	1408086.293	1.15%	392.2109758
LDT1GAS	Los Angeles (SC)	2024	LDT1	Aggregated	Aggregated	GAS	10846002.66	99.91%	3998.351042
LDT1DSL	Los Angeles (SC)	2024	LDT1	Aggregated	Aggregated	DSL	9993.54832	0.09%	3.998837149
LDT2GAS	Los Angeles (SC)	2024	LDT2	Aggregated	Aggregated	GAS	50278373.87	99.79%	20557.60152
LDT2DSL	Los Angeles (SC)	2024	LDT2	Aggregated	Aggregated	DSL	105097.5297	0.21%	38.44573138
LHDT1GAS	Los Angeles (SC)	2024	LHDT1	Aggregated	Aggregated	GAS	1628407.587	44.76%	1370.187016
LHDT1DSL	Los Angeles (SC)	2024	LHDT1	Aggregated	Aggregated	DSL	2009853.215	55.24%	1057.802544
LHDT2GAS	Los Angeles (SC)	2024	LHDT2	Aggregated	Aggregated	GAS	502575.6918	32.97%	454.5500757
LHDT2DSL	Los Angeles (SC)	2024	LHDT2	Aggregated	Aggregated	DSL	1021893.238	67.03%	587.9957615
MCYGAS	Los Angeles (SC)	2024	MCY	Aggregated	Aggregated	GAS	1251912.357	100.00%	282.7724601
MDVGAS	Los Angeles (SC)	2024	MDV	Aggregated	Aggregated	GAS	28173740.16	97.73%	15573.83421
MDVDSL	Los Angeles (SC)	2024	MDV	Aggregated	Aggregated	DSL	654625.6363	2.27%	308.0351898
MHGAS	Los Angeles (SC)	2024	MH	Aggregated	Aggregated	GAS	162207.897	79.31%	208.0755015
MHDSL	Los Angeles (SC)	2024	MH	Aggregated	Aggregated	DSL	42326.17747	20.69%	45.98881565
MHDTGAS	Los Angeles (SC)	2024	MHDT	Aggregated	Aggregated	GAS	628332.9481	12.56%	835.7803438
MHDTDSL	Los Angeles (SC)	2024	MHDT	Aggregated	Aggregated	DSL	4374708.976	87.44%	5549.819827
OBUSGAS	Los Angeles (SC)	2024	OBUS	Aggregated	Aggregated	GAS	262033.0449	42.17%	343.8756205
OBUSDSL	Los Angeles (SC)	2024	OBUS	Aggregated	Aggregated	DSL	359410.2176	57.83%	536.231606
SBUSGAS	Los Angeles (SC)	2024	SBUS	Aggregated	Aggregated	GAS	58377.28762	35.76%	46.97542896
SBUSDSL	Los Angeles (SC)	2024	SBUS	Aggregated	Aggregated	DSL	104873.8728	64.24%	159.847703
UBUSGAS	Los Angeles (SC)	2024	UBUS	Aggregated	Aggregated	GAS	173853.822	34.58%	318.6966255
UBUSDSL	Los Angeles (SC)	2024	UBUS	Aggregated	Aggregated	DSL	328855.7956	65.42%	756.2900084

740 - 790 East Green Street, City of Pasadena
On-Road Emission Factors - Existing

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Lookup	Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	Proportion	CO2_TOTEX
HHDTGAS	Los Angeles (SC)	2020	HHDT	Aggregated	Aggregated	GAS	67980.32052	1.00%	2.412189296
HHDTDSL	Los Angeles (SC)	2020	HHDT	Aggregated	Aggregated	DSL	6731673.952	99.00%	87.93042232
LDAGAS	Los Angeles (SC)	2020	LDA	Aggregated	Aggregated	GAS	123137809.1	99.02%	694.5699329
LDADSL	Los Angeles (SC)	2020	LDA	Aggregated	Aggregated	DSL	1213998.277	0.98%	8.037643103
LDT1GAS	Los Angeles (SC)	2020	LDT1	Aggregated	Aggregated	GAS	10673587.88	99.89%	65.88152301
LDT1DSL	Los Angeles (SC)	2020	LDT1	Aggregated	Aggregated	DSL	12046.0772	0.11%	0.107228937
LDT2GAS	Los Angeles (SC)	2020	LDT2	Aggregated	Aggregated	GAS	47461733	99.81%	434.3714157
LDT2DSL	Los Angeles (SC)	2020	LDT2	Aggregated	Aggregated	DSL	88074.60749	0.19%	0.722660536
LHDT1GAS	Los Angeles (SC)	2020	LHDT1	Aggregated	Aggregated	GAS	2059652.431	53.02%	56.19351079
LHDT1DSL	Los Angeles (SC)	2020	LHDT1	Aggregated	Aggregated	DSL	1825120.67	46.98%	53.16068639
LHDT2GAS	Los Angeles (SC)	2020	LHDT2	Aggregated	Aggregated	GAS	532906.4916	37.19%	6.252550131
LHDT2DSL	Los Angeles (SC)	2020	LHDT2	Aggregated	Aggregated	DSL	900019.8939	62.81%	16.47238964
MCYGAS	Los Angeles (SC)	2020	MCY	Aggregated	Aggregated	GAS	1157482.625	100.00%	5.222063309
MDVGAS	Los Angeles (SC)	2020	MDV	Aggregated	Aggregated	GAS	28337759.13	98.17%	344.7429006
MDVDSL	Los Angeles (SC)	2020	MDV	Aggregated	Aggregated	DSL	528508.0238	1.83%	5.841755215
MHGAS	Los Angeles (SC)	2020	MH	Aggregated	Aggregated	GAS	168562.6462	80.46%	7.190720127
MHDSL	Los Angeles (SC)	2020	MH	Aggregated	Aggregated	DSL	40929.03672	19.54%	2.174039475
MHDTGAS	Los Angeles (SC)	2020	MHDT	Aggregated	Aggregated	GAS	628305.9407	13.84%	8.796602446
MHDTDSL	Los Angeles (SC)	2020	MHDT	Aggregated	Aggregated	DSL	3913087.315	86.16%	97.36994832
OBUSGAS	Los Angeles (SC)	2020	OBUS	Aggregated	Aggregated	GAS	252864.2977	44.11%	3.916672681
OBUSDSL	Los Angeles (SC)	2020	OBUS	Aggregated	Aggregated	DSL	320448.4895	55.89%	7.466187997
SBUSGAS	Los Angeles (SC)	2020	SBUS	Aggregated	Aggregated	GAS	48720.91656	31.77%	0.386989157
SBUSDSL	Los Angeles (SC)	2020	SBUS	Aggregated	Aggregated	DSL	104613.2923	68.23%	4.980701971
UBUSGAS	Los Angeles (SC)	2020	UBUS	Aggregated	Aggregated	GAS	159752.5286	28.74%	4.075178303
UBUSDSL	Los Angeles (SC)	2020	UBUS	Aggregated	Aggregated	DSL	396090.7477	71.26%	7.617935929

740 - 790 East Green Street, City of Pasadena
Operational Electricity - Project

Total Electricity - Project	kWh/yr
Buildings	2,027,174.00
Water/Wastewater	275,489.2
Total	**2,302,663.24**

Electricity Intensity Factors - Water/Wastewater

Process	Units	
Supply	kwh/MG	9,727
Treat	kwh/MG	111
Distribute	kwh/MG	1,272
Wastewater Treatment	kwh/MG	1,911
Total	**kwh/MG**	**13,021**

* Electricity intensity factors from CalEEMod Appendix D for Los Angeles County

Electricity Demand - Water/Wastewater

	Units	Potable Water - Indoor	Potable Water - Outdoor	Total
Electricity Intensity Factor				
Supply	kwh/MG	9,727	9,727	N/A
Treat	kwh/MG	111	111	N/A
Distribute	kwh/MG	1,272	1,272	N/A
Wastewater Treatment	kwh/MG	1,911	-	N/A
Total	**kwh/MG**	**13,021**	**11,110**	N/A
Water Consumption - Project				
Project Water	MG/yr	20.24	1.07	21.31
Total	**MG/yr**	**20.24**	**1.07**	**21.3**
Electricity Usage - Project	**kwh/yr**	**263,575.62**	**11,913.62**	**275,489**

8850 Sunset Blvd, West Hollywood
Operational Electricity - Existing

Total Electricity - Existing	kWh/yr
Buildings	902,052.00
Water/Wastewater	244,742.90
Total	**1,146,794.90**

Electricity Intensity Factors - Water/Wastewater

Process	Units	
Supply	kwh/MG	9,727
Treat	kwh/MG	111
Distribute	kwh/MG	1,272
Wastewater Treatment	kwh/MG	1,911
Total	**kwh/MG**	**13,021**

* Electricity intensity factors from CalEEMod Appendix D for Los Angeles County

Electricity Demand - Water/Wastewater

	Units	Potable Water - Indoor	Potable Water - Outdoor	Total
Electricity Intensity Factor				
Supply	kwh/MG	9,727	9,727	N/A
Treat	kwh/MG	111	111	N/A
Distribute	kwh/MG	1,272	1,272	N/A
Wastewater Treatment	kwh/MG	1,911	-	N/A
Total	**kwh/MG**	**13,021**	**11,110**	N/A
Water Consumption - Project				
Project Water	MG/yr	12.34	7.56	19.91
Total	**MG/yr**	**12.3**	**7.6**	**19.9**
Electricity Usage - Project	**kwh/yr**	**160,703**	**84,040**	**244,743**

Appendix D

Geotechnical Engineering Investigation

Geotechnologies, Inc.
Consulting Geotechnical Engineers

439 Western Avenue
Glendale, California 91201-2837
818.240.9600 • Fax 818.240.9675

May 31, 2017
File Number 21413

Stanford Pasadena, LLC
888 South Figueroa Street, Suite 1900
Los Angeles, California 90017

Attention: Daniel Taban

Subject: Geotechnical Engineering Investigation
Proposed Mixed-Use Development
750 East Green Street, Pasadena, California

Dear Mr. Taban:

This letter transmits the Geotechnical Engineering Investigation for the subject site prepared by Geotechnologies, Inc. This report provides geotechnical recommendations for the development of the site, including earthwork, seismic design, retaining walls, excavations, shoring and foundation design. Engineering for the proposed project should not begin until approval of the geotechnical investigation is granted by the local building official. Significant changes in the geotechnical recommendations may result due to the building department review process.

The validity of the recommendations presented herein is dependent upon review of the geotechnical aspects of the project during construction by this firm. The subsurface conditions described herein have been projected from limited subsurface exploration and laboratory testing. The exploration and testing presented in this report should in no way be construed to reflect any variations which may occur between the exploration locations or which may result from changes in subsurface conditions.

Should you have any questions please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.

REGISTERED PROFESSIONAL ENGINEER
GREGORIO VARELA
No. 81201
Exp. 9/30/17
CIVIL
STATE OF CALIFORNIA

GREGORIO VARELA
R.C.E. 81201

GV:ae

Distribution: (4) Addressee

Email to: [daniel@jadeent.com]

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GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED MIXED-USE DEVELOPMENT
750 EAST GREEN STREET
PASADENA, CALIFORNIA

INTRODUCTION

This report presents the results of the geotechnical engineering investigation performed on the subject site. The purpose of this investigation was to identify the distribution and engineering properties of the geologic materials underlying the site, and to provide geotechnical recommendations for the design of the proposed development.

This investigation included four exploratory excavations, collection of representative samples, laboratory testing, engineering analysis, review of published geologic data, review of available geotechnical engineering information and the preparation of this report. The exploratory excavation locations are shown on the enclosed Plot Plan. The results of the exploration and the laboratory testing are presented in the Appendix of this report.

PROPOSED DEVELOPMENT

Information concerning the proposed development was furnished by the client. The site is proposed to be developed with a mixed-use structure. The structure is proposed to be six stories in height, and will be built over two subterranean parking levels. The exact depth of the proposed subterranean parking levels is unknown at this time. However, based on the experience of this firm, it is anticipated that the lowest subterranean level will extend to an approximate depth of 24 feet below the existing grade. As shown in the enclosed Plot Plan, it is anticipated that the proposed subterranean levels will extend adjacent to the property lines.

Column loads are estimated to be between 600 and 1,200 kips. Wall loads are estimated to be between 10 and 30 kips per lineal foot. These loads reflect the dead plus live load. Grading is expected to consist of excavations to a maximum depth of 28 feet below the existing grade for construction of the proposed subterranean parking levels and foundation elements.

Any changes in the design of the project or location of any structure, as outlined in this report, should be reviewed by this office. The recommendations contained in this report should not be considered valid until reviewed and modified or reaffirmed, in writing, subsequent to such review.

SITE CONDITIONS

The site is located at 750 East Green Street, in the City of Pasadena, California. The site is approximately 2⅓ acres in area, bounded by Green Street to the north, Hudson Avenue to the east, a single-story office building and a single-story church to the south, and Oak Knoll Avenue to the west. The site is shown relative to nearby topographic features in the enclosed Vicinity Map.

The existing site grade descends gently to the south and southeast, having a relief on the order of 8 feet. The site is currently developed with several one and two-story commercial and office buildings, as well as several paved parking lots. The enclosed Plot Plan shows the existing development, as well as the current grade elevations observed across the site.

Vegetation at the site is limited, and consists of a mature trees, bushes and grass lawns, contained in a few planter areas. Drainage appears to be by sheetflow to the city streets.

GEOTECHNICAL EXPLORATION

FIELD EXPLORATION

The site was explored on April 18 and 19, 2017, by drilling four borings. The borings were drilled to depths ranging between 40 and 70 feet below grade, with the aid of a truck-mounted drilling machine using 8-inch diameter hollowstem augers. The exploration locations are shown on the Plot Plan and the geologic materials encountered are logged on Plates A-1 through A-4.

The location of exploratory excavations was determined from hardscape features shown on the attached Plot Plan. Boring elevations are based on elevation contours presented in the Land Title Survey prepared by JRN Civil Engineers, dated May 4, 2017. The location and elevation of the exploratory excavations should be considered accurate only to the degree implied by the method used.

Geologic Materials

Fill materials were encountered in all exploratory borings, to depths ranging between 3 and 5 feet below the existing grade. The fill consists of a mixture of silty sands and sandy silts, which are dark brown, moist, medium dense to very dense, or stiff to very stiff, and fine grained.

The fill is in turn underlain by native alluvial soils, consisting of interlayered mixtures of silty sands and sands. The native alluvial soils range from dark yellowish brown to dark brown in color, and are moist, medium dense to very dense, and fine to coarse grained, with occasional gravel. More detailed descriptions of the earth materials encountered may be obtained from individual logs of the subsurface excavations.

Groundwater

Groundwater was not encountered during exploration, conducted to a maximum depth of 70 feet below grade. The historically highest groundwater level was established by review of California Geological Survey Seismic Hazard Zone Report 014, Plate 1.2 entitled “Historically Highest Ground Water Contours”. Review of this plate indicates that the historically highest groundwater level is approximately 90 feet below grade. A copy of this plate is included in the Appendix as “Historically Highest Groundwater Levels” Map.

Fluctuations in the level of groundwater may occur due to variations in rainfall, temperature, and other factors not evident at the time of the measurements reported herein. Fluctuations also may occur across the site. High groundwater levels can result in changed conditions.

Caving

Caving was not observed in the borings due to the continuously cased design of the hollowstem auger used by the drilling machine. However, based on the experience of this firm, large diameter excavations that encounter granular, cohesionless soils will most likely experience caving.

SEISMIC EVALUATION

REGIONAL GEOLOGIC SETTING

The subject site is located in the northern portion of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges are characterized by northwest-trending blocks of mountain ridges and sediment-floored valleys. The dominant geologic structural features are northwest trending fault zones that either die out to the northwest or terminate at east-trending reverse faults that form the southern margin of the Transverse Ranges.

REGIONAL FAULTING

Based on criteria established by the California Division of Mines and Geology (CDMG) now called California Geologic Survey (CGS), faults may be categorized as active, potentially active, or inactive. Active faults are those which show evidence of surface displacement within the last 11,000 years (Holocene-age). Potentially-active faults are those that show evidence of most recent surface displacement within the last 1.6 million years (Quaternary-age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive for most purposes, with the exception of design of some critical structures.

Buried thrust faults are faults without a surface expression but are a significant source of seismic activity. They are typically broadly defined based on the analysis of seismic wave recordings of hundreds of small and large earthquakes in the southern California area. Due to the buried nature of these thrust faults, their existence is usually not known until they produce an earthquake. The risk for surface rupture potential of these buried thrust faults is inferred to be low (Leighton, 1990). However, the seismic risk of these buried structures in terms of recurrence and maximum potential magnitude is not well established. Therefore, the potential for surface rupture on these surface-verging splays at magnitudes higher than 6.0 cannot be precluded.

SEISMIC HAZARDS AND DESIGN CONSIDERATIONS

The primary geologic hazard at the site is moderate to strong ground motion (acceleration) caused by an earthquake on any of the local or regional faults. The potential for other earthquake-induced hazards was also evaluated including surface rupture, liquefaction, dynamic settlement, inundation and landsliding.

Surface Rupture

In 1972, the Alquist-Priolo Special Studies Zones Act (now known as the Alquist-Priolo Earthquake Fault Zoning Act) was passed into law. The Act defines "active" and "potentially active" faults utilizing the same aging criteria as that used by California Geological Survey (CGS). However, established state policy has been to zone only those faults which have direct evidence of movement within the last 11,000 years. It is this recency of fault movement that the CGS considers as a characteristic for faults that have a relatively high potential for ground rupture in the future.

CGS policy is to delineate a boundary from 200 to 500 feet wide on each side of the known fault trace based on the location precision, the complexity, or the regional significance of the fault. If a site lies within an Earthquake Fault Zone, a geologic fault rupture investigation must be performed that demonstrates that the proposed building site is not threatened by surface displacement from the fault before development permits may be issued.

Ground rupture is defined as surface displacement which occurs along the surface trace of the causative fault during an earthquake. Based on research of available literature, review of the enclosed City of Pasadena Fault Map, and results of site reconnaissance, no known active or potentially active faults underlie the subject site. In addition, the subject site is not located within an Alquist-Priolo Earthquake Fault Zone. Based on these considerations, the potential for surface ground rupture at the subject site is considered low.

Liquefaction

Liquefaction is a phenomenon in which saturated silty to cohesionless soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures.

Review of the California Seismic Hazards Zones Map for the Pasadena Quadrangle (CDMG 1999), indicates that the subject site is not located within a "Liquefiable" area. This determination is based on groundwater records, soil type and distance to a fault capable of producing a substantial earthquake. A copy of this map has been enclosed to this report.

Groundwater was not encountered during exploration, conducted to a maximum depth of 70 feet below the existing site grade. The historically highest groundwater level for the site is reported to be on the order of 90 feet below grade. Based on the density of the soils underlying the site, and the mapped depth to the historically highest groundwater level, the soils underlying the site are not considered capable of liquefaction during the ground motion expected during the design-based earthquake.

Dynamic Dry Settlement

Seismically-induced settlement or compaction of dry or moist, cohesionless soils can be an effect related to earthquake ground motion. Such settlements are typically most damaging when the settlements are differential in nature across the length of structures.

Some seismically-induced settlement of the proposed structures should be expected as a result of strong ground-shaking, however, due to the uniform nature of the underlying geologic materials, excessive differential settlements are not expected to occur.

Tsunamis, Seiches and Flooding

Tsunamis are large ocean waves generated by sudden water displacement caused by a submarine earthquake, landslide, or volcanic eruption. The site is high enough and far enough from the ocean to preclude being prone to hazards of a tsunami.

Seiches are oscillations generated in enclosed bodies of water which can be caused by ground shaking associated with an earthquake. Review of the County of Los Angeles Flood and Inundation Hazards Map, Leighton (1990), indicates the site does not lie within mapped inundation boundaries due to a seiche or a breached upgradient reservoir.

Landsliding

The probability of seismically-induced landslides occurring on the site is considered to be low due to the general lack of elevation difference across or adjacent to the site.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the exploration, laboratory testing, and research, it is the finding of Geotechnologies, Inc. that construction of the proposed structure is considered feasible from a geotechnical engineering standpoint provided the advice and recommendations presented herein are followed and implemented during construction.

During exploration, fill materials were encountered to depths ranging between 3 and 5 feet below the existing site grade. Groundwater was not encountered to the maximum excavated depth of 70 feet below the existing grade. The historically highest groundwater level for the site is reported at a depth of 90 feet.

The existing fill materials are unsuitable for support of new foundations and concrete slabs-on-grade. However, it is anticipated that the existing fill will be removed during excavation for the proposed subterranean parking levels. The exact depth of the proposed subterranean levels is unknown at this time. However, it is estimated that the finished floor of the lowest subterranean level will extend to an approximate depth of 24 feet below the existing site grade. The proposed structure may be supported by conventional foundations bearing in the native alluvial soils expected at the subgrade of the proposed subterranean levels.

The proposed subterranean levels will extend adjacent to the property lines. Therefore the excavation for the proposed subterranean levels will require temporary shoring in order to provide a stable excavation. Shoring recommendations are provided in the "Excavations" section of this report.

The validity of the conclusions and design recommendations presented herein is dependent upon review of the geotechnical aspects of the proposed construction by this firm. The subsurface conditions described herein have been projected from excavations on the site as indicated and should in no way be construed to reflect any variations which may occur between these excavations or which may result from changes in subsurface conditions. Any changes in the design, as outlined in this report, should be reviewed by this office. The recommendations contained herein should not be considered valid until reviewed and modified or reaffirmed subsequent to such review.

SEISMIC DESIGN CONSIDERATIONS

2016 California Building Code Seismic Parameters

Based on information derived from the subsurface investigation, the subject site is classified as Site Class D, which corresponds to a "Stiff Soil" Profile, according to Table 20.3-1 of ASCE 7-10. This information and the site coordinates were input into the USGS U.S. Seismic Design Maps tool (Version 3.1.0) to calculate the ground motions for the site.

2016 CALIFORNIA BUILDING CODE SEISMIC PARAMETERS	
Site Class	D
Mapped Spectral Acceleration at Short Periods (S_S)	2.809g
Site Coefficient (F_a)	1.0
Maximum Considered Earthquake Spectral Response for Short Periods (S_{MS})	2.809g
Five-Percent Damped Design Spectral Response Acceleration at Short Periods (S_{DS})	1.872g
Mapped Spectral Acceleration at One-Second Period (S_1)	0.997g
Site Coefficient (F_v)	1.5
Maximum Considered Earthquake Spectral Response for One-Second Period (S_{M1})	1.495g
Five-Percent Damped Design Spectral Response Acceleration for One-Second Period (S_{D1})	0.997g

Deaggregated Seismic Source Parameters

The peak ground acceleration (PGA) and modal magnitude were obtained from the USGS Probabilistic Seismic Hazard Deaggregation program (USGS, 2008). The results are based on a 2 percent in 50 years ground motion (2,475 year return period). A shear wave velocity of 260 meters per second, selected from published values, was utilized for Vs30 (Tinsley and Fumal, 1985). The deaggregation program indicates a PGA of 0.96g and a modal magnitude of 6.5 for the site.

EXPANSIVE SOILS

The onsite geologic materials are in the very low expansion range. The Expansion Index was found to be between 7 and 10 for bulk samples representative of the site soils. Recommended reinforcing is noted in the "Foundation Design" and "Slabs on Grade" sections of this report.

WATER-SOLUBLE SULFATES

The Portland cement portion of concrete is subject to attack when exposed to water-soluble sulfates. Usually the two most common sources of exposure are from soil and marine environments.

The sources of natural sulfate minerals in soils include the sulfates of calcium, magnesium, sodium, and potassium. When these minerals interact and dissolve in subsurface water, a sulfate concentration is created, which will react with exposed concrete. Over time sulfate attack will destroy improperly proportioned concrete well before the end of its intended service life.

The water-soluble sulfate content of the onsite geologic materials was tested by California Test 417. The water-soluble sulfate content was determined to be less than 0.1% percentage by weight for the soils tested. Based on American Concrete Institute (ACI) Standard 318-08, the sulfate exposure is considered to be negligible for geologic materials with less than 0.1% and Type I cement may be utilized for concrete foundations in contact with the site soils.

GRADING GUIDELINES

The following guidelines are provided for any miscellaneous compaction that may be required, such as retaining wall or trench backfill, or subgrade preparation.

Site Preparation

- A thorough search should be made for possible underground utilities and/or structures. Any existing or abandoned utilities or structures located within the footprint of the proposed grading should be removed or relocated as appropriate.

- All vegetation, existing fill, and soft or disturbed geologic materials should be removed from the areas to receive controlled fill. All existing fill materials and any disturbed geologic materials resulting from grading operations shall be completely removed and properly recompacted prior to foundation excavation.

- Any vegetation or associated root system located within the footprint of the proposed structures should be removed during grading.

- Subsequent to the indicated removals, the exposed grade shall be scarified to a depth of six inches, moistened to optimum moisture content, and recompacted in excess of the minimum required comparative density.

- The excavated areas shall be observed by the geotechnical engineer prior to placing compacted fill.

Compaction

All fill should be mechanically compacted in layers not more than 8 inches thick. The materials placed should be moisture conditions to within 3 percent of the optimum moisture content of the particular material placed. All fill shall be compacted to at least 90 percent of the maximum laboratory density for the materials used. The maximum density shall be determined by the laboratory operated by Geotechnologies, Inc. in general accordance with the most recent revision of ASTM D 1557.

Field observation and testing shall be performed by a representative of the geotechnical engineer during grading to assist the contractor in obtaining the required degree of compaction and the proper moisture content. Where compaction is less than required, additional compactive effort shall be made with adjustment of the moisture content, as necessary, until a minimum of 90 percent compaction is obtained.

Acceptable Materials

The excavated onsite materials are considered satisfactory for reuse in the controlled fills as long as any debris and/or organic matter is removed. Any imported materials shall be observed and tested by the representative of the geotechnical engineer prior to use in fill areas. Imported materials should contain sufficient fines so as to be relatively impermeable and result in a stable subgrade when compacted. Any required import materials should consist of geologic materials with an expansion index of less than 50. The water-soluble sulfate content of the import materials should be less than 0.1% percentage by weight.

Imported materials should be free from chemical or organic substances which could affect the proposed development. A competent professional should be retained in order to test imported materials and address environmental issues and organic substances which might affect the proposed development.

Utility Trench Backfill

Utility trenches should be backfilled with controlled fill. The utility should be bedded with clean sands at least one foot over the crown. The remainder of the backfill may be onsite soil compacted to 90 percent of the laboratory maximum density. Utility trench backfill should be tested by representatives of this firm in general accordance with the most recent revision of ASTM D 1557.

Shrinkage

Shrinkage results when a volume of soil removed at one density is compacted to a higher density. A shrinkage factor between 5 and 15 percent should be anticipated when excavating and recompacting the existing fill and underlying native geologic materials on the site to an average comparative compaction of 92 percent.

Weather Related Grading Considerations

When rain is forecast all fill that has been spread and awaits compaction shall be properly compacted prior to stopping work for the day or prior to stopping due to inclement weather. These fills, once compacted, shall have the surface sloped to drain to an area where water can be removed.

Temporary drainage devices should be installed to collect and transfer excess water to the street in non-erosive drainage devices. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. Drainage should not be allowed to flow uncontrolled over any descending slope.

Work may start again, after a period of rainfall, once the site has been reviewed by a representative of this office. Any soils saturated by the rain shall be removed and aerated so that the moisture content will fall within three percent of the optimum moisture content.

Surface materials previously compacted before the rain shall be scarified, brought to the proper moisture content and recompacted prior to placing additional fill, if considered necessary by a representative of this firm.

Geotechnical Observations and Testing During Grading

Geotechnical observations and testing during grading are considered to be a continuation of the geotechnical investigation. It is critical that the geotechnical aspects of the project be reviewed by representatives of Geotechnologies, Inc. during the construction process. Compliance with the design concepts, specifications or recommendations during construction requires review by this firm during the course of construction. Any fill which is placed should be observed, tested, and verified if used for engineered purposes. Please advise this office at least twenty-four hours prior to any required site visit.

FOUNDATION DESIGN

Conventional

The proposed structure may be supported by conventional foundations bearing in the native alluvial soils expected at the subgrade of the proposed subterranean levels. Continuous foundations may be designed for a bearing capacity of 3,500 pounds per square foot, and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended native alluvial soils.

Column foundations may be designed for a bearing capacity of 4,000 pounds per square foot, and should be a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended native alluvial soils.

The bearing capacity increase for each additional foot of width is 400 pounds per square foot. The bearing capacity increase for each additional foot of depth is 800 pounds per square foot. The maximum recommended bearing capacity is 8,000 pounds per square foot.

The bearing capacities indicated above are for the total of dead and frequently applied live loads, and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces.

Miscellaneous Foundations

Conventional foundations for structures such as privacy walls or trash enclosures which will not be rigidly connected to the proposed structure may bear in native alluvial soils, or in properly compacted fill materials. Continuous footings may be designed for a bearing capacity of 2,000 pounds per square foot, and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended bearing material. No bearing capacity increases are recommended.

Since the recommended bearing capacity is a net value, the weight of concrete in the foundations may be taken as 50 pounds per cubic foot and the weight of the soil backfill may be neglected when determining the downward load on the foundations.

Foundation Reinforcement

All continuous foundations should be reinforced with a minimum of four #4 steel bars. Two should be placed near the top of the foundation, and two should be placed near the bottom.

Lateral Design

Resistance to lateral loading may be provided by friction acting at the base of foundations and by passive earth pressure. An allowable coefficient of friction of 0.45 may be used with the dead load forces.

Passive geologic pressure for the sides of foundations poured against undisturbed or recompacted soil may be computed as an equivalent fluid having a density of 300 pounds per cubic foot with a maximum earth pressure of 1,800 pounds per square foot.

The passive and friction components may be combined for lateral resistance without reduction. A one-third increase in the passive value may be used for short duration loading such as wind or seismic forces.

Foundation Settlement

Settlement of the foundation system is expected to occur on initial application of loading. The maximum settlement is expected to be 1 inch and occur below the heaviest loaded columns. Differential settlement is not expected to exceed ½-inch.

Foundation Observations

It is critical that all foundation excavations are observed by a representative of this firm to verify penetration into the recommended bearing materials. The observation should be performed prior to the placement of reinforcement. Foundations should be deepened to extend into satisfactory geologic materials, if necessary.

Foundation excavations should be cleaned of all loose soils prior to placing steel and concrete. Any required foundation backfill should be mechanically compacted, flooding is not permitted.

RETAINING WALL DESIGN

Based on the estimated depth of the subterranean levels, it is anticipated that retaining walls up to 24 feet in height may be required for the project. As a precautionary measure, recommendations for the design of underground retaining walls up to a height of 26 feet have been provided herein. Retaining walls may be designed as indicated below, depending on whether the walls will be restrained or cantilevered. Retaining wall foundations may be designed in accordance with the provisions of the "Foundation Design" section of this report.

Additional pressure should be added to the retaining wall design, for a surcharge condition due to vehicular traffic or adjacent structures. It is anticipated that the proposed retaining walls may be surcharged by the existing church structure and office building located to the south of the site.

Information regarding the depth, configuration and loading of adjacent foundations will be required in order to determine the additional surcharge loading.

Vehicular traffic is expected in the vicinity of the proposed structure. For traffic surcharge, the upper 10 feet of any retaining wall adjacent to streets, driveways or parking areas should be designed to resist a uniform lateral pressure of 100 pounds per square foot, acting as a result of an assumed 300 pounds per square foot traffic surcharge. If the traffic is more than 10 feet from the retaining walls, the traffic surcharge may be neglected.

Restrained Retaining Walls

Restrained subterranean retaining walls up to 26 feet in height and supporting a level back slope may be designed to resist a triangular distribution of earth pressure. It is recommended the walls be designed to resist the greater of the at-rest pressure, or the active pressure plus the seismic pressure, as discussed in the "Dynamic (Seismic) Earth Pressure" section below.

RESTRAINED BASEMENT WALLS		
	AT-REST EARTH PRESSURE	**ACTIVE EARTH PRESSURE *(To be Combined with Dynamic Seismic Earth Pressure)**
Height of Wall (Feet)	Triangular Distribution of Pressure (Pounds per Cubic Foot)	Triangular Distribution of Pressure (Pounds per Cubic Foot)*
Up to 26 feet	59	47

The lateral earth pressure recommended above for retaining walls assumes that a permanent drainage system will be installed so that external water pressure will not be developed against the walls. Also, where necessary, the retaining walls should be designed to accommodate any surcharge pressures that may be imposed by adjacent traffic and existing structures.

Dynamic (Seismic) Earth Pressure

For walls greater than 6 feet in height, retaining wall design shall consider the additional earth pressure caused by seismic ground shaking. A normal triangular pressure distribution should be utilized for the additional seismic loads, with an equivalent fluid pressure of 25 pounds per cubic foot. The seismic earth pressure should be combined with the lateral active earth pressure for analyses of restrained basement walls under seismic loading condition when using the load combination equations provided in the building code.

Miscellaneous Cantilever Retaining Walls

Miscellaneous retaining walls supporting a level backslope may be designed utilizing a triangular distribution of pressure. Cantilever retaining walls may be designed utilizing the following table:

HEIGHT OF WALL (feet)	EQUIVALENT FLUID PRESSURE (pounds per cubic foot)
Up to 8	30
8 to 12	38

The lateral earth pressures recommended assume that a permanent drainage system will be installed so that external water pressure will not be developed against the walls. Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent structures. In addition, cantilever walls greater than 6 feet in height shall be designed to resist the seismic earth pressure indicated in the previous "Dynamic (Seismic) Earth Pressure" section.

Retaining Wall Drainage

All retaining walls shall be provided with a subdrain system in order to minimize the potential for future hydrostatic pressure buildup behind the proposed retaining walls. Subdrains may consist of four-inch diameter perforated pipes, placed with perforations facing down. The pipe shall be encased in at least one-foot of gravel around the pipe. The gravel shall be wrapped in filter fabric. The gravel may consist of three-quarter inch to one inch crushed rocks.

As an alternative to the standard perforated subdrain pipe and gravel drainage system, the use of gravel pockets and weepholes is an acceptable drainage method. Weepholes shall be a minimum of 4 inches in diameter, placed at 8 feet on center along the base of the wall. Gravel pockets shall be a minimum of 1 cubic foot in dimension, and may consist of three-quarter inch to one inch crushed rocks, wrapped in filter fabric. A collector pipe shall be installed to direct collected waters to a sump

Certain types of subdrain pipe are not acceptable to the various municipal agencies, it is recommended that prior to purchasing subdrainage pipe, the type and brand is cleared with the proper municipal agencies. Subdrainage pipes should outlet to an acceptable location.

The lateral earth pressures recommended above for retaining walls assume that a permanent drainage system will be installed so that external water pressure will not be developed against the walls. If a drainage system is not provided, the walls should be designed to resist an external hydrostatic pressure due to water in addition to the lateral earth pressure. In any event, it is recommended that retaining walls be waterproofed.

Sump Pump Design

The purpose of the recommended retaining wall backdrainage system is to relieve hydrostatic pressure. Groundwater was not encountered during exploration, conducted to a depth of 70 feet below the existing grade. Based on the depth of the proposed development, the only water which could affect the proposed retaining walls would be irrigation water and precipitation. Additionally, the proposed site grading is such that all drainage is directed to the street and the structure has been designed with adequate non-erosive drainage devices.

Based on these considerations the retaining wall backdrainage system is not expected to experience an appreciable flow of water, and in particular, no groundwater will affect it. However, for the purposes of design, a flow of 5 gallons per minute may be assumed.

Waterproofing

Moisture effecting retaining walls is one of the most common post construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water inside the building. Efflorescence is a process in which a powdery substance is produced on the surface of the concrete by the evaporation of water. The white powder usually consists of soluble salts such as gypsum, calcite, or common salt. Efflorescence is common to retaining walls and does not affect their strength or integrity.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method which would provide protection to below grade walls.

Retaining Wall Backfill

Any required backfill should be mechanically compacted in layers not more than 8 inches thick, to at least 90 percent relative compaction, obtainable by the most recent revision of ASTM D 1557 method of compaction. Flooding should not be permitted. Compaction within 5 feet, measured horizontally, behind a retaining structure should be achieved by use of light weight, hand operated compaction equipment.

Proper compaction of the backfill will be necessary to reduce settlement of overlying walks and paving. Some settlement of required backfill should be anticipated, and any utilities supported therein should be designed to accept differential settlement.

TEMPORARY EXCAVATIONS

Excavations up to a depth of 28 feet may be required for construction of the proposed subterranean levels and foundation elements. The excavations are expected to expose fill and dense native soils, which are suitable for vertical excavations up to 5 feet where not surcharged by adjacent traffic or structures. Vertical excavations exceeding 5 feet, or excavations which will be surcharged by adjacent traffic or structures should be shored.

Where sufficient space is available, temporary unsurcharged embankments could be cut at a uniform 1:1 slope gradient to a maximum depth of 20 feet, and at a uniform 1½:1 (H:V) slope gradient to a maximum depth of 28 feet. A uniform sloped excavation is sloped from bottom to top and does not have a vertical component.

Where sloped embankments are utilized, the tops of the slopes should be barricaded to prevent vehicles and storage loads near the top of slope within a horizontal distance equal to the depth of the excavation. If the temporary construction embankments are to be maintained during the rainy season, berms are strongly recommended along the tops of the slopes to prevent runoff water from entering the excavation and eroding the slope faces. Water should not be allowed to pond on top of the excavation nor to flow towards it.

Excavation Observations

It is critical that the soils exposed in the cut slopes are observed by a representative of Geotechnologies, Inc. during excavation so that modifications of the slopes can be made if variations in the geologic material conditions occur. Many building officials require that temporary excavations should be made during the continuous observations of the geotechnical engineer. All excavations should be stabilized within 30 days of initial excavation.

SHORING DESIGN

The following information on the design and installation of the shoring is as complete as possible at this time. It is suggested that Geotechnologies, Inc. review the final shoring plans and specifications prior to bidding or negotiating with a shoring contractor.

One method of shoring would consist of steel soldier piles, placed in drilled holes and backfilled with concrete. The soldier piles may be designed as cantilevers or laterally braced utilizing drilled tied-back anchors or raker braces.

Soldier Piles

Drilled cast-in-place soldier piles should be placed no closer than 2 diameters on center. The minimum diameter of the piles is 18 inches. Structural concrete should be used for the soldier piles below the excavation; lean-mix concrete may be employed above that level. As an alternative, lean-mix concrete may be used throughout the pile where the reinforcing consists of a wideflange section. The slurry must be of sufficient strength to impart the lateral bearing pressure developed by the wideflange section to the geologic materials. For design purposes, an allowable passive value for the geologic materials below the bottom plane of excavation may be assumed to be 500 pounds per square foot per foot, up to a maximum of 3,000 pounds per square foot. To develop the full lateral value, provisions should be implemented to assure firm contact between the soldier piles and the undisturbed geologic materials.

The frictional resistance between the soldier piles and retained geologic material may be used to resist the vertical component of the anchor load. The coefficient of friction may be taken as 0.4 based on uniform contact between the steel beam and lean-mix concrete and retained earth. The portion of soldier piles below the plane of excavation may also be employed to resist the downward loads. The downward capacity may be determined using a frictional resistance of 500 pounds per square foot. The minimum depth of embedment for shoring piles is 5 feet below the bottom of the footing excavation or 7 feet below the bottom of excavated plane whichever is deeper.

Caving should be expected to occur during drilling in the native granular soils underlaying the site. Where caving occurs, it will be necessary to utilize casing or polymer drilling fluid to maintain open pile shafts. If casing is used, extreme care should be employed so that the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than 5 feet. Large sized materials should also be anticipated during drilling (i.e. gravels and cobbles).

Lagging

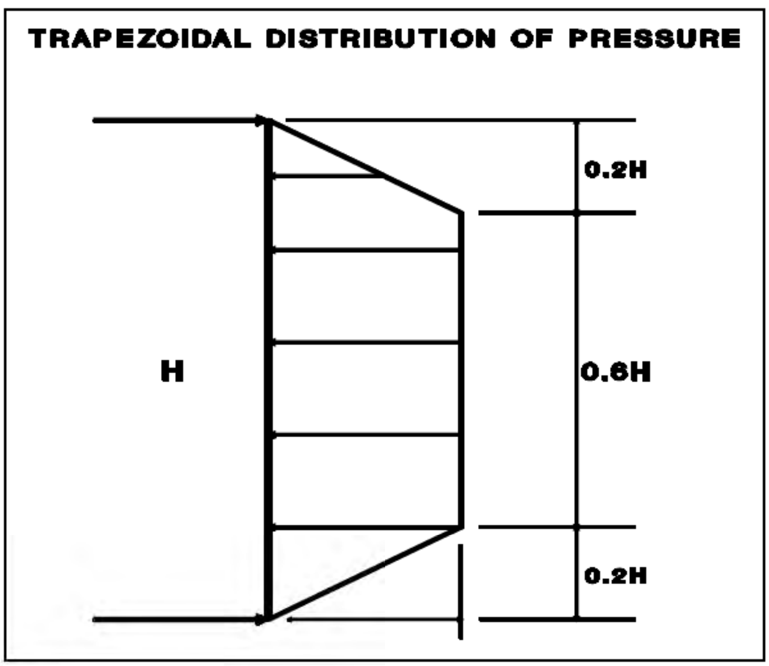
Soldier piles and anchors should be designed for the full anticipated pressures. Due to arching in the geologic materials, the pressure on the lagging will be less. It is recommended that the lagging should be designed for the full design pressure but is limited to a maximum of 400 pounds per square foot. It is recommended that a representative of this firm observe the installation of lagging to insure uniform support of the excavated embankment.

Lateral Pressures

Cantilevered shoring supporting a level backslope may be designed utilizing a triangular distribution of pressure as indicated in the following table:

HEIGHT OF SHORING "H" **(feet)**	**EQUIVALENT FLUID PRESSURE** **(pounds per cubic foot)**
Up to 12	29
12 to 20	36
20 to 28	39

A trapezoidal distribution of lateral earth pressure would be appropriate where shoring is to be restrained at the top by bracing or tie backs, with the trapezoidal distribution as shown in the diagram below.



Restrained shoring supporting a level backslope may be designed utilizing a trapezoidal distribution of pressure as indicated in the following table:

HEIGHT OF SHORING "H" (feet)	DESIGN SHORING FOR (Where H is the height of the wall)
Up to 12	19H
12 to 20	23H
20 to 28	25H

Where a combination of sloped embankment and shoring is utilized, the pressure will be greater and must be determined for each combination. Additional active pressure should be applied where the shoring will be surcharged by adjacent traffic or structures.

Tied-Back Anchors

Tied-back anchors may be used to resist lateral loads. Friction anchors are recommended. For design purposes, it may be assumed that the active wedge adjacent to the shoring is defined by a plane drawn 35 degrees with the vertical through the bottom plane of the excavation. Friction anchors should extend a minimum of 20 feet beyond the potentially active wedge. Anchors should be placed at least 6 feet on center to be considered isolated.

Drilled friction anchors may be designed for a skin friction of 500 pounds per square foot. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads. Where belled anchors are utilized, the capacity of belled anchors may be designed by applying the skin friction over the surface area of the bonded anchor shaft. The diameter of the bell may be utilized as the diameter of the bonded anchor shaft when determining the surface area. This implies that in order for the belled anchor to fail, the entire parallel soil column must also fail.

Depending on the techniques utilized, and the experience of the contractor performing the installation, it is anticipated that a skin friction of 2,000 pounds per square foot could be utilized for post-grouted anchors. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads.

Anchor Installation

Tied-back anchors may be installed between 20 and 45 degrees below the horizontal. Caving of the anchor shafts, particularly within saturated sand deposits, should be anticipated and the following provisions should be implemented in order to minimize such caving. The anchor shafts should be filled with concrete by pumping from the tip out, and the concrete should extend from the tip of the anchor to the active wedge. In order to minimize the chances of caving, it is recommended that the portion of the anchor shaft within the active wedge be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill should be placed by pumping; the sand may contain a small amount of cement to facilitate pumping.

Tieback Anchor Testing

At least 10 percent of the anchors should be selected for “Quick”, 200 percent tests. It is recommended that at least three of these anchors be selected for 24-hour, 200 percent tests. It is recommended that the 24-hour tests be performed prior to installation of additional tiebacks. The purpose of the 200 percent tests is to verify the friction value assumed in design. The anchors should be tested to develop twice the assumed friction value. Where satisfactory tests are not achieved on these initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

The total deflection during the 24-hour 200 percent test should not exceed 12 inches. During the 24-hour tests, the anchor deflection should not exceed 0.75 inches measured after the 200 percent test load is applied.

For the "quick" 200 percent tests, the 200 percent test load should be maintained for 30 minutes. The total deflection of the anchor during the 200 percent quick tests should not exceed 12 inches;

the deflection after the 200 percent load has been applied should not exceed 0.25 inch during the 30-minute period.

All of the remaining anchors should be tested to at least 150 percent of design load. The total deflection during the 150 percent test should not exceed 12 inches. The rate of creep under the 150 percent test load should not exceed 0.1 inch over a 15 minute period in order for the anchor to be approved for the design loading.

After a satisfactory test, each anchor should be locked-off at the design load. This should be verified by rechecking the load in the anchor. The load should be within 10 percent of the design load. Where satisfactory tests are not attained, the anchor diameter and/or length should be increased or additional anchors installed until satisfactory test results are obtained. Where post-grouted anchors are utilized, additional post-grouting may be required. The installation and testing of the anchors should be observed by a representative of the soils engineer.

Internal Bracing

Rakers may be utilized to brace the soldier piles in lieu of tieback anchors. The raker bracing could be supported laterally by temporary concrete footings (deadmen) or by the permanent interior footings. An allowable bearing pressure of 4,000 pounds per square foot may be used for the design a raker foundations. This bearing pressure is based on a raker foundation a minimum of 24 inches in width and length as well as 18 inches in depth into native alluvial soils. The base of the raker foundations should be horizontal. Care should be employed in the positioning of raker foundations so that they do not interfere with the foundations for the proposed structure.

Deflection

It is difficult to accurately predict the amount of deflection of a shored embankment. It should be realized that some deflection will occur. It is recommended that shoring deflection be limited to

½ inch at the top of the shored embankment where a structure is within a 1:1 plane projected up from the base of the excavation. A maximum deflection of 1-inch has been allowed, provided there are no structures within a 1:1 plane drawn upward from the base of the excavation. If greater deflection occurs during construction, additional bracing may be necessary to minimize settlement of adjacent buildings and utilities in adjacent street and alleys. If desired to reduce the deflection, a greater active pressure could be used in the shoring design.

Monitoring

Because of the depth of the excavation, some means of monitoring the performance of the shoring system is suggested. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all soldier piles and the lateral movement along the entire lengths of selected soldier piles. Also, some means of periodically checking the load on selected anchors will be necessary, where applicable.

Some movement of the shored embankments should be anticipated as a result of the relatively deep excavation. It is recommended that photographs of the existing buildings on the adjacent properties be made during construction to record any movements for use in the event of a dispute.

Shoring Observations

It is critical that the installation of shoring is observed by a representative of Geotechnologies, Inc. Many building officials require that shoring installation should be performed during continuous observation of a representative of the geotechnical engineer. The observations insure that the recommendations of the geotechnical report are implemented and so that modifications of the recommendations can be made if variations in the geologic material or groundwater conditions warrant. The observations will allow for a report to be prepared on the installation of shoring for the use of the local building official, where necessary.

SLABS ON GRADE

Concrete Slabs-on Grade

Concrete floor slabs should be a minimum of 5 inches in thickness. Slabs-on-grade should be cast over undisturbed native alluvial soils or properly controlled fill materials. Any geologic materials loosened or over-excavated should be wasted from the site or properly compacted to 90 percent of the maximum dry density.

Outdoor concrete flatwork should be a minimum of 4 inches in thickness. Outdoor concrete flatwork should be cast over undisturbed native alluvial soils or properly controlled fill materials. Any geologic materials loosened or over-excavated should be wasted from the site or properly compacted to 90 percent of the maximum dry density.

Design of Slabs That Receive Moisture-Sensitive Floor Coverings

Geotechnologies, Inc. does not practice in the field of moisture vapor transmission evaluation and mitigation. Therefore it is recommended that a qualified consultant be engaged to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. The qualified consultant should provide recommendations for mitigation of potential adverse impacts of moisture vapor transmission on various components of the structure.

Where dampness would be objectionable, it is recommended that the floor slabs should be waterproofed. A qualified waterproofing consultant should be retained in order to recommend a product or method which would provide protection for concrete slabs-on-grade.

All concrete slabs-on-grade should be supported on vapor retarder. The design of the slab and the installation of the vapor retarder should comply with the most recent revisions of ASTM E 1643 and ASTM E 1745. The vapor retarder should comply with ASTM E 1745 Class A requirements.

Where a vapor retarder is used, a low-slump concrete should be used to minimize possible curling of the slabs. The barrier can be covered with a layer of trimmable, compactible, granular fill, where it is thought to be beneficial. If this granular fill layer is installed, it should be a minimum of two inches in thickness. See ACI 302.2R-32, Chapter 7 for information on the placement of vapor retarders and the use of a fill layer.

Concrete Crack Control

The recommendations presented in this report are intended to reduce the potential for cracking of concrete slabs-on-grade due to settlement. However even where these recommendations have been implemented, foundations, stucco walls and concrete slabs-on-grade may display some cracking due to minor soil movement and/or concrete shrinkage. The occurrence of concrete cracking may be reduced and/or controlled by limiting the slump of the concrete used, proper concrete placement and curing, and by placement of crack control joints at reasonable intervals, in particular, where re-entrant slab corners occur.

For standard control of concrete cracking, a maximum crack control joint spacing of 15 feet should not be exceeded. Lesser spacings would provide greater crack control. Joints at curves and angle points are recommended. The crack control joints should be installed as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. Construction joints should be designed by a structural engineer.

Complete removal of the existing fill soils beneath outdoor flatwork such as walkways or patio areas, is not required, however, due to the rigid nature of concrete, some cracking, a shorter design life and increased maintenance costs should be anticipated. In order to provide uniform support beneath the flatwork it is recommended that a minimum of 12 inches of the exposed subgrade beneath the flatwork be scarified and recompacted to 90 percent relative compaction.

Slab Reinforcing

Concrete slabs-on-grade should be reinforced with a minimum of #3 steel bars on 18-inch centers each way. Outdoor flatwork should be reinforced with a minimum of #3 steel bars on 24-inch centers each way.

PAVEMENTS

Prior to placing paving, the existing grade should be scarified to a depth of 12 inches, moistened as required to obtain optimum moisture content, and recompacted to 90 percent of the maximum density as determined by the most recent revision of ASTM D 1557. The client should be aware that removal of all existing fill in the area of new paving is not required, however, pavement constructed in this manner will most likely have a shorter design life and increased maintenance costs. The following pavement sections are recommended:

Service	Asphalt Pavement Thickness Inches	Base Course Inches
Passenger Car Traffic	3	4
Medium Truck Traffic	4	6

Concrete paving may also be utilized for the project. For concrete paving, the following sections are recommended:

Service	Concrete Pavement Thickness Inches	Base Course Inches
Passenger Car and Medium Truck Traffic	6	4

Aggregate base should be compacted to a minimum of 95 percent of the most recent revision of ASTM D 1557 laboratory maximum dry density. Base materials should conform to Sections 200-

2.2 or 200-2.4 of the "Standard Specifications for Public Works Construction", (Green Book), latest edition.

For standard crack control maximum expansion joint spacing of 15 feet should not be exceeded. Lesser spacings would provide greater crack control. Joints at curves and angle points are recommended. The crack control joints should be installed as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. Construction joints should be designed by a structural engineer. Concrete paving should be reinforced with a minimum of #3 steel bars on 24-inch centers each way.

The performance of pavement is highly dependent upon providing positive surface drainage away from the edges. Ponding of water on or adjacent to pavement can result in saturation of the subgrade materials and subsequent pavement distress. If planter islands are planned, the perimeter curb should extend a minimum of 12 inches below the bottom of the aggregate base.

SITE DRAINAGE

Proper surface drainage is critical to the future performance of the project. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Proper site drainage should be maintained at all times.

All site drainage, with the exception of any required to disposed of onsite by stormwater regulations, should be collected and transferred to the street in non-erosive drainage devices. The proposed structure should be provided with roof drainage. Discharge from downspouts, roof drains and scuppers should not be permitted on unprotected soils within five feet of the building perimeter. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. Drainage should not be allowed to flow uncontrolled over any descending slope. Planters which are located within a distance equal to the depth of a retaining wall should be sealed to prevent moisture adversely affecting the wall. Planters which are located within five feet of a foundation should be sealed to prevent moisture affecting the earth materials supporting the foundation.

STORMWATER DISPOSAL

Introduction

Recently regulatory agencies have been requiring the disposal of a certain amount of stormwater generated on a site by infiltration into the site soils. Increasing the moisture content of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. This means that any overlying structure, including buildings, pavements and concrete flatwork, could sustain damage due to saturation of the subgrade soils. Structures serviced by subterranean levels could be adversely impacted by stormwater disposal by increasing the design fluid pressures on retaining walls and causing leaks in the walls. Proper site drainage is critical to the performance of any structure in the built environment.

The Proposed System

Due to the preliminary stage of the project, the type and location of any potential stormwater disposal system has not been specifically addressed for the proposed development. It is however anticipated that the infiltration system may consist of a drywell system. Since the proposed structure will extend to the property lines, it is anticipated that the drywell would be installed at the bottom of the lowest subterranean level.

The final location and design of the proposed infiltration system shall be reviewed and approved by this office prior to construction to evaluate whether the intent of the recommendations provided by this firm are satisfied.

Percolation Testing

Percolation testing was conducted in Boring B1, following the test procedure for boring percolation provided in the Guidelines for Design, Investigation and Reporting Low Impact Development Stormwater Infiltration (GS200.1), dated December 31, 2014, presented in the Administrative Manual for the County of Los Angeles, Department of Public Works, Geotechnical and Material Engineering Division.

Boring B1 was drilled to a depth of 70 feet below the existing grade. At the completion of drilling of the boring, a 2-inch diameter casing was placed within the center of the borehole for the purpose of conducting percolation testing. The casing consisted of a slotted PVC pipe within the lower 30 feet of the borehole, and solid PVC pipe to the top of the borehole. A sand pack consisting of #3 Monterey Sand was poured into the annular space around the slotted portion of the casing. A 1-foot thick, hydrated bentonite seal was placed over the sand and drill cuttings were placed to the ground surface.

Prior to testing, the borehole was filled with water for the purpose of pre-soaking for 4 hours. After presoaking, the borehole was refilled with water, and the rate of drop in the water level was measured. The percolation test readings were recorded a minimum of 8 times or until a stabilized rate of drop was obtained, whichever occurred first.

The table below summarizes the results of the infiltration rate derived from the testing. This rate includes correction factors (R_f, CF_v, and CF_s), as required by the County of Los Angeles procedure. Field readings and calculations from this boring may be found in the Appendix.

Percolation Testing Boring No.	Depth of Boring Below Existing Ground Surface (ft.)	Percolation Testing Conducted Between Depths (ft.):	Infiltration Rate (in./hr.)
B1	70	40 and 70	10.88

At the completion of the percolation testing, the PVC casing was removed from the percolation testing well, and the resulting hole was backfilled with on-site soils to the ground surface. An asphalt patch was placed.

Stormwater Disposal Recommendations

Based on the results of the exploration, testing and research, it is the finding of this firm that the use of a drywell system for the purpose of stormwater infiltration disposal is feasible from a geotechnical standpoint. The stormwater infiltration system is not expected to impact the neighboring or proposed developments, provided the advice and recommendations presented herein are implemented during design and construction.

The native site soils encountered during the geotechnical explorations conducted by this firm consist mainly of granular sandy soils suitable for stormwater infiltration. The potential for creating a perched water condition by infiltrating stormwater at the anticipated depth is considered remote. The previous section presents the anticipated infiltration rates of selected soil layers. These infiltration rates may be utilized by the civil engineer for the design of a stormwater infiltration system suitable for the project.

It is anticipated that the potential drywell system would be installed below the lowest subterranean level. Stormwater infiltration shall only occur below the primary zone of foundation influence. Based on the estimated structure loads, it is the determination of this firm that the primary zone of foundation influence extends to a depth of 20 feet below the bottom of the deepest foundation to be located adjacent to the potential drywell system. Therefore, it is recommended that stormwater infiltration should occur in the native alluvial soils located deeper than 20 feet below the bottom of the deepest adjacent foundation.

Soils located within the primary zone of foundation influence should not become wet or saturated as a result of the drywells. It is anticipated that a settling chamber will be installed within this primary zone of foundation influence; therefore the seams and bottom of the settling chamber should be adequately sealed to prevent infiltration at this zone.

It is recommended that any potential drywell is installed at least 20 feet away from a private property line. The drywells should be installed centered in between surrounding foundations. Depending on its final location, it is anticipated that the settling chamber of the drywell may be surcharged by proposed adjacent foundations, in which case the chamber should be designed to withstand this additional surcharge load. The final location of the proposed drywells shall be reviewed and approved by this office prior to construction.

Drilling for the proposed drywells will most likely encounter large sized materials (i.e. gravel and cobbles). Due to the granular nature of the site soils, caving may occur in the drilled shafts. The use of casing to maintain open shafts for installation of the drywells should be anticipated.

Stormwater infiltration must be conducted a minimum of 10 feet above the groundwater level. At the site, the historically highest groundwater level is mapped at a depth of 90 feet. Therefore, it is recommended that the bottom of any potential drywells does not extend deeper than 80 feet below the existing grade.

It is recommended that the design team, including the structural engineer, waterproofing consultant, plumbing engineer, environmental engineer and landscape architect be consulted in regards to the design and construction of filtration systems. The design and construction of stormwater infiltration systems is not the responsibility of the geotechnical engineer. However, based on the experience of this firm, it is recommended that several aspects of the use of such facilities should be considered by the design and construction team:

- All infiltration devices should be provided with overflow protection. Once the device is full of water, additional water flowing to the device should be diverted to another acceptable disposal area, or disposed offsite in an acceptable manner.

- All connections associated with stormwater infiltration systems should be sealed and water-tight. Water leaking into the subgrade soils can lead to loss of strength, piping, erosion, settlement and/or expansion of the effected earth materials.

- Excavations proposed for the installation of stormwater systems should comply with the "Temporary Excavations" sections of this geotechnical engineering investigation, as well as CalOSHA Regulations where applicable.

DESIGN REVIEW

Engineering of the proposed project should not begin until approval of the geotechnical report by the Building Official is obtained in writing. Significant changes in the geotechnical recommendations may result during the building department review process.

It is recommended that the geotechnical aspects of the project be reviewed by this firm during the design process. This review provides assistance to the design team by providing specific recommendations for particular cases, as well as review of the proposed construction to evaluate whether the intent of the recommendations presented herein are satisfied.

CONSTRUCTION MONITORING

Geotechnical observations and testing during construction are considered to be a continuation of the geotechnical investigation. It is critical that this firm review the geotechnical aspects of the project during the construction process. Compliance with the design concepts, specifications or recommendations during construction requires review by this firm during the course of construction. All foundations should be observed by a representative of this firm prior to placing concrete or steel. Any fill which is placed should be observed, tested, and verified if used for engineered purposes. Please advise Geotechnologies, Inc. at least twenty-four hours prior to any required site visit.

If conditions encountered during construction appear to differ from those disclosed herein, notify Geotechnologies, Inc. immediately so the need for modifications may be considered in a timely manner.

It is the responsibility of the contractor to ensure that all excavations and trenches are properly sloped or shored. All temporary excavations should be cut and maintained in accordance with applicable OSHA rules and regulations.

EXCAVATION CHARACTERISTICS

The exploration performed for this investigation is limited to the geotechnical excavations described. Direct exploration of the entire site would not be economically feasible. The owner, design team and contractor must understand that differing excavation and drilling conditions may be encountered based on boulders, gravel, oversize materials, groundwater and many other conditions. Fill materials, especially when they were placed without benefit of modern grading codes, regularly contain materials which could impede efficient grading and drilling. Southern California sedimentary bedrock is known to contain variable layers which reflect differences in depositional environment. Such layers may include abundant gravel, cobbles and boulders. Similarly bedrock can contain concretions. Concretions are typically lenticular and follow the bedding. They are formed by mineral deposits. Concretions can be very hard. Excavation and drilling in these areas may require full size equipment and coring capability. The contractor should be familiar with the site and the geologic materials in the vicinity.

CLOSURE AND LIMITATIONS

The purpose of this report is to aid in the design and completion of the described project. Implementation of the advice presented in this report is intended to reduce certain risks associated with construction projects. The professional opinions and geotechnical advice contained in this report are sought because of special skill in engineering and geology and were prepared in accordance with generally accepted geotechnical engineering practice. Geotechnologies, Inc. has a duty to exercise the ordinary skill and competence of members of the engineering profession. Those who hire Geotechnologies, Inc. are not justified in expecting infallibility, but can expect reasonable professional care and competence.

The scope of the geotechnical services provided did not include any environmental site assessment for the presence or absence of organic substances, hazardous/toxic materials in the soil, surface water, groundwater, or atmosphere, or the presence of wetlands.

Proper compaction is necessary to reduce settlement of overlying improvements. Some settlement of compacted fill should be anticipated. Any utilities supported therein should be designed to accept differential settlement. Differential settlement should also be considered at the points of entry to the structure.

If corrosion sensitive improvements are planned, it is recommended that a comprehensive corrosion study should be commissioned. The study will develop recommendations to avoid premature corrosion of buried pipes and concrete structures in direct contact with the soils.

GEOTECHNICAL TESTING

Classification and Sampling

The soil is continuously logged by a representative of this firm and classified by visual examination in accordance with the Unified Soil Classification system. The field classification is verified in the laboratory, also in accordance with the Unified Soil Classification System. Laboratory classification may include visual examination, Atterberg Limit Tests and grain size distribution. The final classification is shown on the excavation logs.

Samples of the geologic materials encountered in the exploratory excavations were collected and transported to the laboratory. Undisturbed samples of soil are obtained at frequent intervals.

Unless noted on the excavation logs as an SPT sample, samples acquired while utilizing a hollow-stem auger drill rig are obtained by driving a thin-walled, California Modified Sampler with successive 30-inch drops of a 140-pound hammer. The soil is retained in brass rings of 2.50 inches outside diameter and 1.00 inch in height. The central portion of the samples are stored in close fitting, waterproof containers for transportation to the laboratory. Samples noted on the excavation logs as SPT samples are obtained in general accordance with the most recent revision of ASTM D 1586. Samples are retained for 30 days after the date of the geotechnical report.

Moisture and Density Relationships

The field moisture content and dry unit weight are determined for each of the undisturbed soil samples, and the moisture content is determined for SPT samples in general accordance with the most recent revision of ASTM D 4959 or ASTM D 4643. This information is useful in providing a gross picture of the soil consistency between exploration locations and any local variations. The dry unit weight is determined in pounds per cubic foot and shown on the "Excavation Logs", A-Plates. The field moisture content is determined as a percentage of the dry unit weight.

Direct Shear Testing

Shear tests are performed in general accordance with the most recent revision of ASTM D 3080 with a strain controlled, direct shear machine manufactured by Soil Test, Inc. or a Direct Shear Apparatus manufactured by GeoMatic, Inc. The rate of deformation is approximately 0.025 inches per minute. Each sample is sheared under varying confining pressures in order to determine the Mohr-Coulomb shear strength parameters of the cohesion intercept and the angle of internal friction. Samples are generally tested in an artificially saturated condition. Depending upon the sample location and future site conditions, samples may be tested at field moisture content. The results are plotted on the "Shear Test Diagram," B-Plates.

The most recent revision of ASTM 3080 limits the particle size to 10 percent of the diameter of the direct shear test specimen. The sheared sample is inspected by the laboratory technician running the test. The inspection is performed by splitting the sample along the sheared plane and observing the soils exposed on both sides. Where oversize particles are observed in the shear plane, the results are discarded and the test run again with a fresh sample.

Consolidation Testing

Settlement predictions of the soil's behavior under load are made on the basis of the consolidation tests in general accordance with the most recent revision of ASTM D 2435. The consolidation apparatus is designed to receive a single one-inch high ring. Loads are applied in several increments in a geometric progression, and the resulting deformations are recorded at selected time intervals. Porous stones are placed in contact with the top and bottom of each specimen to permit addition and release of pore fluid. Samples are generally tested at increased moisture content to determine the effects of water on the bearing soil. The normal pressure at which the water is added is noted on the drawing. Results are plotted on the "Consolidation Test," C-Plates.

Expansion Index Testing

The expansion tests performed on the remolded samples are in accordance with the Expansion Index testing procedures, as described in the most recent revision of ASTM D 4829. The soil sample is compacted into a metal ring at a saturation degree of 50 percent. The ring sample is then placed in a consolidometer, under a vertical confining pressure of 1 lbf/square inch and inundated with distilled water. The deformation of the specimen is recorded for a period of 24 hour or until the rate of deformation becomes less than 0.0002 inches/hour, whichever occurs first. The expansion index, EI, is determined by dividing the difference between final and initial height of the ring sample by the initial height, and multiplied by 1,000.

Laboratory Compaction Characteristics

The maximum dry unit weight and optimum moisture content of a soil are determined in general accordance with the most recent revision of ASTM D 1557. A soil at a selected moisture content is placed in five layers into a mold of given dimensions, with each layer compacted by 25 blows of a 10 pound hammer dropped from a distance of 18 inches subjecting the soil to a total compactive effort of about 56,000 pounds per cubic foot. The resulting dry unit weight is determined. The procedure is repeated for a sufficient number of moisture contents to establish a relationship between the dry unit weight and the water content of the soil. The data when plotted represent a curvilinear relationship known as the compaction curve. The values of optimum moisture content and modified maximum dry unit weight are determined from the compaction curve.

REFERENCES

Applied Technology Council (1978), Tentative Provisions for Development of Seismic Regulations for Buildings: ATC Publication ATC 3-06, NBS Special Publication 510, NSF Publication 78-8.

Boore, D.M., Joyner, W.B., and Fumal, T.E. (1993), Estimation of Response Spectra and Peak Accelerations from Western North American Earthquakes: An interim Report, U.S. Geological Survey Open-File Report 93-509, 15 pp.

California Division of Mines and Geology, 1998, Seismic Hazard Evaluation Report for the Pasadena 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 030.

California Division of Mines and Geology, 1999, Seismic Hazard Zone Map, map scale 1:24,000.

California Geological Survey, 2008, Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Special Publication 117A.

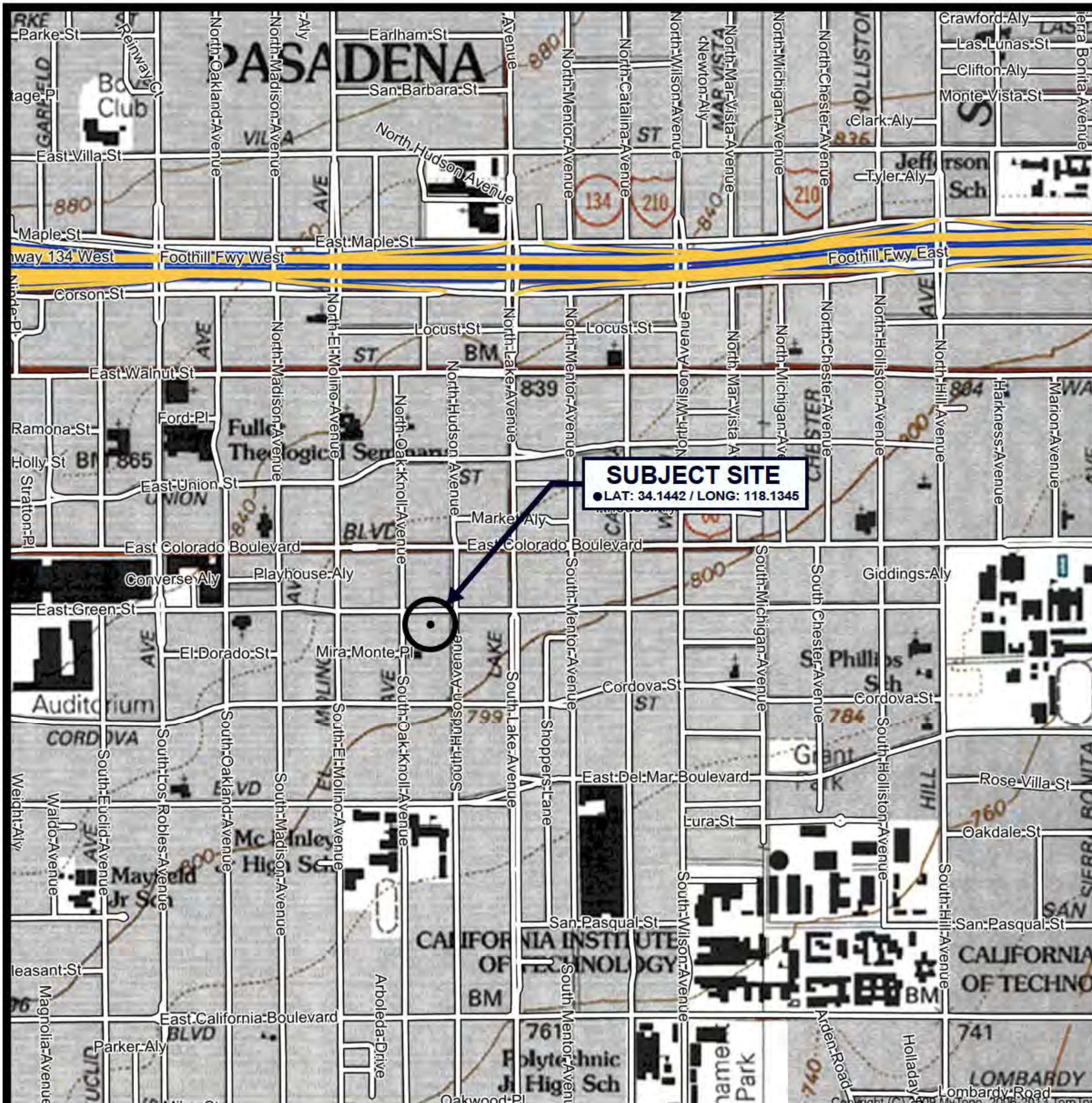
Dibblee, T.W. Jr. 1989, Geologic Map of the Pasadena Quadrangle, DMG Map #DF-23, map scale 1: 24,000.

Hart, E.W. and Bryant, W.A., 1999 (updated 2005), Fault Rupture Zones in California, Division of Mines and Geology, Special Publication 42, 25pp.

Leighton and Associates, Inc. (1990), Technical Appendix to the Safety Element of the Los Angeles County General Plan: Hazard Reduction in Los Angeles County.

United States Geological Survey, 2008, U.S.G.S. Interactive Deaggregation Program. http://eqint.cr.usgs.gov/deaggint/2008/index.php.

United States Geological Survey, 2013, U.S.G.S. U.S. Seismic Design Maps tool (Version 3.1.0). http://geohazards.usgs.gov/designmaps/us/application.php.



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0.0 0.1 0.2 0.3 0.4 0.5 0.6
MILES

0 1000 2000 3000
FEET

REFERENCE: U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES, PASADENA, CA QUADRANGLE

VICINITY MAP

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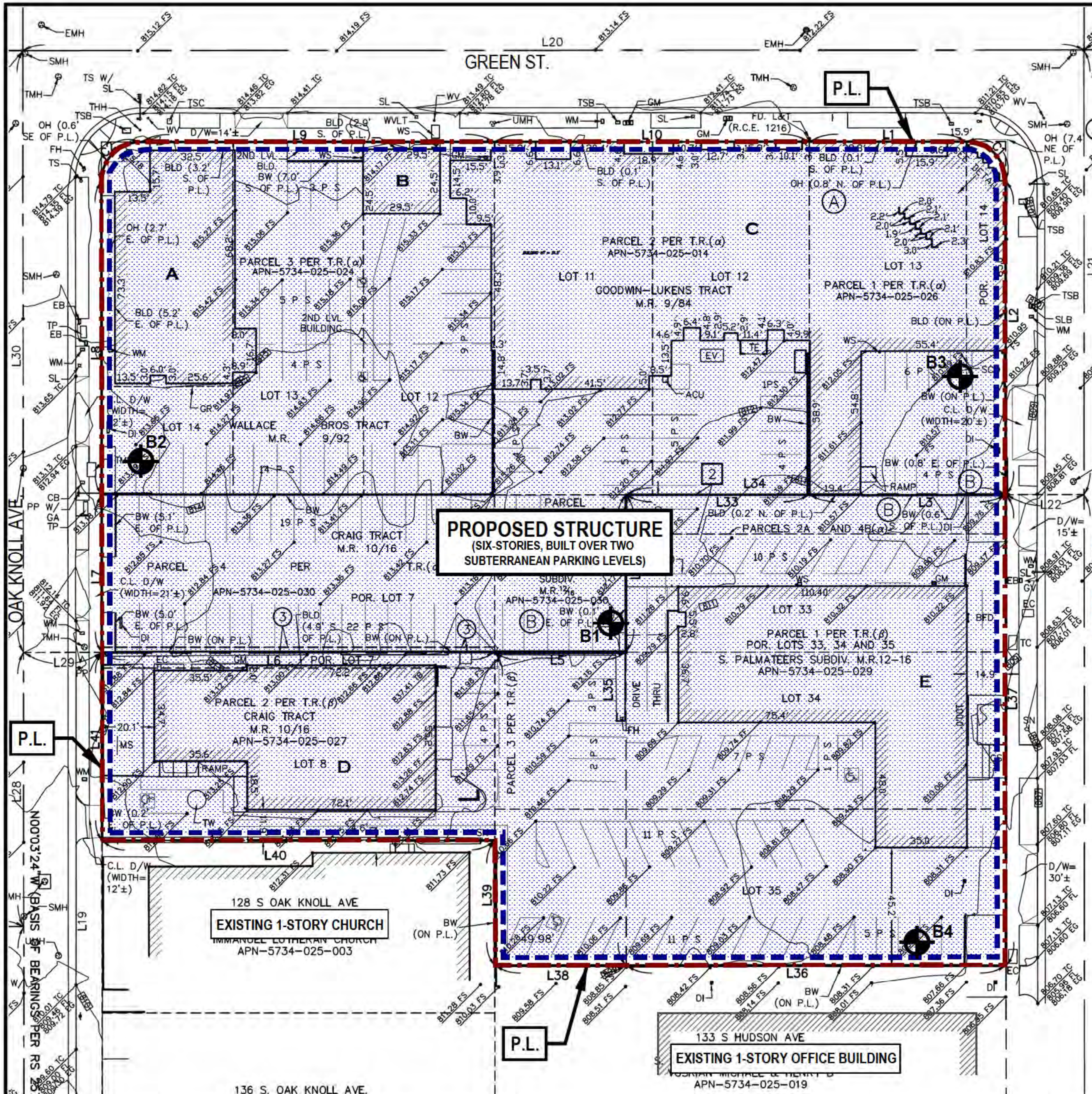
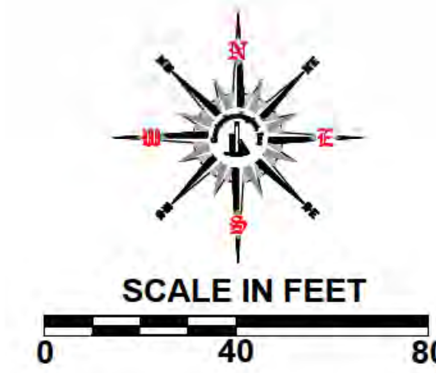
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC

FILE NO. 21413





LEGEND

B4 — LOCATION & NUMBER OF BORING

ANTICIPATED FOOTPRINT OF PROPOSED STRUCTURE

REFERENCE: LAND TITLE SURVEY BY JRN CIVIL ENGINEERS DATED MAY 4, 2017

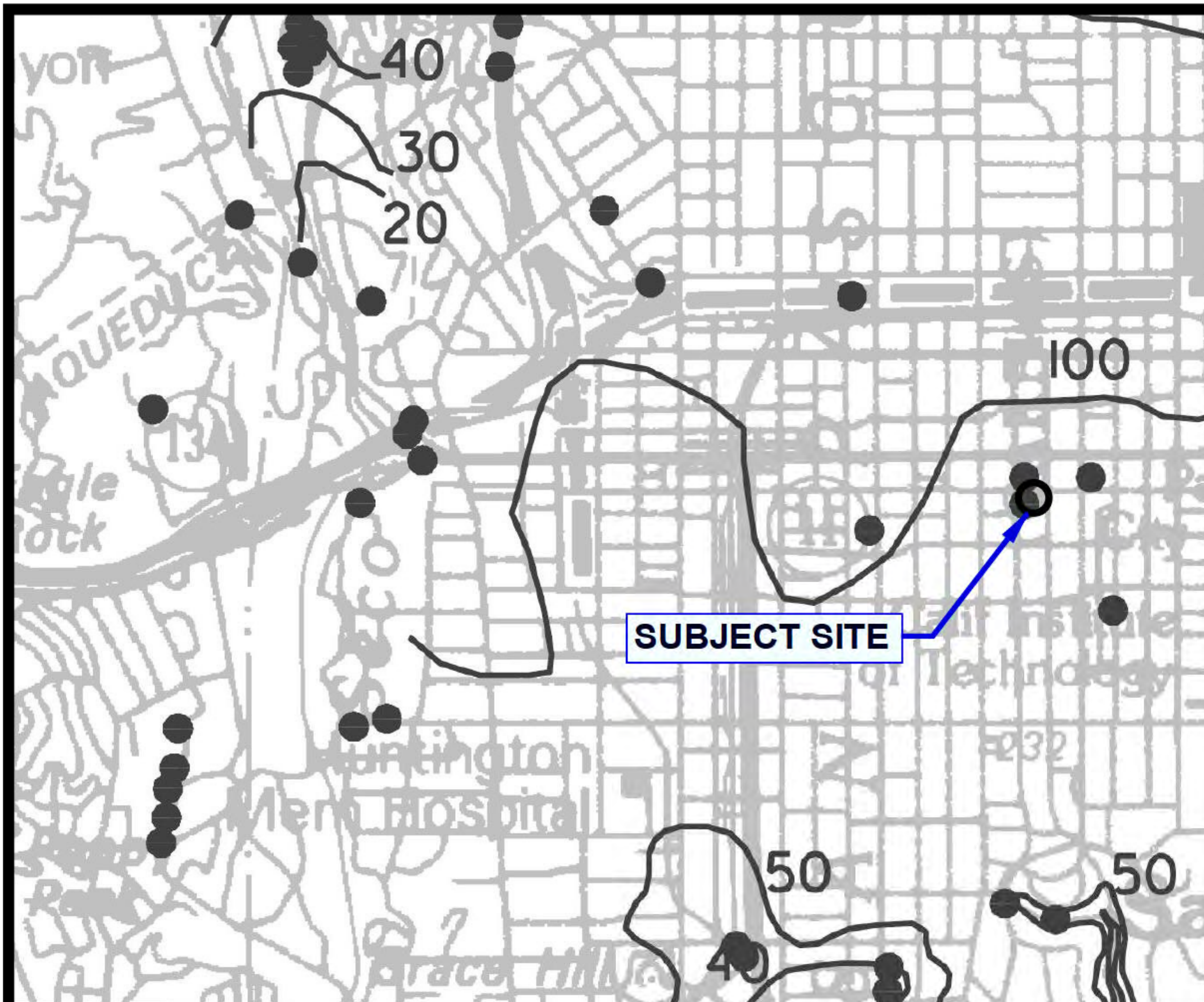
PLOT PLAN

Geotechnologies, Inc.
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC

FILE No. 21413

DATE: May '17



ONE MILE

SCALE

20 Depth to groundwater in feet

REFERENCE: CDMG, SEISMIC HAZARD ZONE REPORT, 014
PASADENA 7.5 - MINUTE QUADRANGLE, LOS ANGELES COUNTY, CALIFORNIA (1998, REVISED 2006)

HISTORICALLY HIGHEST GROUNDWATER LEVELS

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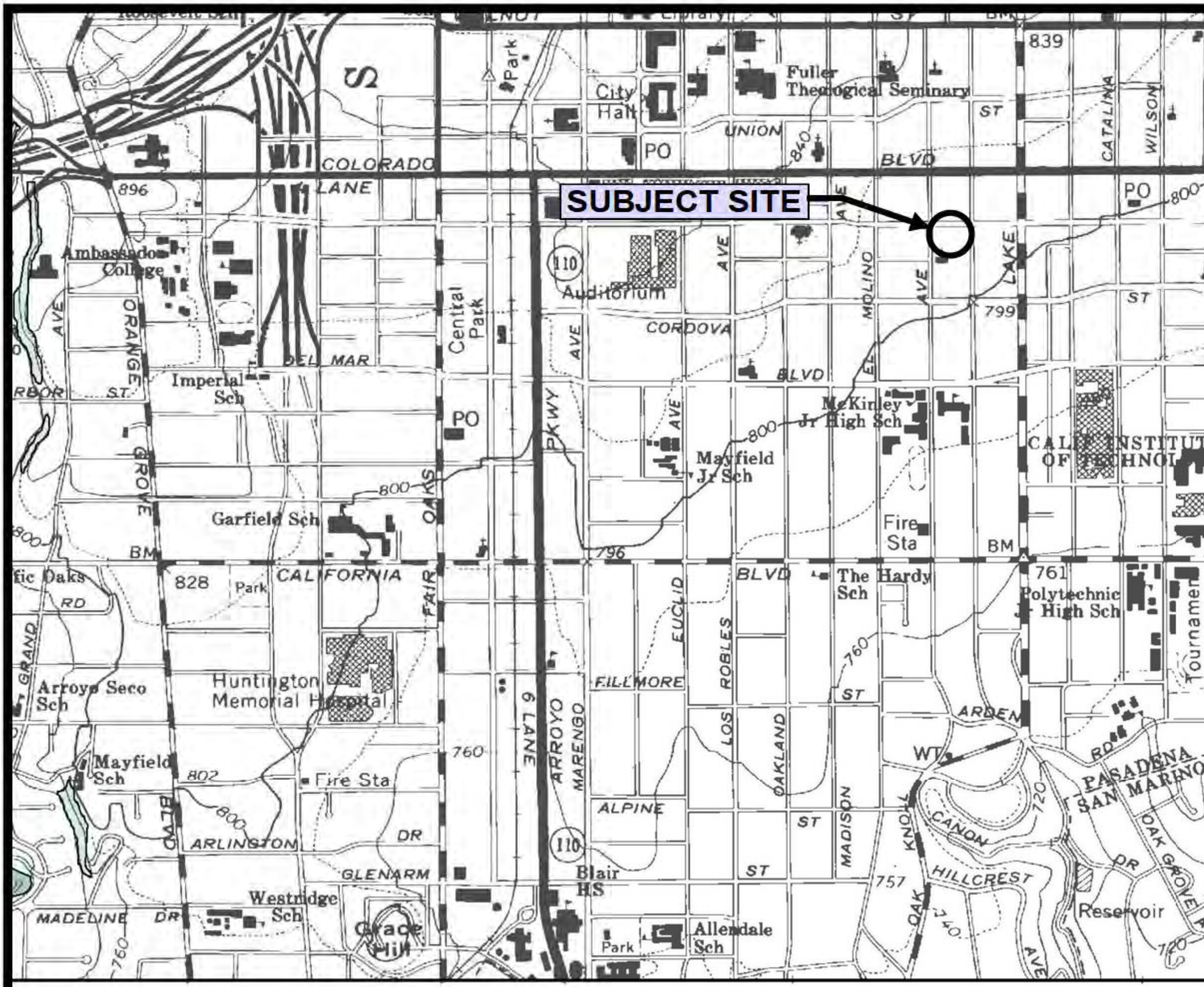
FILE No. 21413



1 .5 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

LIQUEFACTION AREA

REFERENCE: SEISMIC HAZARD ZONES, PASADENA QUADRANGLE OFFICIAL MAP (CDMG, 1999)

SEISMIC HAZARD ZONE MAP

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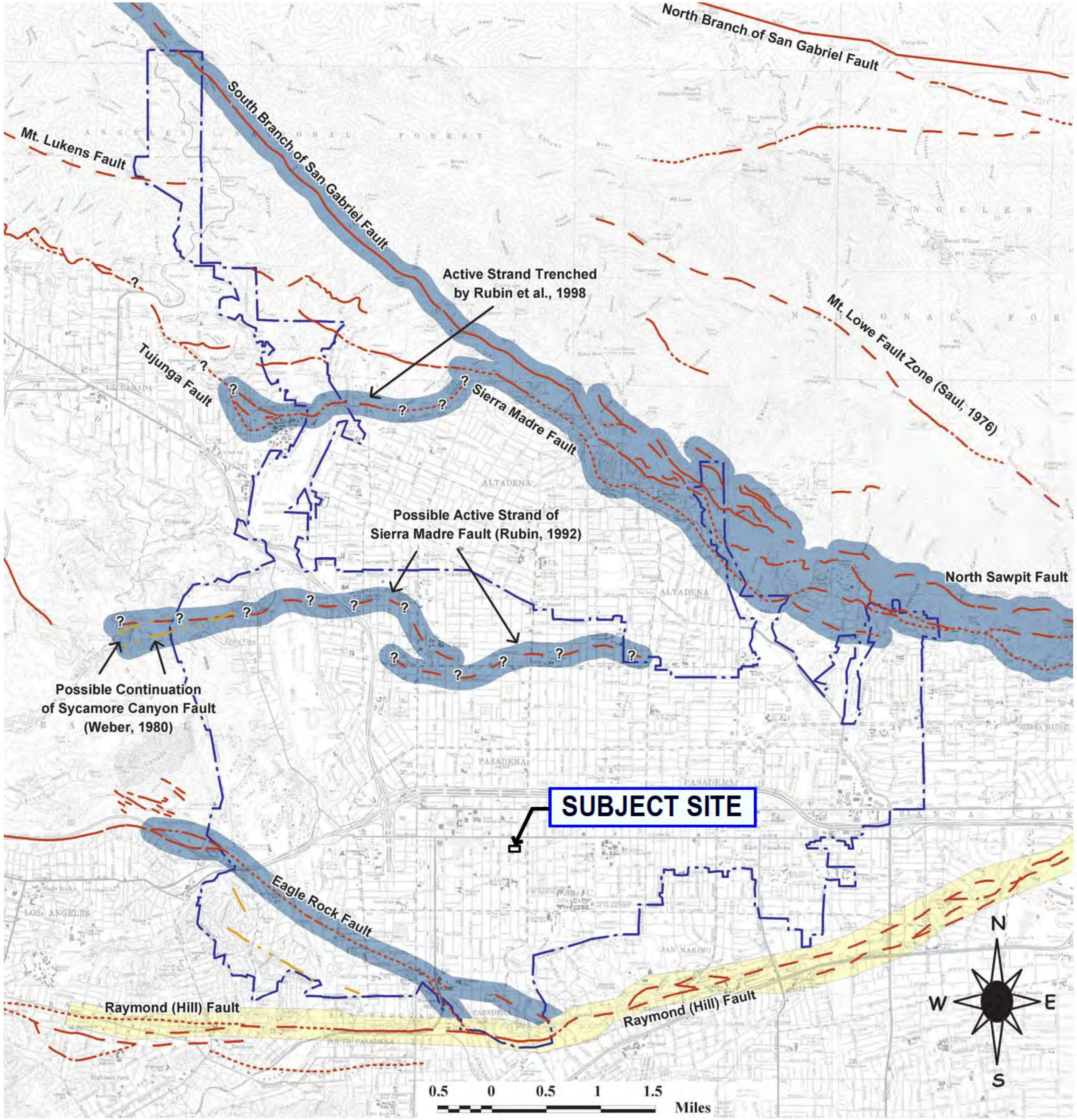
FILE NO. 21413



EXPLANATION

- Lineaments observed in aerial photographs (Weber, 1980)
- Alquist-Priolo Earthquake Fault Zone
- Fault Hazard Management Zones
- Fault; solid where location known, dashed where approximate, dotted where concealed, queried where inferred.
- Pasadena City Boundary

REFERENCE: City of Pasadena Safety Element. Plate 1-2, Fault Map by Earth Consultants International, dated June 2002.

CITY OF PASADENA FAULT MAP	
Geotechnologies, Inc. Consulting Geotechnical Engineers	STANFORD PASADENA, LLC
	FILE No. 21413

BORING LOG NUMBER 1

Stanford Pasadena, LLC | **Date: 04/18/17** | **Elevation: 812.2'***

File No. 21413 | **Method: 8-inch diameter Hollow Stem Auger**

km

*Reference: Land Title Survey by JRN Civil Engineers, dated 5/4/17

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt Parking Lot
				0		3-inch Asphalt over 2-inch Base
				1		FILL: Silty Sand to Sandy Silt, dark brown, moist, very dense, very stiff, fine grained
2.5	110	8.8	123.5	2		
				3	SM	NATIVE SOILS: Silty Sand, dark brown, moist, medium dense, fine grained
				4		
5	6	12.6	SPT	5		
				6		
				7		
7.5	13	13.9	112.9	8		
				9		
10	9	10.3	SPT	10		
					SM/SP	Silty Sand to Sand, dark yellowish brown, moist, medium dense, fine grained
				11		
				12		
12.5	29	4.6	121.1			
				13	SP	Sand, dark yellowish brown, moist, medium dense, fine grained
				14		
15	26	6.9	SPT	15		
						few gravel
				16		
				17		
17.5	48	4.8	112.9			
				18		medium dense to dense, fine to medium grained
				19		
20	36	5.3	SPT	20		
				21		
				22		
22.5	72	3.0	113.9			
				23		dense, few gravel
				24		
25	35	3.4	SPT	25		
						medium dense to dense

BORING LOG NUMBER 1

Stanford Pasadena, LLC

File No. 21413

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26		
				27		
27.5	68	3.5	115.1			
				28		dark brown, dense, fine to coarse grained
				29		
30	85	4.9	SPT	30		
						very dense
				31		
				32		
32.5	39 50/3"	4.0	112.2			
				33		dark yellowish brown, fine to medium grained
				34		
35	69	3.1	SPT	35		
					SP/SW	Sand, dark brown, moist, dense, fine to coarse grained, abundant gravel
				36		
				37		
37.5	65 50/4"	6.7	113.8			
				38	SP	Sand, dark brown, moist, very dense, fine to medium grained
				39		
40	66	3.7	SPT	40		
				41		
				42		
42.5	86	1.9	123.6			
				43		few gravel
				44		
45	46	19.5	SPT	45		
					SM/SP	Silty Sand to Sand, dark brown, moist, dense, fine grained
				46		
				47		
47.5	72	3.0	108.4			
				48	SP	Sand, yellowish brown, moist, dense, fine grained
				49		
50	44	9.1	SPT	50		
					SM	Silty Sand, dark brown, moist, dense, fine grained

BORING LOG NUMBER 1

Stanford Pasadena, LLC

File No. 21413

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				51		
				52		
52.5	40 50/5"	2.8	113.4			
				53	SP	Sand, dark yellowish brown, moist, very dense, fine to medium grained
				54		
55	80	2.0	SPT	55		
					SP/SW	Sand, dark yellowish brown, moist, very dense, fine to coarse grained, abundant gravel
				56		
				57		
57.5	85	2.3	122.3			
				58	SM/SP	Silty Sand to Sand, dark yellowish brown, moist, very dense, fine to medium grained
				59		
60	38 50/5"	5.6	SPT	60		
				61		
				62		
62.5	45 50/2"	3.1	105.7			
				63	SP	Sand, dark yellowish brown, moist, very dense, fine grained
				64		
65	40 50/3"	2.1	SPT	65		
				66		
				67		
67.5	45 50/4"	1.7	107.8			
				68		fine to medium grained
				69		
70	38 50/5"	1.9	SPT	70		
						Total Depth 70 feet No Water Fill to 3 feet
				71		
				72		
				73		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				74		
				75		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
						SPT=Standard Penetration Test

BORING LOG NUMBER 2

Stanford Pasadena, LLC **Date: 04/19/17** **Elevation: 813.5'***

File No. 21413 **Method: 8-inch diameter Hollow Stem Auger**

km *Reference: Land Title Survey by JRN Civil Engineers, dated 5/4/17

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt Parking Lot
				0		3-inch Asphalt over 3-inch Base
				1		FILL: Silty Sand, dark brown, moist, medium dense, fine grained
				2		
2.5	17	8.5	111.1			
				3		
				4		
5	21	3.8	114.7	5		
					SP	NATIVE SOILS: Sand, dark brown, moist, medium dense, fine to medium grained
				6		
				7		
7.5	28	4.0	109.4			
				8		
				9		
10	31	8.7	119.2	10		
				11		
				12		
				13		
				14		
15	41	9.0	116.0	15		
				16		
				17		
				18		
				19		
20	65	9.2	111.4	20		few gravel
				21		
				22		
				23		
				24		
25	72	13.4	114.2	25		
					SM/SP	Silty Sand to Sand, dark yellowish brown, moist, dense, fine grained

BORING LOG NUMBER 2

Stanford Pasadena, LLC

File No. 21413

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26		
				27		
				28		
				29		
30	48	22.9	101.9	30		
					SM	Silty Sand, dark brown, moist, medium dense, fine grained
				31		
				32		
				33		
				34		
35	83	5.8	112.9	35		
					SP	Sand, dark yellowish brown, moist, very dense, fine grained
				36		
				37		
				38		
				39	SM/SP	Silty Sand to Sand, dark yellowish brown, moist, very dense, fine grained
40	80	3.6	112.3	40		
						Total Depth 40 feet No Water Fill to 5 feet
				41		
				42		
				43		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				44		
				45		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
				46		
				47		
				48		
				49		
				50		

BORING LOG NUMBER 3

Stanford Pasadena, LLC **Date: 04/19/17** **Elevation: 811.0'***

File No. 21413 **Method: 8-inch diameter Hollow Stem Auger**

km *Reference: Land Title Survey by JRN Civil Engineers, dated 5/4/17

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt Parking Lot
				0		3-inch Asphalt over 6-inch Base
				1		FILL: Silty Sand, dark brown, moist, medium dense, fine grained
				2		
				3		
4	34	5.0	112.7	4		
				5		
				6	SM	NATIVE SOILS: Silty Sand, dark brown, moist, medium dense, fine grained
				7		
7.5	30	2.9	114.8			
				8		
				9		
10	33	8.5	109.9	10		
				11		
				12		
				13		
				14		
15	60	4.1	112.6	15		
					SM/SP	Silty Sand to Sand, dark brown, moist, dense, fine grained
				16		
				17		
				18		
				19		
20	52	2.5	104.7	20		
				21		
				22		
				23		
				24		
25	79	3.9	103.8	25		
						yellowish brown, very dense

BORING LOG NUMBER 3

Stanford Pasadena, LLC

File No. 21413

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26		
				27		
				28		
				29		
30	40 50/5"	1.4	115.3	30		
				31	SP/SW	Sand, dark brown, moist, very dense, fine to coarse grained, coarse grained, abundant gravel
				32		
				33		
				34		
35	48 50/4"	2.7	106.8	35		
				36		
				37		
				38		
				39		yellowish brown
40	100/9"	1.7	112.7	40		
				41		Total Depth 40 feet No Water Fill to 5 feet
				42		
				43		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				44		
				45		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
				46		
				47		
				48		
				49		
				50		

BORING LOG NUMBER 4

Stanford Pasadena, LLC | **Date: 04/19/17** | **Elevation: 808.1'***

File No. 21413 | **Method: 8-inch diameter Hollow Stem Auger**

km

*Reference: Land Title Survey by JRN Civil Engineers, dated 5/4/17

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Concrete Parking Lot
				0		4-inch Concrete, No Base
				1		FILL: Silty Sand, dark brown, moist, medium dense, fine grained
				2		
				3		
4	16	9.1	103.0	4		
				5	SM	NATIVE SOILS: Silty Sand, dark brown, moist, medium dense, fine grained
				6		
				7		
7.5	55	8.9	117.6			
				8	SM/SP	Silty Sand to Sand, dark brown, moist, dense, fine grained
				9		
10	68	4.2	114.5	10		
				11	SP	Sand, dark yellowish brown, moist, dense, fine to medium grained, few gravel
				12		
				13		
				14		
15	89	2.8	122.7	15		
				16	SP/SW	Sand, dark brown, moist, very dense, fine to coarse grained, abundant gravel
				17		
				18		
				19		
20	40 50/4"	2.1	118.7	20		
				21		
				22		
				23		
				24		
25	95	2.3	112.2	25		
					SP	Sand, dark yellowish brown, moist, very dense, fine to medium grained

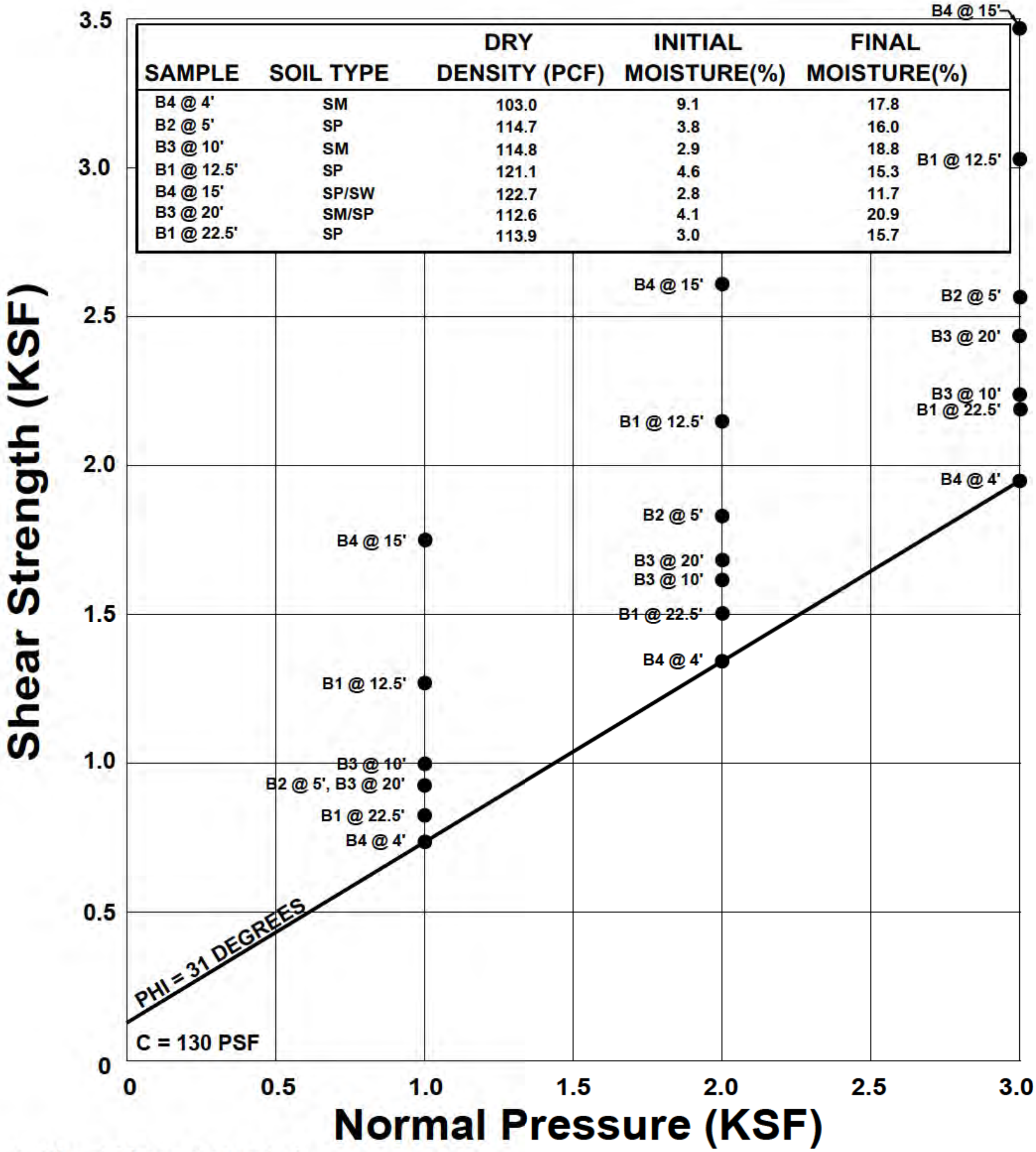
BORING LOG NUMBER 4

Stanford Pasadena, LLC

File No. 21413

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26		
				27		
				28		
				29		
30	40 50/5"	3.6	112.2	30		
				31		
				32		
				33		
				34		
35	90	2.9	113.1	35		
				36		
				37		
				38		
				39		
40	100	3.4	99.3	40		
				41		Total Depth 40 feet No Water Fill to 4 feet
				42		
				43		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				44		
				45		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
				46		
				47		
				48		
				49		
				50		



SAMPLE	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE(%)	FINAL MOISTURE(%)
B4 @ 4'	SM	103.0	9.1	17.8
B2 @ 5'	SP	114.7	3.8	16.0
B3 @ 10'	SM	114.8	2.9	18.8
B1 @ 12.5'	SP	121.1	4.6	15.3
B4 @ 15'	SP/SW	122.7	2.8	11.7
B3 @ 20'	SM/SP	112.6	4.1	20.9
B1 @ 22.5'	SP	113.9	3.0	15.7

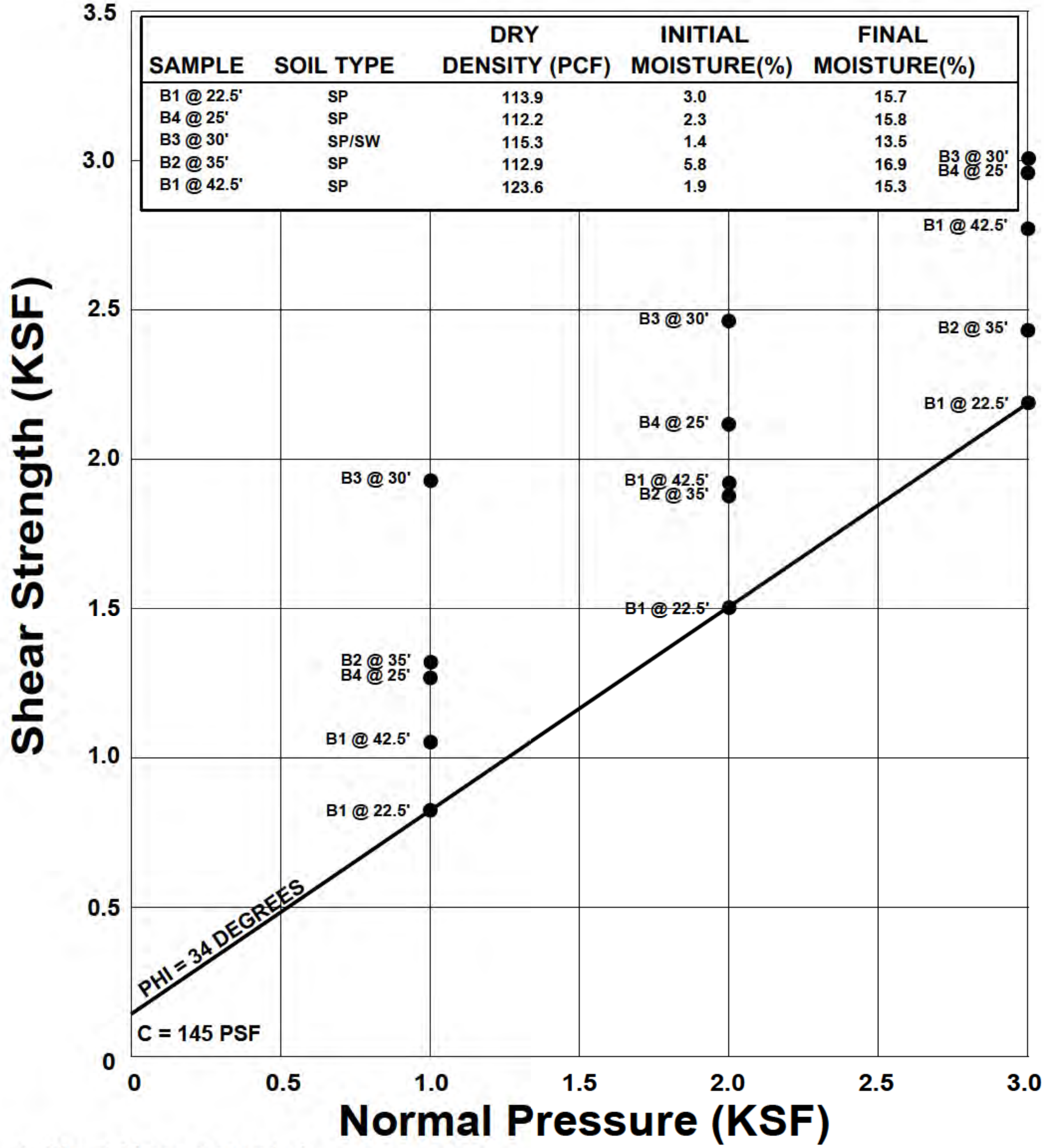
● Direct Shear, Saturated

SHEAR TEST DIAGRAM

Geotechnologies, Inc.
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC

FILE NO. 21413 | PLATE: B-1



SAMPLE	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE(%)	FINAL MOISTURE(%)
B1 @ 22.5'	SP	113.9	3.0	15.7
B4 @ 25'	SP	112.2	2.3	15.8
B3 @ 30'	SP/SW	115.3	1.4	13.5
B2 @ 35'	SP	112.9	5.8	16.9
B1 @ 42.5'	SP	123.6	1.9	15.3

● Direct Shear, Saturated

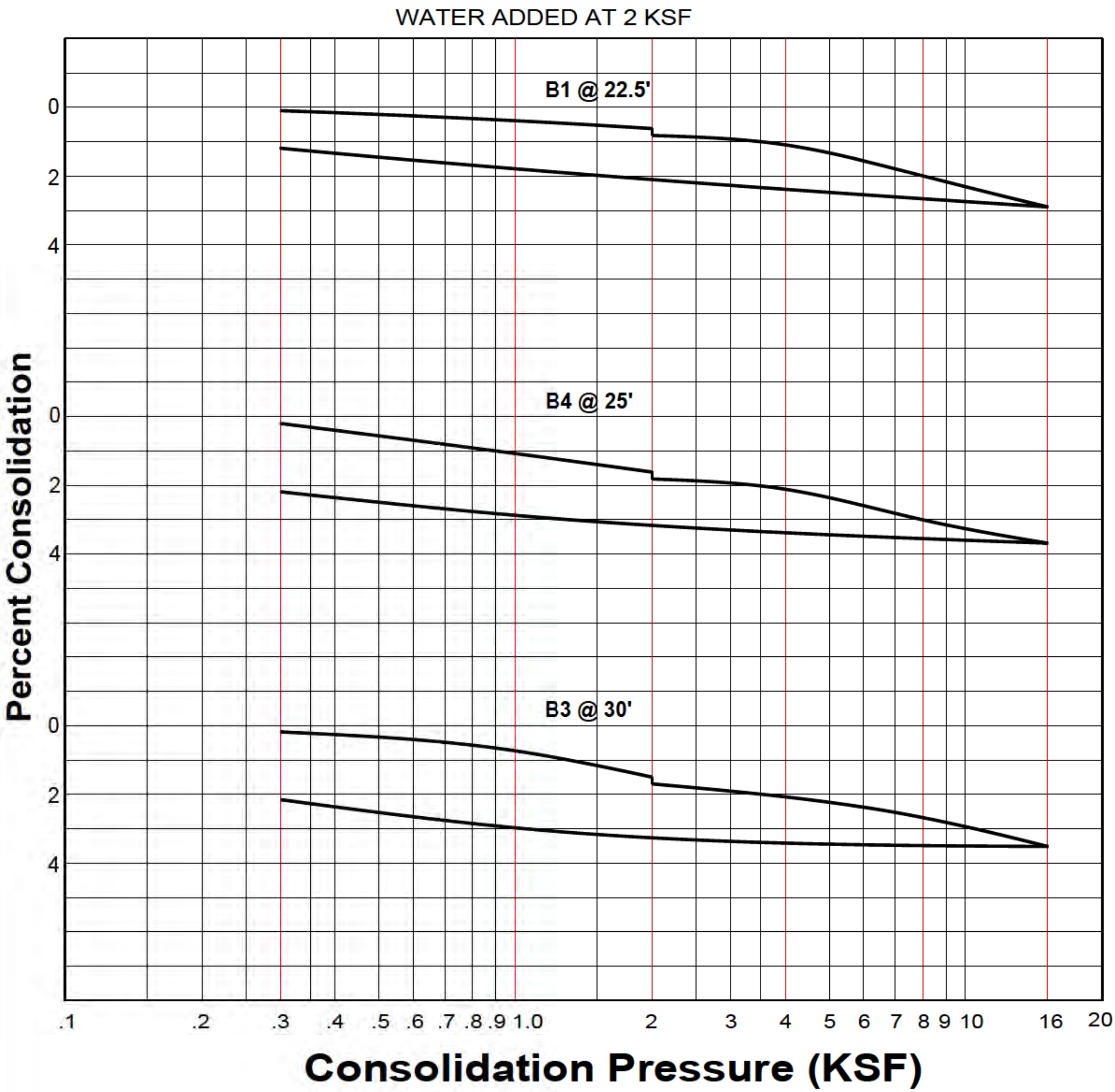
SHEAR TEST DIAGRAM

Geotechnologies, Inc.
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC

FILE NO. 21413

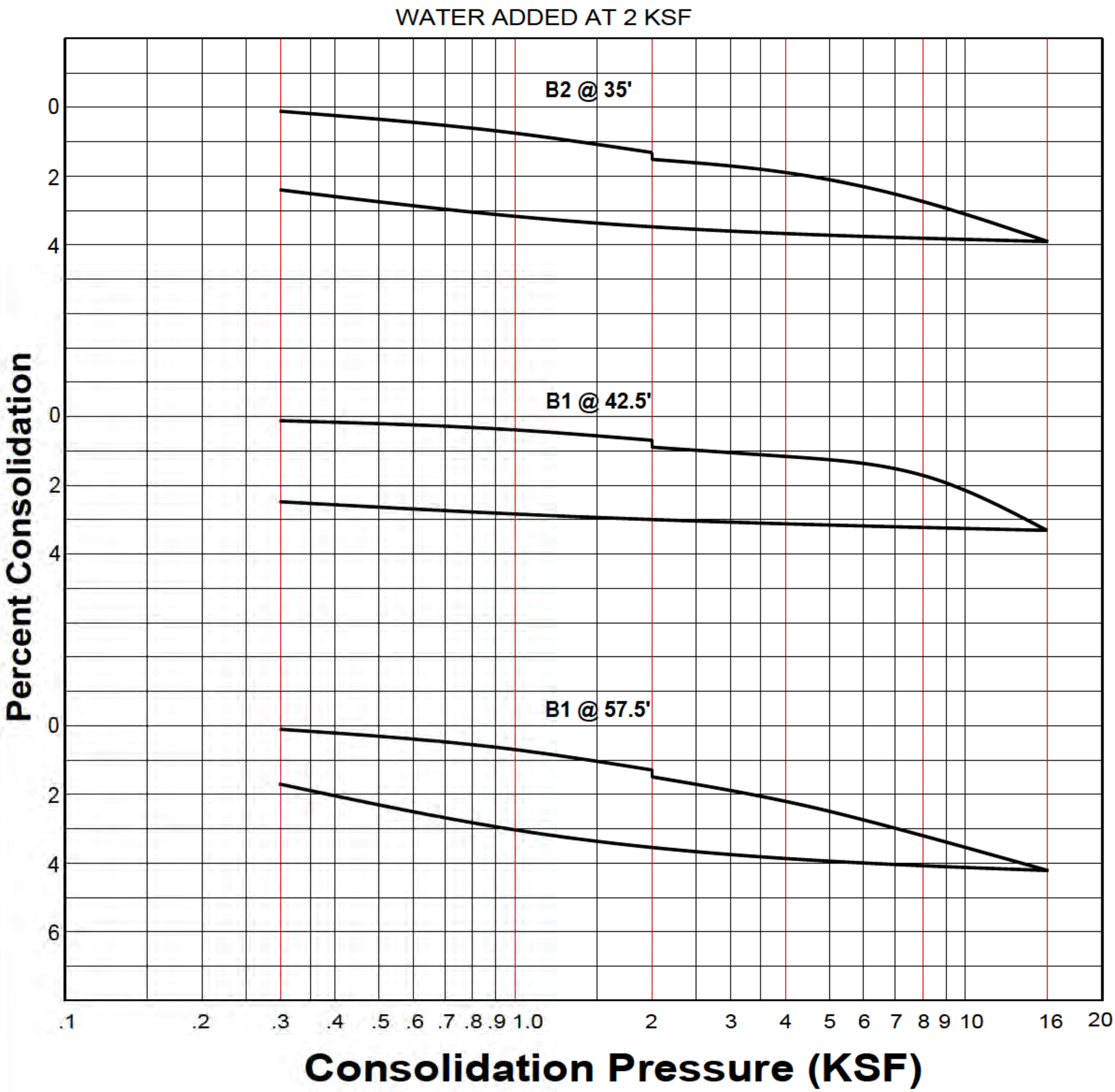
PLATE: B-2



CONSOLIDATION TEST

Geotechnologies, Inc.
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC	
FILE NO. 21413	PLATE: C-1



CONSOLIDATION TEST

Geotechnologies, Inc.
Consulting Geotechnical Engineers

STANFORD PASADENA, LLC	
FILE NO. 21413	PLATE: C-2

ASTM D-1557

SAMPLE	B2 @ 1- 5'	B3 @ 1-5'
SOIL TYPE:	SM	SM
MAXIMUM DENSITY pcf.	128.7	130.4
OPTIMUM MOISTURE %	10.1	9.3

ASTM D-4829

SAMPLE	B2 @ 1- 5'	B3 @ 1-5'
SOIL TYPE:	SM	SM
EXPANSION INDEX UBC STANDARD 18-2	7	10
EXPANSION CHARACTER	VERY LOW	VERY LOW

SULFATE CONTENT

SAMPLE	B2 @ 1-5'	B3 @ 1-5'	B1 @ 10'	B1 @ 20'
SULFATE CONTENT: (percentage by weight)	< 0.1 %	< 0.1 %	< 0.1 %	< 0.1 %

Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413

Soil Weight	γ	120 pcf
Internal Friction Angle	ϕ	31 degrees
Cohesion	c	0 psf
Height of Retaining Wall	H	26 feet

Restrained Retaining Wall Design based on At Rest Earth Pressure

$\sigma'_h = K_o\sigma'_v$

$K_o = 1 - \sin\phi$	0.485
$\sigma'_v = \gamma H$	3120.0 psf

$\sigma'_h =$ 1513.1 psf

EFP = 58.2 pcf

$P_o =$ 19670.1 lbs/ft (based on a triangular distribution of pressure)

Design wall for an EFP of 59 pcf

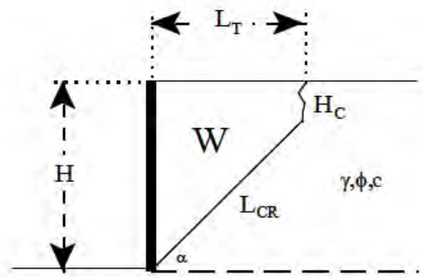
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Drained Cantilever Retaining Walls

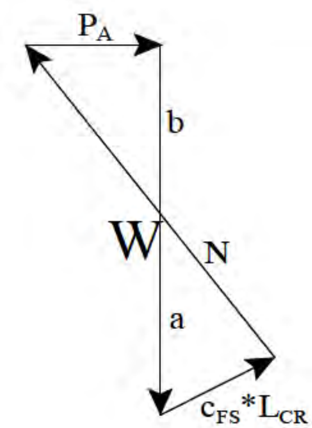
Retaining Wall Design with Level Backfill
(Vector Analysis)

Input:

Retaining Wall Height	(H)	8.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.50
Factored Parameters:	(ϕ_{FS})	21.8 degrees
	(c_{FS})	86.7 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) feet^2	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	2.8	33	4013.1	8.1	2084.5	1928.7	633.0
41	2.7	33	3912.3	8.1	1977.3	1935.0	672.7
42	2.6	32	3808.6	8.0	1877.2	1931.4	709.5
43	2.5	31	3703.3	8.0	1784.0	1919.3	743.3
44	2.5	30	3597.4	8.0	1697.3	1900.2	774.3
45	2.4	29	3491.6	7.9	1616.5	1875.1	802.5
46	2.4	28	3386.3	7.8	1541.4	1845.0	828.0
47	2.3	27	3281.9	7.8	1471.3	1810.6	850.9
48	2.3	26	3178.7	7.7	1406.1	1772.7	871.1
49	2.2	26	3076.8	7.6	1345.1	1731.7	888.8
50	2.2	25	2976.4	7.6	1288.2	1688.2	904.1
51	2.2	24	2877.5	7.5	1234.9	1642.5	916.9
52	2.2	23	2780.1	7.4	1185.0	1595.1	927.2
53	2.2	22	2684.2	7.3	1138.1	1546.1	935.2
54	2.1	22	2589.9	7.2	1094.1	1495.8	940.9
55	2.1	21	2497.1	7.2	1052.6	1444.5	944.2
56	2.1	20	2405.7	7.1	1013.4	1392.3	945.1
57	2.1	19	2315.8	7.0	976.4	1339.4	943.8
58	2.1	19	2227.2	6.9	941.4	1285.9	940.1
59	2.2	18	2140.0	6.8	908.1	1231.9	934.0
60	2.2	17	2054.0	6.7	876.4	1177.5	925.6
61	2.2	16	1969.1	6.6	846.2	1122.9	914.9
62	2.2	16	1885.4	6.6	817.3	1068.1	901.7
63	2.2	15	1802.7	6.5	789.6	1013.1	886.0
64	2.3	14	1721.0	6.4	762.9	958.1	867.8
65	2.3	14	1640.2	6.3	737.1	903.1	847.2



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$
$b = W-a$
$P_A = b*\tan(\alpha-\phi_{FS})$
$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\ max}$ 945.1 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of wall)

$EFP = 2*P_A/H^2$

EFP 29.5 pcf

Design Wall for an Equivalent Fluid Pressure: 30 pcf

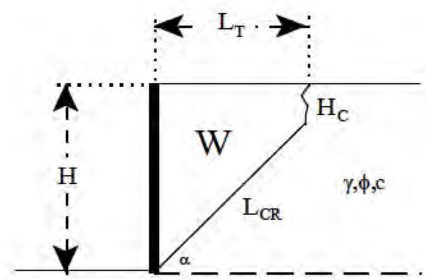
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Drained Cantilever Retaining Walls

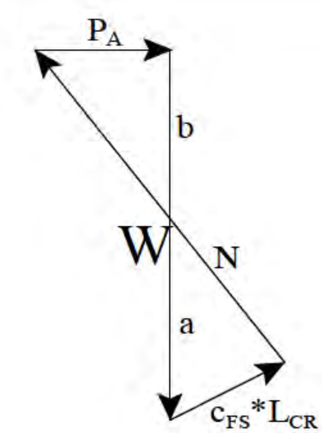
Retaining Wall Design with Level Backfill
(Vector Analysis)

Input:

Retaining Wall Height	(H)	12.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.50
Factored Parameters:	(ϕ_{FS})	21.8 degrees
	(c_{FS})	86.7 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) feet^2	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	2.8	81	9733.5	14.3	3689.9	6043.6	1983.6
41	2.7	79	9434.1	14.2	3471.1	5963.0	2073.1
42	2.6	76	9139.5	14.0	3272.0	5867.5	2155.4
43	2.5	74	8850.7	13.9	3090.6	5760.1	2230.7
44	2.5	71	8568.0	13.7	2924.9	5643.1	2299.5
45	2.4	69	8291.6	13.6	2773.2	5518.4	2361.8
46	2.4	67	8021.6	13.4	2634.0	5387.7	2418.0
47	2.3	65	7758.0	13.2	2505.9	5252.1	2468.1
48	2.3	63	7500.7	13.1	2387.9	5112.8	2512.5
49	2.2	60	7249.4	12.9	2278.9	4970.5	2551.2
50	2.2	58	7004.1	12.8	2178.0	4826.0	2584.5
51	2.2	56	6764.4	12.6	2084.5	4679.9	2612.3
52	2.2	54	6530.2	12.5	1997.6	4532.6	2634.9
53	2.2	53	6301.3	12.3	1916.6	4384.6	2652.3
54	2.1	51	6077.3	12.2	1841.2	4236.1	2664.6
55	2.1	49	5858.0	12.0	1770.6	4087.4	2671.7
56	2.1	47	5643.3	11.9	1704.5	3938.8	2673.8
57	2.1	45	5432.9	11.8	1642.6	3790.4	2670.9
58	2.1	44	5226.6	11.6	1584.3	3642.3	2662.8
59	2.2	42	5024.1	11.5	1529.5	3494.6	2649.7
60	2.2	40	4825.2	11.4	1477.7	3347.5	2631.4
61	2.2	39	4629.8	11.2	1428.7	3201.1	2608.0
62	2.2	37	4437.6	11.1	1382.3	3055.3	2579.2
63	2.2	35	4248.5	11.0	1338.2	2910.2	2545.0
64	2.3	34	4062.1	10.8	1296.2	2765.9	2505.3
65	2.3	32	3878.5	10.7	1256.1	2622.4	2460.0



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\ max}$ 2673.8 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of wall)

$EFP = 2*P_A/H^2$

EFP 37.1 pcf

Design Wall for an Equivalent Fluid Pressure: 38 pcf

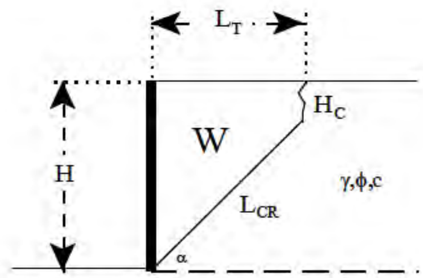
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Drained Cantilever Retaining Walls

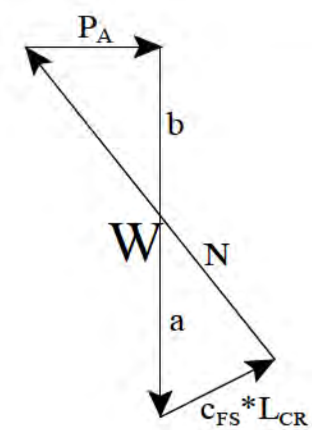
Retaining Wall Design with Level Backfill
(Vector Analysis)

Input:

Retaining Wall Height	(H)	26.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.50
Factored Parameters:	(ϕ_{FS})	21.8 degrees
	(c_{FS})	86.7 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) feet^2	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	2.8	398	47774.3	36.1	9309.0	38465.3	12624.6
41	2.7	385	46153.8	35.5	8699.2	37454.6	13021.3
42	2.6	372	44590.3	34.9	8153.7	36436.5	13384.6
43	2.5	359	43080.7	34.4	7663.7	35417.0	13716.2
44	2.5	347	41622.1	33.9	7221.6	34400.5	14017.7
45	2.4	335	40211.6	33.4	6821.5	33390.1	14290.5
46	2.4	324	38846.4	32.9	6458.1	32388.3	14535.7
47	2.3	313	37523.9	32.4	6127.0	31396.9	14754.4
48	2.3	302	36241.6	31.9	5824.4	30417.2	14947.5
49	2.2	292	34997.1	31.5	5547.2	29449.9	15115.9
50	2.2	282	33788.1	31.1	5292.5	28495.6	15260.2
51	2.2	272	32612.7	30.6	5058.0	27554.7	15381.0
52	2.2	262	31468.9	30.2	4841.6	26627.2	15478.9
53	2.2	253	30354.7	29.9	4641.5	25713.2	15554.3
54	2.1	244	29268.5	29.5	4456.0	24812.6	15607.3
55	2.1	235	28208.7	29.1	4283.7	23925.0	15638.3
56	2.1	226	27173.7	28.8	4123.5	23050.2	15647.4
57	2.1	218	26162.0	28.5	3974.1	22187.9	15634.6
58	2.1	210	25172.4	28.1	3834.7	21337.7	15599.8
59	2.2	202	24203.6	27.8	3704.3	20499.2	15543.0
60	2.2	194	23254.3	27.5	3582.2	19672.1	15463.9
61	2.2	186	22323.4	27.2	3467.6	18855.8	15362.1
62	2.2	178	21409.8	26.9	3359.9	18049.9	15237.3
63	2.2	171	20512.5	26.7	3258.5	17254.0	15088.9
64	2.3	164	19630.6	26.4	3162.9	16467.7	14916.4
65	2.3	156	18763.0	26.1	3072.6	15690.4	14719.0



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\max}$ 15647.4 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of wall)

$EFP = 2*P_A/H^2$

EFP 46.3 pcf

Design Wall for an Equivalent Fluid Pressure: 47 pcf

Geotechnologies, Inc.
Project: Stanford Pasadena, LLC
File No.: 21413

Seismically Induced Lateral Soil Pressure on Retaining Wall

Input:

Height of Retaining Wall:	(H)	26.0	feet
Retained Soil Unit Weight:	(γ)	115.0	pcf
Horizontal Ground Acceleration:	(k_h)	0.32	g

Seismic Increment (ΔP_{AE}):

$\Delta P_{AE} = (0.5*\gamma*H^2)*(0.75*k_h)$

$\Delta P_{AE} =$ 9328.8 lbs/ft

Force applied at 0.6H above the base of the wall
Transfer load to 2/3 of the height of the wall

$T*(2/3)*H = \Delta P_{AE}*0.6*H$

T = 8395.9 lbs/ft

$EFP = 2*T/H^2$

EFP = 25 pcf

triangular distribution of pressure

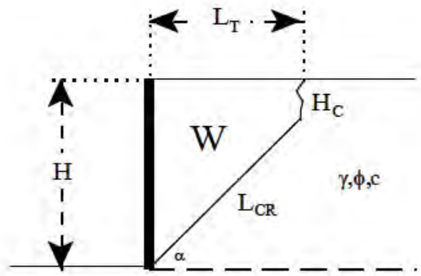
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Temporary Shoring Walls

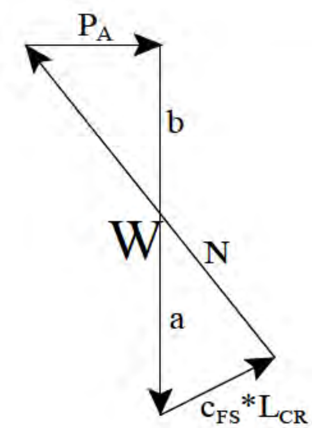
Shoring Design with Level Backfill
(Vector Analysis)

Input:

Shoring Height	(H)	12.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.25
Factored Parameters:	(ϕ_{FS})	25.7 degrees
	(c_{FS})	104.0 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) $feet^2$	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	4.1	76	9082.6	12.3	4643.3	4439.4	1133.8
41	3.9	74	8881.0	12.3	4369.8	4511.2	1236.4
42	3.7	72	8664.1	12.3	4116.5	4547.6	1332.1
43	3.6	70	8437.8	12.3	3882.8	4555.0	1421.1
44	3.5	68	8206.0	12.3	3667.6	4538.4	1503.3
45	3.3	66	7971.6	12.3	3469.5	4502.1	1579.0
46	3.2	64	7736.4	12.2	3287.1	4449.3	1648.2
47	3.1	63	7502.0	12.1	3119.0	4383.0	1711.2
48	3.1	61	7269.4	12.0	2964.0	4305.4	1768.1
49	3.0	59	7039.1	11.9	2820.7	4218.4	1819.1
50	2.9	57	6811.7	11.8	2688.2	4123.5	1864.2
51	2.9	55	6587.5	11.7	2565.3	4022.2	1903.6
52	2.9	53	6366.7	11.6	2451.2	3915.4	1937.4
53	2.8	51	6149.3	11.5	2345.1	3804.2	1965.7
54	2.8	49	5935.4	11.4	2246.2	3689.2	1988.7
55	2.8	48	5725.0	11.3	2153.9	3571.1	2006.2
56	2.8	46	5518.0	11.1	2067.5	3450.5	2018.5
57	2.8	44	5314.4	11.0	1986.6	3327.8	2025.5
58	2.8	43	5114.0	10.9	1910.6	3203.4	2027.2
59	2.8	41	4916.7	10.8	1839.0	3077.7	2023.8
60	2.8	39	4722.4	10.7	1771.5	2951.0	2015.0
61	2.8	38	4531.0	10.5	1707.6	2823.4	2001.1
62	2.8	36	4342.3	10.4	1647.1	2695.2	1981.8
63	2.8	35	4156.2	10.3	1589.6	2566.5	1957.1
64	2.9	33	3972.4	10.2	1534.8	2437.6	1927.0
65	2.9	32	3790.9	10.0	1482.4	2308.5	1891.3



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\ max}$ 2027.2 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 28.2 pcf

Design Shoring for an Equivalent Fluid Pressure: 29 pcf

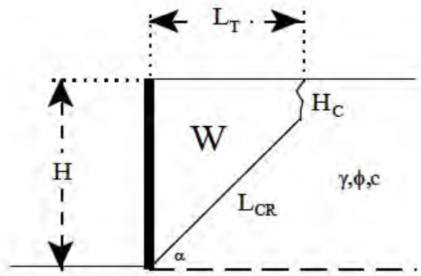
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Temporary Shoring Walls

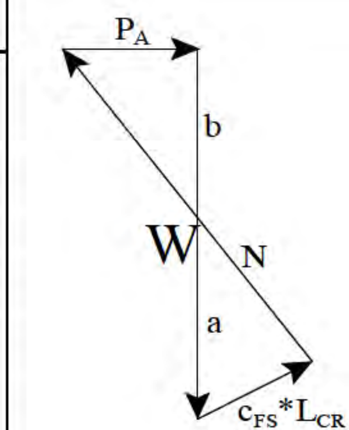
Shoring Design with Level Backfill
(Vector Analysis)

Input:

Shoring Height	(H)	20.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.25
Factored Parameters:	(ϕ_{FS})	25.7 degrees
	(c_{FS})	104.0 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) $feet^2$	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	4.1	228	27388.0	24.7	9357.6	18030.4	4604.9
41	3.9	221	26550.6	24.5	8693.9	17856.7	4894.1
42	3.7	214	25723.1	24.3	8102.9	17620.2	5161.5
43	3.6	208	24909.4	24.1	7574.6	17334.8	5408.1
44	3.5	201	24111.8	23.8	7100.6	17011.2	5634.8
45	3.3	194	23331.6	23.6	6673.7	16657.8	5842.3
46	3.2	188	22569.4	23.3	6288.0	16281.4	6031.4
47	3.1	182	21825.5	23.0	5938.2	15887.3	6202.8
48	3.1	176	21099.6	22.8	5620.1	15479.5	6357.1
49	3.0	170	20391.3	22.5	5329.9	15061.4	6494.9
50	2.9	164	19700.3	22.3	5064.4	14635.9	6616.6
51	2.9	159	19025.8	22.0	4820.9	14204.9	6722.8
52	2.9	153	18367.2	21.7	4596.9	13770.3	6813.8
53	2.8	148	17723.9	21.5	4390.4	13333.4	6889.8
54	2.8	142	17095.1	21.3	4199.6	12895.5	6951.3
55	2.8	137	16480.2	21.0	4022.9	12457.3	6998.4
56	2.8	132	15878.5	20.8	3858.9	12019.6	7031.3
57	2.8	127	15289.3	20.6	3706.3	11583.0	7050.0
58	2.8	123	14712.0	20.3	3564.1	11147.9	7054.8
59	2.8	118	14145.9	20.1	3431.3	10714.7	7045.4
60	2.8	113	13590.5	19.9	3306.9	10283.6	7022.1
61	2.8	109	13045.2	19.7	3190.4	9854.9	6984.6
62	2.8	104	12509.4	19.5	3080.8	9428.6	6932.8
63	2.8	100	11982.5	19.3	2977.6	9004.9	6866.6
64	2.9	96	11464.0	19.1	2880.1	8583.9	6785.7
65	2.9	91	10953.4	18.8	2787.9	8165.5	6689.8



Design Equations (Vector Analysis):
$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$
$b = W-a$
$P_A = b*\tan(\alpha-\phi_{FS})$
$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 7054.8 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 35.3 pcf

Design Shoring for an Equivalent Fluid Pressure: 36 pcf

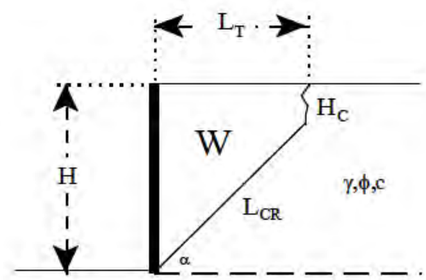
Geotechnologies, Inc.

Project: Stanford Pasadena, LLC
File No.: 21413
Description: Temporary Shoring Walls

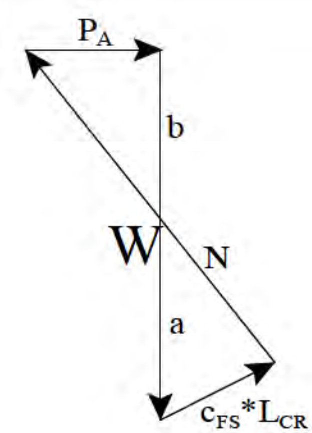
Shoring Design with Level Backfill
(Vector Analysis)

Input:

Shoring Height	(H)	28.00 feet
Unit Weight of Retained Soils	(γ)	120.0 pcf
Friction Angle of Retained Soils	(ϕ)	31.0 degrees
Cohesion of Retained Soils	(c)	130.0 psf
Factor of Safety	(FS)	1.25
Factored Parameters:	(ϕ_{FS})	25.7 degrees
	(c_{FS})	104.0 psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) feet^2	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	4.1	457	54846.0	37.1	14071.9	40774.0	10413.6
41	3.9	442	53055.1	36.7	13018.1	40037.0	10973.1
42	3.7	428	51311.6	36.3	12089.4	39222.3	11489.4
43	3.6	413	49616.8	35.8	11266.5	38350.3	11964.6
44	3.5	400	47970.4	35.3	10533.6	37436.8	12400.6
45	3.3	386	46371.6	34.9	9878.0	36493.6	12799.1
46	3.2	373	44818.9	34.4	9288.9	35530.0	13162.0
47	3.1	361	43310.6	34.0	8757.4	34553.2	13490.5
48	3.1	349	41844.9	33.5	8276.2	33568.6	13785.9
49	3.0	337	40419.7	33.1	7839.1	32580.6	14049.6
50	2.9	325	39033.1	32.7	7440.7	31592.5	14282.4
51	2.9	314	37683.2	32.3	7076.5	30606.8	14485.4
52	2.9	303	36368.0	31.9	6742.6	29625.4	14659.1
53	2.8	292	35085.8	31.5	6435.7	28650.0	14804.4
54	2.8	282	33834.6	31.1	6153.0	27681.6	14921.8
55	2.8	272	32613.0	30.8	5891.9	26721.1	15011.7
56	2.8	262	31419.2	30.4	5650.2	25769.0	15074.4
57	2.8	252	30251.6	30.1	5426.0	24825.6	15110.2
58	2.8	243	29109.0	29.8	5217.6	23891.4	15119.2
59	2.8	233	27989.8	29.4	5023.5	22966.2	15101.5
60	2.8	224	26892.7	29.1	4842.4	22050.3	15056.9
61	2.8	215	25816.5	28.8	4673.1	21143.4	14985.3
62	2.8	206	24760.0	28.5	4514.4	20245.5	14886.5
63	2.8	198	23721.9	28.2	4365.5	19356.4	14760.0
64	2.9	189	22701.3	28.0	4225.5	18475.9	14605.5
65	2.9	181	21697.1	27.7	4093.5	17603.7	14422.3



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 15119.2 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

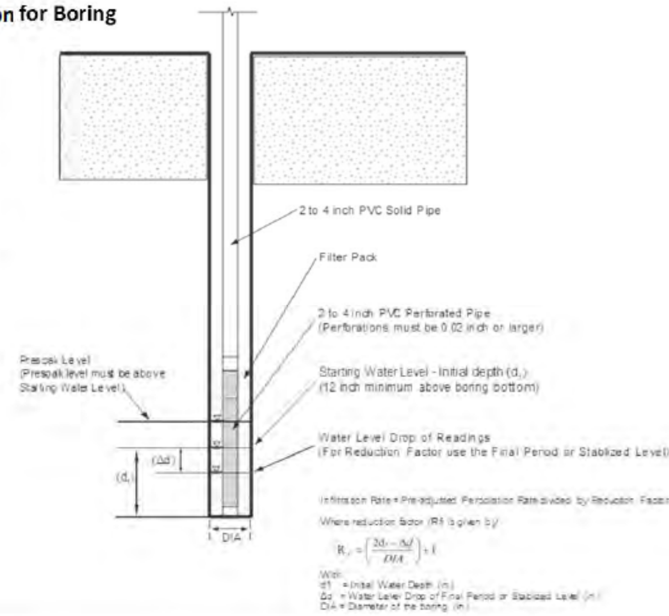
EFP 38.6 pcf

Design Shoring for an Equivalent Fluid Pressure: 39 pcf

Test Date: 18-Apr-17
File No. 21413
File Name : Stanford Pasadena, LLC

Infiltration Rate Calculation for Boring

Testing Boring Number		1
Boring Diameter (DIA)		8 inches
Depth of Boring		70 feet
Ground surface elevation		812.2 feet
Length of Casing (dc)		70 feet
Top of Casing elevation		812.2 feet
finish floor elevation	N.A.	feet
Elevation Bottom of Casing		742.2 feet
Pre-soak Time		4 hours
Measured By	H.C.	



Terms

Initial water depth (d1) =dc-di
Water level drop (Δd) = di-df

Reading Number	Clock Time	Elapsed Time	Water Measurement (d_i) and (d_f)	Percolation Rate	Preadjusted Percolation Rate		Initial Water depth (d1)	Water level Drop (Δd)	Reduction Factor (Rf)	Percolation Rate Variation
							d1 = dc-di	Δd = di-df	Rf = ($2d_1$-Δd/diam)+1	
		Min	feet	ft/min	in/hour		in	in	Unitless	Percent
1	14:30		38.00				384			
	14:40	10	69.60	3.16	2275.20			379.2	49.6	
2	14:45		38.00				384			
	14:55	10	69.50	3.15	2268.00			378.0	49.8	-0.3
3	15:00		38.00				384			
	15:10	10	69.20	3.12	2246.40			374.4	50.2	-1.0
4	15:17		38.00				384			
	15:27	10	69.00	3.10	2232.00			372	50.5	-0.6
5	15:33		38.00				384			
	15:43	10	68.80	3.08	2217.60			369.6	50.8	-0.6
6	15:50		38.00				384			
	16:00	10	68.75	3.08	2214.00			369	50.9	-0.2

Note: Calculation based on County of Los Angeles, Administrative Manual, Low Impact Development Best Management PracticeGuideline for Design, Investigation, and Reporting, dated 12/31/14.
LA County Minimum 0.3 Inches per hour

Measured Percolation Rate= 2214.00 in/hr
R_f= 50.9
CF_v= 2
CF_s= 2

Design Infiltration Rate = 10.88 in/hr